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Protected interests? The fortifications of Nevis, West Indies, from the 17th century to the present day.

(Volume 1 of 2)

by

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PhD Thesis

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September 2003

'Just as none of us is outside or beyond geography, none of us is completely free from the struggle over geography. That struggle is complex and interesting because it is not only about soldiers and cannons but also about ideas, about forms, about images and imaginings'

'Culture and Imperialism' by Edward Said, 1993, p.6

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ABSTRACT

FACULTY OF ARTS
ARCHAEOLOGY
Doctor of Philosophy

Protected Interests? The fortifications of Nevis, West Indies, from the 17th century to the present day.

By Tessa Catherine Sofia Machling

This study examines the development and decline of the 17th and 18th century English/British fortifications of Nevis, West Indies. The forts were first built in the early 17th century and continued to be developed and added to, reaching their maximum strength in the later 17th/early 18th centuries. However, this study shows that following a French attack in 1706, the fortifications of Nevis, unlike those of many other Caribbean islands, were rapidly abandoned. This theory is supported by the archaeological evidence and historical documentation. Reasons for this early abandonment have been suggested.

Ten of the forts have been located in the field, with at least four others identified as having been destroyed by development. Each fort has been catalogued, with plans, photographs and historical information given. In addition, the development of the forts has been placed within the framework of the progression of fortification strategy in Europe, the Caribbean, and in the wider colonial world.

This study details the methodologies used to examine structures of this type, with special reference paid to the disciplines of historical and military archaeology. This research, in contrast to many other military studies, has also examined the lives of those associated with all aspects of colonial military life on Nevis, including soldiers, planters, slaves, servants, women and children. The aim of this analysis has been to place the forts within a broader socio-historical and archaeological narrative, referencing all aspects of Nevisian colonial society.

In addition, the abandonment and loss of the forts has been examined, showing that environmental factors and tourism development are rapidly destroying the fort resource. The management of fortifications built by white Europeans to protect the slave trade is an extremely sensitive issue in the post-colonial Caribbean; in response to this situation, a variety of relevant heritage management strategies have been assessed and recommendations made for the future study and management of these fragile structures.

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Acknowledgements

This study would not have been possible without the help of many people. I would particularly like to thank the Nevis Heritage Project for funding the majority of my fieldwork and my first year's PhD research, also the Morris family and Dolores Boddie who provided accommodation and care on Nevis. Dr. Elaine Morris first introduced me to Nevis and its history and for this I am truly grateful. Following initial funding by the Nevis Heritage Project, AHRB provided the grant for the completion of my studies. I would like to thank the Department of Archaeology, University of Southampton, for providing grants to enable me to travel to St. Kitts for the Symposium in 2000.

I would also like to thank Professor Tim Champion for being a very helpful and supportive supervisor. Without his assistance and guidance this task would have been much harder and less interesting. I would like to thank my advisor, Dr. Jon Adams, for his words on all things maritime and for providing diving expertise and advice during the May 2000 fieldwork.

Within the project, Dr. Jen Heathcote, Dr. Jon Adams, Rex Bangerter, Pete Bellamy, Julie Cathie, Andrew Crosby, Dr. J.D. Hill, Kester Keithley, Dr. Roger Leech and Dr. Elaine Morris all gave extensive help with the fieldwork. Thanks also go to Dave McOmish and Dr. Steph Moser for their help during the 1999 season and beyond.

Many Nevis landowners and managers gave permission for me to work at their forts. Many of them also shared their knowledge of Nevis. I would like to thank all of them, especially The Honourable Mr. and Mrs. Oban Lawrence; Thierry Kennel, Robert Whitfield and Stenroy Wilkenson of the Four Seasons Resort Hotel, Mr. and Mrs. James Gaskell, Mr. and Mrs. Ian Holland, Pam Barry and the Yearwood family. My thanks also go to Peter Rookley for providing me with the archive of the work carried out at Codrington's fort.

Members of the Nevis Historical and Conservation Society offered unstinting support and access to materials on-island. Vince Hubbard is greatly thanked for sharing his knowledge of all things Nevis; also Joan and David Robinson deserve mention for helping me to find people, places, etc. Lornette Hanley is greatly thanked for her sterling work in the Society's archives and for digging out various obscure documents for me. Other members of the NHCS were also extremely useful during the course of this research, in particular Lyra Richards and John Guilbert.

Without the people of Nevis, my research would have been far less enjoyable. In particular I would like to thank Esternella West and the Nevis Planning Department for

their interest in the protection of the forts, members of the Nevis Co-operative Society for many thought-provoking chats about the future of Nevis and the possibility of another way forward, Beeman and the Honey Co-operative for making the best honey in the Caribbean and Sweetpea for providing conversation and insights. On St. Kitts, Esther and the staff of the Bird Rock Beach hotel and Larry Armony and the staff of the Brimstone Hill Fortress National Park are thanked for all their help.

In military matters, I would like to thank Victor Smith for introducing me to many Caribbean forts and for offering advice in all stages of the study. The same applies to Professor Gerald Schroedl who provided offprints of his groundbreaking work at Brimstone Hill and also offered much interesting conversation and a guided tour of the fortress. I would also like to thank Bernard Lowry and Dr. Andrew Saunders of the Fortress Study Group for insightful and helpful discussions. Particular thanks are due to Charles Trollope for his identification of the Nevis cannon (and for a lovely lunch!). I would also like to thank Dr. Edward Harris MBE, Director of the Bermuda Maritime Museum, for his comments regarding Davers Fort and for providing me with a copy of his wonderful Bermuda Forts book.

In addition, I would like to thank the staff at all the libraries, particularly those at the Public Record Office, who were always helpful and cheerful. I thank Major Jack Dunlop of The Royal Inniskilling Fusiliers Regimental Museum in Enniskillen for providing me with material concerning the earliest years of the regiment and for offering encouraging support in my hunt for information on John Johnson.

In particular, I would like to thank my three best friends, Dr Jen Heathcote, Dr. Ruth Prior and Dr. Helena Griffiths for their support and friendship throughout this process: it's always useful to know someone who has done all this before!

Finally, I would like to thank three further people: To Mum and Dad, Jackie and Mac, I would like to say thankyou for your love, support and help. Without their support and encouragement this task would have been much more difficult. Mum translated several French documents for this study and also commented on the text, provided a sounding board for my ideas, and had the onerous task of proof reading the final document: for these services I am indebted.

The third person is Dr. Andrew Garner. I owe him a great debt of gratitude for his emotional (and financial!) support over the past seven years. He has been my proof reader, driver, field-worker, computer specialist and most of all my best friend. He has also had to put up with my student anxieties. For being steady and caring throughout: Thank you. I couldn't have done it without you!

1 Introduction and methodology

'There be many other of these Caribbee Islands beside as namely Anguilla, Barbada, St. Bartholemews, Las Nieves [Nevis], etc. but of so little consideration…that it would seem but tedious to mention them further'

'America or an Exact Description of the West Indies' by N. N., Gent., London 1657.

1.1 Introduction

This study examines the establishment, development and decline of the 17th and 18th century fortifications of Nevis, West Indies. The first forts were built in the earliest years of English settlement in the early 17th century and continued to be developed and added to, reaching their maximum strength in the later 17th/early 18th centuries. However, unlike those of many other Caribbean islands, from the early 18th century the fortifications of Nevis were rapidly abandoned and fell into decay.

Figure 1a) The Newcastle Redoubt, prior to its demolition in 1996.

Over time these fortifications gradually became forgotten. However, in the 1990s, historical research by the author documented their presence and a programme of detailed archaeological research was instigated to record these fragile structures. This study records

the results of this research and aims to place the small batteries and forts of Nevis within an archaeological and socio-historical framework, referencing the colonial and post-colonial environment of the Caribbean from the 17th century to the present day.

1.2 Nevisian fort research

The programme of research was initiated in 1995, when the author was invited to participate in a project examining the Newcastle Redoubt (Fig. 1a), situated on the northern coast of Nevis. Documentary research was carried out with the intention of elucidating the history and dating of the archaeological remains. Following the establishment of a chronology for the site, the author participated in the recording and excavation of the fort. The results of this work were published in 1999 (Morris et al. 1999: 194).

During the course of the work on the Newcastle Redoubt it soon became obvious that remains of other forts/batteries were still to be seen on the island. From documentary research, it also appeared that there had once been many more defensive structures apparently missing from the present day remains. At that time, all of the forts of Nevis were unstudied and most had yet to receive even the most basic recording. As a result, the author used the range of historical evidence present to locate the forts in the landscape and, having established the Fortifications Theme of the Nevis Heritage Project (Machling 2001: 45, 2002: 40, 2003: 31), instigated a programme of archaeological research to examine the origins, development and decline of these fragile structures.

Whilst looking for comparable examples of fortifications from other countries, it soon became apparent that very few smaller forts had been examined archaeologically. Indeed, in the Caribbean, studies of coastal batteries are often restricted to historical studies or in many cases such forts have yet to be studied at all. Archaeological evidence is scarce and where forts have been studied, these have been examined in isolation with little reference to the wider military environment of the island in question. No overall archaeological and historical study of the military structures of any given Caribbean island has, as yet, been achieved.

As such, a primary aim of the author's research has been to document and analyse the Nevis fortification remains as a whole, to provide an encompassing study of Nevisian defence. The people who lived and worked within the military environment, as creators of the archaeological and historical dataset, have been examined through artefacts and documents. Although often not immediately apparent in the archaeological record, the

lives of these people cannot, and should not, be ignored. Indeed, the experiences of historic Europeans, indigenous Caribbean peoples and Africans continue to impact on the present day global community. To understand the present day Caribbean it is essential to understand how such communities came into being: the military defence of the European sugar and slave trade during the colonial period was an important factor in the creation of the present day situation.

Through this approach an inclusive and pluralist study has been produced which references the many strands of archaeological and historical evidence for the military environment of historic Nevis. The author believes that the study in question is the first of its kind and provides an example of what may be achieved in fortification study. Contradicting much received knowledge regarding the irrelevance of these small forts, this study proves that, even with a restricted suite of archaeological data, many interpretations and deductions can be made. When examined in conjunction with other forms of evidence, such as historical documentation, these fortifications can provide academically valid and wide-ranging results, elucidating the military and colonial life of the historic period Caribbean and Europe and its continuing impact in the present day.

1.3 Methodology

This study results from research carried out between 1995 and 2003. Initially, the research concentrated on a single fortified structure, the Newcastle Redoubt (Section C40), and the author did not anticipate that any further work would be done after the cessation of this project. However, it soon became obvious that to analyse a single fort in isolation would be difficult and indeed irrelevant: to understand one fort and to place it in context, a full understanding of the other forts' development and decline would be necessary. In looking for historical information regarding the Redoubt, one could not help but notice the large quantity of material documenting the other forts of Nevis. As an archaeologist, the author wished to locate these forts on the ground and document their existence.

From the beginning it was obvious that the evidence for the study fell into two broad categories: historical documents and archaeological data. The historical documents, housed in the Public Record Office, Kew, the British Library, London and in the Bodleian Library, Oxford proved easy to access and analyse. However, the archaeological fieldwork proved to be more problematic. Due to financial and climatic restrictions, only five trips to Nevis were possible. Although not an ideal situation, the fieldwork carried out has, however, laid a firm foundation for future work on the island.

1.3.1 Fieldwork

The archaeological evidence for the gazetteer (Appendix C) and the following chapters results from five fieldwork sessions carried out by the author in 1996, 1999 and 2000. One visit was paid in both 1996 and 1999 and three visits were made in 2000. On each visit the fieldwork was limited to a maximum of two weeks.

The fort environments can change rapidly and, as such, the evidence present during one visit was found to have drastically altered within a few months. Indeed, on Pinney's Beach, a metre of sand could be deposited on or removed from a fort overnight. Therefore an important aspect of fieldwork was to create a photographic archive of the forts and their preservation over the period of the study. The archive at present contains approximately one thousand photographs documenting the changing environment of the fort locations. Many photographs from this archive have been reproduced in Appendix C. In some cases this archive provides 'before and after' comparisons as the sites are uncovered and reburied, eroded or bulldozed.

In addition to the author's fieldwork, colleagues, local people and visitors to the island since that date have also provided information to the author concerning the current state and preservation of many of the fort structures. This monitoring is ongoing.

The assumption underlying this study is that the majority of remains located represent the forts built by Christopher Codrington and John Johnson in the early 1700s. From the earliest period of fieldwork this assumption has appeared justified with numerous maps, for example, the French maps of 1703 and 1758 (Fig. C1c, C1d & C1f), letters and plans detailing these forts. This assumption has been further borne out by the discovery of several of these forts, which evidenced, through their design, construction technique and size, a compatibility with those forts described in the historical documents (see Chapter 5).

Indeed, the accuracy of many of the descriptions allowed the author to arrive at a certain spot on the coast and locate an individual fort resembling that in the description. In the case of Cotton Tree fort (Section C28), which was undiscovered until February 2000, the author marked the location of Abbott's and Old Road forts and then used a GPS (Geographical Positioning System) to pinpoint a spot in between the two: the underwater remains were immediately obvious when this position was visited.

However, although accurate, the use of historical documents was not solely relied upon and the author walked the area from Charles Fort to the Newcastle Redoubt. The coast from Charles Fort to Coxheath Estate was driven by car. The coast half a mile each

side of Indian Castle was also walked. Where possible, the eastern coast was visited by car, with walkover reconnaissance carried out at White Bay, Hichmans and at Coconut Walk (Fig. C11). The fort positions established from historical documents proved accurate, with no forts being located independently of the historical sources. The fieldwork seasons carried out by the author are detailed below:

1.3.1.1 June/July 1996

This fieldwork season, carried out with a four-person team, examined the Newcastle Redoubt using survey and excavation. The full results have been published in *Post-Medieval Archaeology* (Morris et al. 1999: 194). Reconnaissance of other known forts on the island (e.g. Codrington's Fort and Charles Fort) was also carried out.

1.3.1.2 May 1999

The 1999 fieldwork season was designed as a feasibility study to locate and positively identify the Nevis fortifications discovered during documentary research since 1995. During the walkover survey, ten batteries were located, with a further four apparently having been destroyed by development since 1995. All the fort locations were photographed with several recorded in plan. This season was reported in the journal *Antiquity* (Morris 2000: 267).

1.3.1.3 February/March 2000

This field session involved the recording of all the forts discovered in 1999. Each available fort was roughly cleaned and then photographed, before being planned at a scale of 1:20, with relevant elevations being recorded where necessary. In advance of fieldwork in May 2000, three sites were targeted for further examination.

1.3.1.4 May 2000

The May 2000 season provided the author with the opportunity to examine three forts in detail (Machling 2001: 45). Three teams carried out surveys and trial excavations at Abbott's/Cole's Point, St. Thomas'/Cotton Tree and at Katherine's/Old Road forts. This

work included the examination of underwater remains at each of these forts. Examination of remains at Indian Castle, Mathew's and Johnson's forts was also carried out.

1.3.1.5 October 2000

In October 2000, the author visited St. Kitts for the 'Symposium on Historic Fortifications'. This allowed a useful opportunity to visit many of the St. Kitts' forts in the company of Victor Smith and Professor Gerald Schroedl, who had worked extensively on the St. Kitts structures. In return, the author was able to visit the forts of Nevis with Victor Smith, which offered an invaluable chance to compare and contrast the forts of the two islands. It also allowed the author an opportunity to monitor the preservation of the forts on Nevis, particularly Katherine's/Old Road Fort, which was in the process of being incorporated into the Four Seasons Resort Hotel's landscaping works.

1.3.1.6 Additional fieldwork

In addition to fieldwork by the author, other parties have examined several forts. In November 1999, following Hurricane Lenny, Johnson's fort was uncovered when a number of human skulls were exposed. In response to this discovery Dr. Roger Leech, of the Nevis Heritage Project, recorded and planned the uncovered fort before it was reclaimed by sand.

At Abbott's/Cole's Point fort, metal detecting by Vince Hubbard located the remains of a destroyed cannon (Hubbard 1989: 16). At Fort Codrington the landowner, Mr. Ian Holland, has carried out excavations, recording and restoration. The results of all of the above are included in the gazetteer, accredited to the relevant parties.

1.3.1.7 Discussion of fieldwork

The first phase of fieldwork, on the Newcastle Redoubt, highlighted many of the problems inherent in the field study of Caribbean fortifications. The first hurdle to face any archaeologist working in the area is the climate. The days are extremely hot and, with only twelve hours of light per day, evening working on site was not possible. In July 1996, Hurricane Bertha provided a further, more dramatic, disruption to the author's Caribbean fieldwork.

Hurricanes and tropical storms regularly affect the Caribbean. During any period between late June and November, these storms produce heavy rainfall, high winds and dangerous sea swells. Hurricane Bertha in July 1996 was one such, albeit small, storm. Despite being less damaging than other such storms, this hurricane disrupted work at the site for several days as heavy rains made roads impassable and caused surface water on the site. Even without the storm, the high air humidity caused paper to tear and made recording extremely slow. The heat made digging laborious, thus slowing the amount of work that could be achieved in any given day.

The locations of many of the forts also provided difficulties. Three of the forts had been inundated by the sea, necessitating the use of specialist divers. Another, Indian Castle, lay close to a cliff edge and examination from the cliff base, through binoculars, proved the only safe method. Several forts had been destroyed during development work and one, Saddle Hill, was the subject of a protracted landownership dispute. All of the forts discovered were under some form of threat, be it caused by development or erosion, and all needed the same priority of investigation. A strategy to gain the most information from all the forts in the shortest period of time was necessary. Therefore, the author decided to at minimum make plans of the remains, with a few interesting and particularly vulnerable forts being targeted for small-scale excavation and more detailed survey.

It was discovered that, due to the poor sea-washed preservation environments and the limited time and manpower available, little artefactual evidence - a mainstay of archaeological analysis - would be recoverable. The structures themselves were also so heavily ruined that few military deductions concerning the actions of the forts could be made. However, with the threats to the forts imminent, this limited set of information promised to be all that would be available. To document this evidence, before it was lost, became a priority. The results of this documentation can be seen in Appendix C, the Gazetteer of Fortifications.

1.3.2 Archives

The archival remains proved to be the easiest, albeit time consuming, part of the research. The documents located in the Public Record Office, Kew, the British Library, London and the Bodleian Library, Oxford provided the main sources for this research. A few documents were also located from other sources including the Nevis Historical and Conservation Society archive in Charlestown, Nevis. Due to time constraints, British

County Record Office material has not been examined, although material recovered by colleagues has been assessed

The documents and manuscripts cited in the text and Appendices have been formatted according to a standard referencing protocol, which is detailed in Section C1.2. All original spellings have been retained.

1.3.2.1 The Public Record Office (The National Archive), Kew

The author appears to be one of very few researchers to have examined the majority of the primary documents relating to the Leeward Islands, of which Nevis is one, held by the Public Record Office. These documents, which span the 16th-20th centuries, include maps, correspondence (both personal and official), official reports and inventories, shipping returns and many other miscellaneous items relating to the colonial territories in the Caribbean.

The research at this location was carried out in a six-month block, with additional visits to verify information as and when necessary. Documents of interest were located mainly in the Colonial Office class, although significant amounts of information were also found in the Foreign Office, War Office and Admiralty Office classes. It is estimated that at least c.2-3 million documents within this archive have relevance to the history of the wider Caribbean. The author's research examined over 150,000 targeted documents, with around 900 identified as relevant to the study. By attempting to examine all potentially relevant documents an understanding of the historical dataset for Nevis has been achieved and many previously unknown documents have been located. In addition to the author's analysis, the results of other colleagues' researches in the Public Record Office have been incorporated where relevant.

In contrast to the author's research, many other scholars (for example, Crandall 2000) have preferred to look at known documents or chose to use the précis given in the Calendar of State Papers: Colonial Series, America and the West Indies (Sainsbury 1860). However, although it provides easy access to the documents for those unable to visit the originals, the author has found that the Calendar entries are often incomplete or inaccurately transcribed. It should, however, be noted that the Calendars do appear to catalogue some documents which are now unavailable in the archives, or which have been re-classified to other areas. As such, a search of the Calendars was undertaken, but any evidence gleaned from this source has been treated with caution.

1.3.2.2 The British Library, London

The British Library holds a selection of documents of relevance to Nevis including several maps of the Caribbean, historic accounts of the island and around twenty books which include descriptions of Nevis from the 17th century onwards (for example, Davies 1666, Sloane 1707, Smith 1740, Rymer 1775, Burke Isles 1871, Jeaffreson 1878, Oliver 1914, Harlow 1925).

Of particular use to this study was the location of around thirty relevant manuals of fortification design ranging in date from the late 16th century to the early 20th century (for example, de Bellay 1589, Leybourn 1673, Anonymous 1702, Ozanam 1711, Bisset 1751, Muller 1782, Straith 1833, Nicholson 1907). Although mainly concentrating on fortifications many times larger than those seen on Nevis, these provided a basis for comparison of the techniques and principles of fortification design and construction.

1.3.2.3 The Bodleian Library, Oxford

Several documents and maps relating to Nevis were located in this library. Although helping to enhance the picture of colonial life on Nevis, none proved of direct relevance to the forts of Nevis.

1.3.2.4 The Nevis Historical and Conservation Society archive, Nevis

The archives of the Nevis Historical and Conservation Society, Nevis were searched and a few interesting documents were located. However, the limited fieldwork available meant that time on Nevis was mainly spent in the field. This proved justified as many of the NHCS documents proved to be copies of those to be found in the Public Record Office.

There are large quantities of other governmental documents held on Nevis that relate to landownership, wills, etc. Should any future work be carried out on the fortifications of Nevis, this archive should be examined as it may provide a few gems of information hidden within the mass of civilian documents. However, the plantation focus of these documents, and the limited time available on island during this study, did not allow for a detailed examination of this material.

1.3.2.5 Additional archives

In addition to the above, the author has examined documents uncovered by colleagues in the Bibliothèque Nationale de France and the John Carter Brown Library, USA. Limited budgets and the restrictions of part-time research did not allow for visits to overseas libraries in the wider Caribbean and Europe.

1.3.2.6 Discussion of archives

The documentary research has provided a wealth of information relevant to the history of the forts of Nevis. These documents range from the initial period of settlement in the early 17th century through to the decline of the fortifications in the 18th century and beyond. The high number of consistent reports referring to the forts appears to show that the documentation is, on the whole, reliable. In addition, the intentional or unintentional biases of the writers have provided an indicator of the motivations and actions of the men involved in the military development of Nevis.

1.4 Archaeology and history: objective versus subjective?

Many archaeologists are suspicious of historical documents, believing archaeology to be the only means of objectively looking at information. The author does not follow this theory, but believes that documents are another form of archaeological artefact 'dug up' in libraries as opposed to having been located on site. Although there are biases in historical information, in the case of the Nevis archives, a critical eye and some common sense is often all it takes to broadly separate fact from fiction.

Indeed, it should not be forgotten that, by deciding what to excavate, how to excavate it, what to keep and how to analyse the results, all archaeologists are being subjective. To ignore historical data is to skew the archaeological record as much as to ignore, for instance, all pottery from a site. In the case of the Nevis forts, due to the ruinous condition of the remains and the threats upon them, historical documentation has provided a useful framework, enabling the author to locate the remains quickly and to provide an interesting narrative of their history.

Such narratives offer an easily accessible and understandable explanation so that non-archaeologists may appreciate the 'rubble' to be seen on the coasts of Nevis, and thus protect it accordingly. In short, by using historical information in conjunction with

archaeological data, it is possible to show not only what these fortification builders did, but also possible reasons for how and why they did it.

1.5 Personal perspectives on Nevisian and military history/archaeology

Inevitably, any research and its conclusions are the product, in some form or another, of personal experience, training and conditioning. History, and archaeology, can never be entirely factual and the necessary construction of narratives and interpretations (Southgate 1998: 68) involves the taking of positions and perspectives and the editing of material. In the case of 'colonial period' research, which covers a time span up to and including the 21st century and beyond, this history is still being written to a very real extent, giving a contemporary relevance to any study of the period (Ferguson 1990: 47).

The training, nationality, gender, and even the personality, of the researcher all form the study and its conclusions (Johnson 1999a: 5). In the case of the author, these conditions directly affect the study in question as the background to, and reasons for, the direction of this research. The opinions of the author at the beginning of the research in 1995 were very different from those held in 2003, in the light of eight years experience and observation of Caribbean culture, politics and archaeology. Therefore, a short biography is necessary for the reader to be able to appreciate the perspective of the author. As Higman (1999: xiii) states 'I have included these pieces of autobiography...to help the reader locate the writer in time and place'.

The author of this study is a white, British female, with no connection with the Caribbean or military history, prior to this research. Her training was received in the British archaeological tradition and it was within this country that the total of her archaeological work had been conducted, prior to the Nevis research. The specialism of the author was in the prehistoric archaeology of southern England, particularly the study of prehistoric pottery. As such, the conflicts of cultural ownership and the issues of colonial period research had not impacted onto the author's previous work.

As she lived in London, close to the Public Record Office and British Library, she was asked to carry out historical research on the Newcastle Redoubt. Initially, the author was not sure of the whereabouts of the island of Nevis and, although aware of the sugar and slave trade, had no realisation of the huge impact that Europeans had had on the Caribbean since the 15th century.

Due to previous fieldwork experience, she was asked to join the excavation team in June 1996, when it was discovered that the Redoubt was to be destroyed to make way for

a new airport. In commenting to friends and archaeological colleagues about her work in the Caribbean, the standard response was one of envy to be going to such paradise; few had any knowledge of Caribbean culture, history, politics or economics beyond the limited experiences of Caribbean resort hotels and a vague knowledge of Caribbean migration in the 1950s.

The work of the Nevis Heritage Project quickly highlighted the fact that very little academic archaeological work had been carried out on Nevis. In effect the island provided limitless supplies of, often untouched, archaeological information: the basic patterns of prehistoric and historic settlement, geology, flora, fauna and environment had yet to be researched. The historical material that had been uncovered by the author was found to correspond with the archaeological remains found on Nevis and, as original research, a part-time Doctoral study at the University of Southampton was initiated in October 1999.

As a novice in this research period, the author sought advice from various recognised authorities (for example, the Fortress Study Group). It soon became apparent that small batteries in the Caribbean, which comprise the majority of military structures on Nevis, had been little studied by military specialists who favoured the larger, more 'important' forts. The majority of forts that had been studied had not been examined more broadly within the social, political and economic framework of the colonial Caribbean. It was also noted that the majority of people carrying out military history/archaeology projects were men, echoing, and propagating, the traditional male role in, and view of, military activities.

The author, whilst reading the letters and accounts of the soldiers, planters, Governors and slaves of Nevis, had become interested in the personal struggles of those involved in the colonisation of the island. Often the sequence of letters from one man halted abruptly due to illness or sometimes due to the author having died; on other occasions the writer returned to Britain either voluntarily or by order. In further descriptions, the pleas for clothing and food from the soldiers were poignant, the accounts of sickness were heart rending and the narratives of the treatment of slaves brought home a realisation of the brutality of the people involved.

In short, the descriptions by, and of, the people involved in the daily life of the fortifications provided the means to examine the military archaeology of Nevis in a socio-historical context. In addition, the structures located the documented people. Finds of blown cannon sections suggested possible injury to those manning the cannon when it had exploded, British manufactured pottery and glassware provided the incongruous artefacts of this tropical environment and small sherds of Afro-Caribbean pottery were the only

immediate signs that slaves had ever been near the forts, structures so typically European in form and design.

Many questions became apparent: how many had died or were injured in the forts, who were they, where were they from and what were they doing on the other side of the Atlantic, so far away from their families and homes in Europe and Africa? What were their day-to-day lives like, who did they mix with and what did they think about Nevis? Where were the women and slaves who were known to be present in the military environment: the wives, mothers, daughters and lovers of the slaves and soldiers? Types of forts and guns, their position and success, although of interest, became secondary to the socio-historical aspects of the archaeology, with the resonating stories of the people who lived in and around the forts, the essence of military activity, taking centre stage.

Having spent time on Nevis, the rich cultural and historical background of the Caribbean, and its relevance to the present day, became apparent to the author. Indeed, many of the 17th-19th century plantation names were still present in the local telephone directory representing the slave ancestry of much of the current population. The popular 'Culturama' festival held on Nevis in July/August celebrates the emancipation of these same ancestors and aims to preserve their African heritage through traditional music and dance (Gordon 1998: 69). A few locals even remembered the final days of plantation life and many felt themselves very much connected to the colonial history of Nevis.

In talking to local people (including history teachers), it appeared that few people knew that various American and British archaeological research projects were working on Nevis. Of those people who did know, and many were very interested in history, few of them were aware of the results of the work after the visiting academics had left the island (Trott 1999).

During the course of fieldwork, it became clear that the major tourism developments undertaken by the incumbent Concerned Citizens Movement (CCM) government had been those which had caused, or would cause, the loss of at least four forts (i.e. Long Point Fort, destroyed by the construction of Long Point Port; the Newcastle Redoubt, demolished to make way for the new airport; Black Rock Fort, which was bulldozed in advance of the new Charlestown waterfront development and Johnson's Fort which is threatened by the new Pinney's Estate Hotel Resort project) and many other historic and prehistoric sites. The increased tourism had, rightly or wrongly, directly caused the loss of many of the islands heritage and ecological areas.

During a broadcast by the Minister for Tourism, Malcolm Guishard, on the local VON (Voice of Nevis) Radio on 28th February 2000, the topic of tourism was aired in

relation to a forthcoming Tourist Week to be held on Nevis. The broadcast encouraged Nevisians to be clean and tidy and to be friendly towards the visitors. The following morning, the first day of Tourist Week, whilst talking to local friends the author became aware that this request to be on best behaviour for outsiders had not been well received by many.

On 6th March 2000, whilst the author was present on Nevis, the general election took place. The build up to the event showed that tourism and development were high on the agenda in local politics. The opposition Nevis Reformation Party (NRP) campaigned for the election on an anti-independence, reduction in tourism and development platform and nearly won the seat held by Malcolm Guishard (of the 28th February, VON radio broadcast). Indeed, a talk show (Let's Talk) held on VON Radio on the eve of the election had focussed on the proposed Pinney Estate development, with many local people ringing in to voice their concern over the compulsory purchase of the Estate by the Nevis Island Administration.

In October 2000, the author participated in the 'Symposium on Historic Fortifications' held on St. Kitts to mark the scheduling of Brimstone Hill as a World Heritage Site. All the speakers were white, all were male and the majority were not from the Caribbean. Many local people and school children (mostly sixth-form students) were present for the two-day conference but, for the majority of the time, did not become involved in the discussions after the lectures. However, following a talk on slavery at Brimstone Hill, given by Gerald Schroedl, many questions were put forward, leading to the extension of this particular discussion session by nearly two hours! This proved that an interest in history was present and that many of the other (mostly Eurocentric, militarily orientated) papers had failed to make that history relevant to the audience.

From these experiences, and many more besides, the author became aware that the subject under study, although appearing initially to be a discrete academic project, was actually of primary relevance to the present day Caribbean. This, and the male-orientated approaches of the standard military histories that have been written about the Caribbean, have directly affected the author's approach to the topic.

This study uses a wide range of material including archaeological and historical data, local descriptions and traditions. Primary or comparable accounts written by soldiers, planters, governors, etc. have also been used to create a picture of military life in colonial Nevis. In addition, slaves, native Caribbeans, white women and servants all lived within the military environment and, although they were not soldiers actively working in the

forts, the battles, wars and military activity had an impact on, and formed the background to, their daily lives (Beckles 1999: xvi, Shepherd 1999: xx, Williams 1999: 12).

Indeed, many black and native slaves constructed the fortifications and from the earliest period were taken into battle by their 'owners', a situation formally recognised in 1795 when the West India Regiment was formed (Buckley 1979, 1998). Because the slaves, natives, white women and servants do not have a voice in the archaeological and military historical evidence available for Nevis, descriptions and comparisons from other sources such as letters, journals and songs, both primary and modern, have been utilised.

This study attempts to provide an accessible account and analysis of the archaeology of the military environment of Nevis from the first European occupation to the present day. It is aimed at local people, students and visitors to Nevis, as much as at the academic community of archaeology and history. It is hoped that, through this approach, it will be relevant to many readers outside the North American and European tradition, allowing them to participate fully in the narratives and activities that formed, and continue to form, the archaeology and history of Nevis.

2 The History and historiography of Nevis and the 'English' Caribbean: The prehistoric to the present day.

'The example recently identified in Richard Pares' 'West India Fortune' (Pares 1950) will serve as a general illustration. The Pinney family, exiled in the seventeenth century to Nevis, became a century later the principal capitalists in Nevis...After emancipation they steadily withdrew their West Indian investments and transferred them to cotton, canal and dock shares in England...Back in their native Dorset, as the family biographer stated, they resumed their place in the old houses, the old fields and the old churchyards. It was, he says, "as if they had never been out of the county". That is the picture seen through British eyes. Seen through West Indian eyes, against the background of the derelict island today, it is as if they had never been in Nevis'.

Eric Williams: 'British Historians and the West Indies', 1972: p.33-34.

2.1 Location and environment

Nevis is located in the Leeward Islands, of the Lesser Antilles, Eastern Caribbean, approximately 50 miles to the west of Antigua (Fig. 2a). To the north of Nevis lies St. Christopher (shortened in English, from the 17th century, to St. Kitts), separated from Nevis by a channel, known as the Narrows, of under two miles in width.

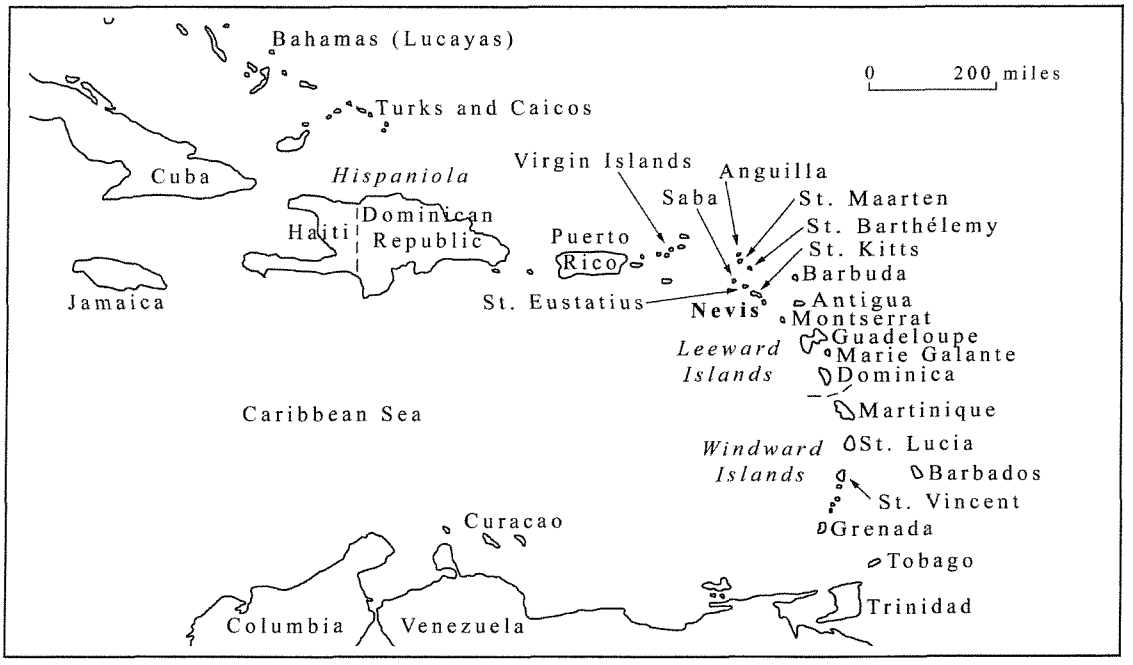

Figure 2a) The Caribbean: Location map

Nevis is c.36 square miles in area and consists of a central volcanic cone rising to 3,232 feet (Fig. 2b & 2c). At the base of the volcano, apart from a few smaller hills, the ground slopes gently to the sea on most sides. The island is surrounded by broken coral reefs a quarter of a mile out from the shore. On the windward, Atlantic-facing coast of Nevis, low cliffs are prevalent and in general the coastline is more rocky and inaccessible than the leeward, Caribbean Sea facing coast (Fig. 2d). Almost in entirety, the leeward coast of Nevis is represented by a long sandy beach, which runs from Charlestown in the south-west to beyond Newcastle in the north (Fig. 2c).

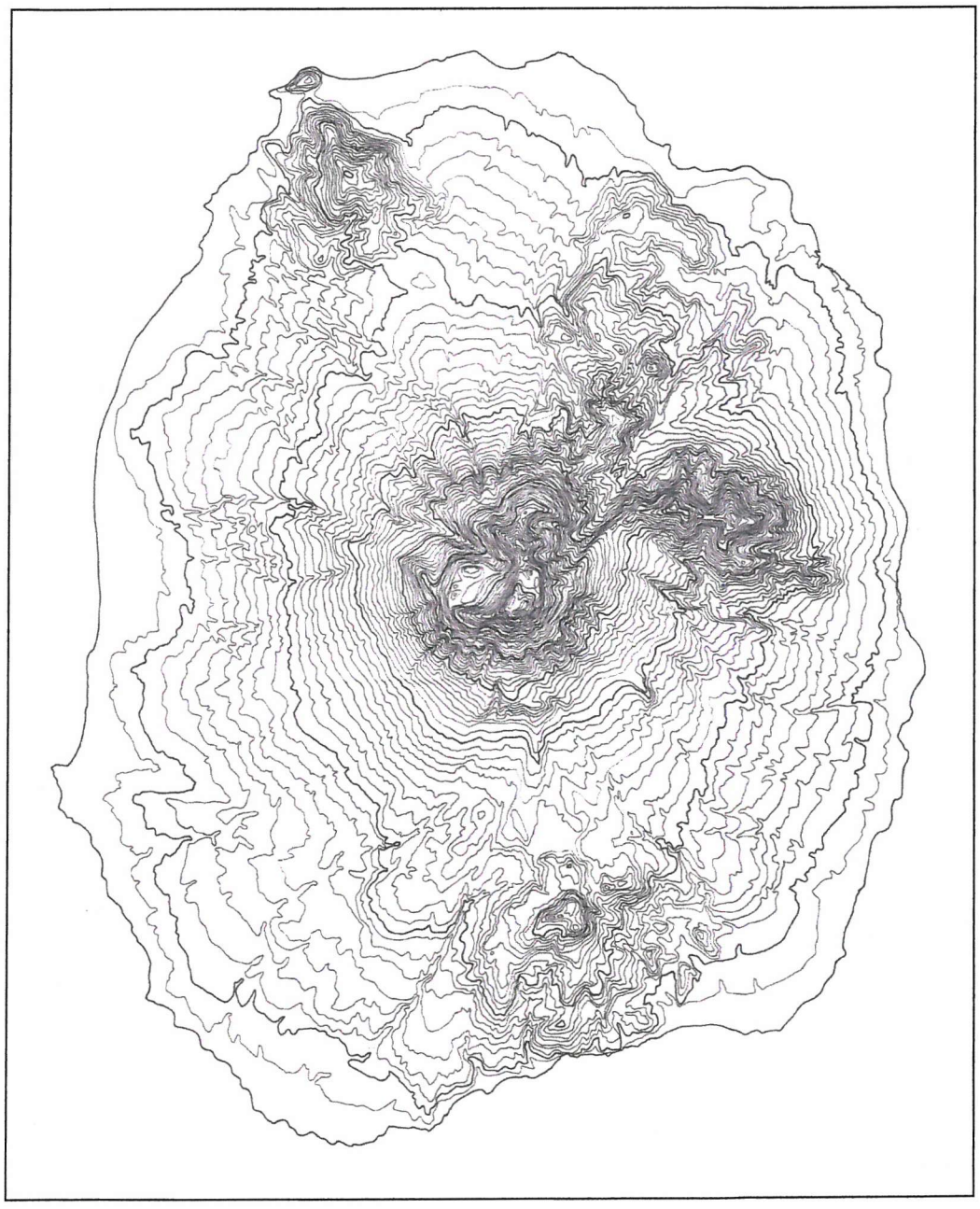

Figure 2b) Contour map of Nevis (contours mapped every 50 feet).

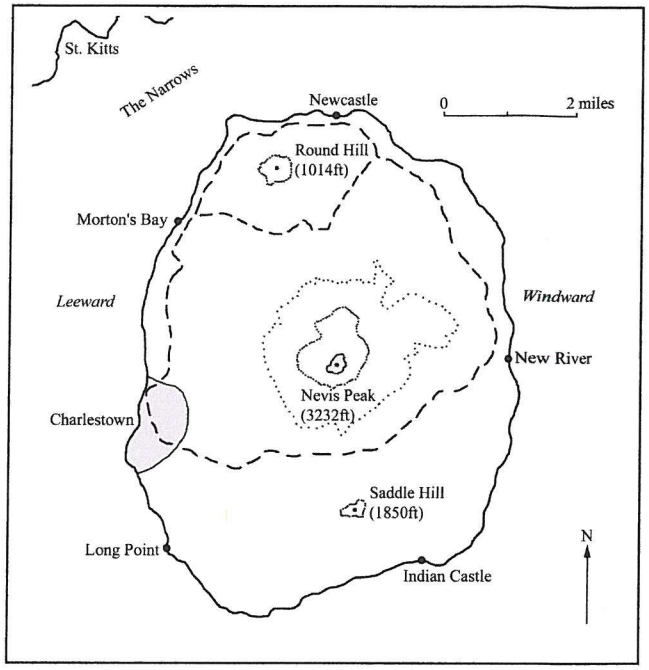

Figure 2c) Map of Nevis with relation to St. Kitts.

The island has a tropical climate with temperatures ranging between 60-90°F (an average of 78°F). In general the windward coasts are more barren than their leeward equivalent, with scrub flora present on the windward coast and dense tropical flora present on the leeward. Between July and November, tropical storms and hurricanes can be expected. In recent years approximately one large hurricane has occurred per year. For example, Hurricane Georges in September 1998 and Hurricane Lenny in November 1999 caused major structural damage on the island.

Figure 2d) Leeward coast (left) and windward coast (right) of Nevis.

Historically, the difference between the leeward and windward coastal landscapes has meant that, with the exception of a few windward landing bays such as Indian Castle and New River, the leeward coasts were the points of access for much of the sea traffic to the island and provided the three main ports (Charlestown, Morton's Bay/Jamestown and Newcastle) during the historic period.

Reliable evidence for pre-European settlement patterns on Nevis has yet to be gathered, although the majority of sites appear to cluster on the windward coasts (Wilson 1989: 432). However, the preliminary results of recent studies of prehistoric Nevis have suggested that the leeward coast was utilised, though in less density than the windward, in the prehistoric period (Crosby 2001: 10).

2.2 Caribbean history

2.2.1 Pre-European history

Although this study focuses on the historic European and Afro-Caribbean communities, it should not be forgotten that Columbus did not discover the Caribbean. Indeed, the islands had been populated from South America over 5,500 years prior to the arrival of Columbus (Wilson et al. 1998: 342, Keegan 2000: 136). By 1000AD highly structured and complex chiefdoms had developed (Wilson 1997: 7), with peoples commonly known as Tainos or Arawaks living in the northern Greater Antilles and Caribs living further south in the Lesser Antilles (Peterson 1997: 118).

By the time of Columbus' voyages of the late 15th/early 16th centuries, the majority of islands were settled and farmed. Diego Alvarez Chanca (1992: 35), the surgeon on Columbus' second voyage, described Nevis in particular as being '...very populous, judging from the many signs of cultivation there were on it'. This reference should, however, be treated with caution. The island has been identified as being Nevis by Hulme and Whitehead (1992: 35), but the author believes that St. Kitts is possibly the more likely location. Whatever the precise location, it is clear from this description that established indigenous populations were present across the Caribbean at this date.

However, although the Amerindians had constructed houses, fields and communal meeting areas, it would appear that these peoples did not have permanent fortifications. As such, the European fortified structures were the first to be seen on the islands and, in the

absence of earlier re-usable structures, were built from first principle from the time of the earliest European settlement.

2.2.2 European 'discovery' and 'development' of the Caribbean

In 1493, on his second voyage to the Caribbean, Columbus visited the Lesser Antilles, of the West Indies, and sighted Nevis in November of that year (Greenwood and Hamber 1979: 23, Hubbard 1996: 4). From the earliest period the island was called 'Nieves', a name deriving either from a freak snow storm in Spain (Hubbard 1996: 4) or from the full appellation, given by Columbus, as 'Nuestro Señora de las Nieves' ['Our Lady of the Snows'] (Gordon 1998: 1), apparently due to its almost permanently cloud-capped mountain.

The Columbus voyages were the 'first gold-rush in the history of the modern world' (Williams 1997: 23) and his agreement with the Spanish Sovereigns included specific shares in any gold and silver recovered (Williams 1997: 23, Ferguson 1998: 21). However, few of the Greater Antilles had any gold and, the entire absence of the commodity in the Lesser Antilles, led to their being largely ignored by the incomers (Watts 1987: 95, Dookhan 1998: 14, Ferguson 1998: 31).

By the end of Columbus' third voyage (1498-1500), with the whole Caribbean under Spanish dominion, the dream of gold had been all but extinguished (Ewen 2001: 8). In order to bring something home to Europe, Taino slaves were taken in their hundreds and shipped to Spain, either to die from European illness or despair; the few survivors were eventually sent back to the Caribbean (Williams 1997: 32). However, the pattern for the future destruction of the Amerindians had been set.

By 1520 Spanish sugar-producing settlements were established in Cuba, Española (Hispaniola, now the Dominican Republic and Haiti), Puerto Rico, Jamaica and the Lucayas (the Bahamas). These settlements were, from this time, dogged by other European countries' privateers/corsairs, buccaneers and trading vessels. For example Drake had visited St. Christopher in 1573 and Hawkins regularly used the islands for supplies during his slaving voyages of the 1560s (Dunn 1973: 10, Appleby 1996: 88). By the early 1600s, with the Spanish colonies still the only permanent European settlements, the other European nations decided to consolidate their interests in the area and targeted the Lesser Antilles and Jamaica for colonisation.

Thus began the three hundred year struggle to make the Caribbean economically viable, leading first to the settlement of white planters and indentured servants from

Europe and then to the large scale displacement (and all its associated horrors) of upwards of ten million (Martin 1999: 3) men, women and children of African origin to the Caribbean via the slave trade.

2.2.3 The English in the Caribbean

In 1604, the Treaty of London had stipulated that England did not recognize the Spanish monopoly of the Caribbean territories (Ferguson 1998: 66) and that, despite the presence of indigenous peoples, any territories unoccupied by Spain were legitimate targets for colonisation (Dunn 1973: 16). By this time many of the islands were familiar as watering posts and sources for timber for the Dutch, French and English trading/privateering ships in the area. For example, an English voyage to Virginia, headed by John Rolfe, had stopped at Nevis in 1607.

The growing ideas of mercantilism, which believed that the prosperity of a nation could be increased by obtaining a greater share of the world's productive land (Dookhan 1998: 136), led these countries into seeking, and monopolizing, new plantation territories overseas, and their traded produce. The West Indies provided the potential for a perfect colony: the trade from such areas 'did not compete with those of the Metropolitan country, and the exploitation of whose natural resources provided additional employment opportunities for the capital and labour, sailors and ships of the Metropolitan country' (Williams 1972: 15).

By the beginning of the 1620s, the negative experiences of Rolfe's Jamestown in Virginia, and the failed settlements in St. Lucia and Grenada in 1605 and 1609 respectively, had shown that settlements with minimal native and Spanish involvement were to be preferred (Dunn 1973: 17, Watts 1987: 142, Appleby 1996: 90). The increasingly fragile relationship with Spain, which culminated in the Anglo-Spanish war of 1625-30, provided a further stimulus to colonisation: the more productive land that could be removed from Spanish control and placed into English hands, the better. The isolated Lesser Antilles, apparently with few Caribs and acres of fertile land, appeared to provide the solution (Appleby 1996: 90).

By this time the Carib and Arawak populations were coming under ever increasing threat. As Drewett (1991: 1) states 'The developed nations of Portugal, Spain and Britain came face to face with prehistory, failed to see its worth and set out systematically to destroy it'. It would appear that, by the early 1620s, many of the Leeward Islands had only small populations of natives, with the only significant settlements being found on a few

islands such as St. Kitts, St. Vincent, Martinique and Dominica. By this date, the majority had either died from European illnesses, had been enslaved or had left the islands.

In 1622, Thomas Warner, from Roger North's retreating Guyana venture, visited St. Christopher and in January 1624 returned with thirteen others and the financial backing of merchants and investors from England (Greenwood and Hamber 1979: 57, Watts 1987: 142, Dyde 1993: 21, Appleby 1996: 90, Ferguson 1998: 66). In the same year, a French party, headed by Pierre D'Esnambuc, arrived having been attacked by the Spanish. Warner and D'Esnambuc, living adjacent to the 'Caribs', decided to join forces against them and successfully removed the native inhabitants in 1626 or 1627 (Watts 1987: 67, Ferguson 1998: 67).

In 1627 the French and English on St. Christopher signed a formal, though fragile, pact of alliance and St. Christopher was divided into three delimited territories: the English held the centre of the island (known to this day as Middle Island) and the French were granted the northern (known as Capesterre) and southern (Basseterre) ends. However, both nations retained rights to the valuable salt ponds at the southern end of St. Christopher. This division would last until 1713, when the Treaty of Utrecht handed the whole island to Britain (Watts 1987: 143).

In 1627, Barbados was also colonised by representatives of the English Courteen Brothers merchant company. By 1628, a small group of the St. Christopher settlers had crossed the narrow channel to Nevis and obtained the island for England (Dunn 1973: 18), appointing Antony Hilton as their Governor. It would appear that Nevis, unlike St. Christopher, was already long devoid of Caribs by this time. In 1632, the English also settled Montserrat and Antigua.

During the initial period of colonisation, the Crown, though wishing to profit from the Caribbean colonies, did not want to bankroll the precarious experiment. Therefore, although final control of the islands rested with the Crown, the day to day running of the colonies was farmed out to suitable favoured nobles (Lord-Proprietors). The proprietorships often required little involvement in the islands. Indeed, the majority of proprietors remained in Britain and oversaw the running of their islands from a distance, only taking active command when taxes and duties were not passed on to them (Dookhan 1998: 109).

Warner had been granted the position of Royal Lieutenant by Charles I in 1625, as 'founder' of what became known as the Leeward Islands (St. Kitts, Nevis, Antigua and Montserrat). With his right of tenure insecure, and the threat of the Spanish and Caribs growing, Warner tried to find a wealthy Proprietor to protect his investment and hoped to

secure the backing of the Earl of Marlborough. However, King Charles selected a court favourite, James Hay, Earl of Carlisle, to receive the office in 1627.

This gave Carlisle the authority to make laws, establish courts and collect taxes in all the Leeward Islands and Barbados (Dookhan 1998: 110). In exchange for these rights, Carlisle had to pay £100 per year, and customs duties from the islands, to the Crown. From taxes and duties the Proprietor was obliged to provide guns, ammunition and fortifications, although the extent to which this was carried out was dependent upon the interest of the individual (see Chapters 5 & 6).

Following Hay's bankruptcy and death in 1636, Francis, Lord Willoughby became Proprietor of the Leeward Islands and appointed separate Governors (usually other favoured nobles, wealthy planters or high ranking military men) for each of the islands under his control. From the late 1630s, these Governors, working with a Council and, from 1639, an Assembly on each island, controlled the Leeward Islands (Gooding 1981: 5). The Council comprised twelve men selected by the Lord-Proprietor from the most influential planters on the island. Each Council had a president, treasurer and speaker. The Assemblies were elected, by planters, from eligible freeholders and assisted the Council and Governor in their legislative and judicial tasks. This system was open to corruption and, in practice, led to a few wealthy planters producing local government policies that favoured their personal business needs (Dookhan 1998: 110).

However, during the Interregnum, the absence of a King meant that his prerogative could not exist and Lord-Proprietors could not be placed. A new system of government had to be found. Therefore from 1650, the Commission for Trade and Plantations became the administrator of the colonies, guided in this role by a Commissioner, the Earl of Warwick (Greenwood and Hamber 1979: 76). Governors, Councils and Assemblies were still present, but during this period the Commission had the final say in all legal and political administration.

The closeness of Nevis and St. Kitts, their common nationality and the presence of the French on St. Kitts meant that the English communities on the two islands became immediately reliant upon each other. They were, however, governed by separate Governors, Councils and Assemblies, whose inter-island interests were often less obvious. Therefore, from the earliest period, in spite of their similarities and mutual interests, conflicts (the echoes of which last to the present day) over taxes, the burden of defence and legislation were common (Laws 1976: 1).

2.2.4 Other European colonies

Elsewhere in the Caribbean, the other European powers were also actively colonising. In 1631, the Dutch occupied St. Maarten; in 1632, St. Eustatius (Eustatia or Statia) and in 1634, Curaçao (Haviser 2001: 64). The French, as well as holding part of St. Christopher, gained Guadeloupe and Martinique in 1635 (Dunn 1973: 19, Watts 1987: 171). With the Spanish Empire in decline, the French, English and Dutch became increasing hostile towards each other. The English and French resented the Dutch trade monopoly and also became enemies through their mutual fight to maintain ownership of St. Kitts (Appleby 1996: 94).

The European settlements of the 17th and 18th centuries created a jigsaw puzzle of different nations scattered across the Caribbean islands. In such close proximity to each other, and in competing for the same resources and their shipment, the local representatives of these countries became rivals and ultimately enemies. Throughout the period of colonisation, attacks by one European nation against another were common. In 1629, the Spanish attacked the new colonies of St. Kitts and Nevis and burnt the towns on both islands. From the 1660s, the Dutch Wars saw the French attack the English on St. Kitts on behalf of the Dutch and the embryonic colony was heavily damaged (Dunn 1973: 23). The wars of the 17th century continued into the following century, with the French successfully attacking St. Kitts and Nevis in 1706 (see Section 5.2.8). Again, plantations and crops were destroyed along with many forts and houses within the towns. In the late 1780s, the French and the English were again at war and Nevis and St. Kitts were occupied for over a year in 1782 (Hubbard 1996: 108).

The colonial settlements were expected to provide wealth for Europe and, as the mineral wealth was negligible, another source had to be found. Agriculture provided the only answer. However, even on the leeward coasts (which were clearer than the windward) the islands were heavily wooded and overgrown with tangled, rainforest flora (Watts 1987: 154). At the time of the first European settlements in the 1620s, timber was cut for buildings and for fires, creating small patches of cleared land where a few crops might be planted. In these areas the first experimental crops and food-stuffs were grown. In the English islands, the most successful of these was tobacco. In 1638, c.670,000lbs was exported from St. Kitts and Barbados (Watts 1987: 156, Appleby 1996: 95).

