Lifelong welfare: teaching older animals new tricks.

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I wonder what you might answer to the baseball player, Satchel Paige’s question: “how old would you be if you didn’t know how old you are?” After all, age is simply a number. I am in my seventh decade (over 60 to the non-mathematicians), but feel 21 and a bit years old. Yes, the bit is getting bigger, but I still find the world a place full of wonder, fun and learning opportunities. It may be the joys of life have changed….. a 10 mile woodland walk as opposed to a 25 mile mountain hike, and a late night is likely to be around midnight nowadays. However, I continue find the world an adventure playground and have little intention of growing old, even though my body continues to age, and this is the point of my paper.

Whilst our pets undoubtedly age, I posit that it is we humans who make them old and, in so doing, reduce their quality of life. Ageing affects human and non-human animals and is a natural process of deterioration, called senescence. It causes biological, psychological and social changes (Phillips et al 2010; Krebs et al 2018). I propose there is much we can do to prepare animals and owners for this normal aspect of life. This paper is intended to start the reader thinking about how to facilitate improvement in the quality of life for our ageing pets and, thus, for our ageing selves.

Biological ageing includes, but is not limited to specific issues such as reduced kidney, liver and cardiac functioning; increasing susceptibility to infections, fragility, loss of muscle mass, dental disease, and arthritis. Individuals may well have partial or total loss of sight, hearing or smell, and be less able to thermoregulate, for example because of a thinning coat of fur.

Psychologically, ageing means some changes in mental abilities and personality. Think Grumpy old woman/man, and jokes of “Being an adult is just walking around wondering what you're forgetting.” Pets too will have mild changes in attention and memory (Kirova et al., 2015); likely to be less tolerant, still want to play / walk but not so fast or for so long. These are normal symptoms of ageing. Of course, there are pathological forms of psychological ageing in humans and non-human animals, such as cognitive dysfunction, Alzheimer’s/dementia, but these are not the subject of this paper.

It should be remembered that none of this is necessarily related to actual *age*. Biological and psychological symptoms associated with ‘old-age’ can happen at any time. The young and middle-aged can suffer from pain, exercise intolerance, sight and hearing loss, other medical problems and even cognitive decline and dysfunction as in early onset dementia (Ritchie & Lovestone, 2002). Indeed, many animals are born with inherited conditions that mean they develop ‘old-age’ biological symptoms when they really should be in their prime.

The biological and psychological aspects of ageing both influence and are influenced by the individual’s social environment. Behaviour changes such as decreased tolerance and increased aggressive responses will alter how others respond to the ageing individual. Likewise, the individual’s resource holding potential decreases as they becomes more frail, less mobile or suffer sensory loss. This affects not only one-to-one, dyadic, interactions, but can have a ripple effect across the social structure of the whole group (Jones-Baade & McBride, 1999; Hurd, 2006).

Where the group involves humans, as for all our pets, the social effects of ageing may have more serious implications for the individual. Being ‘old’ is considered by many to be an undesirable state in our present human society. Indeed, we tend to hide away our older citizens in ‘homes’ and do all we can to make ourselves appear younger and delay the inevitable senescence of our bodies; to the advertisers’ glee. For a not insignificant number of animals, similar negative perceptions can have distressing consequences. Consider the numbers of “senior” animals, especially dogs and cats, who spend the last part of their lives in re-homing centres, perhaps relinquished for a younger model, and, likewise, overlooked by potential adopters. Many will be euthanised simply because they are ‘too old’ to home (see e.g. Salaman et al., 1998; Scarlett et al., 2002). Of course, for the majority of older pets, consequences are less dramatic, but still negative. Owners may spend less time interacting with them, or less quality time (from the animal’s perspective) by excluding them from previous activities because owners consider they are ‘too old’. The effect on the animal may be to instil a state of low mood, basically depression, characterised by symptoms of anhedonia (losing interest in activities it previously found pleasurable), insomnia or hypersomnia, and gaining or losing weight (Moreau, 2002).

Yet, by understanding ageing and changing owner perceptions we can keep animals ‘young’, improve the human-animal relationship and thus the welfare of all. Consequently, we can and should think ahead. As with ourselves, we need to prepare for an ‘old age’ life stage, whenever it happens. It should be a life stage that is not only as physically comfortable as possible, but also psychologically enjoyable. A really important part of this is to not be locked into letting numbers dictate how we view our pets. Being a ‘senior’ is not being old, just a little more mature. Remember, medical and veterinary advances are prolonging lifespans. Society is starting to accommodate the effect of these advances in the way we think about ourselves. For human “seniors”, 60 is now the new 40 (or, in my case, 21 and a bigger bit). ☺ Let us ensure that we sensibly apply the same principle to the later life of our animals.

