**Table 1.** Infrastructure and study details for the 13 river barriers used to assess the validity of two commonly used rapid barrier assessment protocols (SNIFFER and ICE). Barrier IDs have been maintained from the source literature for ease of reference. Passage Efficiency (PE) method indicates if the score is based on barrier permeability (BP) or proportion passed (PP). Size of *S. trutta* and *T. thymallus* refer to fork length, and “body length” for all other species. A complex barrier type indicates that the structure consists of more than one barrier type. Latitude and longitude positions use the WGS84 coordinate system.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Barrier ID** | **River** | **Location (Lat, Long)** | **Barrier type** | **Length (m)** | **Width (m)** | **Height (m)** | **PE method** | **Species** | **Size** | **PE score (0.0 – 1.0)** | **Source** |
| S1 | Deerness | 54.773304,  -1.649746 | Complex | 17.1 | 4.0 | 1.42 | BP,  PP,  BP. | *S. trutta*  *S. trutta*  *C. gobio* | Mean (range): 117 (50-338) mm  Mean (range): 419 (268-754) mm  Mean (range): 73 (52-111) mm | 0.44  0.87  0.14 | Tummers et al., 2016a |
| S2 | Deerness | 54.779182, -1.669066 | Nature-like | 36.0 | 2.0 | 1.11 | BP,  PP,  PP,  BP. | *S. trutta*  *S. trutta*  *S. trutta*  *C. gobio* | Mean (range): 117 (50-338) mm  Mean (range): 175 (125-273) mm  Mean (range): 419 (268-754) mm  Mean (range): 73 (52-111) mm | 0.58  0.70  0.81  0.32 | Tummers et al., 2016a |
| S7 | Deerness | 54.756441, -1.758721 | Culvert | 11.0 | 5.4 | 0.34 | BP,  BP. | *S. trutta*  *C. gobio* | Mean (range): 117 (50-338) mm  Mean (range): 73 (52-111) mm | 0.11  0.00 | Tummers et al., 2016a |
| S8 | Deerness | 54.782337, -1.735478 | Complex | 43.9 | 1.7 | 0.86 | BP,  PP,  BP. | *S. trutta*  *S. trutta*  *C. gobio* | Mean (range): 117 (50-338) mm  Mean (range): 145 (120-219) mm  Mean (range): 73 (52-111) mm | 0.46  0.83  0.22 | Tummers et al., 2016a |
| Buttercrambe Weir | Derwent | 54.018900, -0.885352 | Sloped weir | 6.1 | 20.0 | 1.31 | PP,  PP. | *L. fluviatilis*  *L. fluviatilis* | Mean  SD: 389  19 mm  Mean  SD: 370  21 mm | 0.14  0.09 | Tummers et al, 2016b  Tummers et al, 2018 |
| River Rye Flat V Weir | Rye | 54.203869, -0.936644 | Sloped weir | 4.8 | 12.0 | 1.20 | PP. | *T. thymallus* | Mean (range): 310 (265-421) mm | 0.00 | Lucas and Bubb, 2005. |
| Kirby Mills Flat V Weir | Dove | 54.260586, -0.919864 | Sloped weir | 4.0 | 6.0 | 0.45 | PP,  PP. | *T. thymallus*  *S. trutta* | Mean (range): *ca.* 240 (180-310) mm  Mean (range): *ca.* 260 (150-320) mm | 0.36  0.84 | Lucas and Bubb, 2005. |
| Costa Beck Crump Weir | Costa Beck | 54.242252, -0.813816 | Sloped weir | 2.0 | 5.0 | 0.18 | PP. | *T. thymallus* | Mean (range): *ca.* 250 (174-330) mm | 0.96 | Lucas and Bubb, 2005. |
| Culvert 1 | Swanside Beck | 53.913286, -2.302943 | Culvert | 20.0 | 0.5 | 0.80 | PP. | *S. trutta* | Mean (range): 152 (80–294) mm | 0.98 | Forty et al., 2016. |
| Culvert 2 | Swanside Beck | 53.889151, -2.588886 | Culvert | 63.5 | 2.2 | 3.32 | PP. | *S. trutta* | Mean (range): 128 (74-206) mm | 0.37 | Ribble Rivers Trust, 2015. |
| Pool-Weir 1 | Swanside Beck | 53.910189, -2.267072 | Complex | 8.4 | 6.2 | 1.16 | PP. | *S. trutta* | Mean (range): 131 (80-208) mm | 0.76 | Forty et al., 2016. |
| Rock Ramp | Chipping Brook | 53.884514,  -2.574003 | Rock Ramp | 4.6 | 6.8 | 0.55 | PP. | *S. trutta* | Mean (range): *ca.* 145 (102-326 mm) | 0.71 | Forty et al., 2016. |
| Pool-Weir 2 | Chipping Brook | 53.884514, -2.574003 | Complex | 7.2 | 9.6 | 0.84 | PP. | *S. trutta* | Mean (range): 145 (102-326 mm) | 0.79 | Forty et al., 2016. |