However, by the late 1630s, heavy taxes had been imposed and competition from Virginian tobacco caused the price of the West Indian version to plummet. Yields were also dropping in the Caribbean as the nutrient-hungry crop depleted the soil forcing the

planters to clear new land to ensure production rates. From this time, in an effort to find a more reliable crop, cotton, indigo and ginger were also grown. However, apart from cotton, these crops also proved not to be commercially viable (Watts 1987: 159).

2.2.5 Sugar

Those who had made money from cotton in the 1630s quickly turned to sugar to make their wealth (Watts 1987: 182). Importing sugar plants from South America in the early 1640s, planters on Barbados first cultivated what was to become the ubiquitous crop of the region (Ahmed and Afroz 1996: 6, Appleby 1996: 96). By the 1660s the British islands were producing sugar in earnest, and exported c.12,000 tons to England in 1669 (Dunn 1973: 203).

From the 1620s white, indentured servant labour had been used to cultivate the crops and provide the manpower for the estates. Many of these labourers were poor and had come to the Caribbean on the promise of wealth at the end of their term of indenture. Others were prisoners: either petty criminals transported to the islands or those who had taken the wrong side in the various constitutional and religious crises, which enveloped 17th century 'Britain'. The Caribbean, therefore, became a breeding ground for rebellion, particularly during the mid 17th century. On Barbados for example, in 1650, the island declared Charles II as their sovereign, resulting in the despatch of a parliamentary fleet to blockade the island. After holding out for two years the island finally surrendered to Cromwell in 1652 (Appleby 1996: 99).

To provide for the production of sugar, much new land was cleared on the islands and, when indentured white labour and native slaves proved to be too unreliable and insufficient for the task, black slaves were brought to the islands in ever increasing numbers, in the erroneous belief that they were better suited to the labour and climate (Williams 1994: 20). The presence of large numbers of unhappy black slaves and disenchanted poor people, pickpockets and fraudsters (many of whom had established themselves as merchants and planters) made the Caribbean a dangerous and lawless area. With corruption rife, and the possibility of rebellion restricting the flow of invaluable income to England, the Crown was forced to act.

The English Crown therefore took back control under the Old Representative System (Dookhan 1998: 111) and, from 1660, removed the role of the Lord-Proprietor. Instead a Governor was appointed who was responsible for legislation, the collection of taxes (after 1673 tax was set at 4½% of the exported produce) and the defence of the

islands. These defences were paid for from the tax revenues and by locally raised levies. The Governor again worked in conjunction with the local Councils and Assemblies but Crown rule now meant that the Governor, Council and Assembly bore a direct resemblance to the governing bodies of Britain. Therefore, the Governor represented, by proxy, the King; the Council represented the House of Lords and the Assembly, the House of Commons. All laws and official appointments were now under the Crown's jurisdiction, and it was the Crown that made the final decisions (Laws 1976: 1).

By 1696, a new Governing body, the Board of Trade and Plantations, was set up to administer the overseas colonies and to advise the King. Comprising eight Lords of Trade and Plantations, often planters and men with experience of the Caribbean, this body operated until 1782, when the Council for Trade and Plantations again took over the role (Greenwood and Hamber 1979: 81).

Although the legal and political system was now more organised than it had ever been, the Caribbean was still a potentially dangerous place. Alongside natural threats such as disease and hurricanes, other violent dangers faced the colonists. Murder, robbery and piracy were common in the 17th century and the victims were not restricted to the lower classes. Indeed, by 1710, two Governors of the Leeward Islands, John Johnson and Daniel Parke, had been murdered and their murderers, although known, had escaped prosecution (see Appendix B). Many others colonisers died in brawls or through excessive alcohol consumption (Dunn 1973: 306).

At first, the plantations were small but, as production methods improved and wealth increased, the more successful planters, for example the Pinney family on Nevis (Pares 1950), amalgamated smaller plantations into huge estates of several hundred slave-workers by the 18th century (Dunn 1973: 189). These same planters became the leading members of the island Councils and Assemblies and the politically powerful West India Interest commenced (Dookhan 1998: 58). As their wealth increased, many of the larger planters, preferring to flaunt their wealth and power in Britain, left the islands and appointed overseers to manage their affairs in the Caribbean.

The returning planters, and their wealth, had an enormous impact on the British economy and political system, turning slave and sugar ports like Bristol and Liverpool into fashionable, expensive resorts (Martin 1999: 15). Their wealth also enabled them to qualify for Parliament, giving them considerable political power in Europe. Some historians have convincingly claimed that the Industrial Revolution would not have been possible without the new influx of money (Williams 1994: 105).

This system of growth remained until the late 18th century, when competition from other sugar-producing areas (e.g. Cuba) and sources (e.g. beet), diminishing soil fertility in the Caribbean (Watts 1987: 287), the American Revolution, slave revolts (Martin 1999: 82) and the start of the emancipation movement (possibly, see Williams 1994: 148 for the negation of this argument) led to a drop in the West Indian sugar price (Williams 1997: 285).

2.2.6 The decline of the plantations

From the late 18th century, with an apparent foresight of the economic decline to come, many West Indian planters, typified by the Pinney family on Nevis (Pares 1950), sold up and returned their wealth to safety in England, to invest in stocks and in industry (Martin 1999: 51). By 1834 the slave trade proper had been abolished (although illegal trading through Cuba and other islands continued), and a system of 'free' labour (the Apprenticeship System) had been introduced. By 1838, full emancipation had been given by Britain although for many the realities of emancipation life on islands like Nevis, where little affordable land or free employment was available, still involved working for a planter (Fog Olwig 1995: 107, Williams 1997: 329, Ferguson 1998: 169).

From this time, the Old Representative System of Assemblies and Councils became increasingly difficult to operate, with large disenfranchised sections of the slave-descendant population becoming increasingly resentful of the powers of the enfranchised minority of white planters. This echoed the picture elsewhere in the world where other overseas colonies, such as India, were becoming less and less tolerant of their rulers' power and domination. The British Crown was faced with two possibilities: either it would have to extend the franchise to all peoples on the islands, including the ex-slaves, or it could take on full responsibility for the administration of the colonies, removing the Assembly and Council from power. In the institutionally racist world of the 19th century, the choice was inevitable: the slaves could not be given power and so Crown Colony government was introduced (Dookhan 1998: 114).

Crown Colony government involved the appointment of a Governor, selected by the British Crown. The old system of Assemblies was abolished and replaced with a part-elected, part Crown-nominated Legislative Council. The reality of the situation, although removing the biased white Assemblies, meant that the Governor and the Crown councillors would be able to rule as they wished, almost certainly in favour of the white minority. After the Morant Bay slave rebellion of 1865, Crown Colony rule was gradually

introduced across the Caribbean (Riviere 1990: 38), with Nevis having its Council and Assembly merged in 1866. By 1882, Nevis and St. Kitts had been merged together as one federal unit (Gordon 1998: 6, Hart 1998: 84).

The British West Indian sugar industry, although briefly successful in the 19th century, was in serious decline and by 1894 formed only 7% of world production (Ferguson 1998: 198). On Nevis, as on other islands, cotton production replaced sugar in the early 20th century, but even this had declined to less than 100 acres in the 1990s (Gordon 1998: 63). On other islands sugar continued to be produced until the 1930s and 1940s when many of the last surviving mills were closed. Only on a few islands, such as St. Kitts, does limited sugar production still exist (Dyde 1993: 53, Ahmed and Afroz 1996: 22).

During the first and second World Wars, in an ironic legacy of slavery, many thousands of black people from the Caribbean islands, as British citizens, served with the Allied Forces (Thompson 1997: 91). After these wars, the reconstruction of Europe led to the economic migration of hundred of thousands (c.230-280,000 between 1951 and 1961, Ferguson 1998: 253) of West Indians to Britain, to play a significant role in the cultural and economic landscape of the 20th/21st century.

2.2.7 Independence and the post-colonial period

In 1967, Nevis, St. Kitts and Anguilla became an Associated State of the United Kingdom. However, Anguilla seceded from this arrangement only three months later and on 19th September 1983, St. Kitts and Nevis, under a new Constitution, became independent from Britain (Ferguson 1998: 364). Over three hundred years of British rule had come to an end. However, Nevis still looked for greater independence and in 1998 failed marginally in an attempt to secede from its neighbour, St. Kitts (Adams 1998: 12, Gilligan 1998: 18).

Should this happen in the future, Nevis, one of the smallest territories in the world, with only c.10,000 nationals (at 1998 estimates) would have a single United Nations vote and be truly their own masters. However, such a move would force the island to rely on its own economy (in practice mainly tourism and banking, with their various advantages and disadvantages, see Chapter 7) and would potentially bring further difficulties as larger nations sought support from the island (Ferguson 1990: 26, Adams 1998: 12). The political (and financial) influence of China, Kuwait, Norway and Japan, amongst others, can already been seen in the islands. For example, Kuwait provided a US$10 million loan to fund the new Nevis airport (Warner 1999a: 9, 1999b: 9) and Norway agreed to fund a

US$20 million fish farm on the south-east of the island (Warner 1999c: 12, Gaskell 2000: 5).

In some cases, the Eastern Caribbean islands' votes have become crucial in international policy. For example, the support given to Japan and Norway, by the Eastern Caribbean, within the International Whaling Commission has led to wider criticism of the current political situation that allows large nations to control policy within the international community, through their financial support of small island states (Browne 2001: 21, Greenpeace 2001a, b).

The presence of large trans-national tourism companies (for example, the Four Seasons Group) also adds pressure on the island to conform to the 'paradise island' (Fig. 2e) idyll expected by many 'luxury bracket' tourists (Ferguson 1990: 1, Thompson 1997: 156). In an echo of the colonial past, the majority of European tourists travel to their country's previous/current territories.

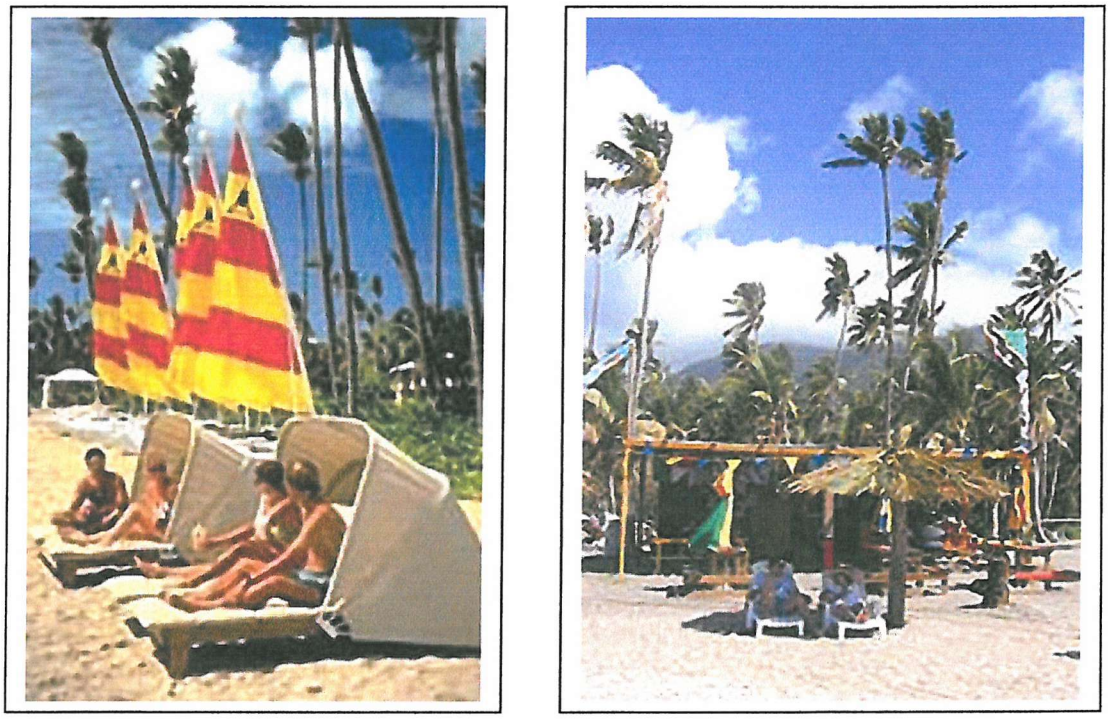

Figure 2e) Typical views of the Nevisian 'Paradise' (from www.fourseasons.com/nevis)

For example, many British travellers to St. Kitts and Nevis arrive on the British owned JMC or British Airways airlines, and stay in plantation inns mainly owned by British and North American nationals/expatriates (Ferguson 1990: 30). Indeed, a few of these plantation estates are still owned, or have been bought back, by the descendants of

the slave-owning planters (e.g. the Golden Rock Hotel and the Pinney's Montravers Estate on Nevis).

Tourism is accompanied by a heavy increase in development, particularly in coastal areas, as hotels and other facilities are constructed. This has caused the land/house prices in such areas to increase dramatically, excluding many islanders from the possibility of land purchase. The increase in population, in turn, places a strain on the already overstretched water, sewerage and electricity resources as hotels build more golf courses, swimming pools and air-conditioned accommodation. In some cases, locals have been excluded from previous common areas and beaches as hotel resorts close off areas to non-residents (Thompson 1997: 159). Many of the new developments pose a threat to the coastal prehistoric and historic period remains. Despite the work of dedicated staff within local government and historical organisations, the few restrictions on planning and development do not prevent the destruction of many archaeological sites (see Section 7.2).

Drawn to the islands by offshore investment (Thompson 1997: 164), many Britons and North Americans invest in local tourist shops, bars, restaurants and holiday homes. Many of these shops accept only American dollars (the Eastern Caribbean has its own dollar (Phills 2000: 4)) for off-island goods, causing a marginalisation of local trade. On Nevis, in response to such factors, several local co-operative societies have been formed, providing locally produced items (priced in Eastern Caribbean dollars) and ensuring a fair return to the Nevisian people.

Although the current situation is by no means equivalent to the days of European occupation, the current reliance on overseas investment and the North American and European tourist trade has forced the Caribbean to adapt, sometimes in opposition to the needs of its nationals, to the wishes of these outside groups (Ferguson 1990: 31). On St. Kitts and Nevis, the national motto, 'Country Before Self', has been used as justification for compulsory land purchase and for the large-scale tourist development of previously residential/green-field areas. For example, the proposed Pinney's Estate hotel development on Nevis (Burton 1998: 5, Warner 1998: 1, 1999d: 1, Gaskell 2000: 5, Warner 2001: 9) and the £300 million Whitegate Developments project in St. Kitts (Bacchus 1999c: 1) will involve the displacement of many locals, as their houses, villages and businesses are bulldozed to make way for the new hotels.

Although the Caribbean countries have to look towards the future and to provide for themselves in the free-market economy of the 21st century, it seems unfortunate that in conforming to the Western vision of a Caribbean tourist paradise they are in danger of losing control of their islands to Western, multi-national tourism and finance companies

(Thompson 1997: 152, Adams 1998: 12, Gaskell 2000: 5). The present reliance on North American and European finance and visitors is producing a new form of colonisation: that of tourism and economics (Boniface and Fowler 1993: 19, Ahmed and Afroz 1996: 181).

2.3 Caribbean historiography

From the earliest times of European 'discovery', the Caribbean islands have been mapped, described and interpreted. The early writers, limited by their mercantilist, racially superior views gave a mainly descriptive view of the islands from a European perspective and many of the narratives, in the form of letters, maps and accounts, are day to day and parochial. All who wrote about the islands were white and male, and all had some interest in maintaining the current system as government men or planters. At this time their social position, leisure time available for writing and even their literacy, set them apart from the majority: the voices of white women, servants, black slaves and native peoples are not present in the narratives.

The information concerning these 'invisible' people comes from descriptions and, in the case of the slaves and native people, these accounts are often inaccurate and racist. Therefore, it must not be forgotten that the currently available sources are only a small percentage of the histories of the peoples involved in the colonisation of the Caribbean. Those sources that are present are the product of selective collation and retention over several hundred years and thus are the result of many value judgements concerning the importance and usefulness of the material (Higman 1999: 29). This procedure is ongoing and many collections will be reorganised, trimmed or expanded in the future.

As a result, any study carried out in the 21st century, as in the 17th century, will be the study as at a particular time written from particular, and limited, sets of available information (Southgate 1998: 68). However, the inclusion of more 'objective' data from archaeological sources and information from oral history and local knowledge can help to balance the inequalities of the documentary resources. The current study recognises the importance of such a multilateral approach and uses many forms of information to reach its conclusions (see Chapters 5, 6 & 7).

2.3.1 The 15th-16th centuries

The earliest writings about the Caribbean date from Columbus' voyages of the late 15th/early 16th centuries. Columbus' diary and the reports by others on his expeditions (e.g.

Dr Chanca) provide the best accounts of the islands although accounts by French and British explorers, such as Sir Francis Drake, John Hawkins and René Goulaine de Laudonnière, provide interesting descriptions of the islands and the native Caribbean peoples in the late 16th century (Hulme and Whitehead 1992: 45).

The reports suggest a purely economic use of the islands with few permanent settlements beyond the Spanish Greater Antilles. Because the Leeward Islands and Nevis were not occupied until the 1620s these early sources provide little information relevant to the purposes of this study.

2.3.2 The 17th-18th centuries

Apart from the Spanish, writings by other Europeans are scarce until the period of English, Dutch and French colonisation in the early 17th century. The writings of this period are mainly official documents and the writings of planters. Compared to the later periods they are few in number and often comprise isolated letters, which have little usable information. The earliest Caribbean colonies were, in effect, frontier towns and, without established legal, administrative and defensive bodies, appear to have produced little bureaucratic paperwork.

However, from the mid to late 17th century, when the Crown took control of the colonies, the quantity, and quality, of the documents increases dramatically. The presence of consecutive letters, reports, maps and plans sent back and forwards across the Atlantic allows an historical framework to be developed within the region from this date. Within the documents the character of the letter writer often becomes visible and the negotiations, petty squabbles, boasts and pleas of the letter writers provide a wealth of information for the social historian.

From the late 17th century, with some fifty years of occupation behind the colonisers, the first histories of the Caribbean were written. These histories ignored all activity prior to European discovery. Although maybe about twenty (Dunn 1973: 24) such histories once existed, only a few now survive in the British Library. For example, Jean Baptiste du Tertre's '*Histoire générale des Antilles habités par les Francais*' published in 1671, and John Davies' '*History of the Caribby Islands*', produced in 1666.

Again, these writings were based either on official reports, hearsay or personal experience. They were written not just as histories, but also as mission statements, which proved the supremacy of the nation involved. As Higman (1999: 49) states: 'In the 17th and 18th centuries they [history writers] were generally members of the planter class, slave

owners with a direct interest in the expansion and maintenance of the plantation economy'. The native peoples were described but the racist overtones of such descriptions make comparison and interpretation problematic. The slaves received even less attention and appeared mainly as names (not even their own, but those given by planters) on lists of belongings.

At this time 'Britain' was undergoing a period of scientific development and discovery. The opening of the world through trade and travel had provided many examples of unknown peoples, lands, flora and fauna. Developments in navigation, cartography, ship-building and astronomy were essential to this travel and various crucial innovations, such as the first accurate measurements of longitude, the navigational tool so essential to overseas trade, occurred at this date (Jardine 2000: 134).

The colonisers, faced with this new world of discovery, set about describing, interpreting and cataloguing what they found. The foundation of the Royal Society in 1660 brought many of these 'scientists' together. In 1665 the Royal Society published the first scientific journal, '*Philosophical Transactions*', which documented the discoveries of these men. Others, such as John Tradescant and his son, preferred to make collections of interesting 'curiosities' (Jardine 2000: 253).

By the beginning of the 18th century, with the 'scientific revolution' (Jardine 2000: 7) in full swing, many writers attempted to scientifically describe the flora and fauna present, the diseases prevalent and the environment and climate of the islands. For example, Dr. Hans Sloane, a Royal Society fellow, published his illustrated '*A voyage to the islands Madeira, Barbados, Nieves, St. Christopher's and Jamaica with the natural history of the herbs and trees, four footed beasts, fishes, birds, insects, reptiles, etc*' in 1707.

By the late 18th century, the number of historical writings had increased dramatically, mimicking the upsurge in antiquarian and imperial interest present in Europe. The theme of scientific writing continued, for example James Rymer's '*An description of the island of Nevis with an account of its principal diseases*' was produced in 1775 but, alongside such volumes, a new breed of historical writing was developing. The first large scale 'comprehensive' histories appear in the late 18th century. Writers such as Edward Long, whose '*History of Jamaica*' was published in 1774, and Bryan Edwards, whose '*History, civil and commercial of the British Colonies in the West Indies*' was published in 1793, produced detailed histories of the Caribbean Islands from a plantation perspective.

At this time, with increasing suspicion of the agents of the West India Interest, and calls for slave emancipation becoming recognised, these histories were the final attempts of the planters to exert their authority and, through history, to assert their claims for plantation status quo. These histories became justifications of a system in decline. They were inherently racist in tone (Thompson 1997: 188) and, in Long's own words, described the Afro-Caribbean slaves as 'distinguished from the rest of mankind...in possessing... every species of inherent turpitude' (Williams 1972: 25).

However, at the same time, the contemporary writings of slaves and the British anti-slavers, which promoted the similarities in mankind, were gaining influence. In 1789, Olaudah Equiano published his autobiography '*The Interesting Narrative of the Life of Olaudah Equiano, or Gustavus Vassa, The African, Written by Himself*' (Sollors 2001: 19). Working closely with other abolitionists, such as Thomas Clarkson, Equiano and his autobiography deeply affected many British people's attitudes to slavery and boosted the anti-slavery movement.

Writers such as Adam Smith in his '*The Wealth of Nations*' published in 1776 had even questioned the role of the British colonies, going so far as to suggest that independence was appropriate for the Caribbean islands. In this model, free trade would be applied and as Smith states, such a system would be '...more advantageous to the great body of the people, though less so to the merchants' (Williams 1972: 19). Those merchants were people like Long and Edwards and their histories were an attempt to resist the groundswell of anti-slavery writing.

As the Caribbean colonies became established and more settled, in the late 18th century, diplomatic visits and pleasure trips became common. These travellers documented their visits in journals and diaries. In many cases the diarists were female: the wives, daughters and sisters accompanying the officials and planters on their travels on the Caribbean 'Grand Tour'. For example, '*Lady Nugent's Diary, Her Life in Jamaica 1801-5*' (Cundall 1939) and Lady Linton's '*West Indian Journal*' published in 1801, give good descriptions of their visits with accounts of the towns and even, in Lady Linton's case, the fortifications seen.

2.3.3 The 19th and early 20th centuries

The Victorian period marked the zenith of the British Empire, which at this time included territories in Africa, Australia, India, Canada, the Far East and the Caribbean. The history writers of the period wrote justifications of this empire and detailed the unquestionable

superiority of the British. As Southgate (1998: 100) remarks, the history of the Caribbean at this date was 'written by spokespeople of imperial powers'.

In 1860, the '*Calendar of State Papers, Colonial Series: America and the West Indies*', edited by W. Nöel Sainsbury, was produced and provided access to the numerous official documents held in Britain. These volumes, which cover the early 17th to mid 18th century, contained limited précis of historic documents. As such they became useful for standard histories of the area, allowing the white, English/British official histories to be widely produced and circulated.

From the late 19th century, with these documents now readily available, the production of Empire-supporting, pro-slavery histories based solely upon colonial documents became common (Williams 1972: 166). For example, James Rodway and Thomas Watt published '*A Chronological History of the Discovery and Settlement of Guiana*'. This work was an echo of Sainsbury's '*Calendar of State Papers*' and compiled a number of state papers and other miscellaneous sources (Higman 1999: 53).

In America, the development of the University system and the 'adoption of the PhD as the prime symbol of certification' (Higman 1999: 66) led to papers and dissertations being produced on the West Indies and their history and environment. For example, Frank Strong produced a dissertation on '*Cromwell's Colonial and Foreign Policy*' at Yale in 1897 (Higman 1999: 67). These works all started from an acceptance of Empire and utilised solely white colonial sources for their evidence. In Britain, writers such as Vere Langford Oliver, whose journal '*Caribbeana*' was published from 1910, dwelt only on the white plantation ancestry, reproducing a series of primary sources and other white orientated legacies, such as transcripts of grave-stones and wills, to support their ideas of West Indian history.

However, in the late 19th/early 20th centuries, the first published black history writers appeared. Authors such as John Jacob Thomas who produced '*Froudacity*' in 1888, and Theophilus Samuel Scholes who published '*Glimpses of the ages or the 'Superior' and 'Inferior' races, so-called, discussed in the light of science and history*' between 1905 and 1908, took apart the myths of black 'inferiority' that had previously been unquestionable to late 18th century writers such as Bryan Edwards and Edward Long (Higman 1999: 58). However, racist views continued to be acceptable to a new generation of followers such as James Antony Froude who published '*The English in the West Indies*' in 1888 (Williams 1972: 175).

2.3.4 The 20th century

By the beginning of the 20th century, the unquestioned acceptance of Empire was failing. In India, Mahatma Gandhi's independence movement of the 1920s and 1930s would show that resistance was possible, and could even have a successful conclusion. In the Caribbean, the decline of the sugar trade, and the economic recession caused by the Wall Street Crash of 1929, led to an increasing sense of unrest. In this atmosphere, a growing pressure for reform developed.

During the first quarter of the 20th century, black writers, thinkers and intellectuals such as Marcus Garvey, Theophilus Albert Marryshow (who co-founded the '*The West Indian*' newspaper in 1915) and Norman Eustace Cameron (who published '*The Evolution of the Negro*' in 1929 and 1934) promoted the history of the Afro-Caribbean peoples and attempted to balance the white Eurocentric histories of the previous three hundred years. Their task was great, as imperial justification maintained a stranglehold on European and American historical writings. In Britain, more academics than ever chose West Indian history as their theme. Unfortunately, works by authors such as C. S. S. Higham, who produced '*The Development of the Leeward Islands under the Restoration 1660-1678*' in 1921, and V. T. C. Harlow, who published the '*History of Barbados 1625-1685*' in 1926, although relying heavily on primary sources, maintained the supremacy of the white Europeans in the Caribbean and concentrated solely on white, male, colonial histories.

Between the World Wars, with Europe and America in economic recession, much white writing began to concentrate on the evils of slavery, for example, H.A.L. Fisher, who published '*A History of Europe*' in 1935 and Arnold Toynbee's '*A Study of History*'. However, these writings, although acknowledging the horrors of slavery, saw the role of the white Briton as virtuous liberator and educator, bringing the corrective influences of Christianity to the slaves and their descendants (Williams 1972: 195). The presence of a thriving commercial, religious and cultural society in pre-slavery Africa was ignored. The role of the slaves and their descendants in their history and liberation was also sidelined, as the activities of Wilberforce and other British emancipationists took centre stage (Higman 1999: 84).

In 1944, probably the most famous/infamous volume on Caribbean history was published. Written entirely from a West Indian perspective, Eric Williams' '*Capitalism and Slavery*' offered an alternative view of slavery and its decline. Williams had been born in Trinidad and had won a scholarship to Oxford in 1931: '*Capitalism and Slavery*' was an expanded version of his doctoral thesis (Higman 1999: 93). Williams had tried to

find a publisher for '*Capitalism and Slavery*' in Britain but had been unsuccessful, the substance of his work being unpopular with the received British interpretation of Caribbean history. Williams (1972: 210) saw 'abolition as the logical outcome of an economic development which, having outgrown its foundations, abolished the very system of slavery which had given it its head start over the world': a view unpopular with many British scholars, who wished to retain Britain's historical role as the liberator of the slaves.

However, in 1944, the University of North Carolina finally published the work. It was received well in America but had an unfavourable reception on the other side of the Atlantic and was not published in Britain until 1964 (Williams 1972: 210). Returning to Trinidad in 1948, Williams continued to fight for autonomy, becoming the first premier of the newly independent Trinidad and Tobago in 1962. Despite this work, and others of a West Indian perspective such as that of C.L.R. James, who published '*The Black Jacobins*' in 1938, works such as G.R. Mellor's '*British Imperial Trusteeship*' and Frank Tannenbaum's '*Slave and Citizen, The Negro in the Americas*' published in 1947, still defended the British historical claim for supremacy, and saw slavery as a necessary progression on the road to black 'civilisation' (Williams 1972: 230).

In 1948, the University of the West Indies was established. In a further colonial legacy, its first Professor of History was an Englishman and, even by the 1950s, very few West Indian nationals were present in the University (Higman 1999: 98). However, from the late 1950s, more and more West Indians joined the staff. Their writings were essentially West Indian in perspective. Writings such as Elsa Vesta Goveia's '*Slave Society in the British Leeward Islands*' which was published in 1965, Douglas Hall's '*Free Jamaica 1838-1865*', published in 1959, and Eric Williams' '*From Columbus to Castro: The History of the Caribbean 1492-1969*', published in 1969, laid a firm foundation for West Indian history from a Caribbean standpoint. However, there continued to be a heavy influx of North American and British lecturers within the organisation and postgraduate historical research continued to be unavailable at the University, forcing students who wished to continue their studies to travel to Britain and North America (Higman 1999: 107).

From the 1960s onwards, academia began to realise that many apparently distinct academic disciplines were closely related and theoretical models utilising a multidisciplinary approach and range of techniques became common. This change in approach deeply affected the study of history, and led to works that encompassed the methodologies of psychology, philosophy, anthropology, archaeology and sociology (Southgate 1998: 4).

Many books and journals now became filled with papers relating to the social history and anthropology of the Caribbean colonies, often with reference to slavery. For example, Richard Dunn's '*Sugar and Slaves: The Rise of the Planter Class in the English West Indies, 1624-1713*', published in 1973, drew together many strands of historical information which shed light on the lives of the slaves, as well as the planters, in the 17th century colonies.

By the 1990s, the growing recognition and re-evaluation of the role of Empire by authors such as Edward Said (1994: xi) brought the topic of colonial history to the forefront. History was now studied with reference to perspectives and included the political, economic, gender and cultural background of the academic writer (Higman 1999: 25). As Southgate (1998: 106) states, '...a change in perspective results in a new perception, which in turn opens the way to new interpretations and narratives'.

The range of sources utilized widened to include oral histories (Ball 1999, Williams 1999), songs, fiction (Said 1994) and poetry in an attempt to build up more inclusive studies of the period. With this increasing pluralism came an inherent specialisation as academics struggled to manage the mass of information within their chosen studies. Large-scale histories became impractical and authors more and more concentrated on specific topics (Southgate 1998: 87, Higman 1999: 122), thin slices of information that could be put together to make the whole. This is the picture at the time of this study, where over 100 journals (author's estimate) publishing colonial period research from all over the world can be identified. Such journals cover all aspects of colonial history and include articles on topics ranging from women in the Caribbean (Beckles 1999: 1, Shepherd 1999: 1, Bush 2001: 147, Cleland 2001: 231) through to studies of disease in the slavery period (Watts 2001: 955).

Many writers and academics now recognize the need to study history inclusively to involve the narratives of the 'invisible' Caribbean peoples so often ignored during the colonial period. However, history alone, with its reliance on documents, is insufficient for the task. Another discipline that can provide relevant information is that of archaeology.

Archaeology can help to relocate these 'invisible' people through the artefacts and structures they left behind. In conjunction with historical information, archaeology can assist with the production of less-biased perspectives on Caribbean history, to include the histories of all peoples of the Caribbean, whether black or white, male or female, slave or soldier. The discipline of historical archaeology was developed from this realisation, and the following chapter (Chapter 3) examines the history of this distinct discipline and its relevance to the study in question.

3 Archaeology and the historic period in North America and the Caribbean.

'The acquisition of knowledge is presented as the prerogative of all humankind, yet in most cases the powerful nations are the subjects of knowledge, while the rest of the world is rendered as object'

R. Layton, P.G. Stone and J. Thomas: 'The Destruction and Conservation of Cultural Property', 2001: p.1

3.1 Historical and post-medieval archaeology

3.1.1 Background

Archaeologists have been excavating sites associated with historical events or figures for many years. In the early period, interest almost entirely centred on colonial remains in countries such as North America, Australia, the Caribbean and Africa. Initially, historical archaeologists examined sites documented in white history with many plantation homes, sites of first settlement and military establishments being explored.

In this formative period, historical archaeology was disparagingly termed 'tin-can archaeology' (Harrington 1994: 5). The discipline was not recognised by many archaeologists and was often carried out with the aim of reconstructing buildings of interest to the white community (Deagan 1996: 20). However, even at this early stage, there were exceptions. For example, the Bullens examined the home of a freed slave, Lucy Foster, who had lived in Andover, Massachusetts at the beginning of the 19th century (Orser and Fagan 1995: 28).

By the 1940s archaeologists started to develop less narrow forms of investigation and attempted to synthesize the artefacts and findings of the excavations into broader interpretations (Harrington 1994: 10). In historical archaeology, this period was marked by a move away from traditional reconstruction-led excavations with many new types of site now investigated including native, slave and shipwreck sites (Deagan 1996: 20).

By 1960, developments within archaeology led to new theoretical approaches being applied within the field. By this date, historical archaeology as a discipline was gaining credence and by 1970 the Society for Historical Archaeology, the Society for Post-Medieval Archaeology and the Australian Society for Historical Archaeology had been founded (Schuyler 1999: 10).

In America, the close links between archaeology and anthropology, led to increasingly anthropological approaches being applied (Johnson 1999a: 28). This culminated in the New Archaeology of the mid 1960s, which was swiftly taken up by

historical archaeologists. This new approach stressed the importance of the adaptation of past cultures to environments and an understanding of the processes that formed the daily lives of peoples in antiquity (Orser and Fagan 1995: 33).

At this time, the growing Civil Rights Movement in America encouraged archaeologists to examine sites of African American interest, led by pioneering work at the Kingsley plantation in Florida (Ferguson 1992: xxxvi). The excavation of such sites finally acknowledged the role of Afro-Americans within American history and set a precedent for inclusive forms of archaeological research across the post-colonial world. As Ferguson (1992: xxxviii) states, in excavating the Kingsley Plantation site the excavator Charles Fairbanks 'was not bowing to professional pressure... for a new and more objective archaeology; he was addressing black demands for more attentiveness to black history'. Further afield in Africa and Australia, studies of other colonial period sites not solely associated with the white man were also carried out (de Corse 2001: 4).

3.1.2 Historic period archaeology in Europe

In Europe, and particularly in Britain, the archaeology of the historic period had traditionally been referred to as post-medieval and comprised the period from 1450-1750 (Schuyler 1999: 10). In practice, up to the 1990s, it was not usually considered to be a valid study area. Often collectors and enthusiastic amateurs had driven the field, leading to an emphasis on data collection and publication rather than on more broad academic interpretation (Johnson 1999b: 17). The detailed work of this period was carried out mainly by industrial or military specialists who examined steam engines, mills, forts and battlefields of the historic period (Hudson 1963: 11, Harrington 1992: 5).

By the 1970s, the rapid increase in urban rescue digs led to more and more post-medieval sites being recorded and interpreted. However, beyond the urban areas, on many British excavations the post-medieval remains were often swiftly drawn and removed so that the prized medieval/Roman/prehistoric remains could be examined at length (Courtney 1999: 5, O'Sullivan 1999: 34).

By the 1990s the picture had changed. New building techniques and restricted development practices led to a reduction in rescue archaeology (Courtney 1999: 7). With this change, many post-medievalists employed within the urban centres found there was less work, with many moving to specialise in other periods. However, at this time, the growing acknowledgement of Britain's role in slavery and colonial history led an

increasing number of British academics to study the period, with many travelling to overseas 'colonial' countries to excavate.

3.1.3 Definitions

From the 1970s, historical archaeology became engulfed in theoretical arguments over the exact definition and scope of the subject (Deagan 1996: 21). Some argued that historical archaeology was '...the archaeology of the spread of European Culture throughout the world since the 15th century and its impact on indigenous peoples' (Deetz 1977: 5), others saw it variously as '...the archaeological study of people documented in recent history' (Orser and Fagan 1995: 5), '...the study of the material remains from any historic period' (Schuyler 1970: 83) or as a '...combination of historical and archaeological materials in the study of the past' (Orser and Fagan 1995: 8). Recently, it has also been seen as a study of 'the modern world' (Hall 2000: 1): an academic mix of evidence that gives an understanding of the past in the present.

In the early period, many of the practitioners of historical archaeology produced '...tabular lists of artefact frequencies...they measured the rate at which slaves picked up European traits, and they used artefacts to demonstrate the obvious difference in status of slaves and their owners' (Ferguson 1992: xl). These methods often produced dry, unreadable site reports of quantifications, which, as Ferguson (1992: xl) states, were of '...little anthropological or historical interest'.

This approach still has a certain currency. However, other academics, such as Martin Hall (2000: 10), have tried to take a more pluralist view of the discipline which '...links together a complex network of sources and connects the present with the past'. Such sources include a variety of materials, with documents, oral histories, archaeology, the Internet, literature and film all having a role in Hall's method of historical and archaeological research. In addition, Hall's approach has been to compare and contrast areas of colonial influence, with both the Dutch Cape in South Africa and the Chesapeake of the USA receiving attention as areas united by their colonial histories.

Such wide-ranging approaches are not unusual in modern historical archaeology. The discipline now encompasses a variety of linked sub-fields including text-aided (Little 1992) and documentary archaeology (Beaudry 1993), alongside Marxian (Leone 1984: 25), capitalist (Leone and Potter 1994: 14, Johnson 1996) and feminist archaeologies (Seifert 1991: 82), amongst others. These disciplines have been carried out in Africa,

Australia, and America and in many other areas of the post-colonial world (for example, Connah 1988: 1, Wesler 1998: 2).

As a result of this variety, a widely recognised description of the discipline has yet to be established (Wesler 1998: 2). Writers such as Orser and Fagan (1995: 14) have attempted the task, although the result is not wholly satisfying. They describe historical archaeology as '...a multidisciplinary field that shares a special relationship with the formal disciplines of anthropology and history, focuses its attention on the post-prehistoric past, and seeks to understand the global nature of life'.

This definition is fraught with problems. It is inexact and 'catch-all' in concept and does not acknowledge the role of archaeology as a core study area within the discipline. The precise definition of 'post-prehistoric' is also open to question, particularly in areas such as Australia, Africa, the Caribbean and North America where 'prehistoric' communities interacted with, and were documented by, European 'post-prehistoric' communities. As such, historical archaeology is still a discipline coming to terms with its boundaries.

3.2 Military & battlefield archaeology

A further recent development within historical archaeology has been the sub-discipline of battlefield archaeology. In general much of this discipline has its roots in the American archaeological tradition, with the Little Big Horn site being the most famous example (Fox 1993, Freeman 2001: 2). This discipline aims to study battlefields through examination of the landscape and through archaeological evidence present at these sites, in addition to the more typically militarily orientated approaches of standard military history (Freeman 2001: 1).

Recently this discipline has become more common outside North America, with a number of battlefields being examined archaeologically in Australia and Africa (Freeman 2001, Doyle and Bennett 2002). However, in Britain, this academic discipline has yet to receive recognition from the wider archaeological community and statutory authorities and in recent years several British battlefields have been threatened with development (Freeman 2001: 5, Pollard and Oliver 2002: 10).

Furthermore, although the study of battlefields is becoming more prevalent, much military archaeology beyond the field of battle tends to concentrate on sites associated with more recent military activity: the Defence of Britain Project (Anderton 2001: 265) and other similar projects in Australia and North America (Starbuck 1999: 196) examining

later 18th, 19th and 20th century military remains. Scant attention has yet been paid to the examination of earlier artillery fortifications.

However, a few of the studied battlefield sites happen to coincide with the locations of forts and these have been analysed as an adjunct to the battlefield examination (Ivey 2001: 128, Pollard 2001: 233). In addition, earlier period castles are now being examined with reference to their civilian *and* military roles (Johnson 2002). However, full-scale archaeological and socio-historical examinations of 17th and 18th century artillery defences and their relationship to the people and events of their day have yet to be achieved (Johnson 1999a: 156).

3.3 Archaeologists abroad

British and North American archaeologists have carried out the majority of historical archaeological work in the colonial world. Many of them are white, and only a few have any cultural background in the areas they are studying. In areas with multi-ethnic communities and a history of racial tension, such as the Caribbean, the presence of yet more whites interpreting local histories can cause great animosity within communities. This can appear to be a new form of academic colonialism, which has '...explicitly or implicitly reflected, expressed and consolidated the ideas and ideals...of imperialism' (Southgate 1998: 101).

In such countries, the core territories of the historical archaeologist, nomenclature has become problematic as Europeans use post-medieval archaeological methods to study American and African sites and Americans use historical archaeological methods to examine European sites (Johnson 1999a: 28). This highlights the problem of having the two separate approaches to the discipline (Johnson 1999b: 17).

This has forced the field of historical archaeology to create broader definitions to encompass ideas and periods never intended to be included in the original discipline, as typified by Orser and Fagan's 'catch-all' definition cited above (1995: 14). This broadening of scope has included almost every conceivable aspect of world history and prehistory since the date that Europeans started travelling the globe. In turn, this realisation has made the term 'historical' archaeology inappropriate as more and more 'prehistoric' peoples of a historic date are examined through artefacts and non-documentary materials.

The recent inclusion of oral history as a valid form of historical documentation (Higman 1999: 25) has also highlighted the inaccuracies of the term 'prehistoric' as it is

now possible for a group of people who had no writing nor were ever written about to be examined by a historian. As Thompson (1997: 18) states, the '...merit of such a division [into history and prehistory] is dubious'. In addition, the use of the word 'historical' suggests a Eurocentric bias towards the writing cultures of the Eastern Atlantic seaboard. As Thompson (1997: 18) says, the '...view of non-European peoples...as being outside the realms of real history, was strengthened by the European division of human endeavour and activity into pre-history and history'.

3.4 Colonial legacies

All too often in historical archaeology and post-medieval archaeology, in the tradition of the divisiveness mentioned above, the past has been separated from the present. In an area such as the Caribbean, and indeed in the related nations of Europe, North America and Africa, the repercussions of colonialism have far-reaching consequences for the present day. At the most fundamental level, for example, the Caribbean would not be almost totally populated by black nationals, had it not been for the slaves' transportation there by white Europeans. The legacy of colonialism and slavery, and its resonances in the cultural, economic and political landscape of the modern world, cannot, and should not, be ignored (Thompson 1997: xiii).

This legacy has recently come to the surface in international politics. In September 2001, the United Nations Conference on Racism was held in Durban, South Africa. At this conference, the nations of Africa and the Caribbean requested an apology for the slave trade from the European nations and America. Thabo Mbeki, President of South Africa, argued for '...recognition that slavery and colonialism were the cause of poverty and under development which in turn contributed to racism' (McGreal 2001a: 16). Some of the nations also requested that Europe and America should contribute financial compensation to Africa and the Caribbean (Mack 2001: 42).

However, even though eleven European nations backed the apology request, in an echo of former times, the four nations most closely associated with historic slavery: Britain, the Netherlands, Spain and Portugal refused to apologise. America, by this stage, had withdrawn its representative (McGreal 2001b: 2).

The Durban conference clearly showed that the legacy of colonialism has a very real relevance to many people in the 21st century. This relevance is not just confined to the peoples of Africa and the Caribbean: by blocking such moves for apology, the nations of Europe and America showed themselves to be affected by their histories. When history no

longer has relevance in the present, then there is no point in protesting against it. As a newspaper editorial (McGreal 2001c: 15) commented '...the slave trade was the start of centuries of abuse...by the west which did not end with slavery or colonialism'.

3.5 Historical archaeology in North America and the Caribbean

Within this background of colonial memory, much historical archaeology has been carried out by outsiders working on the remains of cultures other than their own. Sometimes the academic works of these individuals make uncomfortable reading, as the local populations appear sidelined. Indeed, in some cases, the missionary zeal of the 19th/20th centuries can be detected.

For instance, Charles Orser (1996b: 13), in his standard textbook '*Images from the Recent Past: Readings in Historical Archaeology*' states that '...historical archaeologists living in one country, by virtue of their experience and knowledge, have much to teach those living in other countries'. Closer examination of the words used by Orser sheds light on the preconceptions and standpoints that appear to be taken for granted.

The historical archaeologists mentioned by Orser, in practice, generally originate from Britain and North America, and thus it is British and American ideals of 'experience and knowledge' that are stated as a 'virtue'. In no part of the statement, does Orser consider that such 'teaching' may not be appropriate for, or indeed wanted by, those in the 'other countries'. Indeed, in direct contradiction to Orser's statement, other writers have suggested that '...western archaeologists have much to learn from a dialogue with other traditions of understanding' (Layton et al. 2001: 17)

However, despite this, the colonial attitude is prevalent in many historical archaeological projects and writings. In very few cases do the writers consider the appropriateness of their studies, preferring instead to remain 'scientific' and 'objective'. Few consider the relationship between the sites, the history and the local population. They often visit for a season or two and then vanish back to their universities. As Crick (1995: 212) states, they are archaeological 'tourists'.

Presently, archaeological and historical research in the Caribbean and North America tends to follow this trend, centring on historically isolated plantation, military and native sites (Pulsipher and Goodwin 1982: 21, Armstrong 1985: 261, 1991: 431). Prior to 1980, most research was carried out on plantation estates and fort sites intrinsically connected with Europeans *or* slaves and the archaeologists involved appear to

have regarded the sites '...as laboratories for studying racially separated cultures' (Ferguson 1992: xliii).

Since this time, slowly increasing amounts of work have been carried out on the connected slave, European and native environments, with many slave occupation areas being targeted for research. For example, Leland Ferguson's work in South Carolina (1992: 7), Gerald Schroedl's work on the slaves and soldiers at Brimstone Hill (Schroedl and Ahlman 2002: 38) and Douglas Armstrong's work at Drax Hall, Jamaica (1985: 261, 1991: 431) have provided an integrated account of plantation life. However, military sites are in many cases yet to receive the same treatment (Watters 2001: 89).

3.6 Military history and archaeology in the Caribbean

The number of research projects carried out on Caribbean fortifications is very small and comprises mostly historical and structural studies of the larger Caribbean forts (Crandall and Dyde 1989, Clement and Eubanks 1991, Smith 1994, 1995, Jessamy 1998). Only in Bermuda (Harris 1997), which is not part of the Caribbean, and St. Kitts (Ahlman 1997, Klippel and Schroedl 1999, Schroedl 2000a, b) has detailed archaeological work been carried out on European colonial fortifications.

With notable exceptions, such as Schroedl's ongoing work on the slave dwellings at Brimstone Hill and the re-use of Fort Charles, St. Kitts as a leper colony (Ahlman 1997: 1, Klippel and Schroedl 1999: 222, Schroedl 2000a: 2, 2000b: 3), the study of military sites has been carried out in the 'tabular lists' (Ferguson 1992: xl) tradition, with little attention paid to past and present socio-historical concerns. Cannon have been counted and walls drawn. These have been compared with historical descriptions and matched with battles, at which known European heroes were present.

The inscription in the preface to a recent work by Crandall on Montserrat's military history and archaeology proves the point: 'Dedicated to the British Governors who provided leadership in the defence of Montserrat from 1632 to 1815 and the Montserrat militia and regular British troops who bravely defended the island' (2000: v). Throughout the volume, apart from one mention of a slave revolt in the late 1700s, the slaves who built the forts and those who served in the West India Regiment are not mentioned. This picture is typical. As Buckley (1979: vii) states, '...the broad question of war and slavery has elicited comparatively little response from historians'.

As well as ignoring the slave populations who constructed, and sometimes fought at, the forts, the rank and file soldiers, who in many cases appear to have been treated

extremely badly, have also remained unexamined. As studies such as Crandall's (2000: xxiv) of Montserrat's military history so clearly show, the majority of work has concentrated on the military achievements of famous Governors, Generals and Admirals, rather than looking at the men who actually fought and won or lost the battles.

Although the 'counting cannon and Generals' approach has validity within military studies, the absence of other forms of broad academic enquiry is to be regretted. In many studies, no concerted attempt has been made to examine the sociological impact of the military, and their structures, on the surrounding communities in the past, let alone their continued impression on the present day population.

Except in a few cases, the role of fortification structures as markers of English/British oppression in the past and the present remains to be studied. Indeed, a leading writer (Hughes 1991: 8) in military architecture has even gone so far as to refer to permanent fortifications as being '...in essence non-aggressive and unprovocative'. This was perhaps not a view shared by the slaves and native peoples in Caribbean history. In the present, such forts still provoke reaction. For example, Brimstone Hill Fort on St. Kitts has for much of the past been venerated solely as a magnificent work of military achievement: 'The Gibraltar of the West Indies' (Hamblin 2000: 2). It has only recently received comparable recognition as a monument to the toil of its slave builders, many of whose lives were lost in the process. As the recent, successful, nomination for World Heritage Site status suggests '...it is a memorial to slavery' (Armony 2000: 21).

For many Kittitians and Nevisians, Brimstone Hill (and other colonial sites) are not just about architecture, artefacts and academic study: they are often symbols of their ancestors' lives, their present identity and their role in the history and development of the Caribbean, to the present day (Bacchus 1999a, 1999b: 21). Sites such as Brimstone Hill often provoke deep-seated memories and feelings concerning the treatment of the slaves in the past. In a speech at the inscription ceremony for Brimstone Hill the Education Minister for St. Kitts and Nevis, Timothy Harris stated: 'I would be failing in my duty if I did not pay special attention to those heroes and kinsmen who with their bare hands...produced a world class structure that now ranks among the best monuments in the world' (Bacchus 2000a: 2).

However, often disregarding the local response, much military and plantation work in the Caribbean (both historical and archaeological) has been carried out according to 'top down' principles and has confined itself to very narrow areas of investigation (i.e. forts or plantations, slaves or Europeans) without reference to local feeling or knowledge. Inclusive studies of past and present, formed through a variety of local and non-local

information types, as proposed by academics such as Martin Hall (2000: 1), have yet, in the majority of cases, to be written.

3.7 Archaeology on Nevis

Archaeology on Nevis appears to have commenced in the mid to late 1980s, following the formation of the Nevis Historical and Conservation Society in 1980 (Watters 2001: 87). By 1983, the Society had restored the house where Alexander Hamilton, the first Secretary of the Treasury in the newly independent United States of America, had been born, and established a museum within the building. By 1992, a second museum had been built to accommodate a large collection of Admiral Horatio Nelson memorabilia: Nelson had been posted to the island in the late 18th century and had married the daughter of a Nevisian planter. In keeping with many Caribbean museums, both Nevisian museums celebrated the contribution of white men intrinsically linked to the slave and sugar trades.

However, in 1985, a local museum attendant/archivist was hired to organise the Society's large collection of photos, documents and maps (Manners 2000: 2). The organisation of the collection allowed local students and school children to use the archive, thus making the museums more interactive and useful to the local community (Hubbard and Robinson 2001).

Alongside the museum collections, the Society acted as a facilitator for outside archaeological groups to come and work on the island and in October 1984 the first professional excavations were carried out by Dr. Sam Wilson of the University of Texas, on the archaeology of the prehistoric settlements on the island (Wilson 1989: 427). From the mid-1980s, members of the, mainly expatriate, Nevis Historical and Conservation Society, carried out various small-scale excavations and rescue digs on the island. In 1983, erosion at Fort Charles and at Indian Castle Fort severely threatened the cannon at the forts, and these were pushed inland at Fort Charles, those at Indian Castle being moved by Royal Naval helicopter to within the confines of Fort Charles (Hubbard 2000). Continuing the trend of earlier amateur digs, from 1995, the landowners of Codrington's fort to the north of the island carried out a series of volunteer excavations before completely reconstructing the fort.

By the mid-1990s, mirroring the worldwide interest in colonial archaeology, Nevis became a common venue for archaeological research (Watters 2001: 87). From 1993, archaeologists from the Universities of Boston and Minnesota carried out research on the Jewish cemetery and possible synagogue at Charlestown (Terrell 1994a: 13, 1994b: 4). In

1994, an ongoing project run by the Earthwatch organisation was initiated at the sugar works of Coconut Walk/New River on the west side of the island. In 1997, a team from Michigan University examined the historic Port St. George at Indian Castle (Manners 2000: 2). In 1998, the British television programme, 'Time Team', visited Nevis and excavated sites at Coconut Walk, Montravers Estate and Jamestown (Taylor 1999: 89).

In 1995, the Nevis Heritage Project began research on Nevis (Morris et al. 1999: 194) and by 1999, research themes within the project included plantations, forts and prehistory with members of the team present on the island for at least two months each year. This pattern continues at the time of writing this study (Morris et al. 2001). However, all members of the team, the author included, are white and none are Caribbean nationals. All are based in Britain.

The Nevis Heritage Project is not alone. Much of the work on the archaeology of the Caribbean has been, and continues to be, carried out by nationals of those same old colonial masters, Britain, the Netherlands, France and North America (Haviser 2001: 77). Nevis is no exception to this rule and over the past five years, the Nevis Heritage Project (UK), Elderhostel and Caribbean Volunteer Expeditions (USA), Time Team (UK), Earthwatch (USA & UK) and numerous academics and students (the author included) from the Universities of Texas, Bristol, Southampton, Brandeis, Michigan, Boston and Minnesota (Slayman 1996: 79, Manners 2000: 2) have undertaken fieldwork or research on Nevis.

The majority of the people involved are white and most come to the islands with North American and British ideals of archaeological investigation and research. Very few locals, aside from members of the local Historical and Conservation Society (NHCS) and the expatriate community, have been involved in the projects. Occasionally reports end up in the local NHCS archive, but rarely are the finds and ideas disseminated to the wider local audience or even to schools for use in their curriculum (Trott 1999).

In this situation, much work is carried out for the interest of the academics and others involved, with little connection to the local population. However, an alternative scenario of investigation is difficult to postulate in the present situation. The accepted training and, thereby, the skills, of British and North American archaeology are not, as yet, available on the island (Watters 2001: 83). However, if outsiders continue to come to the island and carry out their research with little or no local involvement, then such training will never be developed. This isolated approach also leads to an incomplete picture of site use and formation.

On Nevis, where the presence of hurricanes constantly changes the topography and where many buildings have only recently been constructed on previously undeveloped sites, the knowledge of locals concerning what was present up to sixty-plus years ago is invaluable. The author has found that local knowledge of place names (which often have a long oral tradition and may not appear on modern maps), building traditions, landowners and sites has been essential to this study.

We should also accept that British and American forms of historical/archaeological investigation might not be appropriate for the Caribbean. It may be that the local people do not want their pasts uncovered, especially not by outsiders (Haviser 2001: 76). The right to make value judgments concerning any other cultures' history is not absolute. However, to ignore the past is a dangerous activity and can result in unsubstantiated histories thriving in the absence of proven evidence, as happened in the 18th-early 20th centuries (see Section 2.3).