Preparations for later life start at the beginning of life. I will not dwell on breed conformation and other inherited conditions, directly or indirectly selected for that can lead to ‘early onset old-age’ symptoms. However, we do need to be ***absolutely clear*** that we have a choice (CAWC, 2006). Ethically we should be promoting breeding and conformations that do not clearly lead to ‘early onset old-age’, regardless of species. Think not just brachycephalia, but consider issues such as excess skin, sloping backs, dwarfism, and giganticism. Such welfare concerns affect billions of animals that we keep, be they dogs, cats, Pygmy goats, dwarf and lop rabbits, miniature ponies, Arab horses, and indeed the reptiles and fish that are highly selected for un-natural colorations or conformations. Examples include the Celestial-eyed goldfish whose abnormal development means the eyes move to the top of the head and the individual becomes progressively blind over the first few months of its life, or the Lionhead goldfish whose abnormality affects its breathing and vision (UFAW, n.d.). No doubt these are both stressful and life shortening conditions for a fish species that can live 15 years or more (and can be taught tricks). We should be advising current and potential owners to research before buying additional pets, for example by showing them the Genetic Welfare Problems of Companion Animals resource for prospective pet owners, from the Universities Federation for Animal Welfare (<https://www.ufaw.org.uk/genetic-welfare-problems-intro/genetic-welfare-problems-of-companion-animals-intro>).

We also need to strongly encourage owners to obtain pets directly from the breeder wherever possible and I include small mammals in this. To get the message across we need to explain why. Environmental stressors that occur either prenatal and/or during early development, including during adolescence, have life- long effects on neuro-biology and health (Mayer and Saper, 2000; Burstein and Doron, 2018). Even short term exposure to what we humans may perceive as ‘mild’ adverse stressors has effects on adult health in rats in terms of stress responses and eating disorders (e.g. Kalinchev et al, 2002). How much more may be the effects of being transported to a pet shop, or in the case of many dogs and exotics, to a different country!

Further preparations relate to ensuring our pets are kept fit physically and psychologically. This of course means appropriate nutrition and exercise. The latter for dogs is frequently limited by behaviour issues. These may relate to lack of appropriate socialisation, exposure to different environments and training. All must be continued to adulthood, until approximately 18 – 24 months of age if the dog is truly going to be well socialised, trained and a confident, relaxed individual. Simply attending puppy classes is not going to be sufficient.

Many dogs are restricted to on-lead exercise for reasons that are avoidable. Ever more frequently dogs are exercised on extending leads which themselves can cause chronic or acute physical damage. Watch how dogs walk on these leads - leaning and pulling to one side, how they are frequently jerked or reeled in by owners rather than spoken to when changing direction or wanting the dog to come back to their side, or how dogs leap around on these leads when interacting with another dog… the latter being risky to both dogs, a quick trip up and it could be a torn cruciate.

Many dogs are not let off lead simply because their owners have not been taught the basics of a reliable recall and obedience. Namely, how to form a good relationship that is based on one-to-one interaction, i.e. beyond the use of food! Disturbingly, I frequently hear owners saying their dog is too young to be let off lead, when it is 5, 6, 7 months old. Regrettably, not only is the dog not learning about recall, neither is it learning how to interact with other dogs nor how to be confident - by having opportunities when on a walk of exploring the world (Dienstbier, 1989; Grippo et al, 2014). All of this can have serious repercussions later. Apart from the physical issues relating to lack of exercise, and the tensions from pulling on leads, many of these dogs will be more anxious and less resilient and able to cope with any future changes in their world, such as new family members or moving home, or going to the veterinary surgery. Likewise, lack of environmental enrichment and novelty in the cages of small mammals will also lead to frustration, boredom, lowered confidence, increased anxiety and depression (Grippo et al, 2014, McBride, 2017; 2017a). Anxiety has negative long term consequences for physical health and thus later life stages (Dienstbier, 1989; Mayer & Saper, 2000; McBride, 2017).

Thus, we should be directing dog (and equid) owners to good trainers who will teach them and their pet life skills using methods that instil confidence and obedience in the animal. This means trainers need to have a clear understanding of human-animal interactions and learning, of positive reinforcement training and thus of how to use methods that are least invasive and minimally aversive (McBride and Montgomery, 2018), as is the ethical stance of those listed by the UK Animal Behaviour and Training Council (www.abtcouncil.org.uk). This includes getting puppies off lead for exercise, and teaching loose lead walking from the get-go and teaching owners how to play with and how to teach their animals new behaviours (tricks), so they can continue to do so throughout their pet’s life.