A further question is raised when we determine what happens to sites in the long term. Preservation of such remains is itself fraught with potential difficulties. In the Caribbean, as in many other countries around the world, the question of for whom the remains are being preserved has to be considered (see Section 7.5.1). In reality, preservation is often linked to tourism: for a site to be preserved it has to interest the potential visitor. In the case of the Caribbean, the tourist visitors are usually white Europeans and North Americans. They are chiefly interested in their own history, and so colonial remains such as plantation houses and forts become the main forms of visited heritage.

The wider plantation estate environments (particularly those of the slaves) and prehistoric remains, admittedly perhaps as a result of their intangibility, are often given minor status (Watters 2001: 84). However, the increased involvement of local communities in archaeological/historical research, in the future, is likely to lead to a heightened awareness, and interest, and may help to preserve sites for local, and tourist, use (see Section 7.6).

On St. Kitts and Nevis, the ongoing development and preservation of Brimstone Hill fort, as a World Heritage Site, has started to sympathetically balance the requirements of both locals and outsiders, although it is only recently that the slave involvement has been recognised and included within the history of the site. The primary focus, in guidebooks and displays (as at October 2000) still concerned the military achievements and activities of the fortress (Matheson 1987: 1, Smith 1992a: 15).

4 The fortifications of Europe and its colonies

'By the mid-17th century the balance in the capabilities of attack and defence reached a climax. No other age saw the erection of such elaborate fortifications on so vast a scale.'

Quentin Hughes, Military Architecture, 1991, p.120.

'There are neither fforts nor castles in any part of my government which may properly deserve that denomination, but such as are called soe and are but plattformes'

Sir William Stapleton, Governor of the Leeward Islands, 22nd November 1676 (PRO CO1/38/152)

4.1 The history of fortification

4.1.1 Introduction

From the earliest times, humans have come into conflict with one another. Whether individual against individual, group against group or nation against nation, human history has often been defined by fights, disputes and wars. From the simplest stick or club to the Inter-Continental Ballistic Missiles of the 20th and 21st centuries, the weaponry developed has a sole purpose in design: to cause the victory of one individual or group over another. Such victory almost always had, and has, a human cost, with many injured or killed. To guard against such threats, various defensive forms of weaponry and fortification have been designed and implemented (Hogg 1975, 1981, Brice 1984, Hogg 1987, Saunders 1989, Hughes 1991).

Inevitably, as attack methods became more efficient, defensive methods were forced to adapt (Hughes 1991: 7). From earthen banks and ditches to concrete bunkers, the history of fortification relies on basic principles: to protect those under attack and to repel the attackers. The success, or failure, of such defences depends on many factors from location, design, and construction through to engineering ability, manpower and command. As Keegan (1994: 152) states, '...strategic defences...ultimately depend for their strength on the will and the capabilities of the power they were conceived to defend'. On Nevis, the personal experience of Governors John Johnson and Christopher Codrington III in Flanders and Ireland, in the many wars of the late 17th century seems to have played a major part in the island's fortification designs (see Section 4.2.5).

The presence of human agents adds a further x-factor to the mix. At any point human emotion, learning or military experience may change the face of any conflict. Over time, to minimise such 'individualism', rules have been defined and chains of command established. However, the human condition will out and, as inevitable as conflict between men, human error has played a leading role in the history of warfare (Dixon 1994: 17).

To minimise effort, expenditure and injury, the symbolic threat of defence and attack has also been used as a powerful weapon. Victory obtained without a fight was often preferable to all out war (Saunders 1989: 7). This 'sabre-rattling' was, and is, often used as a means of maintaining the status quo or to subdue conquered peoples (Keegan 1994: 142). Indeed, any person living in the 21st century is used to such military one-up-man-ship: the continuing efforts of America and Britain against Iraq, Iran and North Korea being the most obvious examples. However, psychological warfare does not always succeed, many peoples preferring rebellion and possible death to being conquered.

4.1.2 Ancient and medieval fortification

The origins of military architecture can be found amongst the first agricultural communities (Keegan 1994: 139). From this time onwards defences gradually developed from earthen banks to complex stone structures and by the 10th and 11th centuries AD, the introduction of castles began the first phase of European artillery fortification development.

In Britain, the castle reached its peak in the time of William the Conqueror, when hundreds were built across England. These castles were designed to be an ever-present reminder of the subjugation of the Britons and were the hub of civil and military life. By the 12th century castles had developed into massive stone structures with high curtain walls and keeps. The psychological impact of such structures as the White Tower at the Tower of London and Rochester Castle cannot be underestimated. They were used as prisons, served as a final refuge in time of war, and were heavily armed with garrisons of archers, catapults and men. Some castles, such as Dover, utilised defence in depth using concentric defensive walls and flanking towers to dishearten potential attackers and to defend against attack should it be attempted (Hogg 1975: 8).

Edward I, in his castle building works in Wales and Scotland, brought the medieval castle to its fullest extent with moats, drawbridges and portcullises added to the defence repertoire (Hughes 1991: 29). Built to secure the English lines of communication, castles such as Caernarvon, Harlech and Caerlaverock controlled the seas and rivers.

Again, such castles were used as symbols of English dominance and control, and were an intimidating presence within the Welsh and Scottish communities. As Hughes (1991: 31) states, they '...certainly set out to impress'. However, from this time on the castle faced a threat that it had not been designed to resist. First recorded in Florentine and English manuscripts of 1326 (Duffy 1979: 1, Saunders 1989: 15), the cannon was to change methods of attack and defence across the globe (Hughes 1991: 58).

4.1.3 Gunpowder and cannon

The precise origins of the use of gunpowder are impossible to determine. However, it would appear that the Chinese first used the substance in the 9th and 10th centuries (Norris 2000: 1). By the mid 13th century, the knowledge of gunpowder appears to have reached Europe and towards the beginning of the 14th century, early cannon were in use on the Continent. These new artillery pieces were unlike any other weapon, instilling terror into the hearts of the armies they were brought against (Norris 2000: 4).

Until the late 14th/early 15th century, the effectiveness of such cannon was questionable: their inaccuracy, lack of manoeuvrability and dangerous unreliability made them of little use as siege weapons. Indeed, the accurate range of the archer and the crossbow was still the major threat in most battles. However, the symbolic and audio/visual characteristics of the early cannon made them of great psychological worth against armies and their startled cavalry horses. As Duffy (1979: 1) states, they '...were judged more by their intended malice than by their efficacy'.

However, by the late 14th century, large wrought iron and cast bronze cannon firing up to 150-200lb stone shot had been developed. The larger guns were difficult to cast as one piece and to combat this, metal staves were coopered together into tubular 'barrels' (Saunders 1989: 15, Norris 2000: 14). By the early to mid 15th century, cast iron cannon and shot had been developed which encouraged a range of standard cannon sizes and increased the accuracy, safety and efficiency of the cannon (Hughes 1991: 62).

This increased efficiency led to cannon being made smaller and, by the late 15th century, the inclusion of trunnions (gun mounts) in a single-casting process allowed cannon to be transported easily on carriages, facilitating their effective use across the battlefield. These same carriages provided the ability to aim the gun more accurately and offered the means for the cannon to recoil, thus absorbing the force of the discharge and allowing guns to be quickly brought back into service after firing (Duffy 1979: 8, Hughes 1991: 62).

From this time onwards, cannon became a very real threat to the castles of Europe. The design of defensive architecture was forced to change in the light of these developments and it is at this stage that the first true artillery forts came into being.

4.1.4 Early artillery fortification

Against cannon, the high, comparatively thin walls of the classic medieval castle proved to be vulnerable. Such walls could collapse into the ditch creating an easily traversable causeway, or were too high to effectively deploy cannon on their roofs. High walls also provided the largest target for cannon to attack. In short, they had to change (Keegan 1994: 323).

Throughout the 15th century, castles and fortified towns across Europe rushed to cut down and strengthen their walls. However, the lowering of the walls left them vulnerable to infantry and therefore, the 'trace' (plan) of the defences became more complicated so that no unprotected ground was present in front of the ramparts. This new style of fortification produced sprawling, costly defences, which had to be protected by larger garrisons (Duffy 1979: 2). Until the late 15th century, many early defences were adapted, strengthened or streamlined. As Duffy (1979: 2) states, they were in reality 'reinforced castles'. However, the rate at which these changes occurred was highly variable. In Britain, for instance, the changes often consisted of adding a few gun ports to city and castle walls.

In 1480, Francesco di Giorgio completed the most important military treatise of the 15th century, the *'Trattato dell' Architettura Civile e Militare'*. Military theory was not uncommon by this time. Indeed, since the early 14th century, the theories of war and fortification had been studied by scholars such as Konrad Kyeser in Germany, Guido da Vigevano in France and Robert Valturio, Niccolo Machiavelli and Leon Battista Alberti in Italy (Hughes 1991: 65). Di Giorgio's ideas were different in that he saw the trace as the key to the strength of any fortress, rather than the size of the army or thickness of walls.

From the 16th century, with the increasing specialisation of weaponry and tactics, the use of the 'reinforced castle' was becoming less and less satisfactory. As fortification theory became more and more complicated, a thorough understanding of mathematics and geometry became essential to provide effective interrelation between the various elements of any fort's design. Until this time, the balance had been set in favour of the attacker and his cannon. However, from this point onwards, the deployment of the skilled, professional

military engineer would gradually even out the forces of attack and defence (Arnold 1995: 210).

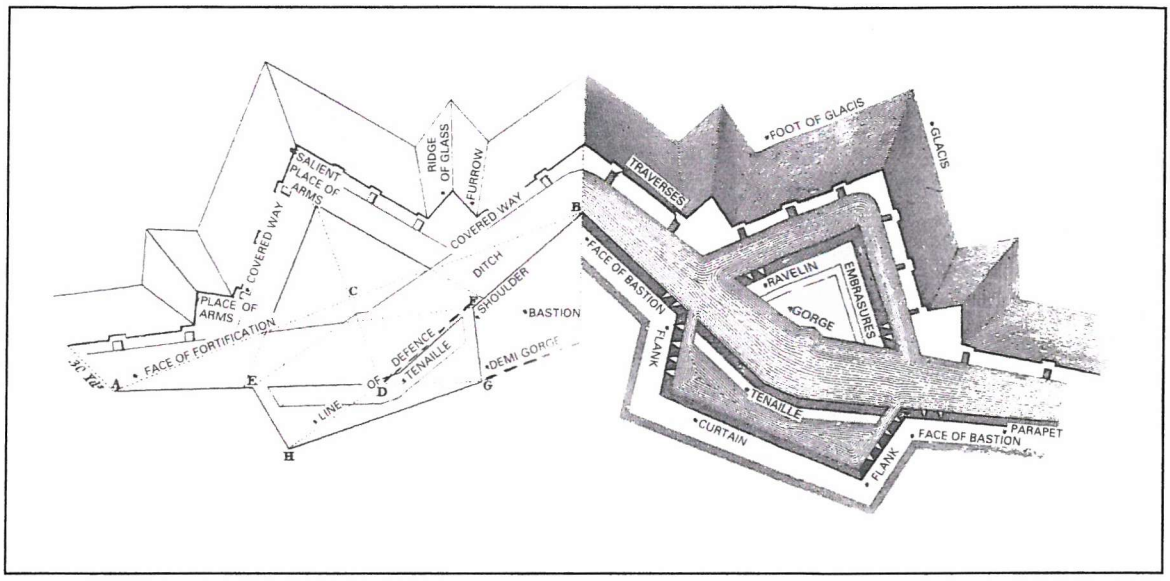

Figure 4a) Illustration of bastion and fortification terminology (Hughes 1991: 242)

In the early 1500s, Leonardo da Vinci became increasingly concerned about the damage done to curtain walls by projectiles, and introduced elliptical walls to deflect shot, and tiers of casemates (vaulted chambers containing cannon) to increase defensive firepower. He also advocated the lowering and thickening of the walls and included ravelins (flanked triangular, defensive outworks) in his designs to protect the gateways of fortifications (Hughes 1991: 66, John Keegan 1994: 324). In 1527, Albrecht Dürer further developed the casemate, including them in huge, squat artillery towers dominating the curtain wall. Their low position provided fire across the ditch (Duffy 1979: 5).

During this period, the bastion (a four sided projection, with two outward faces and two flanks with guns) was first used in Italy (Fig. 4a). This is probably no coincidence as, from the late 15th/early 16th century, Italy became the battleground of Europe, with the French and their newly developed and transportable cannon marching across the peninsula (Duffy 1979: 9, Arnold 1995: 208). It would appear that the bastion was an idea developed from Italian field fortifications of the late 15th century (Duffy 1979: 25, Hughes 1991: 68).

The bastion provided the basis for fortification theory until the 19th century and allowed a far more effective defensive position than had ever been seen before. Wide flanks allowed effective crossfire across the ditch and the meeting of the two faces of a bastion at a point (the salient) eliminated dead ground in front of the bastion and allowed flanking fire from adjacent bastion flanks across the bastion faces. The straight parapets of

the bastion also allowed more guns to be effectively positioned (Fig. 4a). By the mid 16th century, the Sangallo engineering family in Italy had developed a range of new designs which would form the basis for later fortification theory, including the recessed flanked bastion (the origin of the orillon type bastion) and the pentagonal shaped fortress (Duffy 1979: 33, Brice 1984: 117, Parker 1988: 11, Hughes 1991: 71, Keegan 1994: 324).

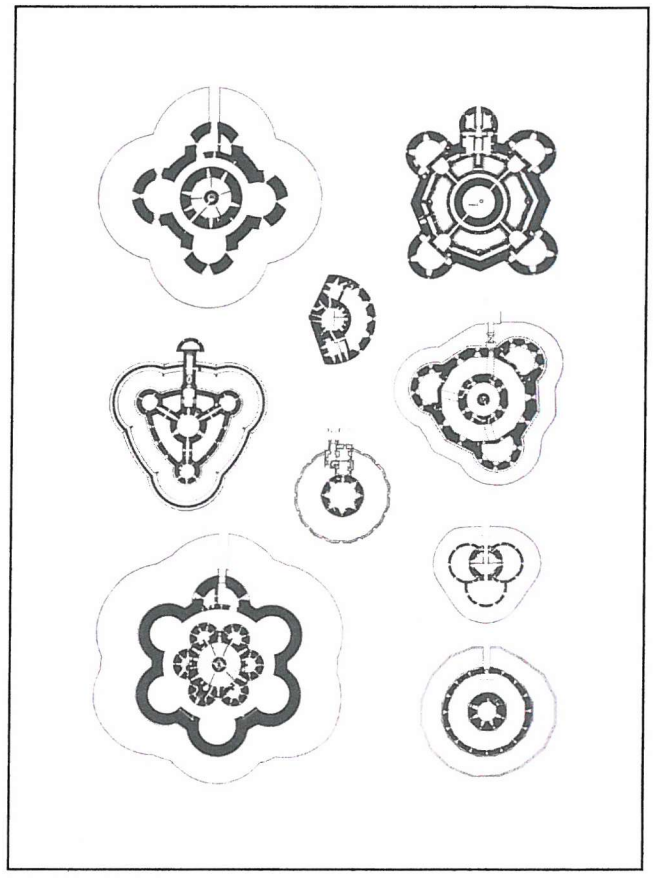

Figure 4b) Examples of Henry VIII's Device Forts (Saunders 1989: 37).

In Britain, however, these developments had little effect. In the first half of the 16th century, Henry VIII, under threat from the forces of France and with a large war chest from the dissolution of the monasteries, set about fortifying the coast of southern Britain (Fig. 4b). Stretching from Milford Haven to the Medway and north to Hull, these 'device' forts (named after the 'Device of the King' document which initiated the building) were the most expensive coastal defence ever constructed by Britain. Although costly, they paid little notice to current Italian fortification theory and were outdated in form. Built from rounded towers with tiered mounted guns, they were based upon Dürer's ideas of the 1520s (Duffy 1975: 189).

Their main purpose was as artillery platforms, and as they were never attacked, it is difficult to say with certainty how well they would have been able to defend themselves.

They were probably sufficient to repel a naval bombardment, but their defence against landward attack would have been highly limited (Hughes 1991: 86). However, in the 1540s and 1550s, at Ambleteuse and Calais in France and at Hull (Howes and Foreman 1999: 12) and Berwick Upon Tweed, the British engineers, John Rogers and Sir Richard Lee, constructed competent angled bastioned forts. Lee in particular, in his work at Berwick upon Tweed, showed a level of military engineering knowledge not seen before in Britain and used obtuse angled orillon bastions on the town's defences (Saunders 1989: 60, Hughes 1991: 86).

By the mid to late 16th century, across Italy, heavily defended forts of the Italian School had been built. These forts showed developed forms of the bastion, closely spaced along the curtain wall to provide effective flanking fire. Another development of this period was the extended use of the ravelin (Fig. 4a). Formerly used to defend gateways, this defensive structure was now used effectively in front of any area of the curtain, providing crossfire in front of the bastions (Duffy 1979: 34).

A further weaponry development, the handgun or musket, now allowed close range defence of fortifications and increasingly forts utilised the power of such weapons in their designs. The covered way (a walkway placed on the outer rim of the ditch) made clever use of the musketeers, forming yet another skin of defence that would have to be breached before a successful assault on the fort could be made (Duffy 1979: 34). Further infantry-inspired developments included the use of the salient and re-entrant angles of the bastions as 'places of arms': areas where troops could mass prior to defence or counter attack (Duffy 1979: 34, Hughes 1991: 91).

The success of the Italian engineers caused them to be used by the majority of European powers to design defences for their kingdoms. The wars of the 16th and early 17th century provided many opportunities for these forts to be tested and modified. By the early 17th century the Italians were unquestionably the best fortification engineers in the world. However, from this time, the role of the French and Dutch became increasingly important, laying the foundation for a century-long French pre-eminence (Hogg 1981: 8, Hughes 1991: 120).

4.1.5 17th century developments

Following the trend of increasingly professionalised and scientific approaches (see Section 2.3.2), fortification theory became ever more complex in the 17th century. As Italian

influence waned, engineers across France, Holland and Germany took on the Italian ideas and developed them in their own style.

Many books on fortification theory appeared in the early 17th century (Pollak 1991: 2). Often derived from first-hand experience, these books covered all aspects of the military arts as practised in the wars of the Low Countries and Spain. The flat terrain of the Low Countries allowed extremely large fortified towns to be planned and laid out by the Dutch; the many waterways permitting huge defensive waterworks to be placed around them. Alongside the large ditched and banked forts and towns, the Dutch also utilised many small redoubts or sconces, which were built from earth and timber, sometimes with a ditch (Saunders 1989: 73).

The Dutch success had stemmed from a corps of engineers formed at the beginning of the 17th century, which gathered together notable specialists such as Samuel Marolois (Marolois 1638) and Simon Stevin (Duffy 1975: 187, 1979: 61, Saunders 1989: 72). However, by the mid 17th century, a lack of innovation and the loss of many areas of the Netherlands to the Spanish, led to the fall of the Dutch school from the popularity it had achieved in the late 16th century. From this time the French, having suffered a decline in the early part of the century, successfully reinvented their military strategy and forces. Their ideas, although widely used in France and the Low Countries, appear to have had little influence in Britain. The military architecture of the British Isles at this time bore scant resemblance to anything seen on the continent.

Following the threats from France in the mid 16th century, England had undergone a prolonged period of peace. However, by the early to mid 17th century, growing hostility between the King and his subjects, exacerbated by religious conflict, led finally to the Civil Wars of the 1640s and 1650s. These wars, though initially an English phenomenon, rapidly spread to Scotland and Ireland (Duffy 1979: 145).

4.1.6 British fortifications of the 17th century: the English Civil War

In the early 17th century, British fortification theory, if such a thing can be identified, was limited and highly derivative (Saunders 1993: 14). English and Scottish soldiers had gained a limited amount of expertise during the Thirty Years War; however, the majority of British knowledge had been gleaned from Dutch treatises translated by writers such as Henry Hexham (Marolois 1638, Hexham 1642).

The disorganised and sporadic nature of the Civil War of the 1640s required specific defences suitable to the conflict. Both sides had heartland areas of support, but

within each area, pockets of resistance could be found which threatened these territories. As such, many structures unsuited to military attack, for example, country houses, old medieval castles and towns, were forced rapidly to defend themselves as they came under siege (Saunders 1989: 75, Harrington 1992: 15).

In an attempt to control and win territory, further fortified works were needed. However, with no standing army or engineering corps on either side, there was no obvious designer or means of construction for such works. With professional soldiery at a premium, many of the troops who had served on the Continent became officers, attempting to control the ill-disciplined volunteer armies. Fortification design often relied on the services of various imported experts from Holland, Germany and France.

However, professional engineering was not common and many soldiers found themselves designing forts. As Ross (1887: 109) states, '...there are allusions to the engineering skill displayed by officers whose ordinary duties were not those which were connected with this branch of the service'. Men such as Sir John Meldrum, who added hornworks (a detached work of two demi-bastions) to the defences of Portsmouth, were of this category (Saunders 1989: 74). However, there were also ill-conceived defences and forts carried out by men of little experience and knowledge. As Harrington (1992: 6) states, '...the defences of the Civil War were produced by a curious dichotomy between experience and ignorance'.

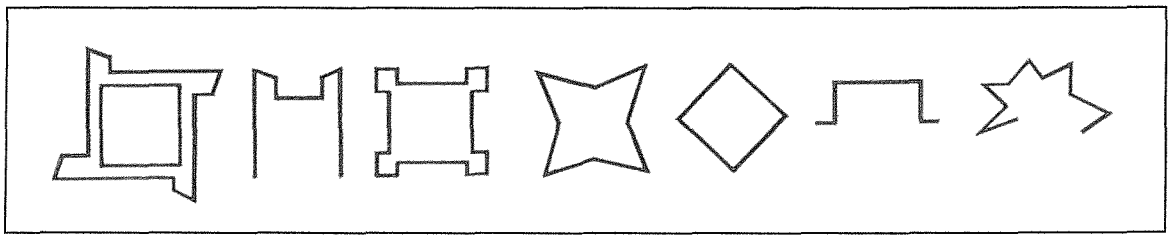

Figure 4c) Typical fort designs of the English Civil War (Smith 1997: 77)

As a result of this haphazard organisation and experience, the majority of defences of the period were small and primitive in design and construction (Ross 1887: 109). Although the need for bastioned forts had apparently been recognised, many of the Civil War defences were not constructed according to geometrical principle, with some, such as March in Cambridgeshire, showing little understanding of why bastions were necessary (Harrington 1992: 46).

The siege works and forts, which would be copied so widely in the colonies, comprised many different designs of small earthen and timber redoubts and sconces (Fig.

4c). Many were bastion-cornered, square or pentagonal designs, surrounded by ditches, although multi-pointed star shapes and triangles with demi-bastions were also common (R.N. 1639). These sconces were designed to secure lines of communication, '...to cover dead ground or hold the enemy at a distance' (Duffy 1979: 157).

In towns such as Liverpool and London (Smith 1997: 70), either a bastioned enceinte (defensive enclosure) or a ring of detached forts and sconces, often connected by entrenchments, was the normal method of defence. In no part of Britain were the heavily defended towns and fortresses of continental Europe replicated. As Duffy (1979: 159) states, '...by Continental standards the English proved very incompetent'.

In the years following the execution of Charles I, some Civil War forts appear to have been pulled down, to guard against use in any further conflict (Smith 1997: 80). Those that were not demolished fell quickly into disrepair, shameful reminders of the terror that had divided families, villages, towns and the nation. However, from the 1650s, Britain came to face a new threat from abroad in the form of the Dutch. The Anglo-Dutch Wars of the 1650s and 1660s, and in particular the debilitating attack by the Dutch on the Medway in 1667, provided the stimulus to British fortification design. Ironically, a Dutchman, Bernard De Gomme was commissioned to design forts that would ensure that Britain would be adequately protected.

4.1.7 Bernard De Gomme

De Gomme's career had started as an engineer in the Low Countries. Coming to England with Prince Rupert at the beginning of the English Civil War, he had been responsible for fortifying Liverpool and Oxford. During the Interregnum he had worked as an engineer on the continent. Upon the Restoration, he returned to Britain and was granted the post of 'Engineer of all the King's Castles' (Saunders 1989: 87). De Gomme's first task was to redesign the fortifications of Portsmouth and Plymouth, although his most famous defences were those built on the Thames and Medway.

In the early 1660s, De Gomme designed and built a large pentagonal, bastioned fort at Tilbury. Tilbury fort was, and is, one of the most competent forts ever built in Britain, with textbook proportions and defences. Surrounded by a deep, water filled ditch, it demonstrates the Dutch tradition of De Gomme's design. He also designed a series of small, powerful batteries, such as Gillingham, Cockham Wood and the Medway Batteries, which dotted the reach of the Medway and Thames (Saunders 1989: 94).

By 1682, De Gomme had been made Surveyor-General of the Ordnance. Under Charles II, the Ordnance Office had been increasingly organised and structured and De Gomme's role further enhanced the process of professionalisation. However, in comparison with developments abroad, Britain was still well behind its contemporaries.

4.1.8 Sébastien le Prestre de Vauban and Menno, Baron van Coehoorn

Under King Louis XIV, the French army had been reorganised and weaponry standardized. In 1658 Sébastien le Prestre de Vauban, was given his commission as Chief Engineer and set about strengthening and constructing forts across France (Duffy 1985: 6, Hughes 1991: 121). His ideas were to be taken up through Europe in the many publications of the late 17th/early 18th centuries (Swall 1691, Allingham 1702).

Vauban developed the Italian fortification system, introducing ever more complicated layered defences to towns and fortifications. This culminated in his 3rd System, used only at Neuf-Brisach (Hogg 1981: 62). The Neuf-Brisach fortifications comprised detached bastions, with counterguards (triangular works built to cover the bastion front), ravelins and tenailles (outworks placed to cover the curtain between bastions) and large re-entrant places of arms for troops (Hughes 1991: 121). Defence in depth had reached its maximum.

However, Vauban's greatest achievement lay in his siege work and, from the 1670s, he developed a systematic method for attacking fortifications. His brilliance in the field of fortification theory and design led to his invincibility in siege works: of the forty sieges he directed in his lifetime, not one was unsuccessful (Duffy 1985: 96, Hughes 1991: 124).

Vauban's siege method lay in the construction of a series of three parallel trenches, which ringed the town/fortress under attack and were constructed, via short zigzag trenches, ever closer to the besieged fortification. By this method batteries of guns could be brought to bear on the ravelin and then in turn on the bastion. When the bastion collapsed, the assault could begin. In the normal course of events, this happened by the twentieth day of the siege (Hughes 1991: 124). By employing this method, sieges became brief and efficient and involved the minimum loss of life. Indeed, Vauban's methods needed to be reliable, as the opposition, in the form of the Dutchman, Menno, Baron van Coehoorn was sufficiently knowledgeable and successful to be a real threat to French superiority (Hughes 1991: 126).

Coehoorn had published his three systems of fortification in 1685 (Baron de Coehoorn 1705). These readily utilised the water sources prevalent in the Low Countries and, although appearing to be similar to Vauban's systems, differed in the increased complexity of the bastions. Coehoorn included orillons with internal magazines, constructed from many layers of masonry. He also included many elaborate outworks in his designs, often only reachable by boat. His later systems were never applied on the ground, as their level of complexity made effective use impossible: a large enough garrison could not be accommodated in the small space inside the walls (Hughes 1991: 130).

4.1.9 Namur

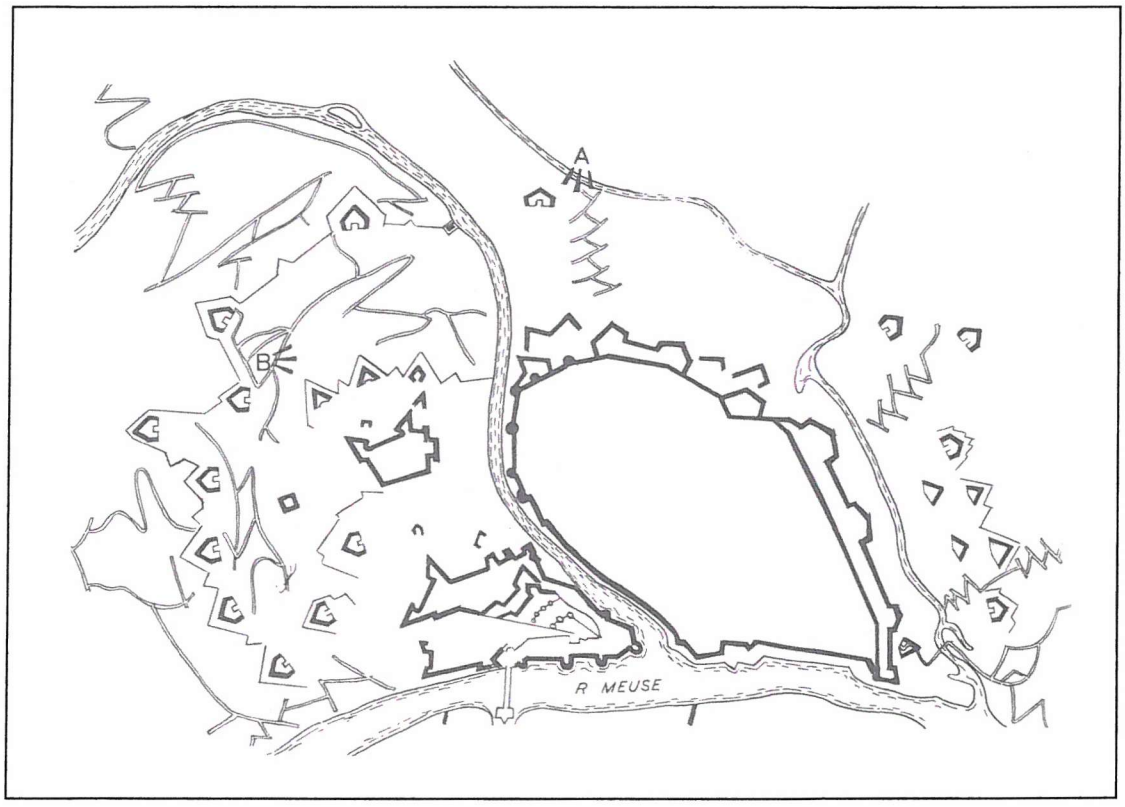

Figure 4d) The fortifications of Namur, 1695 (Duffy 1975: 168)

During the late 17th and early 18th centuries, Coehoorn and Vauban were pitted against each other in the wars of the Low Countries. The most famous of these meetings occurred at Namur in the 1690s (Duffy 1975: 163). These sieges are important as the two probable architects of the Nevis fortifications, John Johnson and Christopher Codrington III, were both present and possibly used their experiences later on Nevis (see Section 4.2.5).

Johnson at this stage was the Captain of a Grenadier company and Codrington, a Lieutenant Colonel in William III's army.

Namur was a Dutch-held town, heavily fortified by Coehoorn and garrisoned by the allied forces of the Dutch, English, German and Spanish. The town had six bastioned fronts and included a citadel to the west. In 1692, Louis XIV, under Vauban's advice, attempted to take the town. Vauban set about the siege, constructing parallels and huge batteries, which maintained a ceaseless fire until the defences were breached, and the town and citadel were surrendered.

By 1695, with the French still in control, the Allies decided they wanted their town back. However, Vauban had spent the three intervening years strengthening the fort, adding a ravelin and two demi-lunes (detached bastion shaped outwork in front of the curtain) and encircling the whole fortress with a perimeter of nineteen lunettes (open-backed, detached bastions). Although not in Namur in person in 1695, Vauban's defences would have been a constant reminder of his influence and skill (Fig. 4d).

William III's army attempted to attack the town by force of men, using English and Dutch Grenadiers (including John Johnson) to seize the covered way of the town. However, this method had produced huge numbers of casualties, and Coehoorn, typically, suggested that by heavily bombarding it with cannon and mortar fire, the town might be subdued faster. However, this method was never tested and a far more accidental victory was obtained. One afternoon, a powder keg was unintentionally ignited and the English Grenadiers and Fusiliers, believing it to be the signal for attack, 'went over the top', directly into the face of French artillery. Although the English casualties were high, the French suffered heavily in the fight that ensued and capitulated within two days (Duffy 1975: 173). Coehoorn had equalled the score.

4.1.10 Montalembert and 18th and 19th century continental military engineering

Vauban's fortification designs proved easier to implement than Coehoorn's and the success of the French school of military engineering continued as Dutch methods slipped from fashion. However, the success of Vauban's siege methods had caused an imbalance in favour of the attack and from the mid 18th century, Marc René, Marquis de Montalembert, set about redressing the balance (Hughes 1991: 130).

Montalembert soon realised that Vauban's forts were weak in one very important aspect: the presence of the curtain wall. Although bastions had been useful whilst cannon ranges were short, the developments in artillery allowed for a far greater range of fire. To

continue to use such guns at close range was a waste of their capabilities. Instead, Montalembert used a saw edged trace of triangular redans (a double faced outwork). Two lines of counterguards lay in front of this and behind it were two-storey towers, capable of holding many large guns (Hughes 1991: 131). In the case of coastal fortifications he advocated high towers capable of delivering a barrage of fire. In Montalembert's view, concealment of such forts was unnecessary, as long as there were enough guns to disable the ships. He also suggested the use of detached forts to hinder any approach towards the fortress proper (Duffy 1985: 159).

Although, Montalembert's proposals addressed all the problems inherent in previous systems, his ideas were widely rejected in favour of tradition and Montalembert was labelled as '...not a true son of the engineering corps' (Duffy 1985: 161). However, by the late 18th century, many of his ideas had been taken up in Prussia and by the 19th century, simplified forms of his polygonal system were used across northern Europe. Towns like Poznan in Poland, the fortifications of which were completed in the late 1880s, were ringed by many detached forts (Hogg 1975: 75).

4.1.11 Britain in the 18th and 19th centuries

Following the troubles of the 17th century, the 18th century opened with peace. However, within a few years the War of the Spanish Succession had again involved Britain in conflict. With the outbreak of war, a survey of all batteries and forts was made with an estimate of their costs to repair. The unacceptably high cost of such repairs, and the fact that the conflict did not immediately threaten British soil, meant that no such works were carried out. The decline of standing British fortifications, with the exception of a few locally constructed coastal batteries, was allowed to continue (Saunders 1989: 114).

However, at certain sites, work was recommended. For example, in the early 1700s, the engineer Talbot Edwards suggested various repairs and redesigns that would be necessary at Gosport. However, his suggestions were ignored and it was not until the 1750s that the work was finally completed. On a few other sites, such as Landguard in Suffolk (Kent 1988: 75), new forts were built.

In 1715, a rebellion by the Scots led to a new survey of the fortifications. The resulting lists show that in the majority of cases, the backbone of British defence still relied upon medieval castles, and the forts built by Henry VIII and Charles II. In 1716, the repertoire was further diminished when the Ordnance Office ordered a reduction in coastal

armaments, leaving many forts with less than half their full complement of guns (Saunders 1989: 117).

A further Scottish rebellion in 1745 led to the construction of several strong forts north of the border, including Fort George at Inverness. By the late 1750s, the possibility of French invasions once again caused temporary panic, leading to the construction of several substantial 'sea batteries' to defend the coast of Sussex and Kent, and the strengthening of the dockyard defences at Chatham and Portsmouth (Saunders 1989: 119).

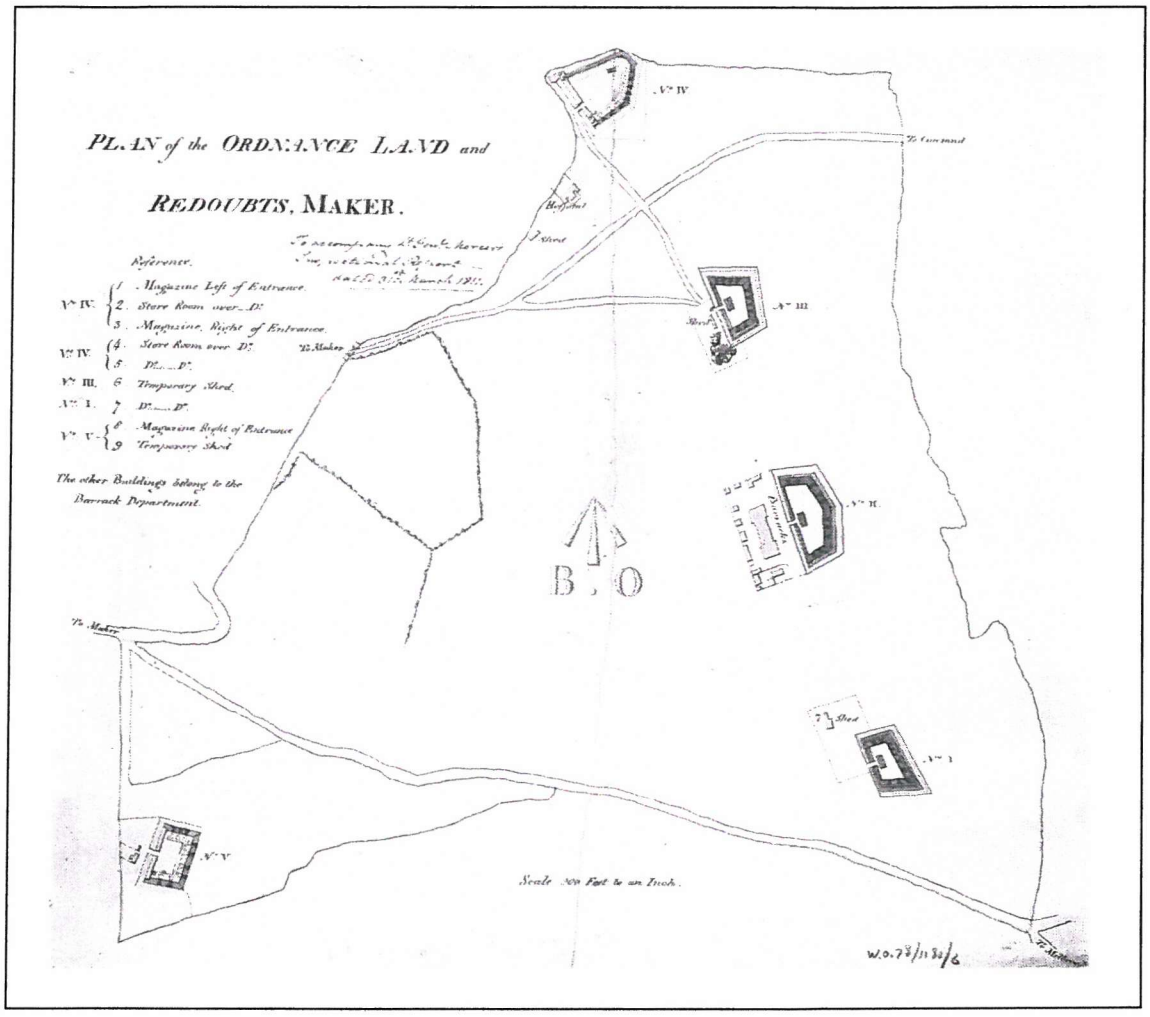

Figure 4e) Maker Heights, Cornwall (PRO MPH 233/6)

By the late 18th century, a series of threatened or attempted French raids had caused a strengthening of British coastal defences. Small redoubts and blockhouses such as those seen at Devonport (Saunders 1989: 125), Maker Heights (Fig. 4e) and Berry Head, Brixham (Saunders 1989: 128) dotted the coasts of southern Britain. However, at the outset of the Napoleonic wars, British defences, if compared to other European

Countries, were meagre and, despite further building programmes such as the Martello towers of the early 1800s (Hughes 1991: 146), Britain fell back on the defensive force of its navy, under the command of such notable admirals as Horatio Nelson.

4.2 Colonial fortification

From the early 15th century, the nations of Europe began a colonial expansion (see Section 2.2.2), which would have a lasting impact across the world, '...binding so many of the peoples of the world to the white man's will and benefit' (Scammell 1989: 1). However, wherever the Portuguese, Dutch, Spanish, French and English went they very soon discovered that the local peoples would not necessarily accede to their demands. They also discovered that they were all vying for the same trade in often the same areas. Conflict was inevitable.

As a result, the spread of Europeans across the globe was marked by an equal spread of European military forces and fortifications. However, the distance from home, restricted availability of resources and manpower, and the limited range of military experience led to a wide variety of fortification designs, constructed with varying levels of success. In short, European military theory does not appear to have travelled well (Duffy 1979: 225, Loftfield 2001: 216).

4.2.1 Early colonisation

By the 1480s, the Portugese had established a factory fort at Elmina on the Gold Coast of West Africa. The fort was built to protect trade: that of gold and slaves. Following Dias' rounding of the Cape of Good Hope in 1487, Portuguese trade expanded eastwards to India and beyond, with strongholds being built at Goa in 1510 (Duffy 1979: 220). By the 1570s the Portuguese had reached the Philippines, invading the territory of the already present Spanish.

Columbus' voyages of the 1490s had also taken the Spanish west to the Americas. The Spanish built very few forts in the early stages of colonisation. The natives were sufficiently terrified of the incomers and debilitated by European diseases that no defences were necessary. However, from the 1550s, the retaliation of the native peoples and the incursions of French, Dutch and English ships into Spanish territory forced the Spanish to look to their defence. Forts were built at Cartagena and Havana in Cuba, at San Juan in Puerto Rico and at Passage Fort in Jamaica (Pawson and Buisseret 1975:6). The El Morro

fort at San Juan, built on a promontory, guarded the entrance to the port and was constructed as a heavily fortified stone fortress, with a dry moat on the landward side (Puerto Rico 2002).

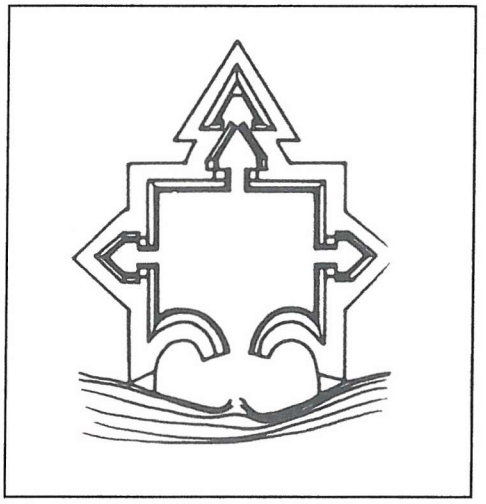

Figure 4f) Ralph Lane's fort, Puerto Rico (Hughes 1991: 134)

Although a few small forts had been built by other European powers, for example Fort Raleigh, built by the English at Roanoke Island, Virginia in 1585 (Hughes 1991: 135), in the late 16th century, the lack of permanent settlements had made fortifications unnecessary. Those that had been built were often primitive in design. For example, Ralph Lane's fort at Puerto Rico, also built in 1585, shows a bizarre arrangement of spurs added to a central square design (Fig. 4f).

However, by the 1620s in the Americas and by the 1640s in Africa, Dutch, French and English colonisation of previously Spanish-held territory had brought European warfare to the colonies. The European nations were forced to respond to these new threats and a rash of small frontier type forts sprang up.

Initially such forts were small wooden structures, more palisaded enclosures than fortifications proper. Sites such as the Dutch Fort Sandenburgh in the Cape (Seemann 1997: 5) were small triangular or square palisades, often with bastions, but sometimes with round corner towers. The majority had very few guns, and those that they had were usually of small calibre. This picture is echoed in the Americas where small, English, Dutch and French forts were constructed across the colonies.

4.2.2 Caribbean fortification in the earlier 17th century

Although reports are by no means common during this period, descriptions of these early, fortified structures can be found. For instance, the earliest fort, of the late 1620s, on St. Kitts, is described as being '...a fort of pallesadoes with flankers and loopeholes for their defence' (Hilton 1675). This description could have applied to almost any of the colonies during this period from James Fort, Virginia to the Cape in Africa.

On some islands stone forts had been constructed by this date. The earliest of these forts were built on Bermuda in the early 1610s. Recorded by John Smith in 1624 (Harris 1986: 311, 1997: 47), these forts appear strikingly similar to the Newcastle Redoubt on Nevis, and it is possible that this fort dates from this early period (see Chapter 5).

Until the 1660s this pattern remained, with small forts being built, for example, by the Dutch on St. Eustatius (Howard 1991, Barka 2001: 116) and St. Maarten (Hartog 1994), by the English on St. Kitts, Nevis, Montserrat (Crandall and Dyde 1989, Crandall 2000), Bermuda, Antigua (Nicholson 1994) and Barbados (Alleyne and Sheppard 1990, Loftfield 2001), and by the French on Martinique, Guadeloupe (Le Lycée Gerville Réache 1990, Delpuech 2001: 32), French St. Kitts and Grenada (Jessamy 1998). The majority of these forts were on the coast, and their main purpose, like Henry VIII and Montalembert's forts, was to provide a barrage of fire seawards to prevent an enemy landing (Loftfield 2001: 214). However, no large forts had yet been built outside the Spanish Caribbean and those forts that were present had few guns of any size.

In the majority of cases, these forts appear to have been built from monies and manpower provided by the island's planters (Pares 1963: 240) and very few of the forts were influenced or designed by professional engineers (Loftfield 2001: 214). The absence of official communications in the mid 17th century archives supports the suggestion that the majority of forts were built under local guidance, with very little reference to the home power. In the English colonies, it is only around the time of the Dutch Wars that fort building began on a wide scale. From the 1660s numerous letters, plans and accounts survive which attest to a programme of fort building in the Caribbean and the Americas.

4.2.3 English fortification in the Caribbean from the late 17th century

In the English Caribbean, from the late 1660s onwards, many new forts were built. This phase of fort building was the first cohesive attempt to defend the islands, with at least one reasonable fort being built, or planned, in each of the English territories. These forts were

usually sited overlooking the principal town/port to guard the trade to and from the islands (Duffy 1979: 225). The older, smaller batteries of the earlier 17th century, with a few repairs and additions, provided adequate coastal defence against ships at sea and their landing parties. However, like Henry VIII's forts, they too had little defence against landward attack.

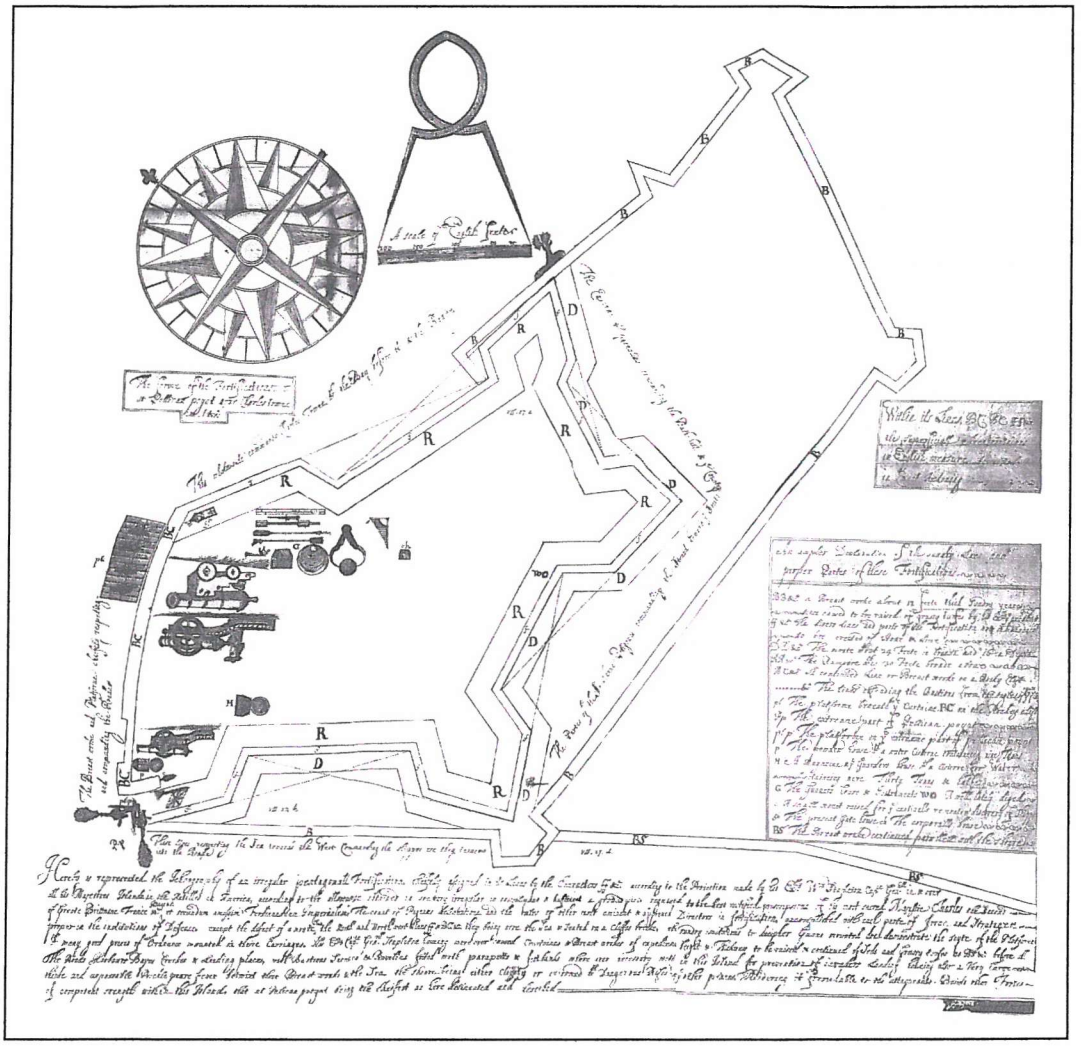

Figure 4g) 1679 plan of Charles Fort, Nevis.

In Montserrat, following a French attack, the then Lieutenant Governor William Stapleton, an experienced soldier, built a new fort at Old Road Bay to protect the new town of Stapletown. By 1672, Stapleton had become Governor of the Leeward Islands and set about fortifying the other islands.

In 1672, Antigua received new forts at Falmouth on Blake Island and at St. John's (Nicholson 1994). In English St. Kitts, Cleverley Hill Fort/Charles Fort and Charles Fort at Old Road were also built (Smith 1994: 76, Schroedl 2000a: 2). On Nevis, Stapleton

planned a new fort at Pelican Point to be called Charles Fort (Fig. 4g). Several of these forts showed elements of European military theory, with Charles Fort, Nevis (Section C9), reflecting Stapleton's experience of warfare in his competent design for a stone enceinte with a series of diamond bastions, an interior rampart and exterior dry ditch on the landward side.

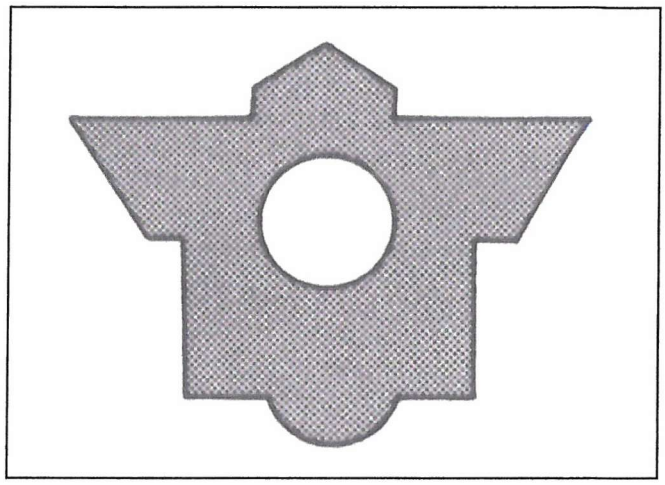

Figure 4h) Fort Cromwell/Fort Charles, 1665 (Pawson and Buisseret 1975: 37)

In the other English islands, such fort building had an earlier history, with Needham's Fort/Charles Fort and Willoughby's Fort being built on Barbados in the mid 17th century (Campbell 1978: 270). Although these forts again show a level of knowledge of the bastion system, the Barbadian examples were small and were built from fascines of bound branches and twigs (Alleyne and Sheppard 1990: 8) as opposed to being built in stone.

In Jamaica, building had also begun in the mid 17th century, with Fort Cromwell, hastily renamed Fort Charles in 1662, being built in the 1650s (Buisseret 1971: 43, Pawson and Buisseret 1975: 62). This fort, although built in stone, bore little resemblance to an accomplished European fort, and comprised a central tower within a walled square. By 1662, this fort had been altered to an even more unusual trace with demi-bastions on the east and west and an unusual redan-type structure on the northern face (Fig. 4h).

By the late 1670s, the Leeward Islands had been reasonably fortified with each island having a main fort, often also an inland deodand or retreat (Buisseret 1973: 43), and a series of small batteries guarding the landing places (Pares 1963: 245). As the sugar and slave trades grew, these forts became increasingly necessary to keep off privateers and other nations' raiding parties and to provide defences, both symbolic and actual, against

the large forces of black slaves, who outnumbered the white colonists in the islands. As a final mark of controlling power the forts were built with the labour of these slaves.

By the late 17th century, the Dutch threats had passed, but relations with the French were deteriorating rapidly. In the run up to the War of the Spanish Succession in 1702, many of the English islands again set to work strengthening and building defences.

Around this time, various engineers, including Hugh Simms, had visited the Caribbean and had ordered various repairs and additions. However, certain islands appear to have been paid more attention than others, with Antigua receiving six years of the engineer's time, and Nevis only three weeks (Hugh Simms Report, PRO CO152/4: 26/11/1700). It is interesting to note, that although Simms was present in the Caribbean from 1691, it is only in 1700 that his report seems to have been examined. A further report by another engineer, Talbot Edwards, was also not read until this same year and even then many of his recommendations were not taken up as they were deemed to be too costly (CSP 1700, No. 949: 26/11/1700).

The role of the engineers appears to have been peripheral on many of the smaller islands, with knowledgeable Governors such as Stapleton, then the two Christopher Codringtons and John Johnson, taking the initiative in fort design and construction. This suited the Crown, as professionally designed forts would inevitably be greater in size and therefore would cost more than the simpler designs of the amateur. They also did not require the presence of a trained engineer at a time when the use of such men was deemed to be of great necessity in Britain and Europe.

Indeed, the simple forts of the amateur engineer appear to have provided the backbone of defence in the English islands in the late 17th/early 18th centuries. Numerous plans of such small batteries can be found in the Public Record Office and British Library. These small batteries show a range of designs including squares, half moons (For example, Macocks Bay and Tomson's Rock on Barbados (BL ADD14034, September 1696; Loftfield 2001: 214), Bransby Point and Powers Battery on Montserrat (Crandall 2000: 343) Charles Fort at Old Road in St. Kitts and James Fort on Nevis (Sections C9 & C34) and a variety of demi-hexagons, octagons and other multi-faceted shapes (For example, Ffontabells, Yatch and Spixes Bay batteries in Barbados (BL ADD14034, September 1696), Old Road Fort (Fig. 4i) and Johnson Point in Antigua (Nicholson 1994: 29) and Old Road, Cotton Tree and Mathew's forts in Nevis (Sections C22, C23 & C24).

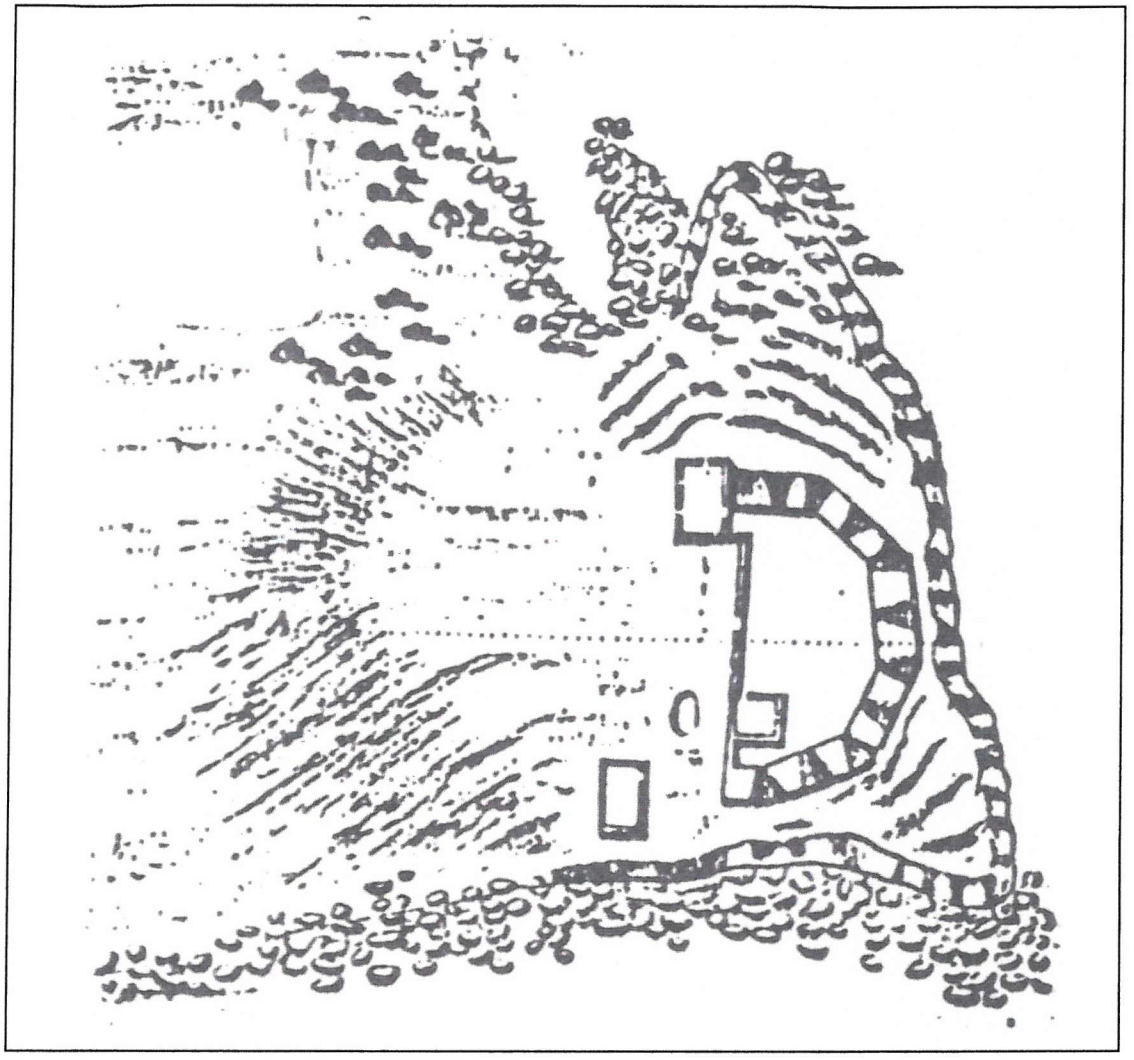

Figure 4i) Old Road Fort, Antigua (Nicholson 1994: 29)

Further afield in the American colonies, the pentagonal or 'rectangular four-bastioned work' (Duffy 1979: 225) so typical of the English Civil Wars, had been built in many areas. For example, at Fort Royal in Newfoundland (Newfoundland 2002), Salem Fort in Massachusetts (PRO CO700/MASSACHUSETTS1), Casco Bay Fort in Maine (PRO CO700/MAINE11), and at Fort D'Orange in Albany, New York (PRO CO700/NEW YORK2) four-bastioned forts were built. However, in the English Caribbean, the large square, pentagonal or triangular bastioned forts so prevalent in the English Civil War and then in the American colonies were on the whole rare.

This picture almost certainly results from the nature of the islands and a different mentality concerning defence in the sugar colonies. The small size of many of the islands allowed their defence to rest with only small batteries and militia garrisons, thus negating the need for larger forts. A further limiting factor was the lack of interest, by the planters,

and indeed by the European governing countries, in their defence. In many cases, fort building was left until any attack was imminent, as mercenary planters preferred to have their slaves working in the plantations, rather than 'wasting' their time building forts (Pares 1963: 242). The European powers preferred to leave the islands to their own devices, unless the threat amounted to a loss of Crown interest.

Nevis appears to have been no different from many of the other English islands. Along with earlier forts such as the Newcastle Redoubt, a large programme of fort building in 1704, resulted in a half moon battery at James Fort and several demi-'gons' at Mathew's, Old Road, Long Point and Cotton Tree forts (Sections C6, C22, C23, C24 & C34). Two figures, Christopher Codrington III and John Johnson, appear to have played a significant part in the design of the Nevis fortifications. This programme of defences proved to be the most ambitious, and successful, ever attempted on Nevis, and provided the majority of fort remains on the island today. However, this episode of fort building was met with derision from the planters, who objected to the high cost and to the use of slave labour necessary to build the coastal defences (see John Johnson's complaints about the Nevis planters PRO CO153/9: 27/7/1705).

4.2.4 John Johnson and Christopher Codrington III

Codrington and Johnson had met at Guadeloupe during an English attack on the island in 1703. Johnson was a Captain of a Grenadier company in the newly arrived Irish 27th Regiment of Fusiliers (for a more detailed history of Johnson's career, see Appendix B). Codrington, Governor of the Leeward Islands, commanded the English attacking forces. By late 1703, under Codrington's patronage, Johnson had become Governor of the Leeward Islands (Earl of Dartmouth, PRO CO152/39: 6/3/1705).

Between 1703 and 1706, Johnson set about repairing the forts of Nevis. These defences comprised twelve new and repaired forts/batteries evenly spaced along the western coast of Nevis and at any vulnerable landing places. All the batteries were linked by entrenchments, which ran the length of the coast, and included spurs between each of the forts (John Johnson, PRO CO152/6: 15/9/1705, CSP 1704-5, No. 1344). These spurs appear to have projected out from the main line of the entrenchments and were used to hold men ready for an advance, also providing enfilading fire along the length of the entrenchments. The defences covered all accessible points along the coast and made it 'as if it were one intire ffort or ffortification' (Council and Assembly of Nevis, PRO CO152/6: 12/3/1706).

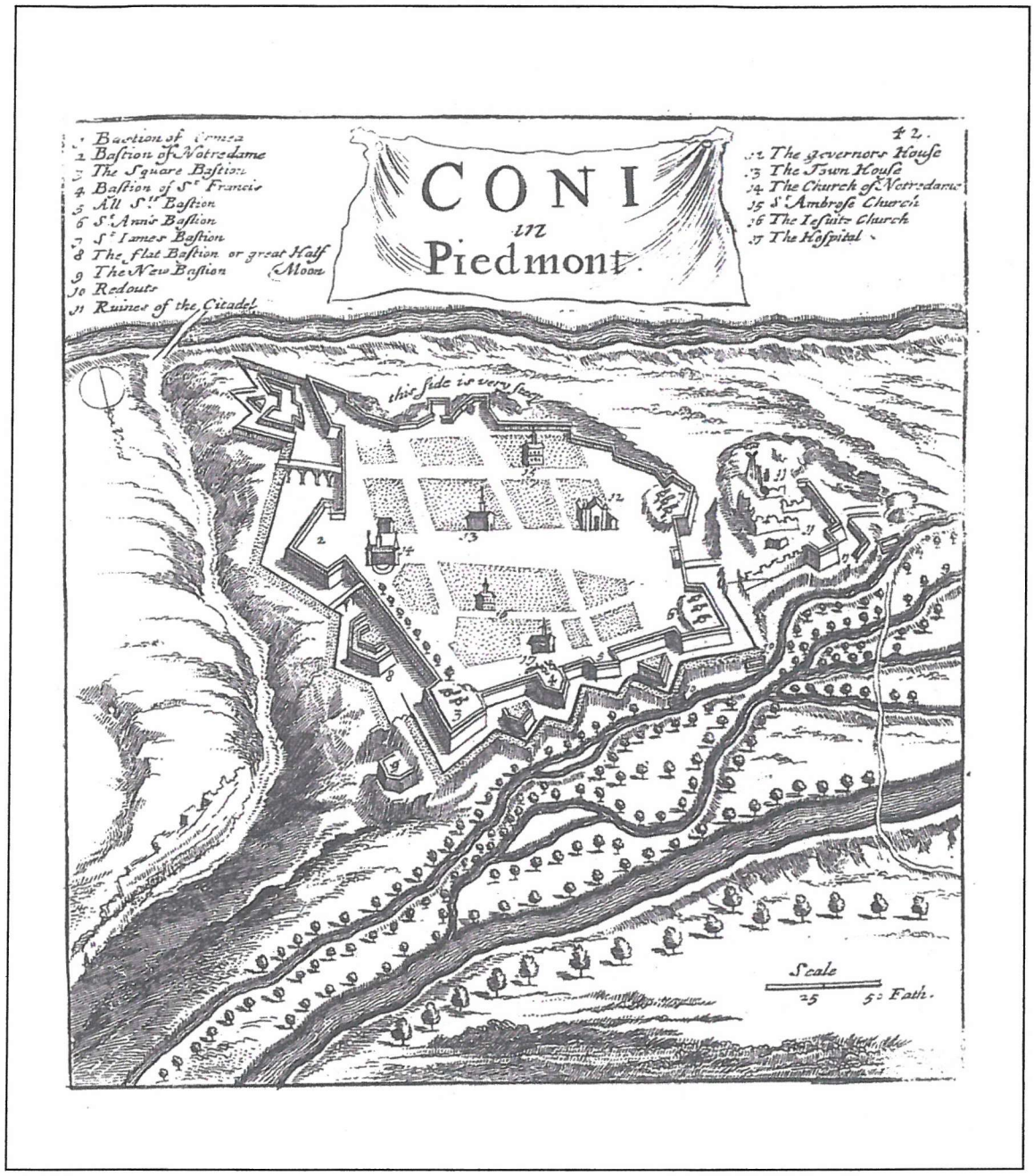

Figure 4j) Plan of Coni in Piedmont, Italy (Boyer 1701). A plat/flat bastion is shown on the curtain wall, at position 8, between the bottom left and centre left bastions.

Indeed, in 1734, Governor William Mathew recognised the similarity of the forts to elements of a unified system when he referred to the forts as being 'platt bastions' (PRO CO152/20/148: 31/8/1734), a type of intermediate bastion, often also called a 'flat' bastion, placed on the curtain of a large fortification or fortified town (Fig. 4j), to defend the area between the corner bastions (Boyer 1701, Anonymous 1702).

The forts cost £11,922 16s 11d in total (Council and Assembly of Nevis, PRO CO152/6: 12/3/1706), a staggering £1.25million in modern money (Economic History

Services 2002). Although it is uncertain how far the accounts of the Nevis Council and Assembly represent a wish list, the discovery of archaeological remains comparable to Johnson's fort plans on Nevis (see Chapter 5.2.4) would suggest that, even if incomplete, the works were at least approximate to the plans and were therefore a costly undertaking.

The forts were built in faced stone and mortar and many had guardhouses/powder magazines. In addition, in the front of each of the Pinney's Beach batteries, a water filled defensive ditch is shown (see Johnson's plans PRO CO700/ST. CHRISTOPHER AND NEVIS/2 and Appendix C). The number of embrasures (gun emplacements) shown varies from six to twenty-nine, with the majority showing ten to thirteen. It is, however, unlikely that so many cannon were utilised, with Johnson in 1704 requesting more high calibre cannon 'as the works being almost finished and none but small guns to put in them' (PRO CO184/1/3: 22/3/1704).

From plans of the structures, it would appear that they were similar to other forts built in the Caribbean at this stage (Campbell 1975: 214 & Fig. 4i), however, it is interesting to note that these linked lines of fortifications were a form of military building most typical of the earlier English Civil War period which remained uncommon until the later 18th/19th century when Montalembert revived their use (see Section 4.1.10).

Though spatially arranged in a similar fashion to English forts of the 1640s, in design, the Nevis forts are best paralleled by British, late 18th century detached works. Indeed, plans of fortifications such as Maker Heights in Cornwall (Fig. 4e), which were constructed in the 1780s, provide almost identical shapes to those found on Nevis nearly eighty years earlier (Saunders 1989: 127).

A further comparison can be seen at Burrough Fort in Portsmouth, which is shown in plan as a five sided, flat backed fort with an internal guardhouse and magazine (BL ADD2285), comparable in design to Cotton Tree Fort. Unfortunately, the date of this fort is uncertain and the only description states that it was 'ruined' by 1752, suggesting a possible foundation date in the earlier 18th century.

The presence of water filled ditches in front of many of the forts, would suggest a late 17th century, British theoretical origin of the type espoused by Bernard De Gomme. The ditches, however, would seem to be an unnecessary addition in forts of this type, which otherwise utilised few close range and landward defences. The coastal position of the forts may provide the clue, as in creating the rampart, digging foundations, etc, a hole might be produced which could be easily adapted to a water filled ditch by means of sea channelling.

Of further interest is the fact that both Johnson and Codrington had been at the siege of Namur in 1695, and would have seen, at close hand, Vauban's detached forts which surrounded the fortress. The trace of these forts is remarkably similar to those seen at Nevis. Even more significantly, the detached works at Namur appear to have been linked by breastworks. Indeed, between two of the lunettes, a triangular-shaped spur, similar to those seen on Nevis maps (Fig. C1f) is shown to the north-west of the main fort (Fig. 4d).

Although impossible to prove, it is tempting to suggest that much of the inspiration for the Nevis forts came from Namur. However, it is probable that Johnson and Codrington saw many such forts during their time in Europe, the Nevis forts resulting from an amalgamation of ideas and experiences. Whatever the case, Namur cannot be certainly discounted as an inspiration, as neither Johnson nor Codrington were trained as engineers and would therefore have used experience to aid their fort designing skills.

4.2.5 French and Dutch 17th and early 18th century fortification

The forts built by the Dutch and French in many ways mirrored those in the English colonies. Initial timber structures were gradually replaced in stone, with a single, larger, fort dominating the military presence in the islands. By 1710 on Grenada, the French had built a bastioned fort at Fort Louis and a series of small batteries around the coast (Jessamy 1998). By 1730, Fort Delgrès and Vieux-Fort (Delpuech 2001: 33) and a series of half moon batteries (Fig. 4k) had been constructed around the coast of Guadeloupe (Le Lycée Gerville Réache 1990:3).

On Dutch St. Eustatius, Fort Orange was built from the 1640s (Barka 2001: 119). Despite being invaded by the English and then the French in the later part of the 17th century, the four-bastioned fort survived, although by 1701 it was in quite a ruinous condition. One or two other early 18th century coastal batteries can be found on the island, although the majority of the batteries date from the period after the English occupation of 1781 (Howard 2002: 1).

On St. Maarten the first fort had been built in 1631 at Fort Amsterdam (Hartog 1994: 23). This triangular, demi-bastioned fort did not prove strong enough and in 1633, the Spanish had captured the island and built a small battery on Pointe Blanche. In 1666, the French had settled St. Martin, adjacent to St. Maarten.

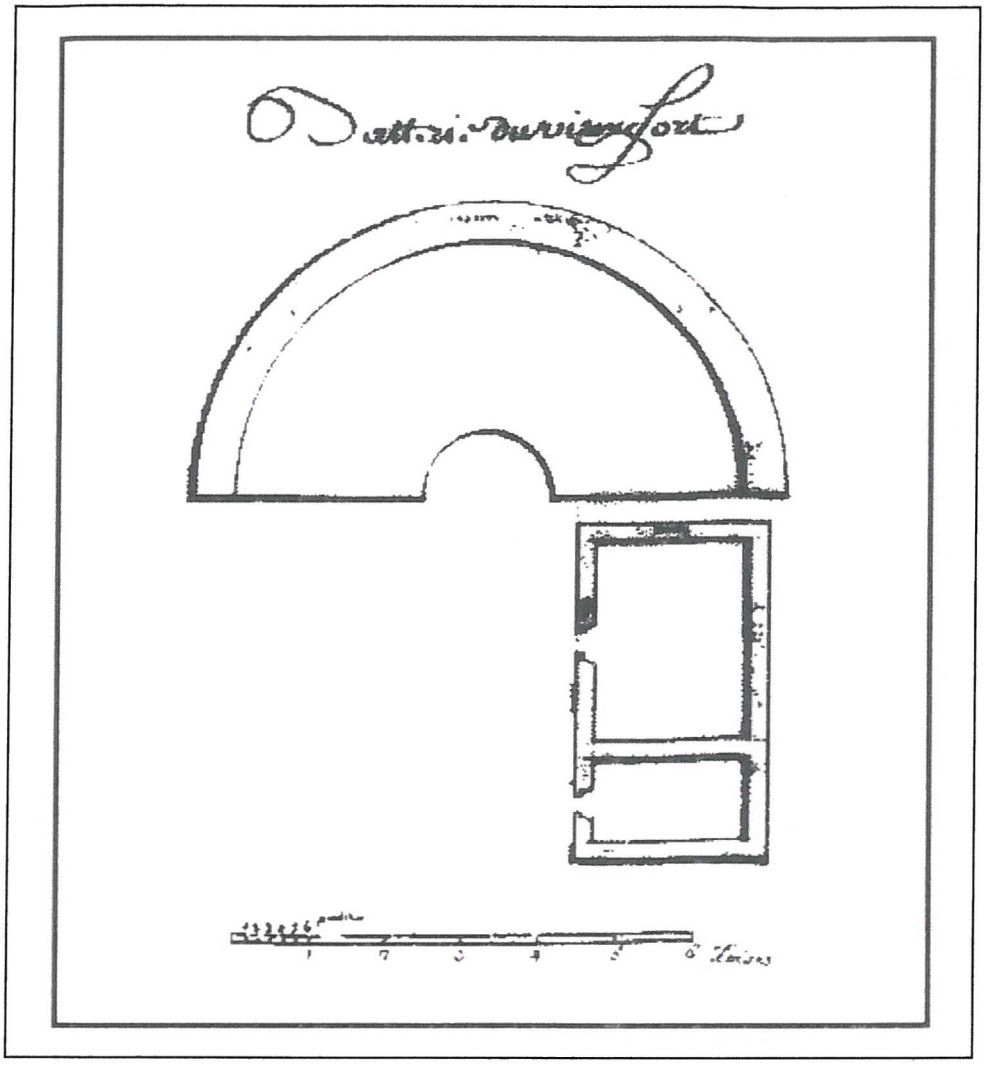

Figure 4k) Vieux Fort, Guadeloupe (Le Lycée Gerville Réache 1990: 15)

Both St. Eustatius and St. Maarten/St. Martin appear not to have been as well fortified as the English islands, a fact responsible for their frequent loss to the French and English in the 17th and 18th centuries. Like St. Eustatius, it would not be until the late 18th and 19th centuries that St. Maarten would be provided with batteries to defend its coasts (Hartog 1994: 55).

4.2.6 The early 18th century Caribbean

During the War of the Spanish Succession, many Caribbean forts came under fire. In 1703 Christopher Codrington III, with John Johnson as Major, led an attack on French Guadeloupe, with the intention of then attacking Martinique. The plan was to take control of the French islands: to create some English 'clear water' in the Lesser Antilles. Although

many of the small French batteries were destroyed, reinforcements from Martinique and a lack of English supplies caused the retreat of the English forces (Le Lycée Gerville Réache 1990: 8, Crandall 2000: 188).

In March 1706, on Nevis and English St. Kitts, invading French fleets caused huge amounts of damage, burning crops, destroying houses and plantations and effectively disabling several forts (for accounts of this attack, see PRO CO184/1, CO152/6, CO153/9, CO239/1). On St. Kitts, this loss is attributed to the reluctance of the planters to construct forts (Crandall 2000: 192); on Nevis, the forts seem to have achieved their aim, holding off the enemy for several days (Richard Abbott, PRO CO184/1/4: 13/3/1706). However, they were let down by the militia who allowed the enemy a landing (see Section 5.2.8.2). The open-backed forts were in no position, and indeed were not intended, to defend against such an attack from the rear (Richard Abbott, PRO CO184/1/19: 22/4/1706).

By 1712, Montserrat had been subject to at least six raids by French privateers, taking off slaves and burning crops. In 1710, St. Eustatius had also suffered at the hands of the French. The attacks on St. Eustatius, Montserrat, St. Kitts and Nevis had never been about seizing territory. Their purpose, so typical of the late 17th and early 18th centuries, was to raid and pillage. Slaves were the prize; the destruction of plantations and forts was an added bonus.

4.2.7 Nevis in the 18th century

Following the French raids on Nevis, the forts appear to have gone into decline. Reports from 1707 describe many of the forts as being without guns (Fort Major James Milliken's Report PRO CO152/7: 15/12/1707) and by 1727, even Fort Charles is described as being 'out of repair' (Account of His Majesty's Forts CO152/16/159: 3/10/1727). In a further report of 1728, Nevis is described as being 'a desert island to what it was thirty years ago' (William Mathew to the Council of Trade and Plantations CSP 1728-9, No. 24). By 1732, Charles Fort and Black Rock are described as being in a 'very bad condition' (Council of Nevis PRO CO186/2: 3/3/1732).

In 1734, Governor William Mathew submitted a wide-ranging report entitled 'A State of His Majesty's Carribbee Islands in America'. Nevis is described as having 'fallen into great decay...with so little care for what the next warr [sic] may produce against them' (PRO CO152/20/148: 31/8/1734). The forts are mostly described as ruinous, with many of the guns being dismounted and unusable.

By 1740, although an Act for a fort on Saddle Hill had been passed (Nevis Act PRO CO153/16: 7/4/1740), within two years this project appears to have been largely abandoned (William Mathew PRO CO152/24/145: 16/10/1742). In 1754, the defences had reached such a deplorable state that when Governor George Thomas first visited Nevis 'there was not the appearance of anything military in that island' (PRO CO152/28/15: 21/1/1754).

In 1773, a document entitled 'A Return of the Forts and Batteries in the Island of Nevis' was drafted (PRO CO152/32: 1/2/1773). At this date Saddle Hill had been reduced to an alarm post and apart from Charles Fort, Black Rock, Morton's Bay, Musketto Point and Long Point, all the other batteries were described as ruinous and unused. Even those forts that remained were, in many cases, in desperate need of repair and few had any decent guns.

Again the inhabitants ignored the requests of Governor Ralph Payne to repair their defences, leading him to remark that 'it has been with a mortification that I have observed their power and existence to retire without any one step having been taken' (PRO CO186/5: 21/6/1773). Despite further exhortations to repair their defences (see William Burt PRO CO153/23: 1/11/1777, William Mathew Burt PRO CO186/7: 10/7/1779, William Burt PRO CO153/24: 17/4/1780) little appears to have been done. Three small batteries do seem to have been built on Pinney's Beach in 1777 (William Burt, PRO CO153/23: 6/10/1777), however, the small calibre of guns present would suggest they would have been largely ineffective against any invasion.

In 1782, a large French fleet arrived at Nevis. Fearing that the French would 'bring their whole line of fire on an open and defenceless battery of a few old and indifferent cannon with a single artillery man to manage them' (John R Herbert to General Shirley, PRO CO152/62/190: 16/2/1782), Nevis surrendered. St. Kitts had also been taken in the same attack and both islands remained in French control until 1783 (Hubbard 1996).

During the French occupation, the majority of cannon on Nevis had been disabled (George Lord Forbes, PRO CO152/75: 3/4/1794) and in the following years, apart from a small number of cannon being sent and a few repairs made to Charles Fort, the island's forts appear to have fallen into terminal decline. The defences were in such a dilapidated state in 1805 that a French fleet demanded, and got, money from the inhabitants, destroyed the ships in the harbour at Charlestown and sailed away without even a single shot being fired (George Webbe Daniel, PRO CO152/87: 14/3/1805).

In 1812 and 1813 surveys of Charles Fort reported that the fort had only four cannon in any sort of good repair; the rest were either dismounted, damaged or had rotten

gun carriages. The buildings within the fort were also desperately in need of attention (John Peterson, PRO CO186/10: 4/12/1812, CO186/10: 1/1/1813). By 1820, the matrosses (gunner's assistants) were described as being old, with one of them lame and the other having lost the use of his right hand (John Peterson, PRO CO186/11: 10/4/1820).

In 1839, records show that the situation had deteriorated even further: the Board of Fortifications had been merged with the Board of Public Works, the militia comprised only twenty-five men and military expenditure had dropped to tens of pounds per year (Blue Book for 1839: PRO CO187/13). By the early 1840s the militia had been disbanded, the post of Captain Gunner was honorary and in the majority of cases the forts were used as Customs and quarantine depots. Indeed, in 1853 the printing and stationery for the Nevis Administration had cost over twice as much as the price of maintaining the forts (Nevis Returns for 1853: PRO CO184/2). By 1869, three of the remaining forts on the island, Saddle Hill, Mosquito Point, Black Rock, were described as being 'quite overgrown with brushwood' (Blue Book for 1869: PRO CO187/43). By 1877, even the final military post of matross had been removed.

Thus ended the tortuous decline of the Nevis military and its forts. As has been shown above, although a military presence was on Nevis until the late 19th century, the island had ceased to offer effective defences nearly 170 years previously. This picture was not however, mirrored in the other islands where the mid 18th to early 19th centuries and beyond saw a remarkable expansion in their defensive systems.

4.2.8 Defences of the Caribbean from the mid 18th century

In contrast to Nevis, the mid to late 18th century saw a period of defensive development in the Dutch and French islands. Even the other English islands present a different scenario from that seen in Nevis, with many of the islands receiving large and complex fortified works from the mid 18th century (Pares 1963: 246).

On St. Kitts, following the depredations of the French, the island appears to have rallied. The Treaty of Utrecht in 1713, brought stability, handing the whole island to the English. By 1717, an amount of £500 was expended on work at Brimstone Hill. By 1723, a series of discontinued bastions and a large bastioned fort, the Mince Pye, now crowned the hill summit. Work continued at Brimstone Hill and by 1782 the fortress comprised a complex arrangement of bastions with storehouses, guardrooms, barracks and even accommodation for the slaves who built and repaired the structure (Smith 1994: 86, 1995: 78, Schroedl 2000b: 7). Although the fort fell to the French in 1782, upon its return to the

British in 1783 it was again heavily fortified in advance of the Napoleonic Wars. By 1790 £41,600 (£3 million in today's money) had been spent on the fort, the work being carried out under the supervision of Lieutenant A. Lees, Royal Engineer (Smith 1994: 91).

By 1805 the Mince Pye had been replaced by the polygonal Fort George Citadel (Smith 1992b: 55). A polygonal bastion, the Prince of Wales Bastion, had also been added. Further improvements included the addition of large infantry barracks and officers' quarters to provide accommodation for the 300-500 troops garrisoned in the fort (Smith 1994: 94). For members of the garrison who became ill, a hospital was provided and for those whom medicine could not cure, there was a cemetery. By 1830, the configuration present today had been achieved (Fig. 4l).

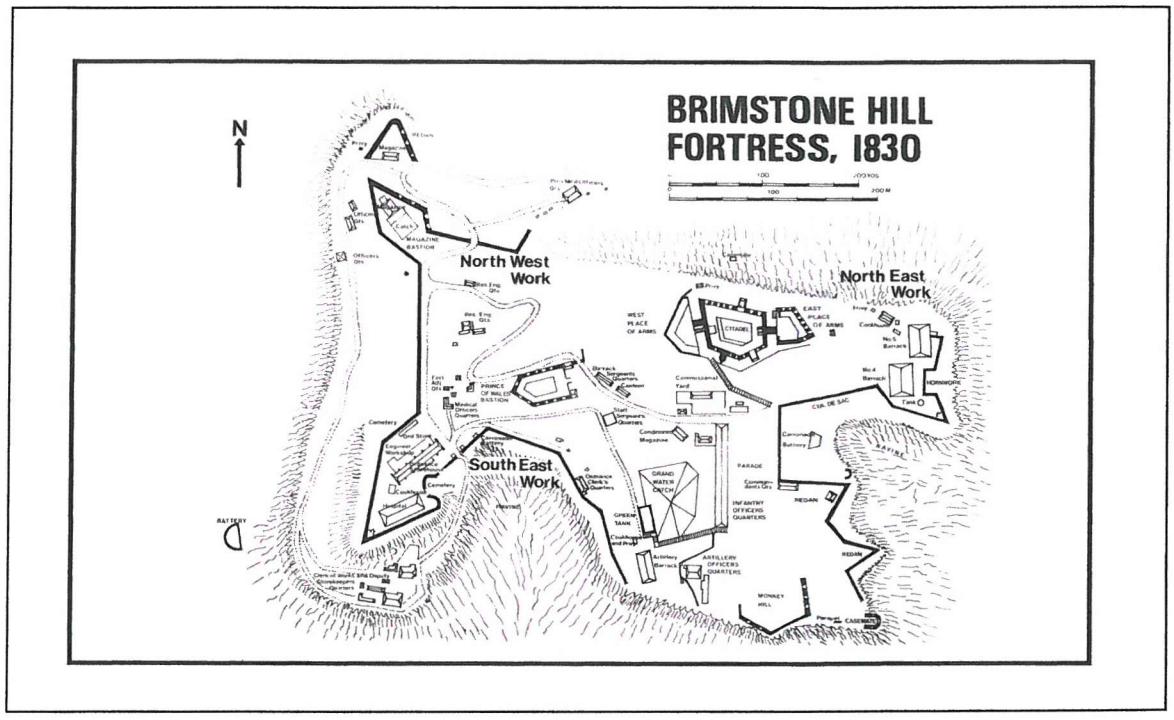

Figure 4l) Brimstone Hill, St. Kitts, 1830 (Smith 1992a: 47)

The coastal forts of St. Kitts were also repaired and developed. In 1723, Charles Fort is shown as a bastioned work with a powder magazine, grenadiers and a guardhouse. Six other coastal batteries are also described in 1724. By the 1760s other batteries such as Fort Tyson had been added to the repertoire. At the end of the Napoleonic Wars, with Guadeloupe and Martinique having been ceded to the English, many of the smaller batteries fell into disrepair.

However, a few, such as Fort Thomas, continued in use beyond the French attack of 1782, and were used as signal stations in the 1840s and 1850s. In 1853, following the

withdrawal of the regiments stationed there, Brimstone Hill was abandoned (Smith 1994: 106).

On the other British islands a similar pattern of renewal in the late 18th century and final abandonment in the 19th century occurred. On Barbados, in the mid 18th century, two extra batteries were added to Fort Charles (Alleyne and Sheppard 1990: 8). Two maps of the island, from 1746 and 1750, show a series of coastal batteries along the western coast (PRO CO700/BARBADOS 7 & 8). In 1783, huge barracks (The Garrison) were built to house the sudden influx of troops brought to the island to guard against an expected French attack. By the late 1780s, a developed bastion fort could be seen at St. Anne's and by 1816 the Garrison had been developed into a massive compound with ordnance buildings, quarters and a cemetery (Campbell 1975: 8).

On Montserrat, although some of the forts fell into disrepair, in the late 1780s a handful of forts, including Fort Barrington, were built (Crandall 2000: 312). Several of the coastal batteries continued in use during this period and, as on St. Kitts, it was not until the end of the Napoleonic Wars in 1815, that defence became less of a priority and the forts fell out of use (Crandall 2000: 395). In Antigua, the defences had an even longer life span, with major programmes of building being carried out during the 18th and 19th centuries. The usual programme of defences was instituted in the early 1780s, with the construction of Shirley Heights (Jane 1982: 15) and strengthening works being carried out at Great George Fort, the Naval Station at English Harbour, and at many of the coastal batteries. Again the cessation of hostilities in 1815 led to a downgrading of military activity. However, the sprawling military base at Shirley Heights continued to be used until the removal of the last garrison in 1854 (Nicholson 1994: 22).

In Jamaica in the mid 18th century, £9,000 was voted for the construction of fortifications, and Fort Augustus, amongst others, was begun. By the late 18th century, several other forts and batteries, for example, Fort Small and Fort Haldane, had been constructed using generous local contributions (Jamaica 2002). However, during the French Revolution, Jamaican slaves, affected by the notions of 'Liberté, Egalité, Fraternité' and inspired by Toussaint L'Ouverture's revolution on nearby St. Domingue, formed an uprising and, although a relatively minor event, this shocked the white inhabitants sufficiently to again mend and strengthen their defences, with several armed positions being constructed around the base of the mountains (Black 1983: 96).

Jamaica, like Antigua, had a large British Naval station, situated at Port Royal. From the late 18th century, under the command of Sir William Rodney, this was gradually expanded and developed. In 1783, a large polygonal battery, Prince William Henry's

Polygon, was built at the eastern end of Port Royal. By 1838, the naval station had been further enhanced and now became part of the North America and West Indian station. However, by 1905, the dockyard was deemed to be too small to accommodate the large British fleets patrolling the Caribbean and was abandoned (Pawson and Buisseret 1975: 141).

In the smaller English islands, like Barbuda, fort building appears to have continued. A probable Martello Tower appears to have been constructed at River Fort in c.1800. Further, well armed, batteries are also reported on the island in the 1810s (Nicholson 1994: 32). In the Dutch islands, the advent of war in 1781 brought a British fleet to St. Eustatius. The size of the fleet and the slight defences on the islands caused the Dutch to immediately surrender. The British then set about fortifying the island and added batteries at Corre Corre, Zeelandia Bay and Venus Bay. However, by the end of 1781, the French had taken the island from the British and further strengthened the defences, possibly building new batteries at sites such as Bouille (Howard 1991, 2002). In 1816, when the island was returned to the Dutch, the fortifications fell into disrepair, being described as ruined on a map of 1840 (Barka 2001: 132). St. Maarten, although strengthening Fort Amsterdam and adding several coastal batteries in the late 18th century, suffered a similar fate to St. Eustatius and was captured by the English in 1801. The British constructed several small batteries, including Fort Willem, on the island. However, following the return of the island to the Dutch, in 1816, the military structures were allowed to decay (Hartog 1994: 56).

The French islands fared little better than the Dutch, with the English invading Grenada in 1762. By 1763, with the island having been officially handed to Britain, the British forces constructed a small battery at Fort Levera/Bedford Point and repaired the defences of Fort George and Hospital Hill Redoubt. In 1779, the French again seized the island and built several new batteries and forts on Richmond Hill. Under the Treaty of Versailles in 1783, the island was again given over to the English, who continued the building works at Richmond Hill. These forts remained in use until 1854, when the British withdrew their forces. In 1880, one of the Richmond Hill forts, Fort Matthew, became a lunatic asylum (Jessamy 1998: 31).

Guadeloupe having been captured by the English in 1759 was returned to French hands in 1763. Despite the refortification of Fort St. Charles (Delpuech 2001:35), by 1794, the island had again reverted to the English. Although briefly returning to French hands in 1802, in 1815, following the end of the Napoleonic Wars, the island was given to Britain.

However, soon after, the British military presence was removed from the island (Le Lycée Gerville Réache 1990: 19).

4.3 Discussion

4.3.1 Patterns of use and abandonment

As has been shown, the history of Nevis fortification is very different from that experienced on many, if not all, of the other English islands. Although reasonably comparable in the period up to the early 18th century, following the attack of 1706, the forts and batteries of Nevis fell into decline while many of the other European islands rallied, upgrading their defences in advance of the wars of the late 18th century. Why this pattern emerged is difficult to ascertain. Clearly, from the continued French attacks on Nevis in the late 18th century, defences were still necessary on the island and so it is strange to find that Nevis appears to have received minimal military upgrading. However, several reasons can be postulated to explain this deficiency.

Firstly, the French attack of 1706 obviously caused great destruction on the island. Every planter and estate owner must have been directly affected by the invasion as testified to by the dramatic fall in sugar production from 2,965 tons in 1704 to 533 tons in 1706 (Hubbard 1996: 94). An account from May 1706 supports this interpretation and states that 'the damage done to Nevis, by a modest computation, amounts to a million of money, besides all HM forts with 100 cannon and all warlike stores' (Merchants and Planters of St. Christopher's and Nevis, CSP 1706-8, No. 355: May 1706).

The return of St. Kitts to the English would have removed a close threat to Nevis, probably increasing the Nevisian planters' apathy. The development of Brimstone Hill would have added to their complacency. By 1720, the picture remains the same, with the inhabitants of Nevis described as 'dispirited and careless' (Walter Hamilton, CSP 1719-20, No. 28: 28/3/1720).

With the debts accrued following the French attack it is unlikely that fortification would have been a priority with the Nevisian planters. In this climate, and with no further threatened attacks, it is easy to see why the Nevis forts were left to ruin throughout the major part of the 18th century. Evidence of such apathy can be seen in the slow and reluctant construction of the Saddle Hill fortifications and the ill discipline of the meagre 300 strong militia (William Mathew, PRO CO152/25/92: 15/4/1746) which led Governor

Sir William Mathew to comment that the Nevisians felt that 'discipline is the first step to tyranny' (PRO CO152/24/152: 16/10/1745).

As the 18th century closed, the decline in the profitability of sugar and the beginnings of the emancipation movement, as shown by the return to England of such notable planters as the Pinney family (see Section 2.2.3), would have further removed any stimulus for fort building on Nevis. Indeed, the longer the decay was allowed to continue, the higher the cost of repairs would become, thus causing a greater reluctance to carry out the, by then, expensive renovations. A further extension of this reluctance may have been caused by the lack of a fort 'motivator', a person of the likes of Johnson or Codrington, who had encouraged, cajoled and bullied the inhabitants of Nevis into constructing forts. Following Johnson's murder (see Appendix B 1.7) and Codrington's retirement to Antigua, the absence of such a person in Nevis is evident.

The new Governor, Daniel Parke, did not inspire respect amongst the Leeward Islanders, and in particular the Nevisians. Parke appears to have done little during his Governorship; the majority of his military activity seems to have been spent criticising Codrington and Johnson, and almost every other Leeward Islands official (for Daniel Parke's complaints see Daniel Parke, PRO CO153/9: 15/7/1706, 28/8/1709, CO239/1: 4/10/1706, 9/12/1706, CO152/6:9/12/1706, etc). Such disrespect and enmity led to his murder at the hands of an Antiguan mob in 1710 (see Appendix B 1.7).

Secondly, in the 18th century, Nevis did not have an embryonic large fort, or an obvious area on which to build one. On islands such as St. Kitts there was usually a partly developed site in a prominent position, for example Brimstone Hill (Smith 1994: 73, 1995: 77), which could be effectively built upon and strengthened. These fortresses were forced to operate mainly in isolation, primarily functioning as places of last retreat, from whence troops could be dispersed in time of war. The home government actively encouraged the construction and development of such 'Refuge Fortresses' (Smith 1995: 91), with large garrisons of British troops being sent out to islands such as Antigua, St. Kitts, and even to Montserrat. The island of Nevis had no such structures to stimulate this type of development, nor the governmental interest to build or man them.

In fact, by the late 18th century, it would appear that Brimstone Hill was deemed to be sufficient to provide for the defence of both islands, with General Thomas Shirley suggesting that '...the security of Nevis and Montserrat depends very much on the state and condition of Brimstone Hill' (PRO CO152/63: May 1784). However, the presence of the Brimstone Hill fortress had not proved sufficient to protect Nevis from the French fleet of 1782 and 1805 and so it is debatable how effective such a policy might have been.

Thirdly, as in Britain, the rise of the British navy led to a reliance upon armed ships rather than on land fortifications. The development of the dockyards at Port Royal and English Harbour throughout the 18th and early 19th centuries is evidence of this change in emphasis. The small batteries that had played such an important role in the 17th century became increasingly obsolete, as the Europeans in the Caribbean relied upon the large fortresses for their defence, with the coasts theoretically being protected by patrolling armed fleets. The accuracy and range of these naval armaments was greater than the small batteries could defend against: once a large fleet of well-armed ships approached an island, as happened on Nevis when the French attacked in 1782 and 1805, the refuge fortresses provided the only hope.

In many ways, Caribbean fortification strategy in the late 18th/early 19th centuries mimics the castle building programme of Edward I in Wales and Scotland. In a similar way to Edward's castles, the Caribbean fortresses became symbols of British imperial dominance: massive, unassailable structures built and maintained by the toil of subdued slaves. Their defences were not enough to protect entire islands: however, the presence of such awe-inspiring structures might stop an enemy ever trying (Pares 1963: 248).

By the 1850s, the sugar trade had all but ended and the slaves had been emancipated. As such, the islands were no longer a profitable source of wealth: the increasing social problems caused by centuries of slavery made government extremely difficult for the Europeans. The colonial boom was over, and from this date onwards the British government increasingly realised that, as far as they were concerned, there was nothing left to defend. In 1854 British military forces abandoned the Caribbean forts.

4.3.2 The Nevisian fort legacy

The pattern of development and abandonment displayed by Nevis' military structures suggests the potential for individualism amongst the Caribbean islands of the British Empire. Although profitability, interest by the home government, and location all influenced the precise military repertoire of each island, the role of the individual cannot be discounted.

On Nevis, the work started by Sir William Stapleton, and continued by Christopher Codrington and John Johnson, was integral. From the letters and plans sent back to England it soon becomes apparent that without their personal attributes and experience, both good and bad, the Nevis defences might have been very different.

For instance, William Stapleton, an experienced Irish soldier, married into the Russell family, one of the largest plantocracies on Nevis (Dunn 1973: 125). With such local connections, is it possible that he was influenced to design better defences for Nevis than for elsewhere? As an amateur engineer, how much were these defences based upon his experience? In Codrington's case, his background as an officer in the wars of Europe and as an Oxford scholar with a theoretical interest in fortifications may have resulted in him designing the Nevis forts. Codrington's patronage of Johnson is also of interest: why did Codrington promote Johnson so quickly? Was it because Johnson was a good soldier or was it because he was a good soldier of lowly background, who would be impressionable and could therefore act as a conduit for Codrington's ideas?

With Johnson, further questions arise. For instance, Johnson's detailed, coloured fort plans of 1705 (John Johnson, PRO CO700 ST. CHRISTOPHER AND NEVIS/2 and Appendix C) are almost unique in the Caribbean, and even in Europe: in the majority of cases only small inked sketches were deemed to be appropriate for such militarily simple structures (for example, Le Lycée Gerville Réache 1990: 13, BL ADD14034). What was Johnson trying to prove by providing such elaborate plans, and what can that tell us about his background and personality? Comments by Daniel Parke, who referred to Johnson as having been a 'bricklayer' and as being unable to read or write (Daniel Parke, PRO CO239/1/15: 4/10/1706), may offer some insight into the insecurities, and wish to please, so apparent in many of Johnson's letters. Furthermore, if Johnson was illiterate, who had written those same letters?

The answers to the above questions may never be known for certain; however, by examining the personalities of those involved in the Nevis fortification process (via their letters) in conjunction with what they achieved (via the archaeological remains of the forts) we may reach a better understanding of the fortifications and the motivations that caused them to be built.

The fact that military construction on Nevis was largely abandoned in the early 1700s provides a time capsule of information, undisturbed in most cases by later works. The majority of archaeological fort remains, the core resource of the present study, date from this final period of activity, with some forts appearing to evidence abandonment almost immediately after 1706. The following chapter (Chapter 5) details these discoveries and, from archaeological evidence, analyses the material remains of the structures with reference to the military development and decline of 17th and 18th century Nevis.

5 The Forts and batteries of Nevis: Thematic analysis.

'Places that are in an island have no need of a regular fortification, because the enemy can have no stable batteries, by reason of the continual motion of the ships...yet it aught to be a little fortified, least it should be surpris'd by an enemy's fleet'

'A Treatise of Fortification' by Mr. Ozanam (trans. by J. T. Desaguliers), London, 1711.

5.1 Introduction

As has been shown in the previous chapter, the development and decline of the forts of Nevis appears to be unusual when compared with the wider Caribbean. Although following the early development patterns for many islands in the 17th century, the decline of the Nevis forts from the early 18th century would appear to mark them as potentially unique within the Caribbean.

The following chapter aims to examine this development and decline with reference to the author's fieldwork on the island of Nevis. This examination is achieved thematically, and analyses the forts with relation to their date, location, design, architecture, construction, naming and armament. It also examines the artefacts found in the vicinity of the forts. It is hoped that this technique will further illuminate the detail of the defences of Nevis and will help to establish a standard method of archaeological fort analysis, which may be used for other islands. Background detail for this chapter can be found in the Gazetteer, in which all the Nevis forts have been catalogued individually (see Appendix C 1.4).

5.2 Themes of analysis

5.2.1 Historical dating

The broad dating of the Nevis forts has been covered in Section 4.2.7. This section examines the dating of the Nevis forts in detail, establishing a firm chronology for fort building on the island. It would appear that the Nevis forts originate with the first period of English occupation, following Thomas Warner's settlement of St. Kitts in the early 1620s. However, the presence of the Newcastle Redoubt, a highly unusual fort not only on

Nevis, but also in the wider Caribbean, might possibly suggest an earlier defensive origin in this case.

5.2.1.1 The Newcastle Redoubt

The Newcastle Redoubt is an enigma within the forts of Nevis. From historical records it is known to have been old in 1706 (Council and Assembly of Nevis PRO CO152/6: 12/3/1706), however, no other historical records relating to its provenance have been located. Based on the defensive qualities of the fort, Victor Smith (1990) has suggested that the fort may originate from the early half of the 17th century. This interpretation seems reasonable as the Redoubt shows great similarity to other such forts built on Bermuda in the 1620s (Harris 1986: 313).

In particular the restored fort of Town Cut Battery (Gates Fort) on Bermuda (Harris 1992: 17) has a small magazine to the rear of the gun battery, which would appear almost identical to the Newcastle Redoubt (see Section 5.2.4.1). However, although Town Cut Battery originated as Davers Fort in the 1620s, the present form has been significantly altered over the years and it is uncertain how much of the original fortification remains (Harris 2002).

It is also possible that the Redoubt belongs to a time later in the 17th century. In 1672, Sir Charles Wheler advised the Nevisians to build 'little redoubts, shut up as well to the land as to the sea' (PRO CO1/29/161: 14/12/1672). However, it is uncertain whether this advice was ever followed. However, this might suggest the Redoubt to be of a late 1660s/early 1670s date. Unfortunately, following the Nevis Heritage Project's rescue excavation at the site (Morris et al. 1999), the fort was bulldozed and no further work was possible within the vicinity. Sadly, had the fort dated to the 1620s, then it was almost certainly the best-preserved, early English Fort in the Caribbean. Its demolition was therefore an even greater tragedy.

5.2.1.2 Late 1620s: Official settlement

Apart from the anomalous Newcastle Redoubt, the first known fortified position on Nevis was established following English settlement in 1628. Initially called Pellican Poynt, this position is mentioned within an account of a Spanish attack on the island in 1629, and is described as having opened fire on the enemy (Harlow 1925: xxiii). At this stage the

island had only one 'great gune' (Harlow 1925:10), which had been placed on the Point to defend the harbour.

5.2.1.3 The 1660s

From the 1620s until the 1660s there is a paucity of official documentary evidence. It is probable that, until sugar cultivation started in earnest in the late 1650s, very few official defences had been undertaken, hence the lack of official records. Indeed, until the 1660s the islands had been haphazardly managed (see Section 2.2.3). However, from 1660, the introduction of a state-appointed Governor and the 4½% duty, led to increased English governmental involvement.

By the late 1660s a few unnamed forts appear to have been built on Nevis. These forts, financed by planters' money, local taxes and by the 4½% duty, were hastily erected to guard against the depredations of the Dutch and French during the Dutch Wars of this decade. In 1666, the islanders had insufficient military provision and complained that 'if wee are neglected from Europe...farewell to the Caribbee Islands by degree' (Francis Sampson, PRO CO1/20/165: 6/6/1666).

5.2.1.4 The 1670s and 1680s

However, in 1671, a new Governor, Sir Charles Wheler intended to remodel and upgrade the 'scurvy platforme' (PRO CO1/27: 1671) at Pellican Point. He also mentioned that there were five very dilapidated platforms on Nevis: almost certainly Pelican Point, Black Rock, Old Road, Duke's Sconce and Morton's Bay. There was also mention made of an entrenched line running the length of the leeward Coast.

By 1672, a new Governor had been appointed. Sir William Stapleton, an Irish soldier who had married into the influential Russell family of Nevis, set about reviving the fortunes of the Leeward Islands (Dunn 1973: 125). On Nevis, acts against the demolition of forts were passed (Nevis Acts, CO154/2/51:26/5/1675) and by the late 1670s, two extra platforms, Session's House and Willoughby's platform had been built. Two alarm gun positions had also been established at Butler's Hill and at Old Windward. By 1679, Stapleton had remodelled Pelican Point fort and had renamed it Charles Fort, in honour of the King (William Stapleton, CSP 1677-80, No. 933: 15/3/1679, for plan see Fig. C9a).

However, by 1680, the Assembly of Nevis ordered that work should be stopped on the new fort owing to the 'inconsiderable sum given by the King towards the building'

(Assembly of Nevis, CSP 1677-80, No. 1369: 25/5/1680). Stapleton continued to lobby for more money, suggesting that monies from the 4½% duty should be used to build a strong fort on each island (William Stapleton, PRO CO1/45/170: 1/7/1680). However, the King, rather inappropriately, insisted that there should be only one fort built for all the Leeward Islands (William Stapleton, PRO CO153/3: 7/2/1681).

By 1682, the arguments over the use of planters' money for defence versus the use of the 4½%, raged on. The slaves had again been taken off the work at Pelican Point, with the Council and Assembly of Nevis insisting the 4½% should be used to pay for any future work (Council and Assembly of Nevis, CSP 1681-5, No. 790: 15/11/1682; No. 804: 20/11/1682). In 1684, William Stapleton proposed the building of a new fort at Long Point. However, again the Assembly of Nevis refused the request (Assembly of Nevis, CSP, 1681-5, No. 1623: 4/4/1684; No. 1704: 24/5/1684).

By 1685, the position of the Nevis government had changed and they agreed to Black Rock and Old Road forts being repaired. Stapleton proposed that both forts should be furnished with stone gun platforms. However, by the end of the year the plans appear to have been abandoned with the Assembly refusing to pay for any guns to go in the forts (Assembly of Nevis, PRO CO1/58/94: 26/11/1685). By 1687, with Stapleton now replaced by Sir Nathaniel Johnson, the work still appeared not to have been carried out. By August of that year, a report was made which described the stone and timber to be used for the forts lying abandoned in a ghut (gully) and on the beach (Anonymous, PRO CO155/1: 6/8/1687).

By 1688, with the possible threat of war, repair work at the Nevis forts appears to have accelerated. A request for money towards building stone forts at Sessions House, Black Rock and Old Road was made (Anonymous, PRO CO155/1: 20/11/1688). Nathaniel Johnson also recommended a remodelling of Charles Fort to include a stone flanker on the landward side of the fort (Nathaniel Johnson, PRO CO1/155: 24/11/1688). By 1690 the island was described as being well enough fortified to hold its own (John Netheway, CSP 1689-92, No. 771: 25/5/1690).

5.2.1.5 The 1690s

In 1692, a Royal Engineer called Hugh Simms spent three weeks on Nevis assessing the forts and making recommendations. However, Simms then went on to spend six years carrying out works in Antigua (Hugh Simms, PRO CO152/4: 22/10/1700). It would appear that his time in Nevis had very little effect, with apparently only the deodand

(mountain retreat) being repaired after his visit. However, from this time, under the Governorship of Christopher Codrington II, the trenches and forts of Nevis appear to have received some attention (Christopher Codrington, PRO CO152/2: 2/9/1696).

By 1699, Christopher Codrington's son, another Christopher, had been made Governor of the Leeward Islands. Christopher Codrington III appears to have been a military man of the ilk of William Stapleton, and immediately set about refortifying the islands. Nevis, by 1701, had five forts at Long Point, Charles Fort, Black Rock, Old Road, James Fort (renamed from Morton's Bay upon the accession of James II in 1685) and a new platform at Round Hill (Council of Nevis, PRO CO152/4: 7/1701). In a further letter of August of that year, in addition to the above forts, seventeen gun emplacements along the leeward coast were also mentioned (Christopher Codrington, PRO CO152/4: 25/8/1701).

5.2.1.6 The 1700s

In 1704, following his promotion to Lieutenant Governor of Nevis and then to Governor of the Leeward Islands, John Johnson set about continuing the defensive works initiated by Codrington. All existing forts on Nevis appear to have been upgraded, with several new forts being built.

Johnson claimed to have constructed at least five new forts: St. Anne's/Indian Castle, William's Fort/Long Point, Johnson's, Mathew's and St. Thomas'/Cotton Tree. At Katherine's/Old Road, St. James'/Morton's Bay and at Round Hill it appears that the forts were rebuilt from the foundations, with Katherine's/Old Road being relocated closer to the sea. Two gun platforms were also added, close to the landing place at Charlestown. In addition, Charles Fort, Black Rock, Abbott's/Cole's Point and Codrington's forts were repaired.

Several of the new forts, including Johnson's, Mathew's and Cotton Tree forts appear to have taken advantage of earlier gun emplacements and were constructed as larger permanent structures on these positions. All the forts were apparently built in stone towards the sea with turf defences on the landward sides. Between the forts, a defensive bank and ditch entrenchment was constructed with spurs between each fort designed as places of arms for troops and guns (Figs. C1c, C1d & C1f). It is likely that the entrenchments were remodelled from the existing trenches constructed in the mid to late 17th century, but, with the construction of the new forts, a new alignment would almost certainly be necessary.

By 1706, the forts were finished. However, the French attacks from February to April in that year appear to have caused considerable damage to the newly constructed defences. Several reports mentioned the activities of Johnson's, Mathew's, Old Road, Charles Fort, Black Rock and Cole Point, with Old Road, Cotton Tree and Cole's Point keeping the French at bay during the February attack (Council and Assembly of Nevis, PRO CO152/6: 12/3/1706).

By the end of March, the French returned and, having gained access to the island, soon held 'foure of the best platforms which were only defensible to the sea' (Richard Abbott, PRO CO184/1/6: 21/3/1706). A further account described only smoke and fire being visible, which when cleared revealed French flags flying in 'two severall forts' (Antony Hodges, PRO CO152/6: 6/4/1706).