This is important not just for dogs, but for all species, be that horse, parrot, cat or tortoise or goldfish, all of which can be taught using the principles of clicker training (see R2 Fish School). Life-long learning and mental activity is the best preventative medicine against old age; regardless of one’s physical health state. Old animals can learn new ‘tricks’ and doing so engages animal and owner. While most books are written for dogs (e.g. Arrowsmith, 2010), most ‘brain games’ can be taught to other species as the training principles are the same. Tricks may be ‘formal’, such as recall or walk nicely, or non-formal. ‘Tricks’ are simply behaviours taught to a cue and from the animal’s perspective ‘sit’ on cue is as much a trick as raising a paw on the word ‘shake hands’! My last dog was learning new tricks up to the end, at aged 16, and my current 13 year old hopefully will have time to learn several more. Certainly he is keen to! Of course, these tricks must be animal-ability appropriate. For example learning to identify a new object, or give 3 barks (or hoof taps ☺) on one signal and two barks to another as opposed to teaching him to beg by sitting up on back legs; that would be like asking me to take up Freerunning or Parkour…not at this stage of my life!

However, mental activity is not all about ‘school’ and ‘tricks’. Play is an essential part of it. To quote George Bernard Shaw “We don’t stop playing because we grow old; we grow old because we stop playing.” You may have heard owners who get a young dog say how it has ‘rejuvenated’ their older dog. Why? Probably because the new dog never considered the original resident as old… but just as another dog who may like to play! Ask the owners, and you will probably find that they stopped playing with their dog months, if not years ago. Many will not have bought it a new toy in ages! They also probably do not give it much opportunity to play on its own. The games may change, but there should still be games, right to the end of life.

Though walks or rides and play sessions may not be as long, they should still be enjoyable and interesting. As an aside that also means reminding owners of dogs with old-age symptoms to walk more slowly… and not drag it along behind them on a lead, or have the poor soul puffing and panting as it tries to keep up, with no time to investigate an interesting smell or to say hello to passers-by.

What about the dog that had a job? The retired assistance dog, the one who did tracking, retrieving or agility, or the horse that used to jump? Though I have never sent my dogs over A-frames (my concerns for damage to front legs), my 13 year old mongrel still does agility ‘moves’ at home, with weaving poles more widely spaced, and jumps smaller. What about games of retrieve? So your dog does not like to fetch the balls or dummy he always had. It may be these are now too hard on his teeth, or too heavy. So how about a different object? Or it may be owners are still using a ball thrower, and the dog simply is not motivated to move that far, or has reduced sight and cannot see where the ball has gone. So abandon the plastic thrower but not the game. Throw the ball not so far, or even roll it. These simple principles of adapting mental activities are applicable to all animals.

Tracking (scent work) can be a lifelong activity for dogs and owners. It is something that all breeds, crossbreeds, designer breeds, and mongrels can do. It has lots of additional advantages of teaching dogs concentration, and is a useful remedial tool for those that are anxious. I personally would like to see all owners learning how to encourage their dogs to use their noses in a controlled way (i.e. not scavenging). For animals with ‘old-age’ symptoms this is a perfect mental exercise with associated age-appropriate physical exercise, the dog will move at its own pace. If there is a reduction of scenting ability, just lay a stronger track or if free-tracking use a smellier object to find. One simple activity is free-tracking. My own dog free-tracks almost every day. On walks I may hide a toy which I ask him to find, or I hide myself and he has to come back from his sniffing wanderings to find me. At home and in the garden he is sent to search either for a hidden toy or part of his normal daily diet or for a treat, such a single small cocktail sausage (these are a good source of scent) that I have scattered and hidden. Cut the cocktail sausage in quarters lengthways and each quarter into 4 = 16 treats per sausage – suitable size for even large breeds. These are mind-occupying and time-wasting games.

Another is using puzzle toys, be they commercial or simply cardboard boxes containing small bits of daily food, or a treat, or sometimes a favourite toy which dog and owner can then play with together. The task of getting to the goodies inside can be made harder by having cardboard boxes in boxes, just like in Pass the Parcel that children play. Boxes are incredibly easy to come by: boxes the owner’s or dog’s own medication has been packaged in, cereal packets, egg boxes, the box the latest online purchase arrived in or a crumpled up cardboard tube from a toilet or kitchen roll. These are great too for rodents, rabbits, parrots and cats. Additionally, for owners there is not only the pleasure of watching your pet have fun, but also the mental stimulation of finding and picking up all the bits of torn cardboard, a different mindfulness exercise!

We have a responsibility for our animals for the whole of their lives, regardless whether we keep them as pets, working animals, livestock, in the laboratory or zoo (Ziegler, 2019). They are totally dependent on us to provide for their welfare, and to give them a life worth living. Having a life worth living depends on the animal experiencing positive emotions, e.g. pleasure, confidence, interest and a sense of control over its environment with opportunities to explore, solve problems and gain sufficient physical and mental rest (Mellor, 2016). Living well is for life, and not just for the young and middle-aged. I hope this article will motivate you to work with owners of all species to help their animals live a life worth living for as long as they live.

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