Following the French attack, the defences of Nevis fell into a rapid decline. In a description from 1707, Gualdings Bay/Indian Castle, Johnson's, Mathew's, Cotton Tree and Cole's Point were described as having no guns, with many of the other forts (apart from Charles Fort) only having only one or two guns (James Milliken, PRO CO152/7: 15/12/1707). Charles Fort and Black Rock forts appear to have been the only ones to have been repaired following the attack, with only a single new battery being constructed near Charles Fort at Christopher Hodgson's (Council of Nevis, PRO CO155/3: 13/1/1707; PRO CO155/3: 23/6/1707). However, although this battery was to have stone platforms, the structure itself was to be built of turf.

5.2.1.7 18th century decline

By 1715 an inventory of stores only mentioned Charles Fort, Towne Platform, Black Rock, Morton's Bay (James Fort), Long Point, and Musketo platform (Codrington's). The inventory did, however, mention a wish to build a new fort on Saddle Hill (Fort Inventory, PRO CO152/11: 1/9/1715). By the late 1710s, the amount spent on the forts (£50 8s 11d in 1718, £200 in 1719) when compared to the amount spent on guarders' wages (£132 2s 11d in 1718, £208 in 1719) would suggest that the repair of the forts was of little priority. By 1722, repairs were again reported to be necessary at Charles Fort.

In 1723, an account by Walter Hamilton blamed this neglect on the fact that 'the most wealthy and best educated of the people belonging to that island reside in England' (Walter Hamilton, CSP 1722-3, No. 576: 8/6/1723). Indeed, the construction of a vault at Fort Charles, agreed in April 1722 had yet to be started in November 1723 (Council of Nevis, PRO CO186/1: 23/4/1722; CO1/186: 11/1723).

By 1727, although various superficial works had been carried out on the guardhouse at Charles Fort, the work on the vault had yet to begin. The other forts were also extremely neglected. In an account from October of that year, Johnson's, Mathew's (now called Queen Anne's), Cole's Point and Cades Bay were recorded as being 'demolished' (Account of His Majesty's forts and platforms in this island, PRO CO152/16/159: 3/10/1727). Of the remaining forts and gun emplacements: Charles Fort, Black Rock, Black Rock Pond, Old Road, James Fort, Muskitto Bay, Long Point, Salt Pond Ghut, Galdens Bay (Indian Castle) and Saddle Hill, the majority had only a handful of guns, with several having only one or two.

By 1730, the picture remained the same, with only £224 14s 4d being spent on the forts between 1724 and 1730 (List of Charges, PRO CO152/18: 8/4/1730). In 1734 a recommendation by Governor William Mathew was made to the Nevis government to keep their forts in order. However, from the description given by Mathew it would appear that this request had not been heeded. Mathew describes the majority of forts built by Johnson as being ruinous, with few usable guns. Many of the guns on the forts, were described as being either dismounted, old or half buried (William Mathew, PRO CO152/20/148: 31/8/1734).

By 1735, with only £9 5s 0d having been spent on the forts (List of Charges, PRO CO152/21/154), the Assembly finally agreed to start work on the fortification on Saddle Hill, first suggested in 1715 (Assembly of Nevis, PRO CO186/2: 20/8/1735). However, by April 1736, the work had been abandoned unfinished (William Mathew, CSP 1735-6, No. 285: 9/4/1736). By 1740, despite acts to the contrary, the Saddle Hill work had yet to be finished (Council and Assembly of Nevis, PRO CO186/3: 12/1740) and by 1744, the Assembly requested that the money put aside for Saddle Hill be used for other projects (Assembly of Nevis, PRO CO186/3: 24/5/1744).

By the mid 18th century, the forts had decayed to such a state that when the new Governor, George Thomas, first visited Nevis he was forced to comment that 'there was not the least appearance of anything military' (George Thomas, PRO CO152/28/15: 21/1/1754). By 1769 the forts were described as being in a 'ruinous condition' (William Woodley, PRO CO153/22: 21/2/1769). In this same year, an account of the forts showed that, apart from Charles Fort, Black Rock, James Fort and Musketo Point (Codrington's) the leeward coast batteries had now vanished. Of the remaining seven forts and four gun emplacements, only three had over two guns with only Charles Fort having any more than single figures (William Woodley, PRO CO152/31/11: 23/2/1769).

By 1771, an act was passed to raise money for fort repairs. The act, which placed a poll tax on slaves, appears to have been used to pay for barracks for two companies of soldiers that had been requested for the islands. In 1773, a further report on the fortifications showed that the declining picture was continuing. Of the twelve identified batteries and platforms, eight were described as ruined, with many being described by location rather than by name. Fort Charles, Black Rock, Morton's Bay and Long Point were described as having walls in a 'ruinous condition' (A return of the forts and batteries in the island of Nevis, PRO CO 152/32: 1/2/1773).

In 1777, three new batteries were constructed on Nevis with one (Pinney's Battery) apparently being built on the site of the old Mathew's fort (William Burt, PRO CO153/23: 6/10/1777). However, these batteries proved to be of little use when the French invaded in 1782. By 1794, only two guns were present in Charles Fort and despite more guns being brought to the island in the early 1800s it would appear that from this point onwards the Nevis 'forts' comprised only Charles Fort and Black Rock. In fact, neither fort appears to have served a military purpose from this date, continuing in use as customs and quarantine points. By 1830, the forts had become the responsibility of the Board of Public Works and when the British forces were withdrawn from the Leeward Islands in 1854, rapidly ceased to function.

In a final description in 1868, the only recognisable forts were Charles Fort, Black Rock, Saddle Hill and Hurricane Hill (Codrington's). However, all were said to be covered in brush and were only mentioned in the report as being land still owned by the Crown (Blue Book for 1868: PRO CO187/42).

5.2.2 Location and communication

All the forts on Nevis, no matter how small, were built to take advantage of the terrestrial and marine environments of the island. Within this framework, the capabilities and limitations of 17th and 18th century artillery provide the key to the spatial arrangement of many of the forts.

In the earlier 17th century, it would appear that limited resources were a further restricting factor to fort development. However, by the 1700s, John Johnson's ambitious, and expensive, fort building plan appears to have plugged the gaps in the defences and provided probably as good a defensive system as could be expected on a small Caribbean island at that date (Fig. 5a).

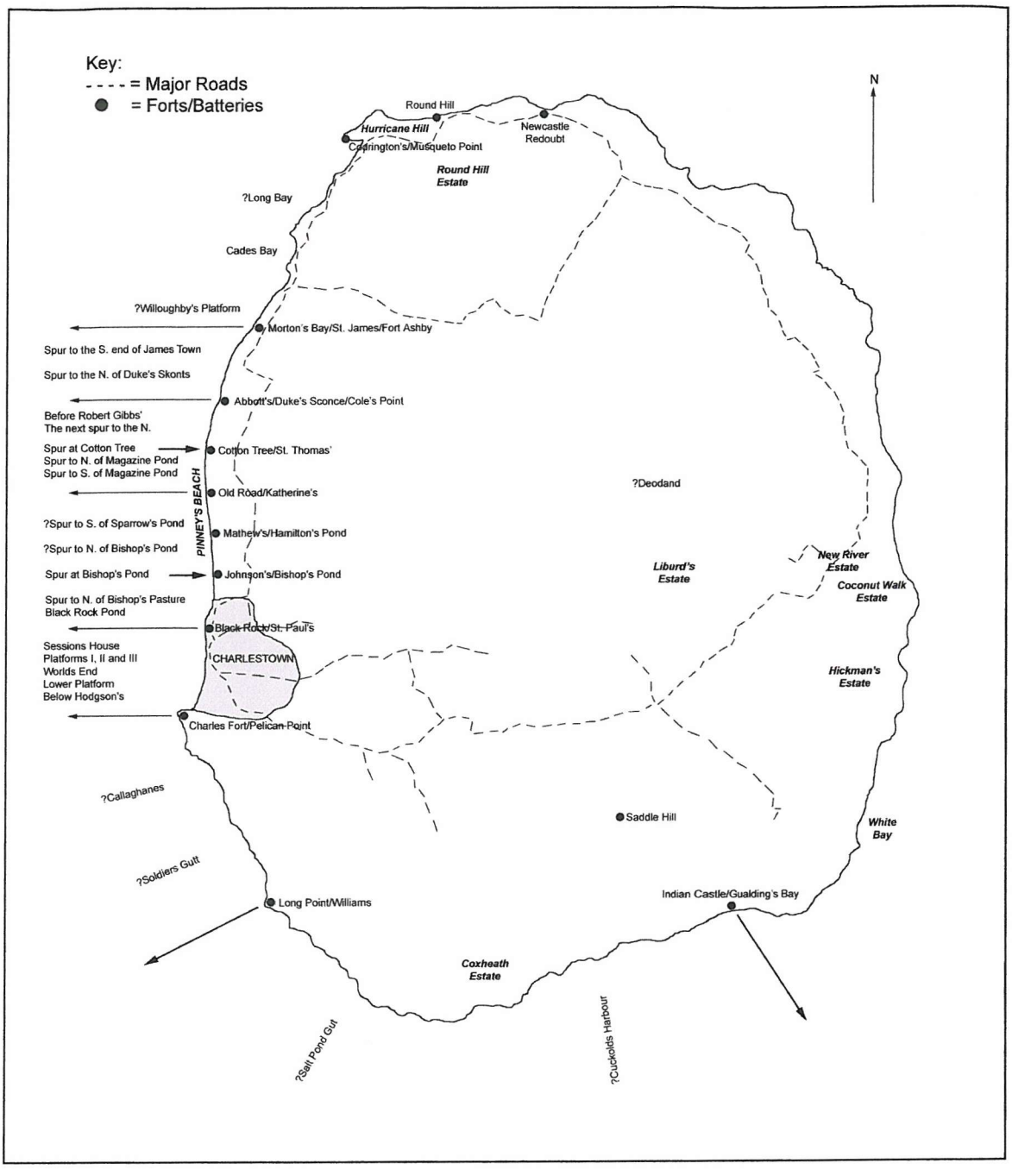

Figure 5a) Map of Nevis showing locations mentioned in Chapter 5

An element of caution should however be added at this point. The topography and coast of Nevis appears to have altered dramatically since the 17th/18th centuries. Hurricanes, erosion and man-made developments have all rapidly altered the beach environment, with some areas having lost considerable amounts of land (see Section C43.8 & Fig. C31c). In the worst cases, the sea has fully inundated two forts (Old Road and Cotton Tree) and two more (Abbott's and Indian Castle) appear to have fallen into the sea from eroding cliffs.

It is therefore difficult to ascertain the forts' precise position in relation to the sea's edge although a position 'so neere unto the sea that an enemy may make no fort trench...to save himselfe from the violence of the fort betwixt the sea and it' (de Bellay 1589) seems likely. The discovery of a possible powder magazine at Abbott's/Cole's Point would suggest that the gun platform of this fort once lay, according to standard military practice, less than a few hundred yards in front of the magazine (Robertson 1754).

Interestingly, the late 17th/early 18th century Nevisian batteries appear to have often been sited close to water. For example, Morton's Bay had water coming 'almost all around itt' (John Johnson, PRO CO152/6: 15/9/1706) and water-filled ditches surrounded Johnson's, Mathew's, Old Road and Cotton Tree forts. In tropical islands, where even in the 17th century stagnant water was deemed to be unhealthy, and is now known to encourage breeding mosquitoes and disease, this seems incredible. However, it would appear that the need to defend the shore was greater than the need to protect the soldiers from illness, providing another example of European military techniques inappropriate to the Caribbean environment.

The discovery of the majority of the fort remains and the position of ancillary structures, such as that cited above, does allow the location of these structures to be fairly well pinpointed within the landscape (Fig. 5a). However, any detailed analysis of the local environments present during the period of the forts' activities is difficult to achieve with certainty.

5.2.2.2 Cannon (gun) ranges

Before further discussion of the Nevis forts, it is necessary to discuss the firing range of the weaponry used within the forts. This weaponry dictated the distances between the positions and cannot be ignored if the reasoning behind the selection of one fort site over another is to be established.

By the period under study, the firing range of cannon, the weapon of choice for fortifications, had increased to almost three miles. However, over such distances the accuracy and power of the battery was reduced considerably and a range of 1,000 yards was deemed practical for defence with a maximum (point blank) velocity achieved at around 600 yards (Trollope 2002). With smaller weaponry such as muskets, the effective range was around 250 yards.

In a line of coastal batteries/forts, such as that seen on Nevis, each fort was designed not only as a seaward defence, but also as a final guard against landing parties.

As such, the area of coast between each fort had to be defensively covered. Although muskets and manned entrenchments had a role to play in such close range defence, in an area with few good topographical defences, such as the wide sandy Pinney's Beach, the furthest apart that forts could be positioned to function effectively would be double cannon range at around 1,200-2,000 yards apart.

Many of the fortification manuals of the period suggest a closer positioning than that mentioned above, with many stating that 'within musket shot', i.e. 250 yards is the maximum distance (J.S. 1688, Allingham 1702, Anonymous 1702). However, with any attacking force coming from the sea in boats and with good visibility along the beach, much greater distances could be utilised, as the enemy was placed at a considerable disadvantage. By the early 1700s, the addition of intermediate gun emplacements and spurs provided such close range defence between the forts.

5.2.2.3 Visibility and communication

A further factor when considering location is the visibility between the forts. To guard against an unexpected attack on an isolated fort, it would have been essential for each fort to be seen by at least one other. If a fort was visibly isolated, an enemy would be able to seize a fort undetected and establish a position before any counter attack could be initiated. Indeed, a fort sited in a location with restricted visibility would be prone to such attacks. This intervisibility also allowed reinforcements to be requested and supplied swiftly if needed. In addition, any line of forts needed to be able to communicate with one another. Battle orders, news regarding the progress of the attack/defence and information regarding casualties would have been essential information to be conveyed to and from the fort. As such, the ability to signal effectively by flags and other means was crucial.

All the Pinney's Beach forts (Fig. C1m) fulfilled the visibility requirements, with those from Charles Fort to Morton's Bay being able to see the next fort to the north and south. From Old Road, it was even possible to see all the forts south of this point, as far as Charles Fort, with further views to the north as far as the cliff in the vicinity of Abbott's/Cole's Point.

However, the forts of Indian Castle and Long Point would not have possessed reasonable visibility and were out of sight of any other fort. Following the construction of Saddle Hill, they would have been visible from this fort, which would have been aware had any ambush taken place. These forts, due to their cliff locations, also had less need for covering defence. However, the successful landing of the French on this side of the island

in 1706, might suggest that the positioning and number of isolated forts away from Pinney's Beach was not, perhaps, sufficient.

Again, those forts to the northern end of the island would have had difficulties when it came to communication. The two forts at Round Hill and Newcastle, although intervisible, would not have been able to see Codrington's fort from their location. In turn Codrington's fort would be unable to see beyond Cades Point. However, the advantageous position of Codrington's fort would have allowed good defence of the site.

At Saddle Hill, the most prominently positioned fort on the island (Figs. C41a & 5a), it is known from historical documents that the main purpose of the site was as a lookout and signalling post. In 1722, £40 was expended to hire a lookout for the fort (Council and Assembly of Nevis PRO CO186/1: 15/6/1722). This situation remained until the discharge of the lookout in 1749 (Council of Nevis PRO CO155/8: 1/11/1749). By the early 1770s the site was again being used as an alarm position, with instructions for three guns to be fired upon the sighting of five or more vessels heading towards the island (William Mathew Burt, PRO CO153/24: 26/9/1778). Should the sighting be made at night then two fire beacons, one on Saddle Hill and one on Pelican Point, were to be lit. However, by December 1778, the Saddle Hill beacon had been maliciously lit and a reward was offered to report the offender (Council and Assembly of Nevis, PRO CO152/59/75: 7/12/1778). By April 1779, a flagstaff and 'colours' for signalling were bought for Saddle Hill (Council and Assembly of Nevis, PRO CO186/7: 30/4/1779).

From the above, and from mentions of alarm guns in the records of the late 17th century, it would appear that the preferred method of signalling attack was using guns. In the later period beacons and flags appear to have also been utilised. However, there is no further evidence of the methods used to communicate between the forts, and unlike St. Kitts, which appears to have established a sophisticated system of signalling posts in the late 1790s (Anonymous, PRO CO153/28: 7/2/1798), Nevis does not seem to have possessed any formal system of signals.

In terms of more practical communication, the forts had to be supplied effectively whilst under siege. Men, artillery and ammunition, along with materials for repairs, would need to be transported quickly and efficiently between the forts. Therefore, some form of connecting road or covered way, usually protected from the enemy by defences or entrenchments, was necessary. On Nevis, the presence of the coast road with associated ditch and wall (see Section C43.8) appears to have fulfilled this requirement.

5.2.2.4 The earliest forts

The earliest forts, those at Newcastle and Pelican Point, could not possibly hope to defend the entire island from an invasion. In keeping with this fact, the Newcastle Redoubt, located on the northern most point of Nevis, appears to have been designed as a final refuge as well as a defensive position. It seems likely that the position was designed to provide instant information regarding any attack launched from St. Kitts (Smith 1990).

In this scenario, and at this early date, it is probable that the attack would come from the French and the Caribs, who had an active presence on St. Kitts. As with all defences, when one considers the attacking force and weaponry, the Newcastle Redoubt, although not impregnable, would have provided a reasonable means of close range defence against a musket, spear and arrow-armed raiding party.

The first official settlement of 1628, and the arrival of the French on St. Kitts in 1625, would have dictated a new defensive technique being utilised. Prior to this date, Nevis would have been used only as a watering and supplies island. However, from 1628, the necessary presence of ships to load and unload trade goods required the defence of the road and harbour at Charlestown, or Red Storehouse as it appears to have been known (Sir Charles Wheler, PRO CO1/27/147: 9/12/1671).

With only one gun in the islanders' possession, the most obvious placing of this gun was at Pelican Point, a rocky promontory to the south of the town with good sights across the bay towards Charlestown, as well as over 180° vision across the sea to St. Kitts round to the south-western approaches to the island. This pattern of the first fort overlooking the harbour was followed in nearly all of the Caribbean islands (e.g. Falmouth Fort, Antigua and Charles Fort at Bridgetown, Barbados) with many going on to become the premier fort on each island.

5.2.2.5 The mid to late 17th century

From the mid 17th century, with increasing numbers of competing European colonies in the Caribbean, the need for defence became great. In the 1670s (and possibly as early as the 1660s), Nevis witnessed the construction of Black Rock, Old Road, Duke's Sconce and Morton's Bay forts on the leeward coast. Again these forts could not hope to defend the island from an organised invasive force, but could threaten enemy ships daring to come too close to the shore. Indeed, in many cases their function appears to have been to

protect English trade ships at anchor from the depredations of enemy privateers and naval fleets in the area.

Although no confirmed archaeological remains have been located from this period, the siting of these forts almost certainly preceded, in general terms, the locations of the late 17th/early 18th centuries. The topographical advantages of these positions would have been the same in the mid 17th century as they were in the early 18th century. However, it is likely that the locations of Duke's Sconce and Old Road Forts were slightly differently placed from their later manifestations, when the addition of more forts allowed a slight repositioning.

It would appear from an account of 1706 (Council and Assembly of Nevis, PRO CO152/6: 12/3/1706) that the original fort at Old Road lay further inland, from the battery examined by the author. Unfortunately, landscaping at the Four Seasons Resort appears to have removed all remains of this structure. However, early robbing and poor preservation, due to construction in turf and timber, are also likely explanations. Duke's Sconce also appears to have been relocated in its later form and would possibly have been constructed in the vicinity of Buildings B and C, rather than at the position of the later Building A at Abbott's/Cole's Point (see Section C31.8).

Fort Names	Distance between forts (yards)
Charles Fort-Black Rock	c.1258
Black Rock-Old Road (Underwater platform)	c.2078
Old Road-Duke's Sconce (Assumed to be Buildings B & C)	c.1340
Duke's Sconce (Assumed to be Buildings B & C)-Morton's Bay	c.1367

Table 5a) Distances between forts, 1670s.

The probable distances between the five forts, present in the early 1670s, were measured from 1:2,500 Ordnance Survey maps (Table 5a). All distances were measured in yards for historical compatibility. As can be seen in Table 1, all the distances are well within the scope dictated by cannon ranges, with the majority clustering around the 1,300 yards mark. However, the long distance between Black Rock and Old Road forts appears unusual. But, if one considers the topographical positioning of the five forts then this measurement seems less erroneous.

Each of the five forts appears to have been located according to a local topographic advantage or for a particular purpose. Charles Fort, as has already been mentioned, had an

advantageous elevated position overlooking the Charlestown bay with good views to the sea. Black Rock, on the opposite point of the bay, provided a dominant position with the possibility of sweeping fire across the bay, out to sea, and flanking fire northwards along Pinney's Beach.

Old Road, positioned on the most westerly point of Pinney's Beach, possessed the widest range of visibility along the beach and again provided good coverage to sea, and flanking fire both north and south along the sandy beach. The location of Duke's Sconce, on a short section of 3m high bluff, the only such on Pinney's Beach, took advantage of the elevated location and again provided cover to sea and flanking fire along the coast. The final fort, Morton's Bay, appears to have been positioned to protect a fledgling trading point, later to become Jamestown, and again was located on the furthest seaward point on that section of beach. This fort also provided flanking fire along the coast.

Therefore, with the necessary locations of the forts at Black Rock and Duke's Sconce and apparently with only enough money for one fort in between, the choice of Old Road seems logical. A further factor to explain the long distance is the available firepower from Black Rock, which, being the second fort of importance on the island, was armed with at least one large cannon, an eighteen-pounder, from the 1670s (William Stapleton, PRO CO1/38/152: 22/11/1676). Further supporting evidence for this theory is provided by the French 'Par Beauvilliers' Map of 1703 (Fig. C1d), which shows a similar proportional distance between Black Rock and Old Road as that given by the measurement from the 1:2,500 maps.

By 1676, two extra gun platforms had been added. The first of these, Sessions House, is described as being close to Black Rock fort and as such is likely to have been built to the south of that fort, within the boundaries of Charlestown. Indeed, the name Sessions House, would suggest a location close to the building in Charlestown used for storing government records. A further reference from 1676 (Thomas Warner, PRO CO153/2: 3/4/1676) mentions a gun platform at Charlestown and it likely that these two platforms are one and the same.

The second platform, Willoughby's platform, is more difficult to locate. Mentioned in a list after Duke's Sconce, it was initially thought, by the author, that Willoughby's platform was in fact Morton's Bay under another name. However, this cannot be the case as Morton's Bay is clearly mentioned in Thomas Warner's earlier account of 1676. In fact, the account mentioning Willoughby's platform says there are five forts and two platforms, but then only mentions four forts by name. Willoughby's is, however, mentioned as one of the two named platforms. It therefore seems likely that

Morton's Bay is the fifth unnamed fort with Willoughby's platform being a new structure built since Warner's earlier account.

As Willoughby's would appear to be further north than Duke's Sconce, two possible sites for this platform can be postulated: the first in the vicinity of Cades Bay, the second at Musketi Point/Codrington's. Both sites were used for fortified positions in the early 1700s, but it would appear that the most likely position would be at Musketi Bay/Codrington's, as this site, overlooking St. Kitts on an elevated promontory, had much the best tactical position. Indeed, William Stapleton had noted the defensive qualities of the Musketi Bay site, in December 1672 (William Stapleton, PRO CO1/29/161: 14/12/1672).

In 1684 a further fort at Long Point was planned and though originally refused, appears to have been built by 1689 (Anonymous, PRO CO153/3: 10/6/1689). Although no positive archaeological remains for this fort could be located, it would seem logical that the fort was built on the rocky promontory at Long Point Estate, to the south of Charles Fort. Finds of cannon during the construction of the port would further support this interpretation (see Section C6).

By 1693, the island had constructed a mountain retreat (deodand) for the safety of the islanders. The location of this retreat is shown on French maps of 1703 and 1758 (Figs. C1c, C1d & C1f). However, the precise location of this site has yet to be positively identified in the present day. It would seem likely that the site is located on the eastern side of the mountain, above Liburd's Estate, where several track ways, still in use, converge onto a ridge at about 1,700ft (see Section C42).

5.2.2.6 Early 18th century

By 1701, following Christopher Codrington III's work in the islands, an extra fort at Round Hill had been added. This fort was almost certainly built in the bay to the north of Round Hill Estate and may even comprise the structure found during the May 1999 fieldwork season (see Section C39.8).

Codrington also appears to have added several gun emplacements, with new military sites at Callaghanes Bay, between Long Point and Charles forts, a further platform being added at Charles Town and fourteen emplacements added between Black Rock and Hurricane Hill (Codrington's). It would appear that these emplacements were positioned evenly between the leeward forts with five being inserted between Black Rock and Old Road, five between Old Road and Duke's Sconce and two between Duke's

Sconce and James Fort/Morton's Bay. In addition, Johnson claims to have rebuilt Morton's Bay fort (St. James' Fort) on a small promontory surrounded by water.

The spatial arrangement of the forts and emplacements would suggest an approximate distance of 346 yards between each emplacement from Black Rock to Old Road, 223 yards between each from Old Road to Duke's Sconce and 456 yards between those from Duke's Sconce to Morton's Bay. The distance between emplacements from Old Road to Duke's Sconce is well within musket range, with the Black Rock to Old Road distances on the edge of practicality and those of Duke's Sconce to Morton's Bay appearing unfeasible. However, all the gun emplacements between the forts had cannon and so this fact is not of huge significance.

5.2.2.7 John Johnson's forts 1704-6

With John Johnson's Governorship of Nevis, the range of forts present on Nevis reached its maximum. It is these forts that have been identified, archaeologically, by the author. Following on from Codrington's gun emplacements of 1701, these forts were all built to defend the landing places of the island. At Indian Castle/Gualding's Bay a new fort was built on a c.10m high cliff overlooking a small bay on the south-east of the island. From shipping acts, Indian Castle had been a recognised place of trade since the 1670s (Nevis Acts, PRO CO154/1/114: 1672). Indeed, in the later period, Indian Castle became the site of an extensive sugar works apparently called Port St. George (Meniketti 1998).

Fort Names	Distance between forts (yards)
Long Point-Charles Fort	c.3,100
Charles Fort-Black Rock	c.1,258
Black Rock-Johnson's	c.738
Johnson's-Mathew's	c.629
Mathew's-Old Road	c.711
Old Road-Cotton Tree	c.629
a) Cotton Tree-Duke's Sconce (Buildings B & C)	c.711
b) Cotton Tree-Abbott's/Cole's Point (Building A)	c.902
a) Duke's Sconce (Building B & C)-Morton's Bay	c.1,367
b) Abbott's/Cole's Point (Building A)-Morton's Bay	c.1,176
Morton's Bay-Codrington's	c.2,860

Table 5b) Distances between forts, 1706.

On Pinney's Beach, Johnson's, Mathew's and Cotton Tree were built. These three forts have been located by the author and would appear to have consolidated the gun emplacement positions created by Codrington. The other leeward coastal forts built by Johnson have also been located and identified. As with the 1660s/1670s forts, measurements between each fort have been calculated from the 1:2,500 Ordnance Survey maps.

As can be seen in Table 5b, the distances between the forts have, in many cases reduced dramatically, with many now coming to almost within musket range cover between the forts. By this stage of the Nevis fort development, topographical advantages were less of a consideration in siting the forts, as the numbers now present made defence of the coast easier. On a long sandy beach the absence of a fort between Morton's Bay and Codrington's appears initially foolhardy but, when closer examination of the offshore environment is made, a possible explanation can be postulated.

Offshore, between Hurricane Hill (Codrington's) and Morton's Bay, there is a shallow area of water forming a triangle with Cow Rocks, halfway across the Narrows to St. Kitts. Much of this area has often less than three fathoms depth of water, making it an extremely dangerous area for shipping. Indeed, a map of 1818 (Fig. C1i) even goes so far as to name it 'foul ground', suggesting it to be an area unsuitable for anchoring and with the possibility of below water obstructions.

Even today, many vessels avoid the area, preferring to steer to the north of Cow Rocks (Holland 2000a). As such, a fort at this point would be unnecessary, and with a gun emplacement at Cades Bay, the fort at Morton's Bay would be sufficient to defend the c.1240 yards to Cades Point. The long distance between Long Point and Charles Fort is a further cause for concern. However, with the naturally defended cliff coast in this area, the provision of a gun emplacement at Callaghanes Bay would have been sufficient to prevent any landing.

5.2.2.8 The aftermath of the 1706 attack

As has been discussed previously, following the French attack, the island's defences rapidly fell into decline. It would appear that by 1707, with the exception of the gun emplacement (Salt Pond Ghut) between Long Point and Fort Charles and that at Cades Bay, the fort arrangement had reverted to that present in the late 1670s. By 1727, Black Rock Pond was again in operation as a gun emplacement between Black Rock and Old

Road, a picture that was to remain the same until 1734, when Soldiers Gutt emplacement (thought to be on the south of the island) appears in the list.

In around 1740, work on Saddle Hill was begun. This prominent hill to the south of the island has 270° views from east round to west. Perfectly sited as a lookout position, it would appear that this fort's primary function was as an alarm post. By 1769 two new gun emplacements on the north-west of the island at The Bay and Long Bay, between Morton's Bay and Codrington's, also appear to have been constructed, although the author could locate no trace of these emplacements.

By 1777, three new batteries had been built on the leeward coast, with one, Pinney's Battery, almost certainly having been constructed in the vicinity of Mathew's fort, at the base of the Pinney's Montravers Estate. The locations of the other two batteries are likely to have been on Pinney's Beach, with ones to the north and south of Pinney's Battery. The remains of a later building overlying the gun platform of Johnson's fort, recorded in November 1999, may well represent one of these batteries. The third battery could not be positively located, although it is possible that the small square building at Old Road (see Section C24.8), examined in May 2000, may represent the guardhouse/ magazine for this battery.

From the late 1770s onwards, the number and location of the forts of Nevis reverted to the pattern of some 150 years before, with only two forts, Black Rock and Charles Fort, remaining to defend the shores of Nevis from attack.

5.2.3 Naming the forts

From the 17th century, the forts of Nevis were named and then renamed many times. Each building phase witnessed the renaming of the structures, with accounts evidencing multiple concurrent names for a single structure. However, in many cases, the use of the phrase 'X fort, commonly known as Y fort' (see Johnson's account, PRO CO152/6: 15/9/1705) and the fact that many of the fort lists detail each fort in order, have allowed the author to group together the many names which relate to a single fort.

The reasons for the given names often allows an insight into the motivations and the political and religious background of many of the architects of the defences of Nevis. Indeed, by choosing certain names, the giver often appears to have been currying favour with a local dignitary or with their monarch. To offer such tokens could do much for their future career prospects, and in an age of political instability could provide a valuable means of proving their loyalty.

In general, the naming of the Nevis forts falls into two broad categories: the first group were named to honour influential personnel such as the English monarchy or the Governors, the second were named by location, typically identified by the name of the plantation estate owner. A third, smaller, category relates to the topographic environment of the fort location. Some of the original fort names had longevity and recognition, which withstood the renaming attempts imposed over the years. Others appear in one account only as anomalous names, which were soon replaced. The various names of the forts are discussed below, with probable origins for the names identified wherever possible.

5.2.3.1 Monarchs and governors

The pattern of royal naming for forts is typical of all Caribbean islands with the majority having at least one fort with the name Charles, James, William, Anne or George included in their title. Nevis is no exception to this rule with Charles Fort being named in honour of Charles II, James Fort in honour of James II, William's/William and Mary's Fort in honour of William and Mary and St. Anne's and Queen Anne's Fort in honour of Queen Anne.

The majority of these nominations took place within the early years of the monarch's reign with Jamestown and James Fort apparently being named a few months before James II's accession. However, the author's view of the Jamestown naming is not shared by all and for this reason a discussion regarding the origins of Jamestown and James Fort has been included in Appendix A.

At a time of great political and religious upheaval, the forts of Nevis reflected these affiliations. For example, John Johnson, a Protestant who had fought on the side of William of Orange in Ireland, unsurprisingly named his forts after King William, Queen Anne and after Governor William Mathew and his Dutch wife Catherine, Baroness Van Leemputt, Queen Anne's Maid of Honour. In the case of William Stapleton, a Catholic Irish soldier, the naming of Charles Fort is unsurprising.

Several of the Nevis forts were named after Governors of the Leeward Islands. In the later 17th century, Willoughby's fort appears to have been named in honour of Governor Francis Lord Willoughby who had control of the island in the 1660s. However, the majority occur from the time of John Johnson, when as well as naming a fort after himself, Johnson named Mathew's and Katherine's (Old Road) Forts after the Governor and his wife and Codrington's Fort after Christopher Codrington III. However, Johnson's naming of a fort after himself may have had unforeseen repercussions, as after the

disastrous French invasion, for which the planters blamed Johnson, his now ruined fort appears in records as Johnson's Folly (PRO CO152/16/159: 3/10/1727).

The absence of monarchic and Governorship names on Nevis after Queen Anne again supports the interpretation of a declining fortification system from the early 18th century onwards. On many of the other islands the monarch and Governorship naming tradition continues with forts being named after George III (Fort George, Grenada (Jessamy 1998) & Fort George, St. Kitts (Smith 1992b)), General Thomas Shirley (Shirley Heights, Antigua (Nicholson 1994: 20)) and William IV (Fort William, Grenada (Jessamy 1998) & Fort Clarence, Jamaica (Jamaica 2002)), amongst others. This does not occur on Nevis.

5.2.3.2 Planters

This group provides the largest number of fort names on the island. This is unsurprising as the planters formed the militia, with the most senior planters being given their own Colonelcy and command of the militia division near their estate. Names such as Morton, Parris, Bishop, Hamilton, Sparrow, Abbott and Cole were common on the island, with many being mentioned as Colonels or Lieutenants in the census lists.

Two of these lists, one from 1677-8 (Oliver 1914: 27) and the other from 1707-8 (Oliver 1914:173), provide an interesting insight into the organisation of planter society (see Chapter 6), with military rank being applied according to estate size. Those planters with very large estates were worthy of a fort name. Even lesser planters could expect to have a fort identified by their name if their estate happened to be near one of the military structures.

At Morton's Bay the present day use of the name Fort Ashby is an enigma. This name for the fort has not been seen in any of the historical documents, and does not appear to have an understood provenance. The author believes that this fort has been renamed in modern times to Fort Ashby, potentially as early as the 19th century, when a Frances Ashby is recorded in the Blue Books (Blue Book for 1875, PRO CO187/49). It is possible that she owned land within the vicinity of the fort and so the fort was named after her.

5.2.3.3 Location and topography

These forts, which include Black Rock, Saddle Hill, Salt Pond Ghut, Old Road, Hurricane Hill, Musqueto Point and Round Hill, were all named according to their location. At the most obvious, for example at Round Hill and Saddle Hill, the names appear to have been

given because the hills were remarkably round, or looked like a saddle. At Black Rock, the presence of dark volcanic boulders on the shore probably led to the naming of the site. At Salt Pond Ghut, it is probable that salt accretions occurred, similar to those seen in the Salt Ponds of St. Kitts.

A further three Nevis forts were named after the parish in which they were located. St. Paul's (Black Rock), St. Thomas' (Cotton Tree) and St. James' (Morton's Bay), are all recognisable parish names still in use in the present day. Old Road was named due to the presence of the shipping lane or 'road' along that section of coast. Musqueto Point and Hurricane Hill are more difficult to pin point, although it would appear that during hurricanes, the exposed and cove like nature of Hurricane Hill, allows the winds to cause immense damage (Figs. 2b & 2c). Musqueto, musketti and mosquito are common naming terms in the Caribbean and South America, being found on Jamaica (Black 1983: 63), Nicaragua, Puerto Rico and the British Virgin Islands, amongst others. This might suggest a common origin, whether as mosquito-infested areas, the bane of historic communities, or as a reference to muskets.

One of the more unusual names, Indian Castle may have been named after the native Caribs. Although gone from the island at the time of English occupation, it is possible that they left remains recognisable to the English. Indeed, from this point around to the east at Hichmans and Coconut Walk Estate, several prehistoric sites with extensive surface artefactual remains have been located (Wilson 1989: 432, Crosby 2001: 9).

5.2.4 Design and dimensions

As has been discussed in Section 4.2.7, the forts of Nevis appear similar in design and dimensions to many others found in the Caribbean. Aside from the Newcastle Redoubt, although little information can be found concerning the earliest phases of Nevis fort building, the location and recording of twelve probable fort sites has allowed some general trends to be identified.

5.2.4.1 Design

The earliest of the forts, the Newcastle Redoubt (see Section C40), appears very different from all the other forts discovered on the island. It was considerably smaller than the other structures and had a square crenellated design. Aside from this, the Redoubt appears to have been designed for a different form of defence from that of the other forts. The fact

that the redoubt was able to be sealed against attack, coupled with its facility for close range defence, evidenced by the lower tier of 'musket holes', would suggest a redoubt type defensive function, very different from the open backed gun platforms of the early 1700s (Morris, et al. 1999: 205). The design of this Nevis fort can be paralleled with the design of a small stone magazine at Town Cut Battery/Gates Fort, Bermuda (Harris 1992: 17).

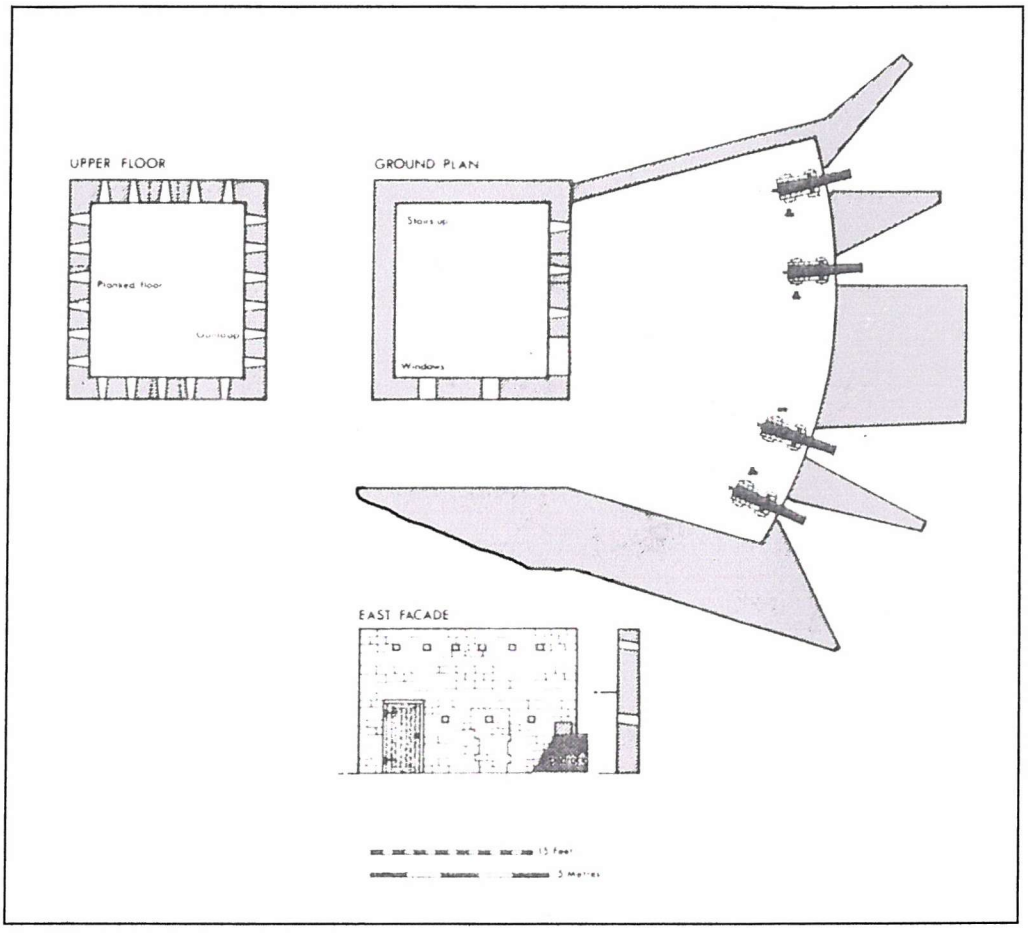

Figure 5b) Gates Fort, Bermuda (Harris 1992: 17)

This building, in terms of its size and the presence of a front facing door and gun loops, presents an almost identical design to that seen on Nevis (Fig. 5b). The gun battery, if contemporary with the magazine, may suggest the existence of such a battery at the Newcastle Redoubt, the sea-facing door then being protected by the platform. Such a door would allow easy access to munitions. In addition, in the turbulent years of early settlement, where attack might not only come from the sea, these two structures appear to have been built to provide a defensive retreat. Unfortunately, the date of Town Cut battery is uncertain and so little may be said about the similarities between it and the Newcastle Redoubt.

The other earliest fort on Nevis, Charles Fort (see Section C9), appears to have been dramatically altered since the 17th century. By comparing the 1679 Stapleton plan (Fig. C9a), the 1705 Johnson plan (Fig. C9b) and the modern day configuration, a number of differences can be seen. The 1679 plan shows a bastioned fort with three diamond bastions on the southern side. A further demi-bastion is shown on the north-east corner. The main firing positions appear to be located on the north-western face, with two tiers of cannon arranged behind a turf rampart on the cliff top and below on a rocky ledge (the area of planking shown on the plan). The whole of the fort is surrounded by a 'moate'. To the east of the fort a turf breastwork is shown. A water cistern with a guardhouse to the north is shown, with a gunner's house on the north-eastern side of the fort. The entrance to the fort is not marked on the plan.

The 1705 plan broadly follows this configuration, with three southern bastions in the same positions as in 1679. However, the arrangement of the gun platform appears to have altered. It would seem that a stone wall had replaced the turf rampart, with the north-eastern corner having been cut into to widen the area of the fausse braye (lower tier of guns). A further stone wall had been placed in front of this position. An entrance into the fort was now shown next to this emplacement. In addition to the guardhouse and cistern of 1679, a further guardhouse had been added to the south of the cistern, apparently replacing the gunner's house of 1679.

Although the two plans of 1679 and 1705 are broadly comparable, and show a progression of the fort design, when the fort today is examined it is obvious that, since this time, some considerable redesigning has occurred on the site. It is also probable that sections of the fort on the coastal side have been lost to erosion. However, the author believes that traces of the original configuration can be found on the site, although much of the structure has been rebuilt and/or refaced.

The present day fort is represented by an irregularly shaped walled enclosure, with a gateway, flanked by two demi-bastions, on the south-eastern side. On this side a deep ditch runs the length of the curtain wall. In front of the entrance, a detached redan protects the landward approach to the fort. Within the fort, a cistern and guardhouse are located.

A report submitted to the Nevis Historical and Conservation Society by Victor Smith, would suggest that there are elements of the early 18th century fort surviving to the present day (1987: 18). Smith suggests that although the battery has been simplified at a later date and the entrance moved to its current position, the presence of the demi-bastions and redan may point to a remodelling. It is possible that the redan represents the remains of the curtain wall leading to the middle bastion, with the demi-bastions having been

adapted from the two remaining bastions. Indeed, on the south-western face of the fort, the construction method and materials compare very accurately with those seen at the other early 1700s forts located on Nevis, suggesting that this section of wall may not have altered.

From the author's examination of the site, it would also appear that some trace of the fausse braye survives below the fort. However, although a ledge can be seen below the northern curtain wall, much of this has been eroded by the sea and appears to have been extensively damaged. It would also appear that the guardhouse built by Johnson is that present within the fort. However, the only way to test the above theories would be to excavate within the fort and in the area of the redan, and such work was not within the scope of this study.

The multiple plans available for Charles Fort are not available for the other Nevis forts. Eleven of the other forts have plans provided in 1705, but there are no available plans for any of the gun emplacements or for the smaller batteries of the later period. There are also no plans available for the earlier phases of the forts remodelled or rebuilt by Johnson. However, although the forts are all severely ruined, the discovery of at least one key architectural feature at each of the forts allowed a comparison, however limited, between the 1705 plans and the archaeological evidence.

The fort at Indian Castle (see Section C3), although almost entirely eroded from the cliff, does have a series of walls and a well. By comparing the alignment of the 1705 plan to the present day remains, it is possible to suggest that the northern boundary wall (Fig. C3b) represents the northern wall of the lost fort. In this scenario, the southern building would represent the guardhouse within the fort. The presence of a ceramic tiled floor within this structure might support such an interpretation. However, the danger of retrieving any information from this close to the cliff edge did not allow for close examination of these features.

At Black Rock (see Section C16), the single tower would appear to evidence the north-eastern corner structure shown on the 1705 plan. This tower was aligned towards the bay at Charlestown. This fact is crucial, as several other historic buildings in the vicinity are aligned to the historic road, preserved in the line of the current coast road. However, the Black Rock tower was aligned at an oblique angle to this road. This alignment matches that of the 1705 plan, which shows the fort turned to face the bay. A precise use for such a small tower is difficult to postulate. The size would not allow the positioning of a large cannon; although a small wall-mounted piece or muskets might be used to provide flanking fire between the towers. It is possible that the tower would have been used as a

lookout position although a contemporary use as a water cistern (its present day use) cannot be ruled out.

Johnson's fort (see Section C20) appears comparable to the 1705 plan with the front of the fort showing a three-sided design. The evidence for a possible wall in the centre of the fort may also represent the back of the gun platform or steps leading down from this structure into the interior of the fort. The author searched the area behind these remains; however, no further trace of the rear of the fort could be located. This result was not unexpected as the rear of the fort is described as having been built of turf. Overlying the front of the platform, a small square building is thought to represent a later battery on the site, possibly from the 1770s. The door of this structure had been blocked at a later date; however, no precise theory for this action can be put forward. It is possible that this building and its blocked door relate somehow to the site's use as a burial ground, but this cannot be proved.

The next three forts in line, Mathew's, Old Road and Cotton Tree, are all shown on the 1705 plans as angled semi-circular designs. However, each is slightly different, with Mathew's showing an elongated form of five faces, Old Road showing a simpler four-faced design and Cotton Tree being designed as a more compact five-sided structure.

At Golden Rock Pavilion, the site of Mathew's Fort (see Section C22), the two furthest ends of the fort were located. These end sections show evidence of an angled design, with the angled walls exactly matching those seen on the northern and southern tip of the 1705 plan of Mathew's Fort. At Old Road (see Section C24), the discovery of a single section of angled wall (Fig. 5c) allowed the positive identification of the fort. No other of the angled beach forts had an angle the same as that shown in Fig. 5c. This therefore suggests that, at Old Road, the design for the fort followed the 1705 plan. At Cotton Tree (see Section C28) a similar section of angled wall was located. This wall lay on its face, which did not allow any accurate measurement of the angle to be taken. However, from rough estimates it would appear comparable to the angles shown on the fort plan for Cotton Tree Fort from 1705.

At Morton's Bay (see Section C34), although initially appearing smaller than the 1705 plan would suggest (see Section 5.2.4.2), the remains present closely match the design given on the 1705 plan. Although the step area of the fort appears to have been slightly remodelled, the presence of a flight of semi-circular steps, on both the 1705 plan and in reality, would suggest an original feature.

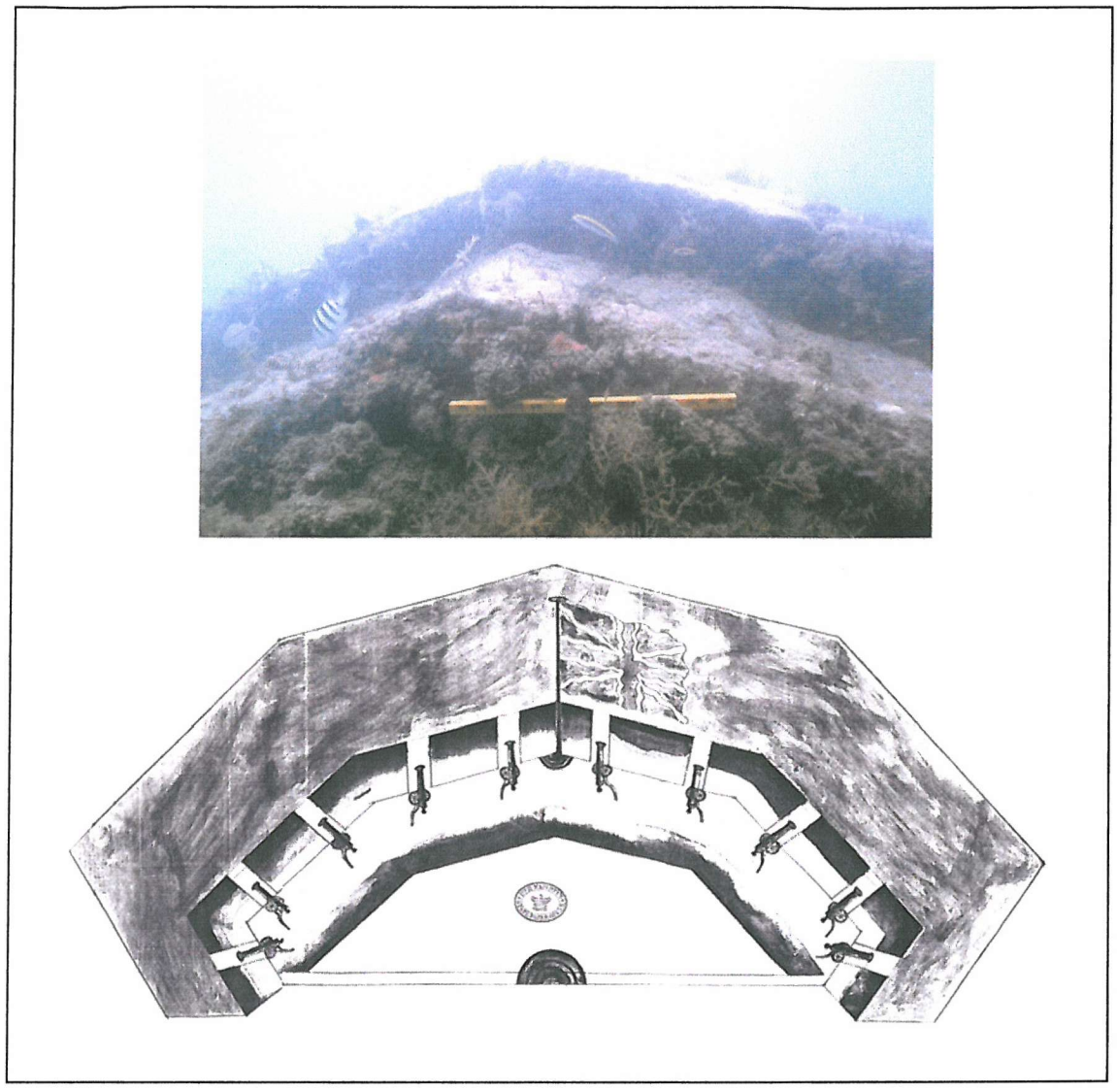

Figure 5c) Comparison of Johnson's 1705 plan for Old Road fort with the angled wall found in May 2000.

At Codrington's, any analysis of the design of the fort is fraught with difficulty, following the site's excavation, restoration and reconstruction (see Section C38.8.1). Although possible evidence of the 1705 phase of building has been found on the site, all assumptions based on this disturbed site should be treated with caution.

As has been shown above, the forts of Nevis appear to follow the designs made by Johnson in 1705. As such, it is possible to postulate that in the majority of cases, the forts can be dated to this period. A further test of this evidence can be made by comparing the dimensions of the forts with those given by Johnson, in an attempt to elucidate whether these 1705 designs were ever achieved in reality, and further to examine how they compared with the standard military practices of the period.

5.2.4.2 Dimensions

Measurements of size and wall dimensions were only possible at nine of the recorded forts (Table 5c). The majority of recorded forts appear to date from the early 1700s, with only the Newcastle Redoubt having probable earlier 17th century remains. However, it is likely that earlier phases of construction dating to the 17th century are present at Fort Charles and Codrington's Forts.

The Newcastle Redoubt, at 6.7m x 6.7m by 4.72m in height, compares favourably to the Town Cut Battery (Gates Fort) in Bermuda. The magazine at this fort is shown in its reconstructed form to be 5.5m x 6m by 4m high (Harris 1992: 17). The building has two storeys, with evidence of an upper row of gun loops running 3.5m above the ground. The door to the structure faces the sea on the left side of the wall. Also on this face, a lower level of gun loops, some 1.5m from the ground can be seen. On the southern face there are two windows. In front of the magazine a platform for four cannon has been reconstructed. The size and design compares very well with the Newcastle Redoubt, and as has been stated above (see Section 5.2.1.1), it is probable that both forts fulfilled a similar function.

Although Fort Charles is the most 'complete' of the Nevis forts, the complexity of the fort and the limited fieldwork time available allowed only a cursory survey of the structure. A full photographic record and survey of the upstanding remains has been made of the fort by Caribbean Volunteers, a copy of which is held in the Nevis Historical and Conservation Society archives; however, the identification of the various building phases, which are known to have taken place from the 1670s up to the 19th century, was not possible.

The other probable late 17th century fort remains were represented by the 'en barbette' wall and gun platform present at Codrington's fort prior to the fort's reconstruction (see Section C38). This platform shows evidence of a 27m long wall in front of a 6m wide paved gun platform. In 1996, the parapet wall was 0.61m (2ft) thick. Unfortunately, no measurements of the wall height were taken and this wall has now been completely rebuilt with no evidence of the original structure surviving.

The remaining forts appear to date from the 1704-6 building phase carried out by John Johnson. By comparing the fort plans sent to Britain by Johnson (PRO CO700 ST.CHRISTOPHER AND NEVIS/2) with the fort remains recorded by the author, a number of deductions can be made (Table 5c).

Fort Name	Dimensions (Johnson's plans)		***Dimensions (Fieldwork)***	Platform Width (Johnson's plans)		Wall Thickness (Johnson's plans)		***Wall Thickness (Fieldwork)***	Width of Embrasures (Johnson's plans)		No. of Embrasures (Johnson's plans)	Ditch Width		
	Yards	**m**	***m***	Yards	**m**	Yards	**m**		Yards	**m**		Johnson Yards	**m**	***Fieldwork m***
Indian Castle	46.7 x 40.4	**42.7 x 36.9**	***? >32 x 30***	8	**8.7**	3 on platform 1½ on others	**3.3** **1.6**	***?*** ***1.2***	1½	**1.6**	10			
Long Point	119.2 x 38.8	**109 x 35.5**	***?***	8	**8.7**	4	**4.4**	***?***	2	**2.2**	12			
Fort Charles	228.8 x 194.5	**209 x 177.9**	***115 x 90***	9	**9.8**	5	**5.4**	***c. 0.6 – >2***	2	**2.2**	29			
Black Rock	75.5 x 57.2	**69 x 52.3**	***? tower c.2.5 x2.5***	10	**10.9**	4 on platform 2½ on others	**4.4** **2.7**	***?*** ***?***	1½	**1.6**	14			
Johnson's	105 x 48.3 platform 160 x 136.7 overall	**96 x 44.2** **146.3 x 125**	***c.70 x 20*** ***?***	8	**8.7**	4 on platform 2 on others	**4.4** **2.2**	***? >1.3*** ***1.3***	4	**4.4**	6	12	**13.1**	?
Mathew's	50.9 x 20.8	**46.5 x 19**	***c.55.5 x >6.9***	6½	**7.1**	4	**4.4**	***?***	1½	**1.6**	15	10	**10.9**	?
Old Road	59.3 x 22.9	**54.2 x 20.9**	***>28 x 21***	6½	**7.1**	4	**4.4**	***1.5***	1½	**1.6**	10	10½	**11.4**	?
Cotton Tree	44.5 x 18.2	**40.7 x 16.6**	***>35 x 14***	6	**6.5**	3½	**3.8**	***c.2.5***	1½	**1.6**	13	9	**9.8**	?
Abbott's	33.4 x 27.1	**30.5 x 24.8**	***?***	6	**6.5**	4	**4.4**	***?***	1½	**1.6**	10			
Morton's Bay	76.3 x 39.3	**69.8 x 35.9**	***c.30 x 15***	9	**9.8**	4	**4.4**	***2.3***	1½	**1.6**	15	13	**14.2**	***5***
Codrington's	24.9 x 19.7	**22.8 x 18**	***?12.7 x 7.7 (see C38.8.1)***	N/A	**N/A**	4	**4.4**	***0.6***	1½	**1.6**	7			
Round Hill	19.8 x 15.8	**18.1 x 14.4**	***c.26 x 9***	5	**5.4**	3	**3.3**	***?***	1½	**1.6**	6			

Table 5c) Comparison of fort dimensions from Johnson's Plans and Fieldwork.

Only six (Fort Charles, Johnson's, Mathew's, Morton's Bay, Codrington's and Round Hill) out of the twelve forts mentioned by Johnson, were preserved enough to allow for dimensions of the forts to be measured. In the case of the two underwater platforms at Old Road and Cotton Tree, estimated measurements have been taken from the dimensions of the rubble spread. At Indian Castle and Black Rock, the partial remains were measured so that minimum dimensions could be established. The forts at Long Point and Abbott's appear to have been lost so could not be measured.

Of the six measurable forts, only two, Mathew's and Round Hill, appear to be of comparable dimensions to the fort plans made by Johnson. Fort Charles and Johnson's fort seem to be about half the size of that suggested by Johnson, with Morton's Bay appearing to have been built to approximately a third to a half of the size. From the estimated dimensions at Old Road it would appear that the fort was considerably smaller than the suggested plan. However, this may be due to the incomplete preservation at the site. Like Mathew's fort, Cotton Tree seems roughly comparable (Table 5c).

Again, with wall thickness and ditch breadths, the measurements from Johnson's plans appear approximately two to three times the actual dimensions. Only at Indian Castle does the possible back wall of the fort match the width of 1.6m (1½ yards) given by Johnson.

Unfortunately, not one of the extant forts showed evidence of any embrasures or of the dimension of the gun platform. It is also unfortunate that no walls survive to their original height, with the majority only being evidenced by foundations. In most cases, wall thickness could not be established with several of the beach forts, for example Johnson's, having been eroded to trace foundations and with others, for example Mathew's fort, showing evidence of a mortared, platform foundation.

One unusual feature, seen at Mathew's and Old Road forts, is a small (15cm wide) 'step' on the exterior of the battery wall (Fig. 5c). This feature could not be seen at any of the other batteries although it is likely that poor preservation is responsible for its absence in many cases. A precise explanation for this feature is difficult to postulate although a range of theories can be suggested.

Firstly, it would seem possible that the step marks the beginning of the wider platform foundations for the forts. Should this be the case, it is reasonable to suggest that the step, which lies some 0.7-1m below the current land level, marks the position of the 17th century ground level. This is supported by Morton's Bay fort where no evidence of such a feature above ground could be located. However, it can alternatively be suggested

that ground level was higher behind the forts and that the forts were built so low to the water as to effectively be terraced into the beach.

Secondly, it is also possible that the step represents a primitive 'cordon', defining the top of the ditch on its interior face. The increase of wall thickness afforded by the step was almost certainly utilised to defend the forts to seaward. Indeed, at Mathew's fort it would appear that the step was only present on the sea-facing section of battery wall. However, such a step at such a low height above ground would have been a dangerous addition to the forts, providing a convenient firing step, from which any attacker managing to reach the walls of the fort could fire into the interior.

At Codrington's fort, although embrasures have been built into the reconstructed fort, by examining the original 1995 pre-reconstruction plan it would appear that this is incorrect (see Section C38.8.1). Indeed, with the elevated location of Fort Codrington cannons firing 'en barbette' appear far more likely and evidence of such a technique can be seen on the uninterrupted wall of the 1995 plan. However, following reconstruction of the site no definite conclusions are now possible (see Section C38.8.1). At Fort Charles, the vestiges of several embrasures can be seen on the north-western wall of the fort, but these appear to date from the final period of usage of the fort in the late 18th/early 19th century, and so provide little comparison for the earlier period.

It is difficult to ascertain why the majority of Johnson's forts appear to have been built smaller than their plans suggest. One possible reason may be that money for such grand forts was unavailable and scaled down versions were implemented. Another is that Johnson was making the forts appear to be better than they were, in an attempt to impress the home power.

It is also likely that the partial remains of many of the structures have produced inaccurate measurements. It is entirely possible that Cotton Tree and Old Road forts were larger than their present day rubble spreads suggest. However, this theory would be difficult to apply at Fort Charles, where the size of the actual fort, even allowing for the length of the now vanished bastions shown on Johnson's plan, is only about half that shown on the 1705 plan.

A further, and more probable scenario in the case of Morton's Bay, is that the scales on some of the plans are incorrect. Of the twelve plans, eleven have scales notated in yards. However, on the plan for Morton's Bay, the scale is notated in feet and yards. It is possible that whoever made the plan (possibly the 'illiterate' John Johnson) confused feet with yards and thus the dimensions taken from the plan in yards would in fact refer to

the size in feet. Indeed, once divided by three, the measurements from the plan compare very well with the modern day measurements.

At Black Rock, although little of the fort remained in May 1999, the small tower would appear to be the south-eastern tower shown on Johnson's plan for the fort (Fig. C16c). From measurements made prior to the tower's destruction, it would appear to be three times smaller in actuality than its plan, again suggesting that the scale given in yards in fact refers to a scale in feet.

At Codrington's fort, the reconstructed fort has been built under the assumption that the north arrow on Johnson's plan is incorrect. However, the author believes this interpretation to be false, for the reasons given in section C38.8.1.

When compared with the dimensions given in contemporary fortification manuals, both the dimensions of Johnson's plans and the modern measurements vary widely. Johnson only gives wall height and thickness measurements for four of the forts, and these range from 8-15 feet thickness with 6-9 feet high walls for cliff locations and 10-12 feet high walls for beach forts. Johnson also describes the beach forts as having 8 feet depth of wall 'below ground' although it is unclear whether these were 8 feet deep earthbound foundations or walls running down the side of the water ditch. He describes the embrasures (named by Johnson as 'ambusiers') as being 2½ feet on the interior and 14 feet on the exterior.

According to many fort manuals, the Johnson measurements were not the standard for the period. For example, walls should be 6 feet high at the parapet, with a further 10-18ft of rampart below. However, for 'en barbette' walls a height of 2½-3ft was required. Wall thickness should be around 4-5 feet, if built in stone, with embrasure widths of 3-4 feet on the interior and 6-8 feet on the exterior. Each embrasure should be positioned 16-20 feet apart. Gun platforms should be 8 feet wide at the front and 14 feet at the back with a length of 18 feet from front to back. Ditches should be from 70-150 feet wide and from 8-12 feet deep (Moore 1673, J.S. 1688, Anonymous 1692, Allingham 1702, Anonymous 1702, Ozanam 1711).

By comparing Johnson's dimensions with those of the fortification manuals a few anomalies can be seen. Johnson's fort walls seem excessively high, although it is probable that he may have been including the rampart in with this height, whereas the fortification manuals separate the height of the parapet from the rampart. However, the finding of stone foundations at Johnson's and Mathew's forts might suggest an exterior wall height of 10-12 feet above ground with some form of elevated platform within the walls. The elevated position of the Morton's Bay platform and the illustration of steps on Johnson's plans for

these forts would further support this interpretation (PRO CO700 ST.CHRISTOPHER AND NEVIS/2).

The dimensions of Johnson's embrasures vary slightly from that given by the manuals. His dimensions show similarity on the interior measurements; however, the wide splay to the exterior seems impractical. Such wide embrasures would also suggest that the numbers of and width of embrasures given by Johnson may not actually resemble a true figure as, on forts such as Mathew's, which has faces of approximately 39 feet in length, there would be insufficient length of wall for the three embrasures shown.

Such wide embrasures may have resulted from an extremely limited number of guns, with the wide exterior apertures allowing a maximum coverage per gun. However, it is difficult to ascertain whether it is Johnson's plans or his description of the embrasures that are incorrect. Unfortunately, the absence of embrasures does not allow for comparison of these measurements against any present day remains.

The possible remains of ancillary structures at the forts compare favourably with the designs and sizes seen at other forts of the period. At Fort Charles, Morton's Bay and possibly at Old Road, the presence of small ruined guardhouses of 3-5m x 4-8m appears appropriate. Such buildings are shown at other Caribbean forts, for example Old Road Fort, Antigua (Fig. 4i). At Abbott's the presence of three sunken-floor buildings might suggest the discovery of powder magazines. Particularly at Abbott's Building A, where the floor of the structure was found 1m below ground level, an interpretation as a magazine seems justified. Indeed, in literature from the period the depth of 4 feet recommended for a magazine was close to that recorded at Abbott's fort (Robertson 1754).

5.2.5 Construction

As in many colonies, on Nevis, where the normal resources of the homeland were absent, the buildings were difficult to construct, with materials apparently being transported over large distances. Timber resources were soon exhausted on the island and stone became the dominant construction material. Although there are records referring to ships moving materials around the island (Anonymous, PRO CO155/1: 6/8/1687), it would appear that the stone, timber and lime necessary were often sourced from the island and carried and hauled to the site of construction. Although cattle and horses appear to have been utilised, the majority of this work would have been achieved by slave labour. The result of their toil is the many stone buildings that still dot the landscape of Nevis. In a bitter irony, the

slaves were forced to build the structures that defended the plantation system that enslaved them.

The tools utilised in the construction of the forts varied little from those recognisable today, with saws, hammers, pickaxes, mattocks, wheelbarrows and shovels being recorded in the documents throughout the period (PRO CO153/2: 30/5/1678; CO153/3: 29/8/1689; CO152/18: 29/1/1730; CO186/2: 1733).

On the Nevis forts, a range of masonry styles have been identified by the author, with particular types apparently being used at certain broad dates. Furthermore, it would appear that the Nevis forts show a level of architectural design and range in excess of that required to fulfil their defensive purpose, which could be achieved by building in turf.

5.2.5.1 Materials

The forts of Nevis appear to have been built from a variety of locally obtained materials. Although the local dacitic volcanic stone seems to have been used in the majority of cases, this appears to have been supplemented with local lignum vitae timber and coral lime mortar. However, imports were also used for the construction, with some stone, timber, bricks, tiles and lime being transported from Europe.

5.2.5.1.1 Turf, timber and prickly pears

The forts of Nevis in the earlier 17th century seem to have been built from turf and timber. One of the earliest forts at St. Christopher, built in the late 1620s, is described as being a fort of 'pallesadoes' (palisades), which would suggest a timber construction (Hilton 1675). This picture appears to have continued until the late 1670s, when William Stapleton repaired the fort at Charlestown by causing 'curtaines and breastworks of expeditious height and thickness to be raised and continued of sods and grassy turfes' (Fig. C9a).

According to contemporary military manuals, the construction of such defences was carried out using wedges of turves, some 55 inches long and 7 inches wide, by 5 inches high sloping down to 2-3 inches (Moore 1673). Ramparts might also be strengthened and revetted by wattle hurdles or earth filled baskets (gabions). In the Caribbean, where suitable materials were scarce, brushwood would also probably have been used.

Another manual suggests that, in the Lincolnshire Fens, a single man would be expected to 'digge and fill a wheelbarrow in a day, seventeen foote square of earth and

about twenty-seven inches deepe' (R.N. 1639). However, in the heat of the Caribbean and with the stony earth of Nevis, a far less amount might be expected.

Figure 5d) Prickly pears at Coconut Walk Estate, February 2000.

In the Caribbean, a further method of defence was provided by a variety of local flora. Attested to on Barbados as well as on Nevis the prickly pear, a cactus-like succulent, was planted along the shore in front of the breastworks and forts (Loftfield 2001: 217). This plant, which has large needle like spines, still grows thickly on the south-eastern side of the island (Fig. 5d) and would certainly have provided the 'large, thick and impassable prickle peare fence' mentioned by Stapleton (William Stapleton, NARCH 15/3/1679: see Section C9).

The gun platforms at this early stage would almost certainly have been built from timber, either as a continuous deck along the battery, or as individual wedge shaped gun platforms. On Nevis, it is possible that these platforms were built from the extremely strong lignum vitae timber. By the 1690s, this appears to have been brought across from St. Kitts (Council and Assembly of Nevis, CSP 1696-7, No. 996: 4/5/1697), although by 1778, even their supply appears to have been exhausted and wood was being imported from Norway (William Burt, PRO CO153/24: 17/6/1778).

A further source of building timber was that brought in by ship. In 1671, the Ordnance Office sent a consignment of timber, nails and tools to Nevis, presumably for use in the island's forts (Ordnance Office, PRO CO153/1: 14/3/1671). Such imports continued in to the 18th century, with further recorded examples of ships carrying timber in 1704, 1721 and 1722 (Imports to Nevis, PRO CO187/1: 19/7/1704; CO187/1: 7/7/1721; CO187/2: 21/5/1722).

5.2.5.1.2 Stone and lime

Figure 5e) Coconut Walk limekiln, February 2000.

By the 1680s, a plan to rebuild the forts in stone and lime had been proposed. At Charles Fort the battlements were to be rebuilt and at Black Rock and Old Road, the platforms were to be made of stone. The battlements of Charles Fort would almost certainly have been constructed from local dacite stone, but it is uncertain whether the platforms would have been built from this material, as it was difficult to work into flat slabs. However, in March 1684, a consignment of 140 yards of paving stones brought to Nevis on the 'Pink Rose' of Bristol (Imports to Nevis, PRO CO157/1: 2/3/1684) may have been destined for the forts. This consignment may have provided the platform for Codrington's fort although this remains conjecture.

A further problem with building in stone was the availability of mortar. On other islands, such as St. Kitts, the presence of limestone outcrops allowed the manufacture of lime mortar. Nevis had no such outcrops. However, Nevis is surrounded by coral reefs,

which could be exploited. Evidence of such exploitation can be seen at Coconut Walk estate where a probable 18th century limekiln is still used for the purpose (Fig. 5e).

As with timber and paving slabs, a further source of lime was that imported from Britain and, in particular, from Bristol. Such imports can be found in records as far back as 1683, when forty hogsheads of lime came in on the 'Nevis Merchant' (Imports to Nevis, PRO CO1/66/330: 24/8/1684). Again, such imports continue throughout the period with further shipments recorded from 1721, 1722 and 1723 (PRO CO187/2: 18/7/1721; CO187/2: 7/8/1722; CO187/1:25/4/1723). According to later reports, when mixed one part lime with three parts of the local volcanic 'tarras' (tufa), a durable and effective mortar could be made (Blue Book for 1864: PRO CO187/38; Blue Book for 1865: PRO CO187/39).

The question of whether the use of Bristol lime could be identified within Nevis mortar samples has been examined in the Newcastle Redoubt report (Morris et al. 1999: 206-210). However, the results proved inconclusive. This fact is almost certainly explained by the mixing of lime and tarras, as described above, which caused a high proportion of volcanically derived material to be present in all of the samples.

5.2.5.2 Construction techniques

By the early 1700s, the construction of at least twelve stone and mortar forts had been undertaken. This building programme provides the first archaeological evidence of construction techniques at the Nevis forts. The forts identified and recorded show evidence of walls of a rubble and mortar core with volcanic stone facing. In the platforms of Mathew's, Old Road and Cotton Tree, these stones are rounded in shape and are generally 20-30cm in diameter.

They have been laid in irregular courses, with a few smaller, generally rounded, pebbles added to fill any gaps between the larger stones. Few of the stones show any evidence of dressing and appear to have been consciously selected and laid with their flattest face outwards (Fig. 5f). The only evidence of mason's work appears on the cornerstones/quoins and on the step on the front of each platform. Here the stones are shaped and dressed into rectangular blocks.

The stonework appears to show only European style and technique, with no sign of African influence, and although it is likely that much of the dressing work was carried out by white masons it is certain that much of the hard work of laying the stones was completed by slaves. But, as with many other colonial sites, the slaves' involvement has

been erased by the enduring European building tradition. Yet again, their presence is known, but of them no sign remains.

Figure 5f) Stonework at Mathew's (top left), Old Road (bottom left) and Cotton Tree forts (right)

Other evidence of this type of stonework can also be seen on the western wall of Fort Charles, at Morton's Bay, the Newcastle Redoubt and buildings A, B & C at Abbott's/Duke's Sconce fort. It was also visible at Codrington's fort prior to the reconstruction of the gun platform parapet wall. The above examples cannot be securely dated, due to later building activity or modern disturbance. However, it would appear from the examples seen at Mathew's, Cotton Tree and Old Road, that the technique is of a 17th/early 18th century date. When examination is made of the probable source of the stones used for these structures, this date appears reasonable.

From historical documents, it would appear that the majority of stone used during the 17th century was collected rather than being quarried. In an account of 1687, the stones for the construction of the forts are described as 'lying at Pains Ghut' (Anonymous, PRO CO155/1: 6/8/1687). Although the author could not establish the precise location of this

ghut, many such occur around the coast of Nevis. For example, the ghut at Indian Castle clearly shows many stones of the type used for the forts eroding from the ghut edges (Fig. 5g).

Therefore, it would appear that in the 17th/early 18th century, the source for much building stone was these ghuts. This situation would provide an efficient means of obtaining the materials, with transportation by sea to the forts a probability. Indeed, it would appear that this method of obtaining building stone continued into the later period with a highways act from 1764 stating that the road surveyor had permission to take any material from the ghuts that he might find useful (Nevis Act, PRO CO185/7: 27/1/1764).

Figure 5g) Indian Castle ghut, February 2000.

However, by the late 18th century, a new type of masonry appears to have developed. At the possible guardhouse at Old Road and in the building overlying Johnson's fort, more regularly coursed walls of squared and shaped blocks can be seen. This masonry is also visible at Fort Charles on the front wall and gateway of the fort (Fig. 5h). In any spaces between the stones, small slivers of angular stone have been inserted into the mortar. It would appear that these slivers were derived during the process of facing the stones. However, although the stones have been dressed, the similar size of stone to that seen in the earlier masonry, might suggest that ghuts were still being used as a source.

Dating for this stonework is difficult to establish precisely. However, the presence of this form of construction on the building overlying Johnson's fort would suggest a date after the fort's destruction in 1706. From comparison with other dated building on the island a more secure time frame can be established.

Figure 5h) Stonework at Old Road (left), Johnson's (right) and Charles forts (below).

Such squared stonework can be seen on several late 18th/early 19th century buildings. For example, at Clay Ghaut and Montpelier mills (1785) and Eden Brown Estate (late 18th century), a similar type of squared stonework is present. However, at Bath Hotel, built in 1778, this form of stonework has been developed to ashlar blocks. Similarly, in the 19th century buildings of Cottle Church (1824), Coconut Walk Mill (1805), Golden Rock Mill (1811) and St. Paul's church at Charlestown (1890s), a much closer spaced coursing of square dressed stones can be seen (Gordon 1998: 30).

From the above, it would appear that in the 17th century stones were collected from the ghuts for use in buildings. By the late 18th century, these stones were now being roughly faced and arranged in more regular courses. By the late 19th century, the stonework appears to show evidence of intensive mason's work, with the stones potentially being quarried. If they were quarried, the source for this extraction has yet to be identified, although a few such quarries are in operation in the present day.

The above theory, however, should not be treated as absolute. For example, the ashlar blocks of the late 18th century Bath Hotel would suggest variability within the general trend. Further work will be necessary to elucidate the precise nature of Nevisian architecture through the years. The theory above merely attempts to find patterns within the architectural styles of Nevis, which may offer clues to the dating of the Nevis forts.

5.2.5.3 Building the forts

It would appear that fortification building on Nevis was a sporadic occurrence, with many years passing between each building phase. As such, it is very difficult to identify the period of time taken to build a fort. Forts such as Cotton Tree appear to have taken about a year from March 1704 to September 1705. However, at forts like Saddle Hill, the work had still not been finished after ten years.

This inconsistent approach was often the result of indolence on the part of the planters: in times of peace there was deemed to be little necessity for fort building, and until threat of war, when hasty preparations were instigated, little appears to have been done. This laxity was also exacerbated by a lack of available money and, at times, a lack of engineering expertise.

The reason for the planters' reluctance to fortify appears to stem from greed. Forts cost money, whether directly as taxes or indirectly in the time that the slaves were away from the plantation, and loss of time meant loss of profits. Ironically, the planters did not like their slaves working on forts, as they feared they would be overworked. Far from being a humanitarian concern, this fear stemmed from a possibility that, after carrying stones and materials to the forts, the slaves would be too exhausted or injured to continue working in the sugar fields. However, the planters were paid a daily rate for the use of their slaves and, typically, the planters in the Council and Assembly decided the rate at which they were to be paid.

A more detailed examination of the people who lived and worked within the military environment of Nevis can be found in Chapter 6. However, a brief summary recording the work necessary to build the Nevis forts is given below.

5.2.5.3.1 White men

Although slaves appear to have carried out much of the manual labour, it would seem that from the earliest period the forts employed a variety of, almost certainly white, craftsmen.

These masons, carpenters and shinglers were employed on the forts and presumably directed the work of the slaves and carried out or supervised the skilled architectural work. This is not to say that the slaves would not have been capable of such work, the suggestion of white workers comes from the pay lists for such work: had they been slaves they would not have been paid.

The first account which relates to these artisans comes from 1668, when the 'masons, carpenters, sawyers and shinglers' were paid £114 6s 39d 'for making and repairing forts' (Account of Charges, PRO CO1/22: 19/6/1668). Although the numbers of men employed or their period of employment is not mentioned in the account, this amount was a large sum, equivalent to £12,000 in today's money (Economic History Services 2002). In September 1705, six masons were paid 7s 9d each for a week of work on the forts, around £43 in today's money (Council of Nevis, PRO CO155/3: 10/9/1705). In 1707, more masons were mentioned as being employed on the repairs to Charles Fort (Council of Nevis, PRO CO155/3/3: 11/12/1707).

By 1725, the refitting of Charles Fort guardhouse was in progress. However, in that year the Assembly agreed to the work only after an overseer had been appointed. Although no record exists of who was given the job, from the tone of the report it would appear that a planter from the Assembly would be required (Assembly of Nevis, PRO CO186/1/20: 17/9/1725).

It is also possible that during times of peace soldiers from the various regiments, for example the 27th Inniskillings, were used to build the forts. Indeed, the treatment of the soldiers as second-class citizens, akin to slaves, is regularly attested to in the documents (see Chapter 6). Similarly to the soldiers, in the earliest period of settlement, prior to the large-scale importation of slaves, white indentured servant labour would almost certainly have been utilised. However, in an account from St. Kitts (Jeaffreson 1878) it would appear that the slaves were used to build the forts, whilst the white servants carried provisions to and from the fort stores.

5.2.5.3.2 Slaves

Despite the use of masons, carpenters, shinglers and possibly soldiers, the majority of construction work would have been achieved using slave labour. Unlike the whites, whose women would never have been considered for such work, female slaves were almost certainly not treated so well. There is no reason to suggest that black women were not used to build the forts.

Little is known about these slaves: they appear as numbers in the accounts of costs to be paid to planters. From the 1670s onwards throughout the period, the use of slave labour is recorded (PRO CO1/27: 1671; CO1/29/161: 14/12/1672; CO153/9: 19/12/1706; CO186/1/20: 17/9/1725). Although money was paid for this work, around 8d (£3.12 today) per day per slave in the late 17th century and 18d (£7.50 today) per day in the first quarter of the 18th century, none of this money went to those who did the work: it all went to the planters. Indeed, the 18d per day paid in the 18th century was the same rate of pay given to an Officer in the regiment based in Nevis (Assembly of Nevis, PRO CO186/3: 27/1/1756). This was not an insignificant sum.

The work the planters were paid for was back breaking for the slaves. Each stone block would have weighed around 35-40kg and hundreds of thousands would have had to have been gathered, quarried and transported to the forts. In 1693, cattle were hired to haul the guns to the forts (Council of Nevis, CSP 1693-6, No. 607: 7/10/1693). However, it would appear that in the majority of cases, slaves were used to carry the materials. An account from 1704 states that half of all the available slaves on the island would be needed to carry stone and 'tarras' (tufa) to Cotton Tree Fort for six days (John Johnson, PRO CO154/5: 19/6/1704). On a typical hot Nevisian day, this task would have been horrific. The report does not mention where the stone and 'tarras' had to be transported from, although it is described as 'lying so farr distant' (John Johnson, PRO CO154/5: 19/6/1704). Indeed, the nearest possible source would be at the cliff at Abbott's/Cole's Point fort, some half a mile to the north. A more remote source inland or on the southern side of the island may even have been used. The six days of hard labour was only part of the work necessary for this fort. Certainly there would have been other periods of carrying and toil, which remain unrecorded.

When one considers the twelve forts built on Nevis in the early 1700s, clearly the work demanded an intensive use of slave labour. If the source of the stone was ghuts then those on the leeward coast of the island would have been insufficient. With the majority of ghuts occurring only on the south and south-east of the island, stones for the majority of the forts would have had to be carried at least three miles to the leeward forts. Such a task must have been backbreaking.

5.2.6 Defence and armaments

The arming of the Nevis forts, like the other military activities, appears to have been haphazard and sporadic. Throughout the period under study a range of ill-matched and old

cannon can be found in the fort inventories. This pattern was not restricted to cannon, with complaints against the handguns sent to the island common.

A further problem was caused by Nevis' official status as one of the Leeward Islands. In many cases shipments of arms were supposed to be shared amongst the Leeward Islands. However, the arrival of these shipments at Barbados in the early period, and at Antigua from the late 17th century, often meant the best, and sometimes all the, arms were seized by other islands before they ever reached Nevis.

Supply also appears to have depended on the favourite island of the Governor at the time. For example, if a Governor was based in Antigua then the largest number of serviceable arms might be expected to end up there: if St. Kitts was his base, then at St. Kitts. This served Nevis well in 1706, when John Johnson, apparently based at Nevis, furnished the island with 'the best guns and stores' (Daniel Parke, PRO CO153/9: 15/7/1706).

Although it is difficult to judge the honesty of the accounts, the general picture from the historical records suggests that after the 17th century, Nevis was never properly armed, with a few odd cannon being sent as and when necessary. It also seems that the armaments would have been used long past their usual life expectancy, with guns that might have been disposed of in Europe still being used in the Caribbean. Indeed, in a hot humid climate, those same guns would have rusted far quicker than in Europe, thus causing greater problems for the ill-armed islanders.

5.2.6.1 Hand-guns and personal weapons

Records of side arms are scarce in the historical documents. From time to time, accounts of muskets being sent can be found, however, it is likely that many planters and militia-men purchased their own arms, with records of swords and pistols being found in the many militia acts of the period (Nevis Act, PRO CO185/2/80: 1721).

5.2.6.1.1 Historical evidence for hand-guns and personal weapons

From an account of 1667, it would appear that five hundred muskets from Barbados were to be sold to Nevis (Council of Barbados, CSP 1661-8, No. 1458: 11/4/1667). However, by 1671, Governor Charles Wheler was requesting a thousand more for the use of the Leeward Islands (Charles Wheler, PRO CO1/26/76: 2/1671). An account of 1672, would

suggest that the number of muskets sent was insufficient with only 1,330 men out of 1,411 able to bear arms having any sort of weaponry (PRO CO1/29/33: 17/7/1672).

Although a further 500 muskets were ordered in 1676 (Ordnance Office, PRO CO1/36/29: 2/2/1676), a company of soldiers arriving in Nevis in April 1678 were described as having no arms or ammunition (William Stapleton, PRO CO153/2: 1/4/1678). From a further account of 1678, it would appear that the muskets, ordered in 1676, had not yet been delivered to the island (Ordnance Office, PRO CO153/2: 15/4/1678). By May 1678, a shipment of 300 'snaphance' (flintlock) muskets and 'bandeliers' (ammunition belts) had been sent (Ordnance Office, PRO CO153/2: 30/5/1678).

However, by 1689, a further 300 flintlocks had been requested (Anonymous, PRO CO153/3: 10/6/1689). Flintlocks appear to have been the handgun of choice in the Caribbean with matchlocks rejected due their propensity for setting fire to the sugar canes when improperly used (Henry Goodrick, PRO CO153/4: 1689).

Although, further supplies of flintlocks were sent to the Leeward Islands in the 1690s it is uncertain how many of these reached Nevis. By 1694, although a further 500 firearms had been sent, the Council of Nevis requested a gunsmith to repair the arms, as the only such craftsman in the area was at St. Kitts (Council of Nevis, CSP 1693-6, No. 1120: 2/7/1694). However, by 1699, it would appear that this had not been achieved, with seven eighths of the handguns being 'out of repair' (Council and Assembly of Nevis, CSP 1699, No. 741: 24/8/1699).

By 1701, it would appear that Christopher Codrington III had rectified the matter, with a gunsmith at Nevis 'fixing up our arms so fast as he can' (Christopher Codrington, CSP 1701, No. 401: 5/5/1701). This was clearly necessary as Codrington describes 'old arms spoil'd with rust and thrown together in heaps' (Christopher Codrington, PRO CO153/7: 20/8/1701).

In 1702, an error occurred and six hundred matchlock muskets were sent to Nevis (Council of Trade and Plantations, CSP 1702, No. 18: 8/1/1702; No. 32: 15/1/1702). Although these were quickly replaced with flintlock muskets, an account of 1705 would suggest that the arms that had been sent were old with, 'not above one in four...fit for service' (Council and Assembly of Nevis, PRO CO152/6: 12/3/1705). By 1706, the situation was so bad that Nevis resorted to charging a duty of two 'firelocks' to ships docking at Nevis for more than two days (Ordnance Office, PRO CO152/6: 1706).

Following the French attack of 1706, only 112 small arms and two barrels of powder remained (Council of Nevis, CSP 1706-8, No. 448: 31/7/1706). By December

1706, a further 250 swords and 250 flintlocks had been sent to Nevis (Ordnance Office, PRO CO153/9: 19/12/1706), however, by February 1707, a further 150 muskets were required (Walter Hamilton, PRO CO152/7: 21/2/1707).

From this time onwards, although a few mentions of muskets and lead shot were made, it would appear that shipments of arms to Nevis became scarce. However, on other islands, such as Antigua, which had 426 small arms with 4,000 flints (PRO CO152/18: 1730), it would appear that supplies continued to be sent. By 1732, an account of the military stores of Nevis described the small arms at Charles Fort being 'fitt for no manner of service nor worth mending' (PRO CO186/2: 3/3/1732). By 1736, this pattern continued with only eighteen firearms being recorded (Committee for Forts and Fortifications, PRO CO186/2: 5/6/1736).

Although requests for arms continued (PRO CO152/23/246: 1739; CO152/59/75: 17/12/1778) it would appear that little more was done for the islands. It is likely that many of the side arms present on Nevis were in private hands: a form of personal defence purchased when the public defences had proved insufficient.

5.2.6.1.2 Archaeological evidence for hand-guns and personal weapons

Very little evidence of such weapons has been found on Nevis. From Codrington's and Johnson's forts, several musket balls attest to the presence of such weapons. However, no confirmed finds of handgun parts have been identified.

It may be that the absence of such weapons results from their portability, allowing them to be removed from their locations and discarded elsewhere. It is also probable that the poor preservation at many of the forts is responsible for this pattern, and more extensive archaeological work will almost certainly lead to many more such items being recovered.

5.2.6.2 Cannon

On Nevis, fifty cannon ranging in date from the late 16th to late 18th/early 19th centuries, survive in the present day. A further three cannon, two recorded as being present at Indian Castle and one at Fort Charles in 1982, have now disappeared (Table 5d). The majority of these cannon have been moved from their original locations with many now adorning hotels and private gardens. It is possible that many others remain to be found on the forts, being either buried in the sand or washed further out to sea. Many of the guns that do

survive appear either old or unusable, with the majority having apparently been taken or disabled during the French attacks of 1706 and 1782.

The pattern of historic cannon supply to Nevis matches that shown for side arms, with few new guns being received, old guns being abandoned and, like the forts, a decline in supply from the 18th century onwards.

5.2.6.2.1 Historic information for cannon

From the earliest period cannon were integral to the defence of Nevis. Indeed, it would appear that the first cannon predates the first fort on the island, being used to deter a Spanish raid in 1629. However, until the 1660s, it would appear that few cannon were imported to the islands, with only six brass drakes sent for all the Leeward Islands in 1664 (PRO CO1/18: 26/10/1664). By 1667, six sakers meant for Nevis had not yet arrived, with the Nevisian planters accusing Barbados of taking the guns for their own use (Petition of planters, CSP 1661-8, No. 1597: 17/10/1667).

By 1670, the six sakers, which had eventually been sent in 1667, remained the only guns sent to the island (PRO CO1/66/210: 15/10/1670), but in 1671, Governor Wheler requested 22 cannon to be sent to the Leeward Islands (Charles Wheler, PRO CO/1/26: 2/1671) and by December of that year, Nevis was described as having thirty 'bad cannon' (Charles Wheler, PRO CO1/27/137: 9/12/1670). By 1672, Nevis had received one further culverin (Anonymous, PRO CO1/29/167: 1672). In addition, twenty-two sakers, three minions and one falcon were recorded as being present on the island (William Stapleton, PRO CO1/29/33: 17/7/1672).

By 1675, although apparently sufficiently provided with guns, it would appear that fifteen of them needed carriages (Anonymous, PRO CO153/2: 3/2/1675). By 1676, thirty-three cannon were recorded, with a further two twelve-pounders and four eight-pounders being brought to the island in May of that year (Thomas Warner, PRO CO153/2: 3/4/1676; William Stapleton, PRO CO153/2: 10/5/1676). By November 1676, the island had thirty-nine cannon ranging from three-pounders to eighteen-pounders with a further five field pieces (William Stapleton, PRO CO1/38/152: 22/11/1676). In April 1678, a further three twelve-pounders were sent (Ordnance Office, PRO CO1/42/35: 15/4/1678).

However, this was clearly not enough, with a further ten guns being requested by the island in that year (Council of the Leeward Islands, PRO CO153/2: 25/4/1678). In May their request was granted with three culverins, four demi-culverins and three sakers being sent to the island (Ordnance Office, PRO CO153/2: 30/5/1678). By 1685, a request

to buy five 'great guns' from the Nevis Agent, John Nethway, was submitted by the Council (Council of Nevis, PRO CO1/58: 12/11/1685), however, this request was turned down by the Assembly who stated that 'the country is in no present want of great guns' (Assembly of Nevis, PRO CO1/58/94: 26/11/1685).

In 1688, St. John's fort in Antigua received four demi-culverins, ten sakers and six minions: far more than that received by any fort in Nevis (PRO CO153/3: 24/5/1688). Indeed, when Nevis requested five long sakers for Long Point fort, it would appear that these were refused, as there were none available (Ordnance Office, CSP 1689-92, No. 377: 24/8/1689).

In 1693, the mix and match nature of the guns supplied to the islands became obvious, with Nevis and St. Kitts having to exchange shot as both had sizes unsuitable to their cannon (Council of Nevis, CSP 1693-6, No. 521: 23/8/1693). However, in that same year it was also reported that a number of guns had been left on the beach at Nevis and were in danger of being swept away by the sea (Council of Nevis, CSP 1693-6, No. 700: 29/11/1693).

By 1696, the two alarm guns in use on the island had split and had to be replaced (Anonymous, PRO CO155/2: 16/5/1696). This was not entirely unexpected as alarm guns, which were only fired with a small charge, were liable to be the oldest on the island.

By 1699 Nevis was described as needing more cannon and in 1701 a request for four sakers, six twelve-pounders and six eighteen-pounders was submitted (Council of Nevis, PRO CO152/4: 7/1701). By August of that year, an account of the armaments at the forts recorded that, although sixty-five guns were present on Nevis, nineteen were either dismounted or in need of new carriages (Christopher Codrington, PRO CO152/4: 25/8/1701).

In 1702, six culverin, six twelve-pounders and four long sakers were requested (Queen in Council, PRO CO153/3: 13/8/1702). Although twenty-eight guns were sent to the Leeward Islands in August of that year it is uncertain how many reached Nevis. By 1704, John Johnson had requested more guns because the island had only three twenty-four-pounders, five or six eighteen-pounders and a handful of six and nine-pounders (John Johnson, PRO CO184/1/3: 22/3/1704).

By late 1704, with the threat of war imminent, further requests for fifty-pounder mortars and twelve-pounders were submitted (William Mathew, PRO CO153/9: 2/10/1704). Although these were sent, it is again uncertain whether they reached Nevis or, more probably in the case of the mortars, went to the other Leeward Islands.

Prior to the French attack of 1706, it would appear that Nevis was well equipped, having ninety-two cannon on the forts (Anonymous, PRO CO154/5: 1705). However, in the list of forts it appears that, in the majority of cases, each fort had less than half the complement of guns it had been built to accommodate, with many only possessing two-, three- or six-pounder guns.

Following the French attack, it would appear that all the Nevis cannon had seemingly either been taken or destroyed, with an account of August 1706 suggesting that, rather than take the guns for their own uses, the French had found the cannon so bad that they had disabled them and left them where they were (Daniel Parke, PRO CO153/9: 28/8/1706). Such damage is attested to by the finding of blown cannon at Cotton Tree fort. The French destruction of the cannon is documented by a report that claimed there were only three usable 'great guns' on the island following the attack (Daniel Parke, PRO CO153/9: 9/12/1706).

In 1707 a small shipment of twenty guns was brought in by Sir John Jennings, although these appear to have been only enough to supply Fort Charles and Black Rock Fort (Walter Hamilton, PRO CO153/9: 21/2/1707). An account of the forts from 1707 supports the picture of a desolate island, with sixty-four cannon mentioned of which three were dismounted and fourteen were sakers, or lower, in size (James Milliken, PRO CO153/7: 15/12/1707).

This picture of decline continued throughout the 18th century, with only fifty-three cannon recorded in 1715 (Fort Inventory, PRO CO152/11: 1/9/1715), forty-five in 1727 (Fort Inventory, PRO CO152/16/159: 3/10/1727) and forty-five in 1734: only twenty-nine of these were serviceable (William Mathew, PRO CO152/2/148: 31/8/1734). This contrasts dramatically with Antigua, which in 1730 had one hundred and thirty cannon including some thirty-pounders (Anonymous, PRO CO152/18: 1730).

By 1746, despite further requests for guns, the situation had deteriorated further with only twenty-six guns mounted in the forts of Black Rock and Fort Charles. Twenty other dismounted cannon were also mentioned (William Mathew, PRO CO152/25/156: 15/4/1746). By 1755, only thirteen guns were mounted at Fort Charles with a further six at Black Rock (Charles Payne, PRO CO152/28: 20/6/1755).

By 1769, a few more cannon had been distributed to the forts with fifty now being present. However, seven of these were described as being honeycombed or old and many were nine-pounders or smaller in size (William Woodley, PRO CO152/31/11: 23/2/1769). Despite an offer to distribute cannon to the other islands from Antigua, little appears to

have been done, with the King refusing to let the guns leave Antigua (King in Council, PRO CO152/32: 5/1/1770).

By 1773, despite there being sixty cannon present on the forts only twenty-seven of these were fit for service; the rest were dismounted, honeycombed or old (Return of the Forts and Batteries, PRO CO152/32: 1/2/1773). In 1777, the three batteries proposed by William Mathew Burt appear to have had only three six-pounders each (William Burt, PRO CO153/23: 6/10/1777).

Following the second French attack on Nevis in 1782, the island was left with only two 'dependable' guns, the French choosing in this instance to take the guns as well as disabling those they had no use for (George Lord Forbes, PRO CO152/75: 3/4/1794).

Although a handful of cannon appear to have been supplied to the island following this attack (Council and Assembly of Nevis, PRO CO152/77/265: 19/9/1795), from the 1800s only twenty cannon, eight of which were unserviceable, were recorded as being present on Nevis, and those only at Fort Charles (John Peterson, PRO CO186/10: 4/12/1812). By 1820, the gun carriages were all described as being unserviceable (John Peterson, PRO CO186/11: 10/4/1820).

5.2.6.2.2 Archaeological information for cannon

The cannon still present on Nevis would seem to reflect the number of cannon present in the mid 18th century, following the French attack of 1706 (Table 5d). With the exception of the seven c.1800 guns at Fort Charles, all can be dated to a period prior to the mid to late 18th century, with the majority dating from the mid to late 17th century (Trollope 2000).

This dating range again supports the interpretation of the decline of Nevisian defences from the 18th century: only eleven of the cannon post-date the French attack of 1706. This is unsurprising, as many of the forts appear to have seen their last major period of use in the early 18th century. With cannon having seen a few years of service in Europe prior to their dispatch to the Caribbean, it would be expected to find late 17th century cannon on early 18th century forts.

The abandonment of disabled cannon following the French attack of 1706 is further supported by the fact that ten of the eighteen mid to late 17th century guns have been disabled by being spiked, having at least one trunnion knocked off or, in the case of the Cotton Tree guns, being blown up. It is almost certain that this damage occurred in 1706.

Two much earlier, late 16th century, guns have also been found on Nevis. One of these, now at the Golden Rock plantation inn, apparently came from further up Mount Nevis and it is possible that it was used as an alarm gun at this location, after its offensive use had ceased. This theory may also account for the 1600s demi-culverin present at Old Road, as it is known that from 1707 one demi-culverin was present at the fort and was used as alarm gun in the 1770s (Return of the Forts and Batteries, PRO CO152/32: 1/2/1773).

By comparing the historical accounts of guns at each fort with those located at the various forts in the present day, it is possible to suggest that many of the presently located cannon have not moved since the French attack of 1706 (Table 5d). Particularly in the case of Old Road and Cotton Tree forts, where all the cannon pre-date 1706, this supposition would appear to hold true. However, with a range of cannon present on the island throughout the 17th and 18th centuries, it is difficult to ascertain with confidence whether this is the case or not. Further work on serial numbers and weights with reference to those recorded in the Ordnance Office records will be necessary to elucidate this problem. Such work was, however, beyond the scope of the present study.

Unusually, Nevis has three extremely rare guns. The Blomefield design, brass six-pounder present at Government House would appear to be one of a very few guns which were cast for an experiment in rifling. This gun has two brackets for the telescopic sights necessary for such an experiment. However, it would appear that the barrel was never rifled (Trollope 2000).

A further brass gun at Government House, the Belfort six-pounder, is of interest as it was cast six inches longer than was usual. Only a very few such guns were made and the Nevis gun is the only known surviving example of this redesign (Trollope 2000). It is almost certain that these two guns were sent to Nevis in response to a request from the Council and Assembly of Nevis in 1795 for 'two brass six-pounder field pieces' (Council and Assembly of Nevis, PRO CO152/77/265: 19/9/1795).

The other two unusual guns date from 1575-1580. One can be identified to the maker Thomas Gresham, who was casting in the later 16th century, the other is an English saker which has had one of its trunnions removed. Again these guns are extremely rare, and one of them may even be the gun used at Pelican Point, during the first years of English occupation. Alongside the military guns, two cannon in a private garden, thought to have come from Saddle Hill, are marked with a 'P', attesting to their commercial and not military, origin. A further merchant gun from the late 17th century has also been found

in the vicinity of the Upper Round Road and is now located in another private garden (Trollope 2000).

When compared with the other Caribbean islands, the supply of cannon to Nevis is unusual. In 1706 Brimstone Hill and Charles Fort on St. Kitts had eighteen and twenty-three cannon respectively (Smith 1994: 77), whereas Charles Fort on Nevis had only twenty (Anonymous, PRO CO154/5: 1705). By 1734, Brimstone Hill had forty usable cannon and fourteen mortars (Smith 1994: 86) and by 1781 had sixty-three pieces of ordnance (Smith 1994: 88). By 1813, the fort had seventy-seven pieces of ordnance (Smith 1994: 102-3).

Sixty-seven of these cannon, dating from the later 17th century to the 19th century have been located at Brimstone Hill and Fort Charles (Smith 1995: 92). On Antigua, seventy-eight guns dating from the late 17th to the 19th century can still be found on the island today (Nicholson 1994: 35). At least fifty cannon also survive on Montserrat (Crandall 2000: 299), although a comprehensive list has yet to be made.

Another difference is the range of sizes present on the forts, with St. Kitts and Antigua showing a significant number of large mortars, thirty-two and twenty-four-pounders (Nicholson 1994: 35, Smith 1995: 98-9). Nevis, by comparison, is only ever recorded as having a handful of twenty-four-pounders. None of these larger guns survive to the present day.

Nevis, therefore, would appear to have fewer cannon than the islands of St. Kitts and Antigua and may even have had fewer than Montserrat. In terms of dating, the range of cannon seen at Brimstone Hill and on Antigua attests to the continuing military presence in the 19th century on these islands. However, the absence of such late guns on Nevis would appear to suggest, once again, that although comparable with the other Leeward Islands in the 17th century, the defences of Nevis were not well provided with armament in the later 18th century and beyond.

Table 5d) Detail of Nevis cannon, identified by Charles Trollope (Trollope 2000)

Fort	Current location	Date	Details and Type	Cross Reference
?Windward/ Red Cliff	Old Manor Hotel	c.1580	English Saker of 7'6". 1 trunnion	
?Windward/ Red Cliff	Jones Estate	?	v. poor condition	
?Windward/ Red Cliff	Jones Estate	?	v. poor condition	
?Coxheath gun emplacement.	Montpelier Inn	1696	9lber of 8'6". Design: 1670 II Cypher: Rose and Crown. Survey number 14278. Weight 22-3-12 Left trunnion marked IF. Cast by John Fuller 1696.	
?Coxheath gun emplacement.	Montpelier Inn	1696	9lber of 8'6" (pair to above) Design: 1670 II Cypher: Rose and Crown. Corroded: no survey number or weight. Left trunnion marked IF. Cast by John Fuller 1696.	
Indian Castle	?	?	Another cannon present in 1982 has disappeared (Paddock 1982)	
Indian Castle	?	?	Another cannon present in 1982 has disappeared (Paddock 1982)	
Indian Castle	Fort Charles	?l.17th	11' V. poor condition	
Indian Castle	Fort Charles	?l.17th	11' V. poor condition	
Indian Castle	Fort Charles	?l.17th	10' V. poor condition	
Indian Castle	Fort Charles	?l.17th	7'6" V. poor condition	
Indian Castle	Fort Charles	?l.17th	6'6"V. poor condition	
Long Point	?	?	? V. corroded ?6lber	6lbers recorded in 1705, 1734, 1769 and 1773
Long Point	Private garden	?	? Saker	Sakers recorded from 1689, 1701, 1707, 1715 and 1727
Fort Charles	?	?	An eighth gun (same as below) was present in 1982 (Paddock 1982)	
Fort Charles	Fort Charles	c.1800	12lbers of 9'. 34cwt. Design Blomefield. Cast by Walker Co. of Rotherham, Yorkshire.	?1806 issue to Antigua. First mentioned on Nevis in 1812
Fort Charles	Fort Charles	c.1800	12lbers of 9'. 34cwt. Design Blomefield. Cast by Walker Co. of Rotherham, Yorkshire.	?1806 issue to Antigua. First mentioned on Nevis in 1812
Fort Charles	Fort Charles	c.1800	12lbers of 9'. 34cwt. Design Blomefield. Cast by Walker Co. of Rotherham, Yorkshire.	?1806 issue to Antigua. First mentioned on Nevis in 1812

Fort Charles	Fort Charles	c.1800	12lbers of 9'. 34cwt. Design Blomefield. Cast by Walker Co. of Rotherham, Yorkshire.	?1806 issue to Antigua. First mentioned on Nevis in 1812
Fort Charles	Fort Charles	c.1800	12lbers of 9'. 34cwt. Design Blomefield. Cast by Walker Co. of Rotherham, Yorkshire.	?1806 issue to Antigua. First mentioned on Nevis in 1812
Fort Charles	Fort Charles	c.1800	12lbers of 9'. 34cwt. Design Blomefield. Cast by Walker Co. of Rotherham, Yorkshire.	?1806 issue to Antigua. First mentioned on Nevis in 1812
Fort Charles	Fort Charles	c.1800	12lbers of 9'. 34cwt. Design Blomefield. Cast by Walker Co. of Rotherham, Yorkshire.	?1806 issue to Antigua. First mentioned on Nevis in 1812
Johnson's	NCHS Museum	?	Muzzle section of possible 12lber	
Old Road	Antique Shop	l.17th/ e.18th	Swedish Finbanker. 6 or 9lber. 7'6" long.	6lbers recorded in 1676 and 1705
Old Road	Old Road	c.1660s	Gun 1. Uncertain type and date.	?
Old Road	Old Road	c.1660s	Gun 2. Uncertain type and date.	?
Old Road	Old Road	c.e.1600s	Gun 3. Demi-culverin. Long neck	Demi-culverin recorded in 1707, 1727 and 1773
Old Road	Old Road	c.1660	Gun 4. Saker or demi-culverin. Browne. 1 trunnion, broken muzzle.	6lbers recorded in 1676 and 1705
Old Road	Old Road	Pre-1670	Gun 5. Swedish Finbanker. 12-18lber. No trunnions	?12/18lbers recorded in 1701 and 1734
Cotton Tree	Cotton Tree	c.1660s	Gun 1. Cascabel end	?
Cotton Tree	Cotton Tree	c.1660s	Gun 2. Cascabel end. Browne. Poss. same as Gun 4.	?
Cotton Tree	Cotton Tree	Pre 1720	Gun 3. Muzzle with trunnion.	?
Cotton Tree	Cotton Tree	c.1660s	Gun 4. Muzzle only. Browne. Poss. same as Gun 2.	?
Cole's Point	?	?	Another gun present in the 1980s has disappeared	?
Cole's Point	Private Garden	?	Broken fragment with 12lb ball attached.	12lber recorded in 1705
Morton's Bay	Fort Ashby	1st ½ 17th C.	English 12lber of 9'. Weight 24-2-0	?12/18lbers recorded in 1701 and 1734
Morton's Bay	Fort Ashby	1670-90	English culverin (18lber) of 9'. Cypher: Rose and crown Weight 37-0-20.	?12/18lbers recorded in 1701 and 1715
Morton's Bay	Fort Ashby	1670-90	English demi-culverin of 8'. Weight 23-2-?. Spiked in ?1782	Demi-culverin recorded in 1707 and 1727

Morton's Bay	Fort Ashby	Last ¼ 17th C./e. 18th C.	Swedish Finbanker. Demi-Culverin or 8lber of 7'6". Cypher: Amsterdam Admiralty. Spiked and only 1 trunnion	Demi-culverin recorded in 1707 and 1727
Morton's Bay	?	?	Another gun present in the 1980s has disappeared (Paddock 1982)	?
Codrington (was on shore below fort)	Codrington	1702	9lber of 10'. Cypher: Rose and Crown, Weight 31-0-3. Cast 1702 by P. Gott	9lbers recorded in 1705
Codrington	Codrington	c.1660	Demi-culverin of 7'. Needs turning over.	9lbers recorded in 1705
Round Hill Bay/ Newcastle	Private Garden	c.1670-90	?Falcon of 4'4"	3lbers recorded in 1705 and 1707
Newcastle Beach	Administration building	c.1750	9lber of 5'. Civilian pattern based on John Armstrong's ordnance design.	
Nisbetts Beach	Nisbetts hotel	c.1695	English ?9lber. Ball wedged in gun...muzzle 1/3 has gone. ?Same batch as Montpelier	
Mountain	Golden Rock	l.17th/e.18th C.	Swedish Finbanker. Demi-culverin (9lber) of 7'6".	
Mountain	Golden Rock	1575	English Minion or Saker of 6'6". Weight 10-0-8. Marked TG at 1st reinforce (Thomas Gresham). Cast at Mayfield	
Mountain	Private Garden	1st ¼ 17th C.	English Demi-culverin (9lber) of 7'. + 4 cannon balls (2 x 12lb, 1 x 10lb, 1 x 18lb)	
Upper Round Road, Morgan Estate	Private Garden	c.1690	English falcon of 4' (2 to 2½lber). ?Merchant gun.	
Upper Round Road, Morgan Estate	Upper Round Road, Morgan Estate	?	Buried: located, but still on mountain.	
Saddle Hill	Private Garden	m.18th C.	Commercial 4lber of 5'4". John Armstrong type. Weight 9-2-7. P marked.	
Saddle Hill	Private Garden	m.18th C.	Commercial 4lber of 5'5". John Armstrong type. Weight 9-1-0. P marked.	

UNCERTAIN FIND SPOTS				
	Private Garden	c.1670	English Saker or 6lber of 6'6"	
	Government House	1794	6lber of 5', brass. Blomefield design. Weight 6-0-?. Cyphers ^{3}GR and R (George III and Richmond). Cast at Woolwich Royal Brass foundry by I & H King. Proved 14 May 1794. Fitted with sight brackets. Experiment in rifling	Two brass 6lbers were requested by the Council of Nevis in 1795 (PRO CO152/77/265: 19/9/1795)
	Government House	1779	6lber of 5ft, brass. Weight 5-2-24. Cyphers ^{3}GR and J (George III and Townsend). Cast at Woolwich brass foundry in 1779 by J & P Verbruggen. Only Belfort gun known in existence.	Two brass 6lbers were requested by the Council of Nevis in 1795 (PRO CO152/77/265: 19/9/1795)

5.2.7 Artefactual evidence

In addition to finds of cannon, a few of the Nevis forts have provided other artefacts. However, by comparison with other civilian, urban and rural sites, for example, Charlestown, Jamestown and the Montravers Plantation Estate (Leech and Williams 2001: 76 & 78, Barker et al. 2002: 81), the range and quantity of material appears restricted on the forts. This may result from the poor preservation of many of the forts however, even at better preserved sites like Fort Charles, there is a paucity of artefacts to be found on the surface.

At Indian Castle (see Section C3.9), surface collection just inland from the fort yielded a few sherds of 19th and 20th century transfer printed ceramics and a few pieces of 19th century glass. However, the proximity of the site to the cliff edge did not allow collection over the fort site itself. In addition to these finds, in the cliff face a ceramic tiled floor could be seen just below the surface. Again, the cliff did not allow close examination of these tiles, however, from a distance they would appear to have been European in manufacture and from their size, approximately 25cm x 25cm, would appear to be standard floor tiles of the 18th or possibly 19th centuries.

From Johnson's fort, a musket ball and a few sherds of Afro-Caribbean pottery were located. However, the water-washed nature of the site did not allow for any precise

contextual information for these finds. At Old Road and Mathew's Forts a few pieces of 'onion' bottle glass and pottery were sighted, but, due to their unstratified context and difficulties of long-term preservation, all artefacts from these underwater sites were left in situ.

At Abbott's Building A (see Section C31.9), the excavation of the possible magazine uncovered six sherds of Afro-Caribbean ware, one rim sherd from a late 17th/early 18th century Staffordshire trailed slipware cup, six clay pipe stems, one broken ?Dutch brick of a possible 16th/17th century date, two pieces of unidentifiable bottle glass, one small piece of unidentifiable bone and three pieces of iron including two hand-made, square headed nails and an 'L' shaped fitting. The dating of these artefacts to the 17-18th centuries would support the dating of the site to this period, again supporting a possible abandonment in the early 18th century.

Two of the sites, the Newcastle Redoubt and Codrington's, provided larger assemblages of material, however, the disturbance of the interior deposits at the Redoubt and the random recovery of the Codrington's material does not allow close contextual analysis. However, the types and significant quantities of material recovered do allow for interpretation.

5.2.7.1 Codrington's Fort

The artefacts recovered from Codrington's fort (see Section C38.9) result from excavations by the landowner and the Nevis Historical and Conservation Society in the late 1990s. The author was unaware that these had taken place until after their completion and, as such, no advice could be given.

The excavations, although well intentioned, were not carried out according to archaeological principle and no contextual information was recorded. Recognition of finds was also limited, with local pottery being ignored in many cases. As such what remains today is a cleared site and a large assemblage of incomplete and unstratified material.

The majority of material seen by the author, represents a range of European ceramics and glass. The ceramics found include transfer prints, creamwares, trailed slipwares and tin-glazed earthenwares. A range of stonewares is also present. The majority appear to date from the later 18th and 19th centuries, although a few sherds of tin-glaze wares attest to an earlier occupation phase. Some sherds of Afro-Caribbean ware (see Section 5.2.7.3) are also present.

Military artefacts are rare on the site although two bone and three brass buttons dating from the 18th to mid 19th century, four musket balls, two Stang bullets and part of a chin strap attest to a military presence. One of the bone buttons on the site is of particular interest as it would appear to be comparable to those manufactured at Brimstone Hill, St. Kitts in the 18th century (Klippel and Schroedl 1999: 226). Four 8lb cannon balls were also found. A possible ram-rod section and flagpole holder were recovered and three horseshoes attest to the presence of horses on the site.

Other domestic artefacts include a flat iron, iron nails and two hoes. The handle from a Chippendale style chest of drawers has also been found. A soapstone, or holystone, (used for scrubbing ships' decks) has also been identified, by the landowner. The glass pieces recovered from the site suggest cylindrical shaped vessels alongside several square case bottles and a few onion bottles.

5.2.7.2 Newcastle Redoubt

This fort has provided the chief archaeologically excavated assemblage from a Nevisian fort. The assemblage includes ceramics, glass, bone, chipped flint/chert and metal work (Morris et al. 1999: 210).

Of the 581 sherds of pottery recovered, only 59 were from European vessels. The rest were sherds of Afro-Caribbean wares (see Section 5.2.7.3). Of the European wares, the majority date from the late 18th/early 19th centuries however, two small sherds of 17th century tin-glazed earthenware and two sherds of possible Spanish olive jar attest to an earlier phase of occupation. Sponged wares of the mid 19th century are also represented, alongside several sherds from five types of continental stoneware vessels.

The metalwork on the site included an 18th century pewter spoon, a perforated lead fishing weight, fragments of a copper alloy bowl and a collection of hand made nails. In addition 112 fragments of barrel-bands were recovered. A single-holed bone button was also found which, like those at Codrington's fort, is likely to attest to a formal military presence on the site (Klippel and Schroedl 1999: 230). In addition to the above a range of animal bone, including examples from sheep/goat, chicken, pig, bird and fish, was also found.

In summary, the artefacts recovered during excavations at the Redoubt attest to the presence of activity in the later 17th century with a hiatus in activity until the later 18th/19th century when the site appears to have been used as a possible store/dwelling. Modern finds attest to the site's later use as a venue for playing cards and socialising.

5.2.7.3 Afro-Caribbean pottery

Afro-Caribbean ware has long been associated with slaves. Known to follow African styles, but made from Caribbean and American clays, these vessels have been seen as markers of the presence of slaves on colonial sites (Ferguson 1992: 22). However, recent discoveries of Afro-Caribbean pottery on many types of non-slave specific, colonial site may suggest the pattern is more complex than at first suspected. The finds from the Nevis forts would seem to support such a theory.

Finds of Afro-Caribbean ware at four of the Nevis forts provide an interesting possible contradiction to those who believe that Afro-Caribbean ware was produced mainly for slave use (Morris 2002: 84). It is known that slaves were present on the forts to build and maintain them, however, it is equally possible that the presence of Afro-Caribbean pottery at the Nevis forts may attest to a use by the soldiers guarding the forts. Indeed, it is unlikely that slaves would have been allowed anywhere near weapons such as cannon as, by learning how to use these weapons, any future slave rebels could potentially utilise cannon in their struggle.

Although it is possible that social stigma concerning the inappropriateness of using 'slave pottery' may have denied white soldiers the use of such vessels, the poverty and lack of social status experienced by the rank and file soldiers (see Chapter 6) would not have precluded, and may even have necessitated, the use of goods and ways of living otherwise unacceptable to the richer white man. Afro-Caribbean pottery was almost certainly the cheapest pottery that could be bought, and having been forced to 'work in the fields with the negroes' (Colonel Fox to William Blathwayt, PRO CSP 1700, No. 373: 1/5/1700), it would seem prejudicial to assume that the soldiers would use only European pottery when they were, to all intents and purposes, living the life of a slave.

It is also possible that all members of Caribbean society used such vessels commonly, as cook-wares. Although the presence of European table wares has been attested to at many of the grander Caribbean Estate houses, the presence of Afro-Caribbean wares in the kitchens of houses such as Montravers (Barker et al. 2002: 81), may suggest that, 'below stairs', such vessels were in common use. Indeed, by 1859, the Blue Book for that year records that the 'coarse earthenware' produced on Nevis 'supplies the whole island with ordinary utensils' (Blue Book, PRO CO187/33: 1859).

Although this supposition cannot be proved, it will be interesting to see whether such a pattern of material finds occurs at other military sites in the Caribbean. At present

the data is unavailable. Should this theory be proved correct, it would suggest that Afro-Caribbean pottery provided a form of material culture utilised by the poorer members of Caribbean society whether black *or* white. As such, the slaves would have provided a valuable service to many members of the Caribbean colonial community who could not afford the grand European ceramics of the higher planter classes and who did not have the skills to produce their own.

5.2.8 The forts at war

The Nevis forts were only seriously tested three times in their history: in 1667, 1706 and 1782. However, on each occasion the result was different. In 1667, the English fleet came to the rescue. In 1706, the militia and not the forts let the island down and in 1782, the completely unprepared Nevisians with their dilapidated forts were also to blame for the loss of the island.

5.2.8.1 1667: The second Anglo-Dutch War

Following a French expansion in St. Kitts, which drove away many of the English settlers in 1665, the arrival of a Dutch and French fleet off Nevis in 1666 caused great consternation. This fleet, under the command of Admiral M. De Ruyter, quickly took sixteen ships that were in the Nevis road and appeared to have designs to invade the island.

It would seem that the few batteries attempted to resist this attack, however, it was only upon the dispatch of a seventeen-strong fleet under the command of Governor Francis, Lord Willoughby that retaliation was attempted. This retaliation was short lived, however, as Willoughby's fleet was lost in a hurricane en route to the island (Hubbard 1996: 72). This hurricane, although destroying the English means of defence, also caused great damage to the French and Dutch.

By 1666, the French had regrouped and successfully attacked Antigua and, in 1667, Montserrat. Nevis was the next obvious target. However, a fifteen-strong English fleet under the command of Admiral Sir John Harman, was dispatched from England. This was not before time as, in May of that year, a French fleet of twenty-seven ships, supplemented by three Dutch warships, and under the command of General de le Barre, headed for Nevis (du Tertre 1671: 250). However, the English got to Nevis first and following a disorganised French attack, managed to get fireships in amongst the fleet

causing the French ships to retreat, followed quickly by the Dutch warships (Hubbard 1996: 76). The English had won.

Although few direct references remain to attest to the role of the Nevisian forts, it would appear likely that it would have been to resist a landing party and to defend against any enemy ship coming too close to the shore. A French account of 1667, suggests that a further role would be to provide cover, with the English fleet described as having 'pulled back under the fort at the tip of Nevis', almost certainly a reference to Pellican Point/Charles Fort (du Tertre 1671: 250), with a further account describing the forts defending the English fleet with their cannon.

Although this battle was won at sea, the Nevis forts clearly had a role to play. This role, had the French fleet succeeded, would have been even greater as the ships attempted to seize the island. However, it is probable that had the French fleet prevailed, these same small batteries would have been insufficient to the task and, as du Tertre (1671: 253) states, 'it is certain that our naval armament was capable of taking on the English fleet, and seizing the island of Nevis, were it not for the bad manoeuvres made there'.

5.2.8.2 1706: The French attack

As has been shown in Chapters 4 and 5, the attack of 1706 appears to have been crucial in the development and decline of the Nevis forts. Although the forts were at their maximum extent prior to this attack, the collapse of Nevisian defences after 1706 appears to result from the psychological and pecuniary damage inflicted by the French.

The attack began in early 1706, when a fleet under the command of the Compte de Chavagnac approached the shores of Nevis. On 7th February 1706, the French ships came into range and, as Col. Richard Abbott narrates, 'gave their broadsides which was returned very warmly by three of our own forts [probably Mathew's, Old Road and Cotton Tree forts] battering on them at one the same time doing considerable damage to the ships and killing the commander of the seventy gun ship' (Richard Abbott, PRO CO184/4: 13/3/1706).

After this, as Johnson states 'perceiving the roughness of the forts, platformes and trenches, which were observed to be well lined, twas thought adviseable to remand them [the French soldiers] on board' and five days were '...spent without any real action more than exchanging great shot daily between the forts and the enemy's ships; with some damage on their side but none to ours' (John Johnson, PRO CO153/9: 13/3/1706). The French finally stood off and headed for St. Christopher.

Johnson, apparently perceiving that Antigua was also in danger, took some of the 27th Inniskilling Regiment to that island. However, after sacking St. Christopher (Council and Assembly of Nevis, PRO CO152/6: 12/3/1706) the French returned to Nevis on the 21st March. The arrival of the fleet to the north of the island convinced the Nevis commanders that 'the enemy would attempt their landing to the northward and accordingly the troops were posted' (Richard Abbott, PRO CO152/6: 3/6/1706). Johnson's coastal batteries were effective and prevented a landing on the western coast. The forts, at Long Point and Indian Castle, also protected the few southern and eastern bays of the island.

The French, realizing that attack on the west would be futile, split their fleet and in the night landed 3,000 men in Green Bay to the south-west of the island. By daybreak on the 22nd they were in command of 'foure of the best platforms which were only defensible to the sea' (Richard Abbott, PRO CO184/1/6: 21/3/1706). Those four platforms almost certainly included the forts at Old Road and Cotton Tree.

Nevis was sacked and 'two thirds of the chief town was burn'd to the ground' (David Dunbar, PRO CO152/10: 7/7/1715). Many sugar estates were also destroyed. From contemporary accounts it would appear that defeat was not inevitable, rather the result of the neglect of two Nevis planters, Colonel Burt and Colonel Butler, who had been stationed at the bay: 'the former leaving his post and the latter not taking that due care as became him' (Richard Abbott, PRO CO184/1/19: 22/4/1706).

From the account above, it would appear that, with greater numbers of trained men, the island might have been saved. Indeed, the fact that the forts on the leeward coast kept the enemy at bay during the February attack, would suggest that they were capable of defending the island. However, once again human error led to the loss of the island as the militia proved incompetent and Johnson unwisely took many of the regular troops to Antigua.

5.2.8.3 1782: The return of the French

The invasion of 1782 was a mere formality, which pitted a heavily armed French fleet against one dilapidated fort. Indeed, no shots were fired on either side. As John Herbert stated, any attack from Nevis would have been 'the height of folly' and upon 'maturely considering our situation...it was thought that opposition would be little better than madness...it would be more advisable to propose articles of capitulation' (John Herbert PRO CO152/6/190: 16/2/1782). The island surrendered and the French controlled the island until 1784, when it was handed back to the English

This result was unsurprising, as the Nevis forts had long since been abandoned to decay. With little interest shown by the planters in rectifying the defences of Nevis, such attacks were inevitable. Once again, the people had let the island's defences down. Had they been maintained and repaired, as those of St. Kitts and Antigua had been, then defeat was not necessarily inevitable. If nothing else, the island would have been able to attempt a defence.

5.2.8.4 Success?

It is difficult to ascertain how successful the forts were in each of these attacks as there was always human error or laxity, which did not allow the forts to function to their full potential. However, this fact is a telling reminder that the forts were only as good as the people who manned, maintained and attacked them. It could be the most defensible fort in the world architecturally, but, if it did not have trained men to defend it, then defeat would be inevitable.

The 1667 victory showed that, if supported from the sea, the forts could provide a useful defensive purpose. However, a large amount of luck on the part of the English, and incompetence by the French and Dutch, appear to have played equal roles. The 1706 attack, however, seems to have succeeded due to the incompetence of the militia rather than any defect in the forts. By 1782, it is difficult to assign a role to the forts, as they do not appear to have played any part in the defeat. Indeed, their dilapidation would rather suggest that Nevis in 1782 was an island without forts.

5.2.9 Abandonment and loss

Following the gradual abandonment of the forts in the later 18th century, it would appear that the structures were allowed to fall into ruin. It is almost certain that stone robbing, a practice continued today, exacerbated this ruin. The closeness of many of the structures to the sea would have also meant they were extremely vulnerable to the elements, with hurricane seas and winds causing great damage to the abandoned buildings. However, in the 21st century, several of these structures appear as fully submerged ruins. Many others have been severely eroded. It is uncertain how this situation occurred, but a number of factors, both natural and man made, would appear to be responsible.

5.2.9.1 Erosion

Nearly all of the Nevis forts have suffered from some sort of damage since their 18th century abandonment. On the cliff forts of Charles Fort, Indian Castle and Abbott's/Cole's Point, this erosion is dramatic with around a metre of cliff being removed each year. At the beach forts of Pinney's Beach and the north coast this erosion removes the sand from around the forts before depositing it again within days. However, over time, the aggregate loss to the beach is marked (Cambers 1998a: Appendix 2, 1998b: 2).

An OAS/USAID report of 2001 shows the severity of this erosion, with an average of 1-2m (in the case of Cotton Ground 2.41m) being lost from the beaches of Nevis (Daniel 2001: 4-6). When one examines the beach widths recorded between 1988 and 1999, this amount is shown in stark relief: many of the Nevis beaches have lost between a third and a half of their width during this time (Daniel 2001: 34).

Indeed, when one examines maps of the island, it would appear that the dramatic erosion seen in recent years was not present in antiquity. For example, the Isles map of 1871 clearly shows the western coastal road still in use (Fig. C1k). Today, the coastal road follows a parallel route further inland between Charlestown and Cotton Ground, suggesting that the loss of this structure happened within the last 100 years. In a comparative study between erosion rates from 1946-1991 and 1991-2001, the rate of erosion appears to have doubled (Cambers 1998b: 8). Clearly, erosion rates have increased dramatically in the last ten years. Indeed, in talking to local people, it would appear that many of the Pinney's Beach forts were present as on-land remains until the c.1980s.

This dramatic loss can be explained by a number of factors including wave action, currents and sediment transport, coastal morphology, sea level rise, vegetation or lack of it, storms and seasonal changes (Daniel 2001: 4-6). On Nevis it would appear that a combination of the natural factors listed above is causing much of the damage. However, the role of humankind cannot be ruled out.

In recent years, quantities of sand have been dredged from the natural offshore barriers (Cambers 1998b: 4, Warner 2000a: 14). In addition, development work along Pinney's Beach and at Charlestown has resulted in a number of artificial reefs and protective barriers being constructed on the shore (Cambers 1998a: 6). It is suspected that these barriers may inhibit longshore drift and may well be exacerbating the erosion problems on the western shore (Cambers 1998b: 5, Gaskell 2000c: 24).

However, such erosion would not appear to be wholly responsible for the submerging of Old Road and Cotton Tree forts. These two forts lie in similar

environments to Johnson's and Mathew's forts further south, and although eroded, neither of these forts has suffered the fate of Old Road and Cotton Tree forts. It would appear that another theory is possible in this case.

5.2.9.2 Geological activity

The forts at Old Road and Cotton Tree appear to have suffered a far more dramatic fate than any of the other forts, with their remains becoming entirely submerged. Although intensive damage by the French in 1706 has been suggested (see Sections C24.10 & C28.10) the submerging of the forts almost certainly did not result from a 'man-made' event. An isolated effect, such as that seen at Cotton Tree and Old Road forts can often only be produced by geological events. Several such have been postulated and these include earthquakes, landslides and uplift of the east side of the island with subsequent sinking of the western side.

Although uplift of the eastern side of the island would appear to be taking place, for example, raised beaches are visible at Butler's, Hichmans and at Indian Castle, the level of volcanic activity necessary to evoke such localised levels of uplift and consequent subsidence, would be expected to show many identifiable geological signs. These have not been noted on the island (Heathcote 2003).

Earthquake activity is not uncommon in the Caribbean (Robson 1964: 785), and it is possible that this has contributed to their submerging. Indeed, at Mathew's fort, the presence of a large break in the stonework (see Section C22.8) may have resulted from such action. A further example of this can be seen at the Newcastle Redoubt, where large cracks present in the south and north walls have been attributed to the earthquake of 1690 (Morris et al. 1999: 201).

It is possible that such an earthquake may have caused the land around Cotton Tree and Old Road forts to slide westwards away from the volcano. Such a movement need not be dramatic, merely enough to make the foundations of these structures vulnerable. There are several fault lines radiating out from the cone, which might be responsible for such an event (Griffiths 2003).

In addition, in the vicinity of Cotton Tree there is a fan of geological material resulting from an earlier eruption of the cone. It is possible that Old Road and Cotton Tree forts were built on this fan. From examination of the fan on the shore at Paradise Beach, it would appear that this material is a friable and unconsolidated tufa. Clearly a fort built on such a foundation would be subject to erosion more dramatically than a fort built on firmer

bedrock. This might explain the damage suffered at Old Road and Cotton Tree. However, a precise explanation will be impossible without further geological work at the site.

5.2.9.3 Summary

In conclusion, the origin of the current preservation states of the Nevis forts has many different interpretations. It is almost certain that a number of factors influenced their state, with immediate robbing after abandonment almost certainly making them more vulnerable to decay. Environmental factors of erosion and hurricane damage have definitely played a crucial role, with recent beach developments enhancing the natural erosive effects. It is also possible that 'one off' geological events have further altered the picture.

However, more research will be necessary on the geological and environmental processes at work on the Nevis shore, before any conclusions could be made with confidence.

6 Soldiers, planters, slaves and civilians: Peopling the forts of Nevis

'Oh what's the matter with you me lass
And where's your dashing Jimmy?
O, the soldier boys have ta'en him up
And sent him far, far from me
Last payday he went into town
And them red-coated fellows
Enticed him in and made him drunk
And he's better gone to the gallows'

'Recruited Collier', traditional English folk song.

'If we hadn't become sojers, all might have gone back as it was before...But now tings can never go back, because we have showed our energy and our courage'

Thomas Long, former slave and Private in the 1st South Carolina Volunteers (Wentworth Higginson 1870).

6.1 Introduction

To understand the forts of Nevis it is essential to examine the men and women who lived and worked within the military environment of this small Caribbean island. Every inhabitant would have been affected by the wars of the region and the majority would have played some role, whether direct or indirect, in the maintenance and support of the island's defences and in the creation of the archaeological dataset. As Corvisier states, military activity has, 'a strong influence not only on national activity and the growth of the state, but equally on the economic, social and mental structures of the whole of society' (Buckley 1998: xv).

Even in peacetime, the presence of soldiers, the maintenance of the militia and the building and repair of the forts occupied a significant place in the day-to-day activities of the islanders. Whether black or white, male or female, rich or poor, all relied on the defences provided by the batteries and forts of Nevis. The Governors who designed the forts, the slaves who built them, the soldiers and militiamen who armed them and the women who tended the sick and grieved for their sons, lovers, husbands and fathers lost in war, cannot be forgotten.

Caribbean society was intrinsically militarised and colonial organisation reflected this state of affairs. For example, from the earliest period, individual planters, as senior militiamen, were afforded military titles. However, these titles did not reflect their military

competence, but rather their plantation status. Evidence of such a system can be seen in the census returns of 1677-8 and 1707-8 reproduced in *'Caribbeana'* (Oliver 1914: 27 & 173). These censuses show all the inhabitants of Nevis, divided into companies and divisions, each division headed by a Colonel.

As can be seen from the numbers of slaves owned by each planter, only the richest were afforded the top denomination of 'Colonel', with various more minor planters being given the title of Lieutenant Colonel, Major, Lieutenant, Captain and Sergeant. At the other end of the social scale, it can also be suggested that the slaves within the plantations were treated in a similarly militaristic fashion, being organised into groups within groups, all managed by different levels of overseers. These too are listed within the censuses, the total numbers identifying the wealth of their owner.

In contrast to the planters, the 'true' soldiers of the British Army sent to the Caribbean were often lowly in rank and status and, apart from the officers, were usually treated poorly. In many cases they appear to have been regarded as second-class citizens, another form of slave to be exploited at will. To their families, once in the Caribbean they were lost, 'banished to the outer darkness' (Bredin 1987: 165).

It is almost impossible to know how the different groups present on the island of Nevis felt about the forts. It is also difficult to suggest the precise nature of their day-to-day involvement in the defences. However, from archaeological evidence and historical documentation and from comparison with the experiences of others in the Caribbean and Europe, some general trends can be identified.

This approach is important, as few other scholars have devoted attention to this matter. In the Caribbean, as Buckley (1998: xiv) states, 'social scientists have limited their attention to the economic and social aspects of plantation slavery'. Apart from a few significant pieces of work, such as Schroedl's work on the slave and soldier societies at Brimstone Hill fort (Schroedl 2000b, Schroedl and Ahlman 2002: 38), as has been already stated, forts are generally examined in isolation from the people who lived and worked within them. More widely, in the case of the armies stationed in the West Indies, it is only recently that the history of this force has been addressed (Buckley 1998: xiii). However, in the majority of cases the earlier 17th century military societies, perhaps due to the elusiveness of evidence, have been on the whole neglected. It is only in the study of the later 18th to 19th centuries, when much Caribbean defence reached its maximum, that such communities have been scrutinized in detail.

This chapter examines the diverse groups of people present in the Caribbean, with the aim of illuminating the narratives of those who lived within the military environment

of Nevis in the 17th and 18th centuries. As such, the forts of Nevis will be placed within a framework of human experience, increasing the understanding and relevance of the ruined stone and mortar structures visible today.

6.2 Colonial society

Caribbean society was essentially a divided society, a polarised version of the European system in the 17th and 18th centuries. Probably the greatest cleavage occurred along the planes of race and colour, with black men and women of African origin being socially and materially separated from their white counterparts. Within Caribbean colonial society other significant cleavages included those between men and women, civilians and soldiers, rich and poor and free and bound. The divisions between urban and rural areas and Catholic and Protestant societies also cannot be discounted.

Indeed, it can be argued that all aspects of Caribbean society were riven by cleavages, defining those who were acceptable to white plantation society and those who were 'other'. Many such divisions were, and are, the result of a white, plantation-centric bias, which did not give value to the many other groups represented in Caribbean colonial society. Indeed, by referencing only their own agendas and activities, the writings of the planters propagated these divisions, with women, slaves, the poor, indentured servants, the disabled, the sick and many other groups besides, not featuring in the writings of the white plantation society man. Again the censuses illustrate the assumed insignificance of these others, with many of the woman, children, slaves and poorest inhabitants of Nevis meriting only a numerical count under the entry for a named male planter (Oliver 1914: 30).

Within the archaeological remains, it is possible to see evidence of these fractures. At the most fundamental level, the landscape of Nevis has been divided according to these principles, with zones of plantation, urban, military and slave activity being evidenced. For example, the forts mainly cluster on the coasts, apparently separated from the plantation zone by the coast road, which unintentionally defined the limits of civilian and military activity. On plantation estates, such as Montravers, the zones of slave and planter activity can be seen in the very separate remains of the white-occupied plantation house, and the slave village, some distance away (Leech et al. 2002: 59).

Many of these remains testify only to the white European male, with house and fortification designs, roads, cannon and mills providing the masculine material evidence. Relics of women are rare and, until recently, even the remains of slave activity had not

been identified. This imbalance is, however, being addressed through the work at plantation estates like Montravers (Leech and Williams 2001, Leech et al. 2002).

Although colonial society would have liked to believe that such divisions were absolute, the diverse nature of human existence produced many alliances that crossed the cleavages defined by the white man and, in many cases, such alliances caused problems of categorisation for these same people. Indeed, to define a difference one must first establish the criteria for difference and it is at this stage that the apparent absolute cleavages of colonial society begin to crumble. For example, in the case of skin colour, the sexual exploitation and aggression of the white man against female slaves produced children who were neither black nor white and, following generations of such abuse, skin colour would not necessarily define the category of the person as black slave or free white.

Also, through the freeing of slaves after a certain period of time, it was possible for free blacks to own plantations and slaves of their own. Such a scenario, though extremely unusual, is evidenced by a petition from 1737 which details that Benjamin and Billy Johnson, two freed slaves, had paid their taxes 'in proportion to the substance both in land and negroes which they had acquired by their industry' (Benjamin and Billy Johnson, PRO CO152/23/69: 13/1/1737). However, although appearing to conform to the characteristics of plantation owners, the fact that their petition was a defence against treason suggests that these men were not accepted by white Caribbean society.

Other examples of alliances across the divisions of Caribbean society appear to be evidenced by the findings of Afro-Caribbean pottery across a range of colonial sites. Again, the apparent division evidenced by the separate occupation areas of the Montravers Estate is blurred by the findings of Afro-Caribbean pottery in both the plantation house *and* the slave village.

Within the military environment, the boundaries are again vague. For example, black slaves were often used to defend the islands of the Caribbean and, from 1795, could be regular soldiers in the West India Regiment (Buckley 1979: 1). On Brimstone Hill, from the mid 18th century, these slaves were an integral part of the day-to-day operation of the fortress (Schroedl 2000b: 3). Elsewhere in the Caribbean, there are records of women assisting men 'under dangerous combat conditions' (Buckley 1998: 150) and, further afield, of women fighting as regular soldiers.

In the case of regular white soldiers, their poor treatment and poverty appears to have forced them to live like the slaves. On Nevis, they were turned out into the fields where they were 'forced to build themselves huts for their cover' (John Johnson, PRO CO153/9: 27/7/1705) and in some cases had to 'work in the fields with the negroes'

(Colonel Fox, CSP No. 372: 1/5/1700). Again the finds of Afro-Caribbean pottery at the forts may evidence this alliance of poverty.

However, it must not be forgotten that, though experiencing similar treatment to slaves, these soldiers and other less fortunate whites were different from black slaves in that, however unlikely, restitution was possible. They might get sent back home, they might rise, as John Johnson did (see Appendix B), to a better position in society. At the most fundamental level, they also had an identity and their own names: an important psychological privilege not afforded to the majority of black slaves.

6.3 The people

Although artefactual evidence is, to date, unavailable at many of the Nevis forts, perhaps obviously, the very existence of the forts testifies to the actions of people. The remains of the forts and the few artefacts that have been recovered by the author offer some insight into the activities of these people (see Section 5.2.7).

However, at such an early stage of archaeological investigation on Nevis, the majority of evidence for the daily lives of those who worked within the military environment comes from historical documentation. This written evidence provides an historical framework for future archaeological investigations of the island's military past and it is for this reason that the following narratives are included.

It should also be remembered that, although superficially representing a society typical of that to be found in Britain in the 17th and 18th centuries, the society of the Caribbean was intrinsically 'frontier' in nature. The social and legal structures of Britain were in many cases ignored, with the power of the planters outweighing that of the home nation in many cases.

6.3.1 Soldiers

The first regular British soldiers arrived in the Caribbean in 1652. These men had been sent to quell the Barbadian government's anti-Puritan stand (Buckley 1998: xiii). Although the 1652 incursion was motivated by political action, the many troops who were sent to the West Indies in the years to come were there to protect the Caribbean's 'profitable plantation-slave economies' (Buckley 1998: xiv).

Alighting after a long and insanitary journey by boat across the Atlantic, the 17th century soldier must have been awed by his new surroundings. Although many had

probably travelled widely abroad in the wars of the 17th century, the tropical climate and flora and fauna of Nevis and the other islands must have seemed surprising and strange. The usual soldier's uniform of dark-coloured, woollen coats, thick leggings and a hat (Tincey and Embleton 1998: 17) was kept in the West Indies and this refusal to adapt to local conditions must have made everyday living a chore: to fight in such clothing must have been nearly impossible. Added to this, on Nevis, the stationing of troops at forts and batteries, for example Morton's Bay fort, close to stagnant water, must have caused disease to spread like wildfire through the companies.

The historical records for the soldiers stationed in the Leeward Islands paints a picture of poverty and disease, with morale low and conditions worse. The earliest such accounts occur from the late 1660s when Sir Tobias Bridge's Regiment at Nevis were described as 'bare and naked' having received less than one month's pay since they arrived on the island in 1667 (Sir Tobias Bridge, PRO CSP 1661-8, No. 1760: 27/5/1668). By 1675, the two companies on St. Kitts had been reduced through illness and death to 49 and 54 men per company as opposed to the 80 men per company that were present in 1671. They had also not been paid for three years (Anonymous, PRO CO153/2: 18/6/1675).

In 1678 a regiment of six hundred men under Colonel Collingwood's command were sent to the West Indies. By 1681, those stationed on St. Kitts had not been paid since their arrival in 1678 (William Stapleton, PRO CO153/3: 26/5/1681). By November of that year the continuing lack of pay prompted Stapleton to remind the English powers that the 'French soldiers doe not want flower, meat or brandy whilst ours are naked and starving' (William Stapleton PRO CO153/3: 12/11/1681). With the French soldiers so well treated by comparison it is clear that desertion to the opposition must have been on Stapleton's mind.

Again in 1682, Stapleton raised the comparison with the treatment of the French soldiers and stated that 'the poor souldiers…starving upon the dividing lines [between English and French St. Kitts]…do see with a hart burning their neighbours paid every month upon a table or the drum head and we are four years in arrears' (William Stapleton, PRO CO1/48/183: 25/3/1682). By June of that year, the Council of St. Christopher demanded that 80-100 soldiers per year should be sent to make up the declining number of troops (Council of St. Christopher, PRO CO153/3: 28/6/1682). Presumably the lack of pay and clothing had reduced their numbers through illness and desertion.

By 1684 the troops had still not been paid and by 1688 the regiment had been disbanded with only eighteen months' worth of pay given. Under the disbanding order

those who had already left the regiment would get nothing (King in Council, PRO CO153/3: 4/5/1688). After ten years with no pay, it is a miracle that any men still remained in the Regiment, as many would have been forced to leave or find other means of supporting themselves. Unfortunately, no records remain of how these men managed under such conditions, although labouring on the plantations seems likely.

By 1689, many of the soldiers based on Nevis had died of smallpox (PRO CO153/4: 19/9/1689). Also in this year, a new regiment under the command of Colonel Henry Holt was sent to the West Indies. By 1694, three quarters of these men were dead and those that remained had not received any pay (Colonel Henry Holt, PRO CO 152/1: 1694). They had, however, received a shipment of clothing in 1692, but this had to be returned, as the cloth was too thick for the climate (PRO CSP 1689-92, No. 2401).

By 1695, following the embezzlement of their provisions by the officers, the soldiers were detailed as 'marching by foot without shoes or stockins' (Christopher Codrington, PRO CO152/1:16/7/1695). Some were said to have mutinied. However, by October of that year they were being billeted by the Council of Nevis and were receiving 10d per day until 'otherwise provided for' (Council of Nevis, CSP 1693-6, No. 2087: 12/10/1695). However, by 1697 Holt's regiment were described as being in 'a deplorable condition for want of their pay' (J. Johns Sonn, PRO CO152/2: 4/5/1697). By 1698, the Assembly of Nevis refused to billet the soldiers, 'so long after peace' (Assembly of Nevis, PRO CSP 1697-8, No. 592: 21/6/1698).

This situation continued into 1699, and when Colonel Collingwood's regiment returned in February of that year, the Assembly refused to let more than three companies land and would only agree to their being provisioned for a week (Council and Assembly of Nevis, PRO CSP 1699, No. 33: 13/1/1699). By 1700 Collingwood had died and the soldiers were left to fend for themselves. Nevis, the only remaining island to be provisioning the soldiers, demanded that the soldiers 'work in the fields with the negroes' (Colonel Fox, PRO CSP 1700, No. 372: 1/5/1700) in return for their board.

In 1701 the soldiers were finally disbanded, and with the threat of war, the Nevisians passed an act to give £15 per year to those soldiers who could be persuaded to stay on the island and serve in the poorly-staffed militia (Nevis Act, PRO CO154/5: 10/3/1701). By 1703, with the War of the Spanish Succession underway, the Nevisians passed an act to compel the inhabitants to quarter the soldiers stationed on the island. Under this act, any person who refused quarter would be fined 1s 6d per day, which would be paid to the soldiers in question (Nevis Act, PRO CO185/2/44: 1703). Again in 1704, such an act was passed.

By March 1705, Nevis had seventy-one 'Queen's troops' to supplement the island's militia (John Johnson, PRO CO154/5: 3/1705). However, a further account of this date stated that, due to a lack of recruits from England, the two companies on Nevis were in the main staffed by the 'poorer men' of Nevis (Council and Assembly of Nevis, PRO CO152/6: 12/3/1705).

By May of that year the situation had worsened, and there were only two hundred soldiers, the men of Whetham's 27th Inniskilling Regiment, stationed in the entire West Indies (Daniel Parke, PRO CO152/6: 31/5/1705). By July, the Assembly of Nevis had turned the Nevis quotient of these men 'out of that poore and indifferent quarters...into the fields where both officers and men are forced to built themselves huts for their cover' (John Johnson, PRO CO153/9: 27/7/1705). This cruel action had been taken after Johnson had refused to pass a law that he viewed as prejudicial to 'her Majesty's prerogative'. Once again, as had happened to Fox's men in 1700, the poorly paid and maltreated soldiers had been used as pawns in a political battle between the planters and the Governors.

By late 1706, following the French attack, the soldiers of the Inniskilling Regiment were in dire straits. Although exact casualty lists do not exist, accounts stated that, whether due to sickness or war, by late 1706, all the officers and many soldiers had died and, of those that remained, many were now sick (Daniel Parke, PRO CO153/9: 9/12/1706). By 1707, Whetham had returned to London leaving the few remaining soldiers unpaid. The Nevisians further worsened the soldiers' plight, by again refusing them quarter. The continuing refusal to quarter soldiers meant that, when two hundred men from Colonel Lylliston's Regiment were sent to the Caribbean, two companies earmarked for Nevis were sent elsewhere (Daniel Parke, PRO CO153/10: 10/6/1707).

By 1710, there were only two hundred and sixty men to defend the Leeward Islands. The remainder of the Inniskilling Regiment, now unpaid since 1707, had no clothes or money and were provided for by charity (Colonel Jones, PRO CO152/9: 24/4/1710). In 1711, a new regiment, Colonel Jones', had been formed and Nevis had forty-five regular troops. However, by 1718, the men of the regiment, now under the command of Colonel Richard Lucas, were regularly deserting to St. Eustatius (Walter Hamilton, PRO CO153/13: 19/12/1718).

By 1734, records of regular soldiers become scarce, again suggesting that, following the French attack of 1706, military activity on Nevis fell into sharp decline. In a letter from William Mathew in August of that year, he mentioned that a company of men from Jones' regiment were still at Charles Fort, however, it would appear likely that these

were the stragglers left over from the early 1710s (William Mathew, PRO CO152/20/148: 31/8/1734).

Although further troops were requested for Nevis in 1756, by 1763, the number of troops in the Leeward Islands was reduced to numbers 'fixed for time of peace' (Earl of Egremont, PRO CO152/47/23: 18/5/1763). By 1779, Nevis had lost all its regular troops and by the 1780s, only Barbados, St. Lucia, Antigua, St. Christopher and St. Eustatius were mentioned as having regular British soldiers (List of the Regiments, PRO CO152/41: 1780s). In 1831, a request for two companies of men was made, however, it is uncertain whether this request was granted and no further regular troops appear to have been stationed on Nevis.

6.3.1.1 Discussion of soldiers

As has been shown above, the conditions experienced by the British rank and file soldier in the 17th and 18th century were - on Nevis and St. Kitts at least - appalling. From accounts of the later Napoleonic Wars (Hibbert 1964: 1, Hathaway 1996: 15), it would appear that this hard life was suffered by many others, with long marches, poor equipment, bad food and irregular wages forming the common experience of the British soldier. In one account from Private James Aytoun writing in 1788 from Dominica, the officers were described as 'unfit', the men were fed 'like fighting cocks' and following parade he had to wring 'more than a gill of sweat' out of his shirt. Often men were flogged (Aytoun 1984: 6-8).

It should also be remembered that all of the accounts above only detail the conditions the men endured *beyond* the field of conflict. When the injury and death experienced by many in the theatre of war is added to the above, their suffering becomes incomprehensible. Although casualty lists do not exist for the 1706 attack on St. Kitts and Nevis, such lists from the English attack on Guadeloupe in 1703 offer some clues.

During this battle eighteen officers and 226 soldiers were killed, with a further eighteen officers and 191 soldiers being wounded. Fifty-nine men deserted and a further twelve were taken prisoner (Anonymous, PRO CO152/5: 1703). It is therefore unsurprising that so many well known folk songs of the period refer to the soldiers' suffering, with songs such as the 'Recruited Collier', 'Jimmy and his own true Love', 'Scilly Rocks' and the 'Enniskillen Dragoons' (Mudcat Cafe 2002) detailing the tragic experiences of loved ones lost to the army overseas.

Although the historical documentation for the soldiers on Nevis is detailed, it should not be forgotten that none of the accounts were made by the men themselves, but were set down by the officers, Governors and planters who controlled their lives. Indeed, it is probable that many of the men could not read or write and, as such, would be unlikely to create written accounts, often only leaving their narratives through the oral medium of songs.

Again, in the archaeological evidence, these men are almost entirely unrepresented. Although several guardhouses/magazines have been located, at Charles Fort, Morton's Bay and possibly at Johnson's, Mathew's and Old Road, the material remains of these men's lives have yet to be discovered on Nevis. It is possible the graves at Johnson's fort are those of soldiers, however, civilian yellow fever or cholera graves of the 19th century would appear likely.

We also do not know where the men lived. Although apparently quartered by the planters, it is uncertain whether barracks were ever constructed on Nevis before the early 19th century when such accommodation is mentioned as being just outside Charlestown (General Maxwell, PRO CO186/14: 6/3/1831).

The absence of material relating to the soldiers' daily lives desperately needs addressing and any future work carried out on the forts of Nevis will need to concentrate on this little-understood area. Although finds of Afro-Caribbean ware at the forts may point to the validity of the accounts of poverty evidenced above, until further work is carried out such accounts will be impossible to prove or disprove.

Another absence from the historical accounts for Nevis occurs in the case of black soldiers. There are references to a black company of fifty men being in St. Kitts in 1795 (Anonymous, PRO CO153/28: 14/7/1795), however, no such records could be located for Nevis. This almost certainly results from the comparatively early decline of the Nevis forts as, by the time of the formation of the West India Regiment (Buckley 1979, 1998) in 1795, the Nevis forts had long been abandoned.

It would therefore seem likely that the role of regular black soldiers in the defence of the forts of Nevis was minimal. However, this is not to say that black people did not fight for Nevis, as they almost certainly did throughout the period under study (Buckley 1979: 2), but that they could not be classified as regular soldiers for the purposes of this study (see Section 6.3.3).

6.3.2 Militia

The militia forces in the Caribbean were intended to provide the backbone of defence and, from the early 17th century, every boy and man from fourteen to sixty years was expected to do their duty to protect the islands (for example, Nevis Acts, PRO CO154/2/61: 10/2/1672; CO154/2: 1682; CO185/1: 2/5/1706; CO153/13: 7/1721; CO185/4: 20/10/1740; CO185/7: 9/12/1774; CO185/10: 11/3/1824). However, the planters, despite loving the titles and trappings of military position, saw such duty as onerous and throughout the period under study there were many complaints about their laziness and reticence to serve (Buckley 1998: 53). In 1672, an account by William Stapleton detailed that aside from 1,200 men who did do their duty there were at least 200 more who 'absented themselves' (William Stapleton, PRO CO1/29/161: 14/12/1672).

The militia was drilled once a month for each division, the divisions being assigned geographically by parish. Each eligible man was assigned to a company and in 1676 there were 1,300 men in thirteen companies. The militia troops also had a section of sixty horse, although there were complaints that these horses were useless after being used as beasts of burden on the plantations (William Stapleton, PRO CO1/38/152: 22/11/1676). Stapleton described the drilling of the militia as including skirmishing and shooting practice, with the mounted men practicing the 'gayning, keeping or loosing' of ground (William Stapleton, PRO CO1/38/152: 22/11/1676).

By 1689 the island had 1,400 men in the militia, however, by 1691, following an outbreak of disease, this number was reduced to five hundred (Archebald Hutcheson, PRO CO153/4: 3/4/1691). By 1693, it was required that each planter should provide one gun and cartridge box for every fifteen slaves that they possessed with a further penalty imposed on those who 'wilfully break or sell their guns' (Council of Nevis, PRO CSP 1693-6, No. 521: 23/8/1693). Clearly, the planters were already trying to avoid militia service. By 1701, the Nevisian militia was described as 'ill disciplined' and poorly armed (Colonel Fox, PRO CO152/4: 3/1701) and to try to solve these problems, disbanded regular soldiers were encouraged to join the militia. By 1702, a further act was passed which offered 20s fines to those Colonels who did not turn up for drills (Nevis Act, PRO CO185/2/42: 1702). By 1705, the militia were being taught how to service cannon, with regular gunners being sent to instruct them in the art (Queen in Council, (PRO CO153/9: 31/1/1705). However, in March 1705, there were only around 530 men in the Nevis militia.

By 1706, just before the French attack, the militia had been in the field supervising the slaves carrying out the repairs to the Nevis forts (Council and Assembly of Nevis, PRO CO152/6: 12/3/1706). By the time of the French attack there were only 450 men in the force (Richard Abbott, PRO CO184/1/6: 21/3/1706). The loss of the island to the French, though attributed to John Johnson, would in fact appear to be the result of negligence on the part of the militia, with Colonel Burt leaving his post and Lieutenant Colonel Butler 'not taking that due care as became him' (Richard Abbott, PRO CO184/1/19: 22/4/1706). Abbott also mentioned that the 'chief officers [were] constantly discouraging the men' (Richard Abbott, PRO CO184/1/19: 22/4/1706). To guard against such incompetence, in May 1706, a militia act was passed which detailed that those 'who yield forts to the enemy shall be executed as traitors' (Nevis Act, PRO CO185/1: 2/5/1706). Clearly, the islanders had not been impressed by the actions of their militia.

Following the French attack the militia had stood at only 150 men, although it is uncertain whether this low number was the result of death in war, sickness or due to the islanders refusing to serve. However, in 1711, due to a perceived threat from the French, one third of the entire population was kept on guard each night (Walter Hamilton, PRO CO152/9: 2/6/1711).

By 1722, the militia, despite a rise in 1720 to 378 men, had now decreased again to around 200 in number. They were again described as 'ill disciplined' and 'troublesome and obstinate' (John Hart, PRO CO152/14: 11/7/1722). By the mid 1700s the number had again risen to around 300 (William Mathew, PRO CO152/20/116: 11/2/1734; CO152/24/145: 16/10/1742) but they were again described as 'badly armed and worse disciplined' (William Mathew, PRO CO152/24/145: 16/10/1742). Mathew even remarked that the militia believed that 'discipline is the first step to tyranny'. When Governor George Thomas arrived on Nevis in 1754, he said that the militia officers had 'laid down their commissions' after 1706 (George Thomas, PRO CO152/28/15: 21/1/1754).

From this point onwards the militia stabilised at around 300 men, with several militia acts passed in the latter part of the 18th century attempting to force the inhabitants to serve (Nevis Acts, PRO CO185/7: 9/12/1774; CO185/8: 13/10/1797). From the 1830s the militia went into terminal decline, with only 157 men serving in 1834 and the numbers crashing to twenty-three men in 1840. An account from 1846 states that the arms used by the militia had been lodged in the police station in 1839 and had not been used since (Blue Books, PRO CO187/20: 1846). The service of the militia had come to an end.

6.3.2.1 Discussion of militia

As can be seen above, the militia, although intended to provide much of the defence of Nevis, were clearly not up to the job. Indeed, the loss of the island in 1706 appears to be mainly due to their incompetence, with many complaints being made about their poor attitude and behaviour. In comparison with the documentary evidence for regular soldiers, the contrast between accounts is very noticeable. At no time are the conduct, training and competence of the regular soldier questioned, although the same certainly cannot be said for the militiamen. It should however, be remembered that those complained against were often the officers of the militia, and not the rank and file men. Without good leadership, the militiamen did not stand a chance.

It is very difficult to identify the militia at the forts and, even with greater levels of archaeological evidence than at present, it is anticipated that this situation will continue. Though not found at the forts, evidence for the richer planters who led the militia is to be found on the plantations in the many houses, mills and sugar works which dot the colonial landscape. However, the smaller planters and free men, like the lower ranks of soldiers, have a presence in the landscape of Nevis that has yet to be identified.

6.3.3 Slaves

The involvement of slaves in the defence of Nevis is apparent from the earliest years of the slave trade (Buckley 1979: 1). In many ways, these people provided the means of defence as the constructors and, often, as the defenders of the island. Their labour was forced and unpaid and under these circumstances, the presence of many stone built forts on Nevis is a tragic reminder of their toil.

By the early 1670s, they were described as having constructed the 'line' or entrenchments along the coast of Nevis and by 1678 were reported to be building the forts, with others armed with 'lances' protecting the coasts (William Stapleton, PRO CSP 1677-80, No. 642: 1/4/1678). By 1685, their 'owners' were being paid 8d per day for their labour (Assembly of Nevis, PRO CO1/58/92: 27/8/1685) and in 1687 the slaves were again involved in the construction of forts, with records detailing that they were moving stone and timber from the ghuts (gullies) to the fort sites (Anonymous, PRO CO155/1: 6/8/1687). By 1702, their presence was required whenever the alarm was raised on the island and it was stipulated in an act of that year that the slaves must be provided on such occasions with a bill-hook or lance for their defence (Nevis Act, PRO CO185/2/42: 1702).

Again, in 1704 they have been sent to carry stones to Cotton Tree fort (Council of Nevis, PRO CO154/5: 22/3/1704).

Their role in the 1706 French attack is largely unknown; however, one reference suggests that following the abandonment of forts by the militia, the slaves continued fighting for a further fourteen days (Hubbard 1996: 92). Their bravery even led one author to comment that 'their brave behaviour and defence there shames what some of their masters did' (Hubbard 1996: 92).

Following the French attack of 1706, the slaves were immediately sent to mend the ruined defences, with two hundred made to repair the trenches. The planters were paid 18d per day for their services (Council and Assembly of Nevis, PRO CO152/6: 12/3/1706). By early 1707, two thirds of all slaves were sent to repair Charles Fort, but by late 1707 this number had been reduced to sixty (Council of Nevis, PRO CO155/3/225: 11/12/1707). Throughout the 1720s and into the 1730s these works continued with the guardhouse being refitted and the ditch being cleared (Assembly of Nevis, PRO CO186/1/30: 17/9/1725; CO186/2: 3/3/1732). By 1736, they were at work at Saddle Hill with £840 8s 6d being paid to the planters for this service (Council and Assembly of Nevis, PRO CO186/2: 1736). This amount is equal to £95,900 in today's British pounds (Economic History Services 2002): clearly the labour of the slaves was extremely valuable.

By the 1770s the Nevisians had found another way to make money from the slaves, though this time the money went to repairing the island's fortifications. In acts passed throughout this decade a poll was put on each slave owned and the planters had to pay between 3s and 5s 9d per slave (Nevis Act, PRO CO186/6: 5/4/1771; CO152/32: 4/1772; CO186/5: 27/7/1774; CO152/33: 4/1776; CO152/34: 6/1777). It is uncertain how successful these acts were and, by May 1779, the Council had stopped all work at the forts (Council of Nevis, PRO CO186/7: 5/1779). Again in the 1790s, similar poll taxes on slaves were passed, but this time only 2s 6d in 1795 and 1s 3d in 1798 per slave was paid (Nevis Act, PRO CO185/6: 28/9/1795; CO185/8: 11/12/1798). By 1807, with growing calls for the emancipation of slaves, a decree was passed which stated that all slaves taken as prizes in war, were to be set free (Anonymous, PRO CO152/91: 1807).

6.3.3.1 Discussion of slaves

As with soldiers, records of slave activities are scarce and impersonal. Their only details come from documents recording the labours they were forced to carry out. We do not know their names, genders or ages. In the case of the regular white soldiers, this situation

also occurs, however, with one difference. It is probable that all white soldiers were men. This is not, however, necessarily the case with the slaves carrying out work at the forts: almost certainly, many of them were women.

Although it is likely that domestic servants, who were often women, were not involved in the construction works, records stating that two thirds 'of all dutiable slaves' (Council of Nevis, PRO CO155/3: 13/1/1707) were to go to work on the fort repairs would suggest that there was little differentiation between the sexes. Indeed, records from the early 20th century show that manual labour, such as stone-breaking and loading barges, was commonly carried out by black women (Shepherd 1999: 101). There is no reason to suggest that this 20th century activity did not have its origins in the 17th and 18th centuries.

Although evidence for slaves fighting at the forts is rare, the account of their resistance to capture in 1706 and the acts that required them to carry lances would suggest that, in time of war, they were used as extra militia. Of course, this fighting was not necessarily their decision but another requirement of the planter, an extension of forced labour. It is also possible to suggest that the slaves genuinely wished to defend their island and themselves from any foreign attacker. Indeed, it can be argued that, having established family units and a precarious routine they would not wish to be enslaved by another power, which would almost certainly result in their separation from loved ones and the starting of a new life. In other words, 'better the devil you know' might have prevailed.

The archaeological evidence for these slaves, like that for the planters, is rare at the forts. Unlike the later fortifications of other islands, the early decline of the Nevis fortifications means that it is probable that little evidence of the presence of slaves will be found at the fortifications of Nevis. Indeed, the abandonment of the Nevis defences preceded the use of slaves as artificers and pioneers on other forts in the Caribbean (Schroedl 2000b: 3). As has been stated above, the formation of the black West India Regiment also post-dates the activity period of the Nevis forts and so it is unlikely that the presence of such slave soldiers will be located in the archaeological record for Nevis.

The designs and construction techniques used to build the fortifications are intrinsically European, with the only possible evidence of the slaves' activities being seen in the Afro-Caribbean ware found at several of the forts. However, as has been stated in Chapter 5, although slaves would have fought in the battles, it is unlikely that they would have been trusted near such weapons as cannon and thus the finds of this pottery may point to its use by soldiers. Documents suggest that slaves were not even trusted with guns, only lances and bill-hooks. When one considers their horrific treatment this is hardly surprising: in the heat of battle it would be easy to 'accidentally' shoot your 'owner'.

6.3.4 Women

Aside from the soldiers, slaves and planters, there were other groups involved in the defence of the island of Nevis. Although perhaps not fighting on the front line, women played an integral role in Caribbean military society (Beckles 1989, 1999, Shepherd 1999), and almost certainly would have tended the sick and wounded and fed the soldiers. As Napoleon Bonaparte said, 'an army marches on its stomach' (Daintith et al. 1990: 247). To provide food for this stomach was often the role of women. The female area of military life has been largely ignored and, as Buckley (1998: 145) states, 'the explanation of our ignorance of women's involvement in the British Army is the preoccupation of the military and those interested in the military with conceptions of masculinity'.

Records of women within the historical documents are extremely rare, however, there are a few which evidence their roles in the Nevisian defences. In 1693, the islanders decided to fortify a place 'for securing of women and children' in time of war (Anonymous, PRO CO155/1: 22/5/1693). This place, almost certainly the deodand, was to be built on Mount Mary. The author could not identify the location of this fortified site, although the eastern side of Mount Nevis seems likely. A Mrs. Earle, who owned the land, was accordingly compensated (Council of Nevis, PRO CSP 1693-6, No. 426: 24/6/1693).

Also in this year, the Council of Nevis decreed that all widows should provide horses and accoutrements for the troops (Council of Nevis, PRO CSP 1693-6, No. 744: 26/12/1693). From the 1677-8 census (Oliver 1914: 27), it would appear that there were about ten widows on the island with around twenty-five other women listed as the heads of family. The rest of the total of 838 other white females present on the island almost certainly can be described as wives, daughters, mothers and servants. It was their men who fought in the militia. By comparison with the white women, there were 1,321 female slaves.

In 1706, the records show that the women and children took refuge in the mountains during the French attack (Richard Abbott, PRO CO152/6: 3/6/1706). However, it is also stated that, due the suddenness of the attack, the retreat had not been provisioned with water or supplies (Captain David Dunbar, PRO CO184/1/18: 18/4/1706), suggesting that the time the women and children spent on the mountain was probably unpleasant and uncomfortable.

Following the French attack, the 1707-8 census (Oliver 1914: 173) records that there were now twenty-eight female heads of family. Records for widows are not given in this later census, although a total for widows and single women of eighty-three, would

suggest some losses of husbands in the 1706 attack and its aftermath. Possibly as a result of an exodus before or after this attack, the number of white women on the island had reduced to 575. There was, however, an increase in black females with 1,901 black women now present on the island. Their choice to leave was obviously non-existent.

In 1706, following the murder of John Johnson by John Pogson (see Appendix B), two women's lives were directly affected. The husband of one was a soldier, the other a planter in the militia. They were also the wives of the murdered and of the accused. Although little is known of Johnson's widow, an account from 1706 details that the estate left by Johnson was administrated by Major Gore of the Inniskilling Regiment (Daniel Parke, PRO CO152/7: 8/3/1706). No further details exist and we can only guess at her desperate thoughts and feelings at that time.

It is possible to know, however, what the wife of the accused was feeling. Pogson's wife, Sarah, wrote one of the very few accounts written by a woman, seen by the author. Writing on behalf of 'her great family of small children' she begged for leniency upon her husband (Sarah Pogson, PRO CO241/1: 23/11/1706). Although involved in a murder case, her suffering at the potential loss of her husband to support her, echoes that which would have been felt by many women whose men were captured, wounded or killed, leaving them to fend for themselves. A further account from 1722 also emphasises the reliance of women and children upon their husbands and partners. Made by the gunner at Charles Fort, this account detailed that his wage was not enough to support his family. This again proves that military activity on Nevis had an impact on the lives of all those on the island (John Johnston, PRO CO186/1: 20/3/1722).

Another group of women directly affected by warfare was the wives of the officers and governors stationed in the West Indies. Although often rich and therefore more protected from the atrocities of war, the experiences of these women cannot be discounted (Buckley 1998: 147, Shepherd 1999: 30). Probably the most famous such account was '*Lady Nugent's Journal*' (Cundall 1939). This journal details Lady Maria Nugent's experiences during her husband's Governorship of Jamaica from 1801-6. Although later than the period of activity at the Nevis forts, her experiences, of the sun scorching her nose and the sand burning her feet, would have faced many officers' wives throughout the colonial period (Cundall 1939: 256).

Lady Nugent was not enamoured of cannon (Cundall 1939: 256) and at Fort Brunswick, the salute firing of the cannon startled both her and her horse (Cundall 1939: 103). Throughout her diary there are constant references to her fears that her husband is

over-exerting himself or of the dangers he may be in (Cundall 1939: 146, 192, 243), again echoing the life of worry and anxiety felt by many 'service' wives.

However, unlike the rich Lady Nugent, black slave women could not voice such concerns and, after being forced to carry out manual labour, would probably have, understandably, had little time for the worries of women of the ilk of Lady Nugent. However, we will never know, as their narratives do not exist for Nevis. Even for the later period, at the time of the West India Regiment, there is still a fundamental absence of detail. For example, it is still uncertain how many of the Caribbean black soldiers had black wives and escorts (Buckley 1998: 155). It is also uncertain whether there were black or white prostitutes present at the Caribbean forts. What can be said is that the majority of women, whether rich or poor or black or white, would have felt uncertainty and fear in the face of war; it is likely that the men also felt such emotions.

6.4 Summary

As has been shown above, military life in Nevis in the 17th and 18th centuries influenced all members of society. The slaves who built the forts, the soldiers and militia who manned them, and the women who fed the men, tended the sick and worried for the safety of themselves and their families, are all integral as facets of the Nevisian defences. As yet we know very little about many of these groups, however, future archaeological and historical work on the island may help to illuminate their lives.

An understanding of these peoples' lives will ensure that military studies of Nevis, and of the other Caribbean islands, include all members of society, and not just those referenced by white male planters. In this way, the enduring legacy of the West India Interest may finally be addressed, allowing the emergence of more truthful narratives, that include not only the structural and material defences of these islands, but also the socio-historical factors surrounding their implementation.

The available documentary sources concerning people also support the interpretations evidenced by the remains of the forts of Nevis. Again, the pattern of a defensive system developing in the mid to late 17th century and declining following the French attack of 1706 has been suggested, with fewer troops being sent and the labours of the slaves being less frequent following this attack. As such, the records of the people have added support to the other archaeological and historical evidence available for the forts of Nevis.

7 The Nevis fortifications in the 21st century

'Many of our yesterdays, or more correctly their influence, affect much of contemporary life, perhaps more deeply and certainly more strongly, than many people realise'

Peter J Fowler: 'The Past in Contemporary Society: Then, Now', 1992: p.11

'Only a heritage that is clearly ours is worth protecting...Jamaicans whose beaches are fenced off for exclusive tourist use, cannot suppose these legacies truly their own'

David Lowenthal: 'The Heritage Crusade and the Spoils of History', 1998: p.22

'I said good morning. I got no response. I said to them, I only came to tell you that I do not want any of you to sit on the stones of the Four Seasons Property'

A Security Guard's comments to beach vendors, reported at their trial (Ngunjiri 2002a)

7.1 Introduction

As has been shown in the previous chapters, the colonial and military activity on Nevis has produced a wide range of material and historical remains. These remains attest to the colonial presence of Europeans and provide a continuing focus for Western interest at the present time (Haviser 2001: 80). The colonial period fortifications, plantation houses and European ceramics and furniture, amongst other items, mirror the present day influences, with Western tourism and banking echoing the colonialism of earlier days (Boniface and Fowler 1993: 30, Lanfant et al. 1995: 211).

Whether driving, like the British, on the left side of the road but in American cars, whether viewing ornate colonial buildings, going to Barclays Bank to get US Dollars or having Sunday lunch in a Plantation Inn, the Western tourist from Britain or America sees much that they recognise and feel 'safe' with (Boniface and Fowler 1993: 7). However, the local shingle built houses, the Caribbean food, the local dialect, the Eastern Caribbean Dollar and the goods produced by the many Co-operative societies provide examples of an everyday Caribbean culture that is all too often sidelined by tourism (Farnsworth 2001: xix).

Within this duality of Western versus Caribbean, lie the Nevis fortifications. Built by slaves to British designs, in many ways they echo this duality. To the white Western tourists visiting the islands they provide a reminder of home and, for example, an

interesting chance to see where Admiral Nelson was once stationed and to touch the cannon that would once have defended against the French. However, to some locals these sites are more than just objects of tourist interest in the landscape: they, and the plantations, can be seen as markers of oppression: a constant and ever present reminder of their ancestors suffering at the hands of the white man (Lowenthal 1995: 250). Traditionally, the latter view of colonial structures has been ignored.

This tension between the requirements of tourists and locals is not unique. Even in countries with less complicated and sensitive pasts, the conflict between the visitor and the local is present. As Boniface and Fowler (1993: 3) suggest, 'not all of the people can be pleased all of the time'. However, in post-colonial countries this conflict is more marked, with the interests of the coloniser and the colonised often varying widely according to historic imbalances of power (Fowler 1992: 11, Mbunwe-Samba 2001: 32, Aplin 2002: 17).

In post-colonial Nevis, this conflict can be seen in the accelerated tourism of the island with new, foreign-owned, resort hotels and developments being planned and built on residential and public areas at an increasing pace. The heritage sites of the island, particularly the beach forts, have suffered at the hands of this development and, without protection, will be a vanished resource within ten years. Indeed, if the heritage sites of Nevis are to survive, Nevisian tourism and development bodies need to address several important questions regarding this heritage (MacManamon 2000: 49, Aplin 2002: 19).

Firstly, it needs to be decided what comprises the military heritage resource. Also, once the resource has been identified, a plan to manage this resource has to be established. However, what should be managed and how this can be achieved is a difficult question to address. The most important question concerns the market for the heritage and asks for whom the heritage is being preserved and developed. The author believes that this question should form the basis for all heritage management and, in the post-colonial world, the contradicting needs and wishes of the visitor and the local people need to be addressed with sensitivity. This chapter aims to examine these questions in detail, elucidating the various conflicting arguments surrounding the military monuments that are the subject of this study.

7.2 Assessment of the historical significance of the Nevis fortifications

As has been shown in Chapters 4 and 5, the fortifications of Nevis would appear to be unusual within the colonial period Caribbean. Although following the general pattern of

military development seen on many other islands in the 17th century, the decline of the Nevis military defences following the French attack of 1706 appears extremely early. As such, the Nevisian fortifications provide an opportunity to examine a fortification system unaltered by later years. On Nevis, where only English/British fortification remains are found, this stunted pattern of development is of interest as the work of one single colonial power. On other islands this pattern is not present, with many showing longevity of fort development into the 19th century or evidencing several occupying countries' defences, adapted and developed over several centuries.

The underwater remains of Old Road, Cotton Tree and Mathew's Forts, despite their water-washed environments, allow the potential to examine English batteries which have possibly been little robbed or disturbed in modern times. In the Caribbean where cannon are constantly being removed to other sites and development or reconstruction has destroyed or altered many forts, this fact is not inconsiderable.

The fortifications of Nevis allow the opportunity to examine the colonial English forts of a small island. Although following general military engineering methods, these forts show an individuality that can only be explained by the involvement of experienced, and yet officially untrained, engineers. As such they provide a chance to study the works of the amateur fort builder. The fortification works by John Johnson, Christopher Codrington and William Stapleton would appear to exemplify the frontier nature of Caribbean military life in the 17th and early 18th centuries.

Fort specialists often regard small fortifications of the type seen on Nevis as being too small and militarily insignificant to warrant detailed analysis. However, the author believes that the smallness of these structures is the key to their interest. It is precisely because they are *not* large, competent fortresses with many years' development and official interest, that they are worthy of academic study. As frontier works carried out by amateur engineers they provide the opportunity to examine English/British military strategy at its most basic level.

The study in question is the first to have looked at the complete defences of a single island both archaeologically and historically. By examining the batteries, forts, entrenchments, armaments and people, a picture of military development and decline across the whole island has been established. In a world where the efficacy of British imperialism and military force are often taken as read, the overwhelming feeling of incompetence, lack of leadership and disorganisation attested to by the development and decline of the Nevis forts provides a significant balance to the traditional view of Britain as a unifying and stabilising force.

In the 21st century, where increasingly Britain's role in the slave and sugar trade is being questioned and rewritten from a non-British perspective, this study has highlighted the incompetence and sporadic activity prevalent in the development of English/British military defences of the 17th and 18th centuries. This study has placed these apparently solely military structures within the political and socio-historical framework so often denied to military works. The forts of Nevis cannot be seen merely as military entities sitting isolated within the realm of colonial Nevis. They were, and are, *intrinsic* to this colonial environment and provided a focus for all the colonial activities.

For example, all members of Nevisian colonial society were in some way connected to the forts of the island. Whether they were the slaves, planters, Governors, women or children, all were directly influenced by the presence of the Nevis fortifications. Many previous Caribbean fort studies (Hartog 1994, Nicholson 1994, Smith 1994, 1995, Jessamy 1998, Crandall 2000, Howard 2002) have isolated the military structures from their many human actors preferring instead to see the forts as receptacles for guns, military strategy and famous generals.

Furthermore, the role of slaves in the activities of Caribbean forts has often been ignored. Only recently, at forts such as Brimstone Hill (Schroedl 2000b), has their work been acknowledged. However, even at these sites, the precise role of the slave is as yet little understood. No statistics concerning the numbers of slaves used or the effort involved have been produced. Nor do we know the genders, ages or backgrounds of these people. Even for the later 19th century, information is still scarce. In addition, studies have not examined the sources for the building materials in detail nor how these were transported to the site. Apart from a few examples such as Charles Fort, St. Kitts (Schroedl 2000a), the continuing use of fortifications into the 21st century has also yet to be addressed.

To summarize, the day-to-day role of Caribbean fortifications beyond the theatre of war has traditionally been almost entirely neglected. In many studies it is as if the forts miraculously appeared overnight as fully manned defences whose only social role was evidenced by their activities in war. However, as the author has shown, this was not the case and the role of the forts in colonial day-to-day life cannot be underestimated.

The author believes that this study has gone some way to redress this absence of recognition, placing military life and the forts of Nevis within the often muddled, lawless and imbalanced system that was Caribbean colonial life in the 17th and 18th centuries. However, this study has not finished the work; further work will be necessary on the

Nevis forts. Such work should further elucidate the nature of the people, structures and events that comprised Nevisian military life in the 17th and 18th centuries and beyond.

7.3 Research potential of the Nevis fortifications

This study has laid a firm foundation for any further research to be carried out on the fortifications of Nevis, West Indies. Due to developmental threats, such research is of immediate necessity. Indeed, several of the forts recorded and examined by the author have already been destroyed, and of those that remain, all are under some form of threat (see Table 7a). As such this study has provided what may be the only source of information for many of the forts: it has created a record and analysis of the state and preservation of the Nevis fortifications at the start of the 21st century. However, there is still much work to be done.

7.3.1 Site by site recommendations

Firstly, all the forts need to be examined in closer detail. Although the author's research has suggested probable dating for the forts, further excavation and survey work will be necessary to confirm the precise lifetime and activity of individual forts. At destroyed forts such as the Newcastle Redoubt, Long Point and Black Rock it may be possible that remains of ancillary structures or peripheral defences may survive, and survey and excavation work may be useful to the understanding of the wider environments of these apparently lost structures. For example, at the Newcastle Redoubt, its relationship to the village of Newcastle is yet to be understood and identification of structures between the Redoubt and the village would help to clarify this picture.

At Cotton Tree, Old Road, Mathew's and Johnson's forts, underwater excavation will almost certainly provide artefacts, which will help to date the fortifications more accurately. In addition, finds from these forts will help in understanding who was present at the forts and what their day-to-day lives were like. The recovery and analysis of artefacts, such as hand-guns, cannon and general military paraphernalia will help to enhance further the picture of military life at the forts. From close archaeological examination it may also be possible to confirm the destruction of Old Road and Cotton Tree forts in 1706. However, this work would be a difficult undertaking as the sites lie in shallow, often cloudy, water and a skilled diving team working over several weeks or months would be necessary.

It is also uncertain how much material or contextual information would survive, although sightings of 'onion' bottle glass, ceramics and 'Dutch' bricks at all four of these sites would suggest that, even if unstratified, there are artefacts which could be recovered. Furthermore, at Mathew's and Johnson's forts, the location of the sites as being half in and half out of the sea, would allow for further work on the landward portions of the forts. Again, it is uncertain whether the landward areas have been sea-scoured, or whether all contextual information and artefacts have been heavily disturbed, however, as at the destroyed forts, further ancillary structures or peripheral defences may be identified.

At Morton's Bay fort, additional excavation within the vicinity of the present day structure, particularly around the upstanding wall of what would appear to be the guardhouse/magazine, will add to the picture of activity at this site. Analysis of this fort and the settlement of Jamestown will provide the opportunity of examining fort activity and its relationship to civilian life. It would also be interesting to examine the extent of the original fort beneath the 1980s café, however, such an undertaking would necessitate the removal of the modern concrete floor, which is unlikely to be possible.

At Codrington's fort, the excavation and reconstruction of this site has removed almost all the archaeological material from the fort. However, it is likely that some remains survive at the limits of the site, with potentially further ancillary structures being as yet undiscovered and thus undisturbed. Limited excavation and assessment work is therefore recommended at this site. It is also suggested that the massive assemblage of artefacts recovered from the excavations on the site should be examined in detail. Although these artefacts are unstratified, by talking with the excavators concerning find spots, etc, it may be possible to build up a limited picture of activity on the site. Indeed, even if unstratified, the artefacts from this fort provide a discrete range of material from a military site.

At Round Hill fort, the apparently undisturbed remains provide the best opportunity for examining a 'Johnson period' battery. This small battery, although different from many of the other stone built forts, would appear to have been largely undamaged and lies far back from the sea, so is unlikely to have been greatly altered by inundation. However, as this fort is under no present threat, it is recommended that it should be preserved in situ, until such a time as the threat to the structure necessitates its excavation.

Abbott's fort/Cole's Point, has been examined closely. Although eroding from the cliff edge, the trial excavation and extensive survey work at this site makes it less of a priority for future research. Indeed, it would appear that the fort has long since gone over

the edge of the cliff and as such, it is recommended that erosion at the site should be closely monitored, but that no further work is necessary at present.

Indian Castle provides a very interesting challenge for further research. Although clearly offering a range of archaeological contexts and artefacts, the closeness of the site to an unstable cliff edge, makes any excavation work almost impossible. This is regrettable, as the presence of several floor levels, walls and a well, clearly make this site of great potential interest. The location of the site in an uninhabited area on the south side of the island suggests that any remains would be largely undisturbed or altered by later domestic activity. However, the impossibility of carrying out work safely at the site does not allow for any further excavation. It is therefore recommended that this site be monitored closely and that the base of the cliff be regularly checked for exposed contexts and falling artefacts. Although not ideal, this method would provide for at least a minimal amount of evidence to be gained.

At Saddle Hill, although the site has been altered in recent years, it may be possible to find archaeological evidence of the precise development and use of this anomalous Nevisian defence and lookout position. It would also be of use to locate the deodand mountain retreat, in order to evaluate its precise military function. Indeed, integrated work at these two sites may help to elucidate the development of Nevisian mountain retreats from the 17th-19th centuries.

Charles Fort provides an example of a more typical Caribbean fort. This fort, built at the same time as Charles Fort, St. Kitts, is of a similar size and type to this latter example. The author believes that excavation of this site will provide many opportunities to examine the development and decline of a Nevisian fortification from the 17th to 19th centuries. Many historical documents attest to further structures within the fort, which cannot be seen on the ground. The survey of the fort carried out by Caribbean Volunteers in 1997 provides a basis for this research.

With two good plans from 1679 and 1705 (Figs. C9a & C9b), it should be possible to examine the changing form of the fort between these two dates, and the fort's subsequent alteration following these dates. For such work a detailed examination of the remains in front of the fort gateway will be necessary. It is recommended that a professional topographic and geophysical survey be conducted within the fort, with targeted trenching within the vicinity of the fort and around the entrance to the fort being carried out according to the survey findings. Evidence of slave and soldier occupation areas should be sought, and the author expects that such information will be found within the buildings located inside the fort.

The entrenchments of the coastal zone should also be actively researched. These ditches and banks located by the author in several locations, have the potential to provide further information about the construction and development of some of the earliest Nevisian defences. This aim could be achieved by slot trenching across the identified features. In addition, further remnants of this defence should be located and surveyed/trenched. In particular, the spurs/'places of arms', detailed by Johnson in 1705 and shown on the French maps of 1703 and 1758 (Figs. C1c, C1d & C1f) should be sought, as possible evidence of massed troops may be located at these sites.

7.3.2 Broader research questions

As has been shown above, each of the Nevis fortifications has the potential to offer greater insights into the development and decline of the defences of the island. However, all the fortification sites, when taken as a whole, offer the possibility of examining several broad research questions.

Firstly, the fortifications need to be looked at more widely within the colonial landscape of Nevis. Detailed analysis of plantation estates in relation to the fortification zone will allow a much more accurate representation of the precise role of the planter in the defences. For example, the diary of John Pinney would suggest that he, a planter, was responsible for the construction of a battery at the base of his Montravers Estate (Pares 1950). Was this true of other planters? Were bigger batteries built where there were influential planters' estates? Although the fortification layout seems to follow military necessity, an element of planter control does seem likely. However, to answer these questions, detailed plantation estate work will be necessary.

In addition, comparison of dated buildings and their construction methods may help to date the Nevis forts more accurately. As the author has shown in Chapter 5, it would appear that stonework styles develop and change throughout the period under study. However, further comparison with other dated buildings on the plantation estates and in the towns will be necessary to clarify this development.

Secondly, the subsequent use of the fortifications following their decline in the 18th century needs to be established. For example, at Black Rock and Charles Forts there is historical evidence for their continuing role as customs depots. Archaeological evidence of such use should be sought. At Codrington's Fort and at the Newcastle Redoubt (Morris et al. 1999: 205) various artefacts would appear to be evidence of a later, domestic, use of the structures. At Johnson's fort, the blocking of the doorway of the square building over

the Johnson period fort and the burial of several skeletons would also attest to a secondary, non-military use of this site, possibly as an epidemic grave. During future excavation work at all the fort sites the later patterns of use need to be established.

Thirdly, the fortifications of Nevis ought to be compared more closely with those of the other islands (Watters 2001: 94). Although the author has suggested differences between the development and decline of the Nevisian forts in comparison with other islands, further work will be necessary to refine this model. Indeed, on many other islands, small batteries of the type seen on Nevis have been largely ignored. Work on the batteries of St. Kitts recently initiated by Victor Smith will provide a local comparison for the Nevisian forts. However, this work is in its earliest stage, and at the time of writing, such comparisons were not yet possible. Another possible contrast would be to examine closely the small batteries of islands such as Antigua, where it is known that considerable money and effort were put into defences. Indeed, on islands that had the services of large numbers of regular troops and fort engineers, and official backing from Europe, the development and decline of these islands' batteries will potentially provide a great contrast to the Nevisian defences.

Fourthly, the pattern of geological/geomorphological effects needs to be closely examined. To date, the precise nature of the island's geology is little understood. The role of earthquakes and tidal waves in the island's history has yet to be securely documented. These effects, along with hurricanes, have considerably altered the fortification environments, leading to the submerging of three of the Nevis forts, the abandonment of the coast road/entrenchments between Charles Town and Cotton Ground, and the erosion of Indian Castle and Abbott's/Cole's Point forts. Although the author has pointed to several possible scenarios for these events (see Section 5.2.9), none can be positively proved or disproved. For further work to be successful, it is therefore essential to understand how and when these events took place. It may be that climatic/geological factors led to the final abandonment of some of the forts; without further work it is impossible to say with any level of confidence.

Finally, and perhaps most importantly, the role of people in the forts of Nevis needs to be examined in more detail (Watters 2001: 97). As has been stated previously, in many fortification studies the role of the human participants is often neglected. In the colonial Caribbean, where militarisation was intrinsically linked with the slave and sugar trades, this human role is perhaps more important than in non-colonial societies. On Nevis and in the Caribbean, better linking of the defences with the men and women who designed, built and manned them is necessary. The lives of the planters, slaves and

soldiers have yet to receive close attention and this situation needs to be urgently addressed.

Archaeology may help to bridge this gap, with the artefacts recovered on future excavations helping to reconstruct the ways of life of these men and women. The role of Afro-Caribbean pottery as a marker of slavery needs to be examined in detail, with the possible non-slave use of such pottery deserving particular attention. However, should this pottery prove to have been used by many other white members of Caribbean society, the possibility of identifying further markers for the presence of slaves needs to be explored. Are there intrinsically slave-associated artefacts or building types present at the forts? And if not, why not?

These and many other questions regarding the people associated with military life need addressing. For example, is it possible to identify women at the forts from the archaeological record? Do the archaeological artefacts attest to the accounts of the poor treatment of soldiers? What do the artefacts found on the forts tell us about the status of those who deposited these artefacts? Where were the soldiers buried? Where did the soldiers live? Only when these questions have been satisfactorily answered, will the history of the Nevis fortifications be balanced. Without the history of the people, the fortification remains are soulless structures, devoid of life.

In summary, the study in question has provided a firm basis for further research on the fortifications of Nevis. However, this research is by no means complete. Only through further study will the Nevis forts truly come to life. The potential areas for such research have been highlighted above; however, with the current threats against the fortifications of Nevis, it will need to be rapidly undertaken before the resource that might answer many of these questions is lost for good.

7.4 Threats to the forts

On Nevis, tourist development of the island is in its infancy and many historic and prehistoric sites still survive. However, the island is developing rapidly: within the time that the author has been researching the Nevis forts, at least four of them have been destroyed (Table 7a). At Long Point, the new port has removed the opportunity of examining the fort at this location. The Newcastle Redoubt and the remains of Black Rock fort have been bulldozed to make way for, respectively, an airport runway and a waterfront development. The underwater fort remains at Old Road fort have been covered

with sand at the Four Seasons Resort. All of these developments have occurred within the last seven years.

Fort	Location Type	Date of alteration and threat	Type of Development
Indian Castle	*Cliff*	*Ongoing Cliff Erosion*	*N/A*
Long Point	Cliff	Destroyed 1999	Port development
Charles Fort	Cliff /Town	Ongoing damage	Stone Robbing, Villa Development
Black Rock	Town	Destroyed September 1999	Charlestown waterfront development
Johnson's	Beach	2003: Ongoing proposal to develop Montravers Estate	Tourist Resort
Mathew's	Beach	2003: Ongoing proposal to develop Montravers Estate. Café built on walls	Tourist Resort Café
Old Road	Beach/Underwater	Buried October 2001	Beach Reconstruction
Cotton Tree	Beach/Underwater	2003: Ongoing proposal to develop Paradise Beach	Tourist Resort
Cole's Point	*Cliff*	*Cliff erosion*	*N/A*
Morton's Bay	Beach: slightly inland	Reconstructed in the 1980s Threat due to road widening	Café Road
Codrington's	Cliff	Reconstructed 1996-2001	Alteration Reconstruction
Round Hill	*Beach: in private garden*	*Private: No immediate threat*	*N/A*
Newcastle Redoubt	Beach	Destroyed November 1996	Airport Runway
Saddle Hill	*Mountain*	*Private: No immediate threat, but possible reconstruction damage*	*N/A*

Table 7a) The developmental threats to the survival of the Nevis fortifications: entries in italics refer to forts solely under natural threat or that are under no threat.

In addition, the fort remains at Indian Castle and Cole's Point are eroding rapidly. Proposed tourist developments at Johnson's, Mathew's and Cotton Tree forts will almost certainly remove or alter the remains to be found at these sites. In the past, Morton's Bay and Mathew's forts have had cafés built on them and the location of Charles Fort has had a villa complex built close to its walls. At Codrington's fort, the original fort has been dramatically altered by the reconstruction work on the site. In short, apart from Round Hill and Saddle Hill and Codrington's forts, which has been heavily restored, all the Nevis fortifications are under some form of threat, be it environmental or human. Many have already been lost.

Apart from the developments at Charles Fort, Morton's Bay and at Mathew's Fort, all the other developments have been carried out within the last ten years; the fort repertoire visited by the author during the earliest years of the fortifications research has dramatically reduced over the years. This situation clearly needs addressing. However, this

problem is not quite as straightforward as it might first appear. Before any such management can be attempted a fundamental question needs answering: Should the forts be preserved?

7.5 Management, preservation and tourism

As has been stated above, the fortification repertoire has been greatly reduced since the earliest days of the author's research. According to standard archaeological principle this destruction should be arrested immediately. However, in the complex society that is the post-colonial Caribbean, Western archaeological theories may not be appropriate.

7.5.1 Why preserve and for whom?

Historically, preservation of archaeological and historical remains in the Caribbean has been closely linked to tourism. Providing 31% (US$ 75.7million) of the Gross Domestic Product of St. Kitts and Nevis in 1998 (Spinks 2000), the influence of the tourism industry in local government policy is considerable. As Nevisian Tourism Minister Malcolm Guishard (2002: 15) stated, 'tourism, to put it bluntly, is our bread and butter'. With 48% of these tourists coming from the USA and 25% from Europe as opposed to only 7% from the Caribbean itself, the requirements of the Westerner are dominant (Spinks 2000). Most hotels market themselves as unspoilt retreats where colonial style meets relaxation and luxury (Fig. 7a).

As instantly recognisable examples of Western architecture and history, the fortifications and plantation houses of the Caribbean are obvious tourist attractions (Urry 1996: 143). However, in the post-colonial Caribbean the preservation and marketing of such structures is problematic and has to be achieved sensitively. Such preservation may not even be appropriate in certain circumstances. Ironically, on Nevis, the same tourism that is the darling of the heritage industry is causing the destruction of the Nevis forts to make way for large resort hotels, airports and ports. Nevis has not yet realised the potential of its history.

Damage, destruction and loss of archaeological remains are typically abhorred within the Western tradition of archaeology. Many books detailing various strategies of site preservation and management can be found on academic library shelves (For example Feilden and Jokilehto 1998, MacManamon 2000, Layton et al. 2001, Aplin 2002). However, although the wanton loss and destruction of historic sites is to be regretted, it

may be that 'the past in the present is so fraught…that we would do better not to probe, not to insist, but to leave things covered for a while and laid to rest' (Bender 2001: 199). There is a possibility that this situation exists in many areas of the Caribbean.

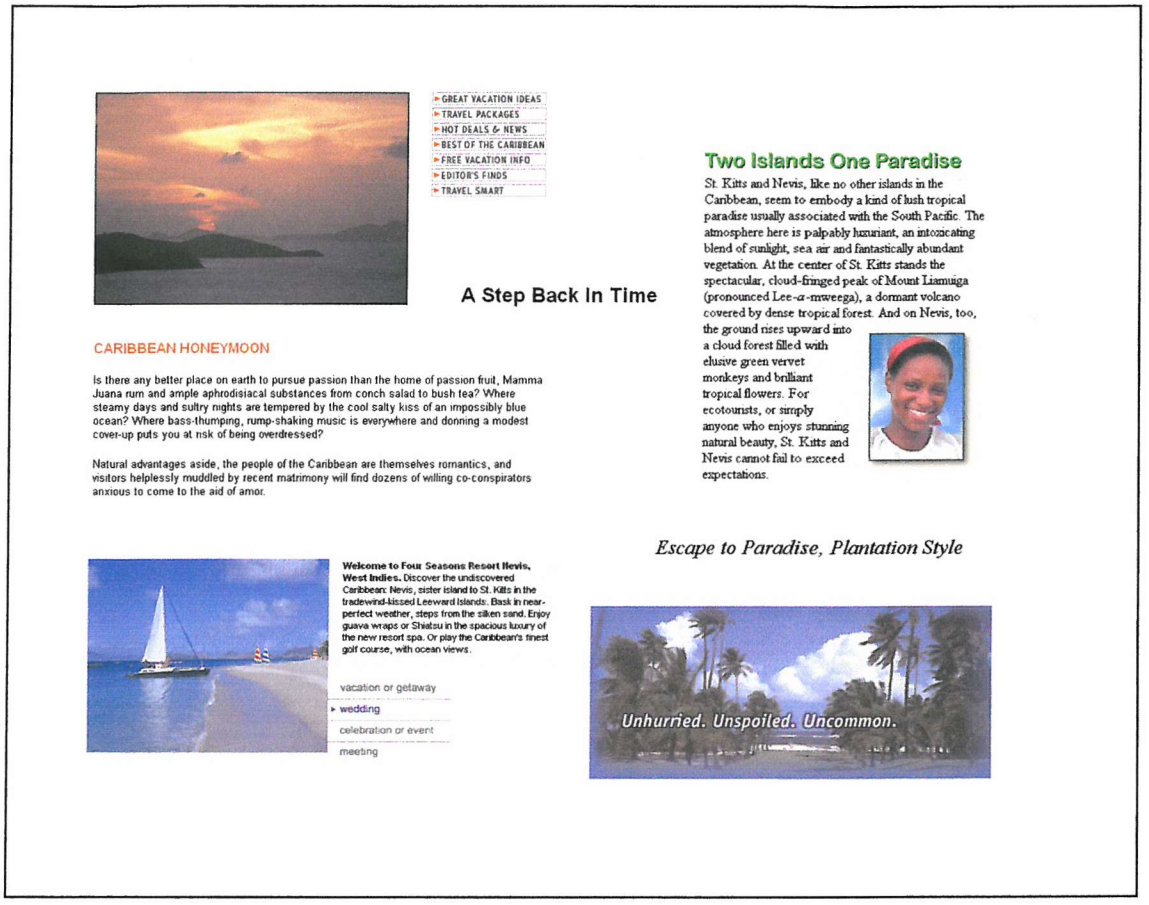

Figure 7a) A Selection of images from the web sites of the Four Seasons Resort, Caribbean Travel and Life, Nisbetts Plantation Beach Club, Golden Rock Plantation Inn, Ottley's Plantation Inn and the St. Kitts and Nevis Tourist site.

However, the precise level of local sensitivity towards the preservation of historic sites in the Caribbean is difficult for the outsider to evaluate. Indeed, many people may argue that the outsider has no right to attempt such an evaluation. On Nevis, it is difficult to gauge feelings about these monuments, and as an outsider, the author has always been aware of her lack of cultural ancestry in the histories of this small island, and her subsequent lack of right to decide their future. It is difficult for a white person to understand fully the impact of slavery on many sectors of the local population and it can be seen as a further example of colonial interference to try to speak for these people.

However, in order for the various arguments concerning the preservation of the fortifications of Nevis to be addressed, some attempt has to be made at tackling this thorny issue. In doing so, the author is giving her *impression* of the situation, gleaned from

comments and observations made during her visits to the island. As a personal perspective the views expressed may not be entirely valid and almost certainly will not cover all the varied views present across the island. However, to assess whether and why the Nevis forts should be preserved, an examination of the various interests present on the island will allow a clearer picture of how a balanced management and preservation strategy may be achieved.

Two main groups of people on Nevis can be identified: those that live on the island and those who visit as tourists. Both groups contain a range of nationalities, with black and white people providing the two largest ethnic groups. However, tourism to the Caribbean is predominantly white (Urry 1996: 142) and the local population is predominantly black. There is, however, a contingent of expatriates living on the island, many of whom are white. From the author's experience, until recently, it has been mainly the expatriates who have been involved in the Nevis Historical and Conservation Society. The museums and the majority of projects carried out by the Society, for example, the excavations at Codrington's Fort and the Newcastle Redoubt, the rebuilding of a traditional Lighter boat, and the development of the Upper Round Road trail have all been directed by incomers to the island.

Therefore, it can possibly be argued that, until recently, the representation of Nevisian history has, even if subconsciously, referenced Western ideas in the selection of sites to be examined and preserved, histories to be told, etc. When one looks at the efforts put into the development of the heritage of Europeans as opposed to prehistory and slavery, this argument would appear justifiable. So in this environment, what do the local population require?

In short, it is impossible and incorrect for the author to answer such a question. However, a variety of views expressed to the author may help by offering possible requirements, which need to be addressed in any preservation strategy. There are two main views that the author has perceived concerning the history and future development of Nevis. Firstly, some people feel very angry about the legacy of slavery and colonialism and feel that the continuing unrestricted tourist development of the island in the 21st century echoes the colonialism of earlier years. However, the second group appears to wish to try to put the past behind them in the hope of building a better future. Tourism and banking development offers these people the means of building this future.

The first view would suggest that many are angered by the role of outsiders in the future development of their island, and feel that the wrongs committed by the white man

in times past have yet to be assuaged. For example, Tafari Ayinde (1999: 23), a Nevisian, has written in his poem 'Oualie' [the Indigenous Caribbean name for Nevis]:

'Thru Nevisian eyes a looked at Nevis' growth in complete disbelief
Mon mi jus' could not believe it
Nevis' future was left to be dictated by a business'

The view that the island is being taken over by tourism has many adherents and the author has sensed during many conversations that the tourism developments of the island sit uneasily with many local people. Such developments inevitably bring in more Western visitors who want Western services, products and heritage. Much of the money produced by these non-island owned hotels, resorts and gift shops does not return to the Nevisian economy. The people who oppose such unrestrained tourism generally appear to be interested in promoting Nevisian culture, with the co-operative societies offering unique Nevisian gifts and products that cannot be bought elsewhere.

The other general opinion suggests that tourism and the banking industry are a necessary part of Nevisian life and provide much-needed investment in the island's economy. Indeed, many feel that without tourism, their livelihoods would be threatened. Many of these people also appear to feel that the involvement of outside nations provides cultural diversity to the island and offers the opportunity to become involved in international affairs. A considerable number of Nevisian professionals have travelled widely with many receiving their university education in either Britain or America; however, even amongst this group there would appear to be some feeling that unrestrained tourism is ill advised and needs to be regulated accordingly.

Inevitably, both the views expressed above impact on management strategies at Nevisian heritage sites. Those of the first view would wish to see the involvement of the Westerner restricted and might not appreciate the remains of yet more 'white' monuments being highlighted in their heritage, especially by white academic 'tourists' placing an outsider's value judgement on such remains (Crick 1995: 205, Haviser 2001: 76). The second group, however, might wish to see these sites developed to provide a niche market for Nevisian tourism. Additionally, and in contradiction, they might allow certain heritage monuments to be destroyed if they stood in the way of a developing tourist industry. Both views need to be considered carefully and a sensible, and sensitive, management plan created with reference to these views.

It is extremely difficult to balance the pro- and anti-tourism and heritage preservation arguments to the satisfaction of all parties and such decisions on Nevisian policy are ultimately not the proper concern of the non-Nevisian. The author can merely suggest what might be possible in heritage management and suggest what will be 'lost' should this management not be achieved. Whether Nevis decides to preserve or destroy the fortifications should be settled by consensus of opinion, and that consensus needs to be local.

However, the author believes that the loss of Nevisian heritage to tourism development is to be greatly regretted. The author acknowledges that the preservation of the Nevis forts is not a given, and that the case for allowing many monuments of slavery to be allowed to crumble and decay is a persuasive and valid one. However, when the destruction of monuments is carried out to provide for the, perhaps transient, needs and wishes of the modern-day, Western tourist market, this destruction is not so understandable.

If one looks at the Nevisian fortifications in the same light as Brimstone Hill, it could be argued that to remove the fortifications of Nevis is to remove monuments that memorialise the achievements of their slave builders. As the Brimstone Hill World Heritage Site nomination states, such forts can be seen as monuments 'to the skill, strength and endurance of the African slaves who built and maintained' them (Armony 2000: 21).

The Brimstone Hill solution suggests a compromise between the pro- and anti-tourism elements and would offer something to each group. The history and legacy of the military defences, and the role of slaves in this system, could be covered by exhibits and display boards so that both locals and tourists could find interest and education in the sites. As such the forts would become closely linked with the local community, as opposed to being markers of the white man and his armies.

Handled sensitively, such monuments could be shown as being intrinsically linked to all aspects of colonial life, with the legacy of such colonialism made obvious to those who might not have absorbed the serious and long lasting effects that such a system has created in the world. As such, these forts can provide the possibility to challenge preconceptions, to widen knowledge and to educate on a local and international level. As Feilden and Jokilehto (1998: 100) suggest, 'sites have more than one important story to tell about their history'.

7.5.2 Nevisian legislation

In order for the fortifications of Nevis to be preserved and managed, fundamental changes in development need to be made. Although the work of the Planning Department is to be praised, the difficulty of balancing tourism with preservation interests often causes problems. When that same tourism provides many jobs, and income and investment, preservation becomes even more difficult to uphold. Legislation is in place that could protect historic sites, however, without the full backing of the Nevis Island Administration, this legislation is likely to remain only partially activated.

Nevis has already put in place an act, The National Conservation and Environment Protection Act, 1987, that provides for 'the better management and development of the natural and historic resources of St. Christopher and Nevis' (National Assembly of St. Kitts and Nevis 1987: 1). This act defines historic sites as any place which is 'historic by reason of an association with the past and is part of the cultural or historical heritage of Saint Christopher and Nevis, and such a classification may include archaeological sites, historic landmarks and areas of special historic or cultural interest' (National Assembly of St. Kitts and Nevis 1987: 3). The management of the historical sites of Nevis, under Section 15 of the act, can be delegated to the Nevis Historical and Conservation Society.

Within the act, the Conservation Committee is able to advise on beach development and conservation of historic remains and is responsible for the drawing up of detailed management plans for each of the nation's designated protected areas. These protected areas comprise the Brimstone Hill National Park, St. Kitts and the Bath Hotel, Nevis. In addition the act also requires that a Coastal Management plan be drawn up for both islands, 'to regulate developmental activities in a coastal zone' (National Assembly of St. Kitts and Nevis 1987: 14). In the case of the beaches, removal of beach material or of natural sea barriers is prohibited, with a $1,000 fine and/or six months' imprisonment imposed against those who break this law (National Assembly of St. Kitts and Nevis 1987: 17).

Furthermore, archaeological investigations are restricted, with those who carry out such activities requiring a licence from the government (National Assembly of St. Kitts and Nevis 1987: 23). All items recovered from such excavations, and a copy of any findings, has to be returned to the government of the islands. The act also states that a list of buildings of historic interest requiring preservation should be drawn up. Any person who damages a building on this list shall be liable to a $1,000 fine with a charge per day of $50 for the length of time that the damage has not been rectified (National Assembly of

St. Kitts and Nevis 1987: 25). However, archaeological sites not falling into the building category are not covered by the act.

Following the creation of a zoning plan in October 1987, which identified guidelines and areas for tourism, urban development, agriculture and National Parks, in 1991 the Nevis Zoning Ordinance was adopted (Cambers 1998a: 6). This theoretically regulated the tourism developments in the coastal zone 'to maintain so far as possible the unspoilt appearance of the areas' (Cambers 1998a: 7). However, when the Four Seasons Resort was built in the early 1990s, several of the resort's buildings were built in areas disallowed by the guidelines (Cambers 1998a: 6).

Recent damage by hurricanes on the coastal zone has further raised the profile of these delicate areas. Reports by UNESCO on coastal erosion have highlighted the problem of coastal development (Cambers 1998a, 1998b, Daniel 2001). Although recommending protection of the beach areas, and unintentionally many of the fortification remains, it is somewhat worrying to see that Mathew's fort, although not recognised as an historic site, has been identified as a hazard to longshore drift (Cambers 1998b: 17).

As can be seen from the Four Seasons example above, it would appear that the interests of the tourist industry often override the Environmental Protection Act and the Nevis Zoning Ordinance, both of which appear to be rarely enforced. Further, recent, actions by the Four Seasons Resort, during the beach reconstruction at the site in 2000, have highlighted the inherent problems of implementing the act. Many people questioned the legitimacy of the Four Seasons actions citing the potentially illegal creation of artificial barriers and the dredging of sand from other offshore areas thus altering the natural beach line (Gaskell 2000c: 24, Warner 2000a: 14, 2000b: 3). However, their legal case was lost. In addition, the development of the Newcastle airport runway, Charlestown waterfront and the Long Point Port would appear to have been carried out with little reference to the requirements of the Environmental Protection Act and with little consultation with the Nevis Historical and Conservation Society.

Furthermore, it would appear that some of the archaeological work carried out on Nevis has not been carried out according to the Act's wording. This is not the case with the Nevis Heritage Project, which gained permission for its work, has produced annual interim reports, and has itemised export agreements for any artefacts temporarily removed off island for analysis.

There are signs of hope, however. In some areas considerable achievements have been made. For example, the management plan for Charlestown (Myers 1999, Amory 2002: 15), created by the NHCS and the local Planning Department, clearly shows the

potential for the historic buildings to form an integral part of the island's tourism (Myers 1999: 5). In July 2002, the Nevis Island Administration announced its intent to set up a National Trust, 'to develop and preserve historic sites in Nevis' (Ngunjiri 2002b: 12). However, it is uncertain whether this will be primarily a tourism-directed or preservation body.

In addition, in 2002, the NHCS and Nevis Island Administration, in consultation with the Nevis Heritage Project, initiated a set of guidelines to regulate archaeological activity and to validate the professional qualifications of those carrying out work on the island (N.H.C.S 2003). Such a set of guidelines is to be welcomed. Furthermore, the inscription of Brimstone Hill as a World Heritage Site and its recent and ongoing change in interpretational emphasis sets a precedent for fortifications across the region.

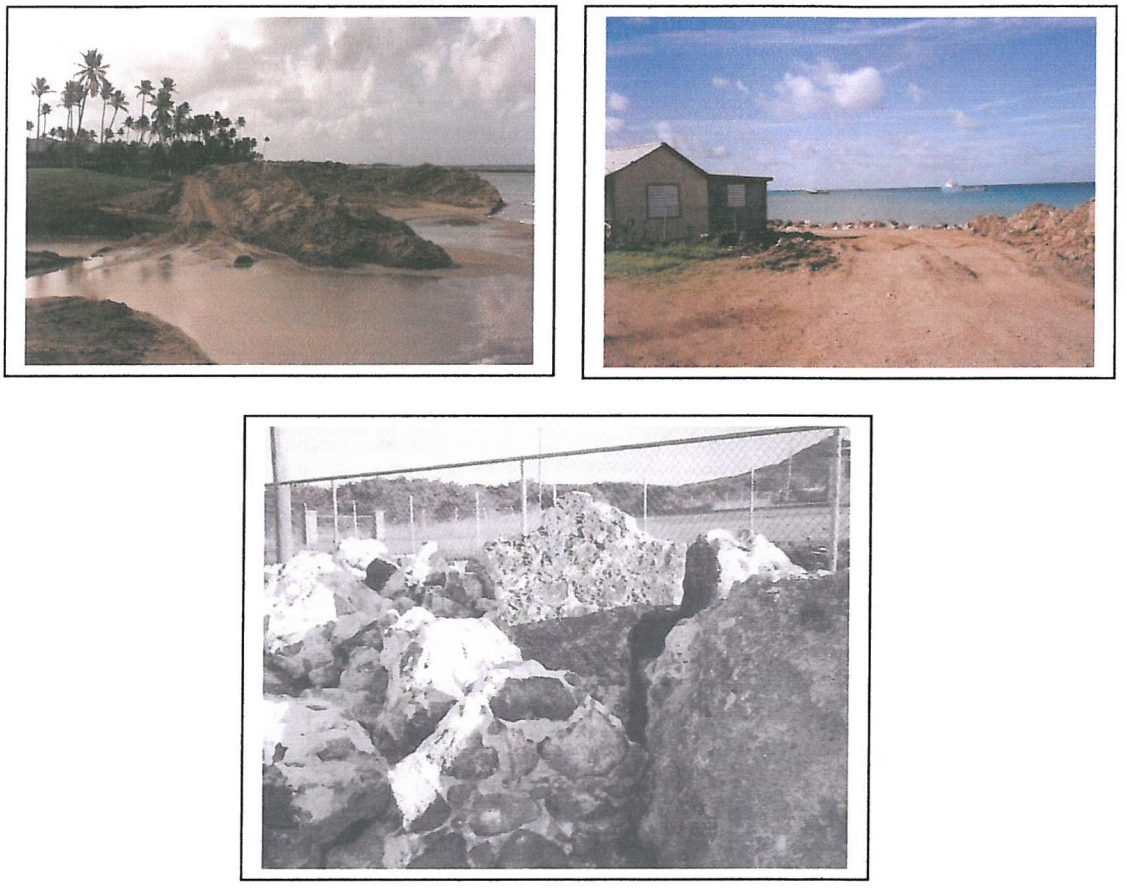

Figure 7b) The Loss of Old Road (top left), Black Rock (top right) and Newcastle (bottom) Forts.

The Nevis Planning Department's actions to save the forts at Old Road and Cotton Tree were witnessed at first hand and strenuous efforts were made to protect these structures. The Four Seasons Resort was persuaded to use the story of the Old Road Fort within their tourism information and although not perhaps an ideal solution, removed three of the fort's cannon further out to sea before the fort was buried. These cannon now form

part of the resort's diving trail. At Cotton Tree, representatives of the planning department visited the underwater fort, and the presence of this site has been noted, should any further developments be planned for this area.

In short, the legislation, and interest in the heritage of Nevis, is present on the island. However, all too often this legislation appears sidelined, with the interests of tourism taking precedence. This unrestricted development is to be regretted, and if it is not stopped, within ten years the majority of the fortification resource will be lost (Fig. 7b) and the beach turned into a long street of hotels.

7.5.3 The way forward

As has been stated above, the author believes that the Nevis forts should be protected from future tourist developments. However, in their precarious environments, active preservation is a difficult undertaking. It is probably not desirable to have these monuments restored. Such restoration can often remove an 'elegance' from the ruins and, although possibly easing understanding of the monument in question can often represent a unilateral, frozen 'past' which cannot possibly reference the many interpretations which can be put on any site. Indeed, as Holtorf (2001: 294) suggests, archaeologists should construct 'one or more pasts that are appropriate for all of us'.

The author believes that it will not be possible to preserve the Nevis fortifications indefinitely; the frequent hurricanes and erosion seen on the island will be difficult to combat at the majority of the fort sites. However, the forts should be actively protected from destruction by development and for the remaining days of many of the Nevis forts, attempts should be made to manage their promotion within the community as a whole (Aplin 2002: 37). It is envisaged that, in many cases, simple information boards with an orientation plan, a basic historical timeline and a case study event (such as the slave investment in building the forts, or descriptions of the French attack in 1706) should be put up at each of the batteries. Images should be prevalent, with photographs from excavation and diving work present where available.

These information boards would be consecutively numbered to provide a fort trail along the coast of Nevis. The boards, though containing stand-alone information, would also present a developing narrative over the range of fort sites so that those undertaking the fort trail would sense a progression as they complete the trail. It is envisaged that a fort guidebook will be written to accompany the trail, which would offer additional

information and would also serve as a readily available history of the Nevis fortifications and their creators.

The guidebook will point out other historic sites to be seen en route from fort to fort, an estimated time for each section of the walk and could offer suggestions for bars and restaurants that could be visited along the trail, thus providing a possible means of funding for the booklet. In addition the guidebook and information boards would provide an easily accessible education resource for school visits, allowing local children to explore and interact with the historic forts (Aplin 2002: 38), thus raising their profile amongst local people. On several occasions, the author has seen school children visiting the forts of Nevis. However, with the current level of available information, exercises of counting cannon were often all that has been available to the teachers.

This process of dissemination has already begun, and an illustrated children's storybook and an A5 size, fully illustrated, plain language guidebook about the Newcastle Redoubt are currently in preparation with an expected publication date in 2004. The more general fort guidebook is expected to be available in 2005.

At Cotton Tree fort, it would be possible for tourists, school children and locals to 'dive' the site themselves. As the fort is in such shallow water, snorkels would be all that was necessary. If fluorescent markers were attached to the cannon, these artefacts could be 'found' and examined by visitors.

At the larger, better preserved Charles Fort, much more is possible. The whole site would need to have the vegetation cut within the fort and the stone-robbed walls consolidated. Alongside detailed information boards, a number of improvements would allow the visitor to feel a sense of what the fort must have been like in the past. For example, the mounting of the cannon at the site on carriages, the creation of a wooden gate into the fort, and possibly the reconstruction of a guardhouse/magazine would greatly enhance the interpretation of the site. Were further excavations to be carried out within the fort, these could also provide part of the visitor experience.

This fort would form the focus and beginning of the Nevis fort trail, and would have notice boards describing the role of the slaves, the day to day running of the fort, its development and decline, the life of John Johnson, etc. Being located close to Charlestown and the museums, this site is ideally placed as a major local education and tourist site. Unfortunately, although such repairs would not cost a great deal (sponsorship could probably be found) and would need little day-to-day management, such work has yet to be carried out.

In addition a special display of artefacts recovered from the forts could be placed in one of the Nevisian museums. Such a display could reference the ways of life of the soldier, slave and planter and examine their roles within the Nevis defences, through the artefacts that they left behind. Interactive exhibits are also possible, with analogies to recognisable modern day experiences given. For example, a block of dacite with its weight given as, say, numbers of bags of shopping or bags of potatoes, could be used to explain how gruelling it must have been for the slaves to transport the thousands of stones to the Nevis forts. Narrative accounts from the period could also be used to describe the day-to-day life of the British soldier.

In summary, it is suggested that information boards and a fortifications trail provide the optimum strategy for raising awareness about the role of the Nevis forts in the history of the island. Such boards would provide a resource for tourists and locals alike. If handled sensitively, and with emphasis placed on *all* members of colonial society, a balanced and educating story of military life may be achieved, increasing 'a sense of identity' in the local community (Aplin 2002: 37).

7.6 Local and non-local involvement

An important necessity of the above recommendations is the increased participation of local people in the island's history. All too often, as has been stated previously, archaeological and historical work has been carried out by off-island visitors. Indeed, similarly to the situation experienced in other parts of the world, 'sporadic work is being carried on by mainly foreign researchers on what may be described as a "hit and run" archaeological excavation' (Mbunwe-Samba 2001: 33). This situation is clearly unacceptable and needs to be immediately addressed.

In the case of the Nevis forts, the author feels that further research and presentation should be achieved in close collaboration with Nevisian or Caribbean nationals. Indeed, the development of the author's perceptions of the island and its community over the time of this study would result in a very differently achieved fieldwork project if initiated today. A primary aim would be to canvass the views of local people and involve them in the project. Unfortunately, the logistics of the Nevis Heritage Project and the introductions offered to the author did not allow for such an integrated approach. In this respect the Project is not alone; pluralistic research is as yet uncommon in other similar projects (Haviser 2001:76). In an attempt to address this problem, the author has sought the

opinions of local people and interested parties met during the course of her fieldwork and visits to the island.

To avoid such a situation in future, the island should facilitate the training and employment of a local island archaeologist. This role might operate similarly to the British County Archaeologists, who monitor development, advise on developmental impacts and organise watching briefs, assessments and excavations accordingly. This post could have a tourism and education profile, actively promoting the sites in the community and guiding visitors around their remains. It is essential that this position be filled by a Nevisian or Caribbean national. Such an arrangement would lead to a comprehensive and integrated system of heritage management and would encourage more local people to interact with, and to control, the development and management of their heritage.

7.7 Summary and concluding remarks

As has been shown in this study, the Nevis fortifications provide a fascinating insight into the military and colonial activities on Nevis in the 17th and 18th centuries. These apparently small and insignificant structures tell a very big story. This story is of a small colonial island on the edge of British influence, controlled by men whose greed for trade was in constant contradiction to their civic and military responsibilities. Men and women from far-flung areas of the globe came to the island in search of the wealth this trade produced, with many more being forced to labour in the heat to achieve this wealth for others. Men came to defend the trade and fought, got sick and died far away from home. Of those that survived, many never returned to Britain's shores.

The Nevis forts, as defenders of this trade system, were intrinsically linked to the many facets of colonial life in 17th and 18th century Nevis. Governors designed the forts, slaves built them, and soldiers and planters manned them. The women involved with these men had to stand by and watch as their partners, sons and fathers played out their roles in the defence of the island. At times these wars and battles were brutal, sometimes they were merely sabre-rattling: at all times they were frightening and created a degree of uncertainty typical of frontier settlements.

Gradually, as interest in defending the trade lessened, these small forts fell into ruin. Slavery was abolished and the white man took his wealth and returned home to Britain. The British Empire eventually fell. The forts gradually disappeared and were lost from knowledge. However, three hundred years later they have been re-discovered and their narratives told. The men and women who operated in this system have had their lives

illuminated. Most importantly, the military history of Nevis has been examined in all its many forms, and the image of British military efficiency and superiority has been questioned and found wanting.

In the present day Caribbean, the various colonial period fortifications still have a role to play. As markers of the military and colonial system once present on these islands, these small structures offer the possibility to further expand the colonial story. By giving evidence of the people and events of long-forgotten days, this study of the Nevis forts provides an opportunity to rethink history, to challenge preconceptions, and to broaden the views of those who see forts merely as ancient buildings with cannon and associated famous Generals and battles.

By placing the Nevis fortifications within a narrative of haphazard colonial management, human cruelty and personal struggle, this study offers a realistic view of the English/British military in the 17th and 18th centuries. These forts have much to tell about the creation and development of the colonial system whose legacy continues to have an impact on 21st century societies. Indeed, only by referencing *all* areas of colonial and military activity can a truly balanced military history of this island be achieved. The author believes that this study has achieved such a balanced history and has created a firm foundation for future military research on the small island that is Nevis, West Indies.