MAMMAL COMMUNICATIONS Volume 7 ISSN 2056-872X (online)

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ABSTRACT

Harbour seals (*Phoca vitulina vitulina*) are found around the coast of Scotland (including the Hebridean and Northern Islands), Northern Ireland and parts of England but only occasionally at sites in Wales and SW England (SW Britain). One site in SW Britain is the Dart estuary in Devon, where sightings have been recorded since 2006. This paper documents the birth of two harbour seal pups in 2019 and two in 2020 on the Dart estuary with all surviving to weaning. The local assembly of adult harbour seals consisted of two males and two females in both years. These are thought to be the first records of this kind in the region.

INTRODUCTION

Harbour seals have a circumpolar distribution south to temperate seas where they live mainly in saltwater but also, occasionally, in freshwater (Bonner 1989). Their populations are stable or declining in all sectors of the UK coast except SE England, where they are increasing (SCOS, 2019; Thompson *et al.* 2019; Crawley *et al.* 2020). Populations in the Wadden Sea and at the southern reach of their range in the NE Atlantic on the N France coast are increasing (Vincent 2017). The increase is thought to be due to recruitment, increasing pup production and total protection from hunting (Vincent 2017).

During the 20th Century, harbour seals were largely absent from the Channel coast of England, with no pup production identified. In the early 21st Century, their numbers along SE England coasts began to increase (SCOS 2019). However, the only known harbour seal assembly where pup production occurs on the English south coast is at Chichester harbour. In 1993 a harbour seal pup was 'rescued' from the harbour at East Head and three harbour seals were observed here in 1994 (Hampshire and Isle of Wight Wildlife Trust 2011). By 2017 there were at least 49 with 11 pups. An unknown number of harbour seals are found in Poole Harbour, where breeding is not known to occur (Dorset Wildlife Trust 2020). A small number of rehabilitated harbour seals have been tagged and released at this site by the RSPCA/Dorset Wildlife Trust.

Since 2000, harbour seal sightings have been recorded annually but intermittently at island sites in N Wales (Westcott 2002; Westcott & Stringell 2004) and they have been observed annually on or near the estuary of the Dart since 2006, with never more than two individuals being seen (Westcott 2006, 2018). On these occasions harbour seals were resting ashore amicably with grey seals. However, no records of harbour seals breeding at Welsh or SW England (Cornwall, Isles of Scilly, Devon and Lundy) sites are held by the Sea Mammal Research Unit or the Joint Nature Conservancy Council. As harbour seals occur on adjacent coasts to those of SW Britain (Isle of Man, Ireland and France) as well as the coasts of Scotland and E England, the reasons for their relative absence from SW Britain coasts remain to be identified. It will be important to understand whether the observations reported here mark changes in the fortunes of harbour seals in SW Britain.

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Key words: harbour seal, pup production, SW Britain

Full citation: Westcott. S. (2021) harbour seal, pup production, SW Britain. Mammal Communications 7: 6-10

METHODS

Between May and September 2019 daily pleasure boat cruises operated on the Dart between Dartmouth and Totnes. These served as platforms from which seal observations were made at distances of 30 m – 75 m and seal-identification photographs taken (using a Nikon D7000 DSLR camera with an AF NIKKOR 70-210 mm lens). Harbour seals were identified by reference to the alignment of their nostrils, head-shape, pelage markings and their vocalisations (Anderson 1989).

The date, time, location, sex, age (of the pups), whether hauled out or in the water, tidal height, weather conditions and disturbance were recorded (Grellier et al. 1996). The sex of individuals was determined by reference to their underparts and, subsequently, by photo-ID (Cordes & Thompson 2015). Age of pups was known in one case and estimated in the others from dates when first and last seen with their mothers. All pups had black pelages. When pups were weaned, their dorsal pelage was black, but the ventral surface was whitish (see Figure 1).

Between May and October 2020, boat platforms were unavailable due to the Covid-19 pandemic. Permission was granted by Blackness Marina to make observations from their land at a distance of less than 40 m from the seals. Blackness Marina lies adjacent to the 2019 nursery locality.

Figure 1. Weaned harbour seal pup (#4) by Blackness Pontoon, 21/08/2020

OBSERVATIONS

(a) 2019

On 29 days between May and September, 116 observations were made, totalling 812 minutes (3 – 16 minutes per observation). Two pups (#1 and #2) were seen, always within five metres of their mothers. Neither birth was observed but since mother/pup sightings were invariably within 50 m of Blackness Rock it is likely that both births occurred close to this location. The minimum number of harbour seals observed in the vicinity of Blackness Rock in 2019 was six: two females, two males and two pups (#1 and #2). The following documents the main observations:

10/07: 08;50: First sighting of very young harbour seal pup (#1) with mother at entrance to Dittisham Mill Creek.

10/07: 15:50: Harbour seal pup (#1) in shallows, just below mother on Blackness Rock.

31/07: 14:05: Harbour seal pup (#2) and mother swimming by Blackness Pontoon.

16/08: 10:50: Harbour seal mother and pup (#2) on Blackness Rock (Figure 2).

16/08: 16:30: Same female hauled out in same place, pup (#2) two metres away in water. On the floating pontoon c 25 m distant from Blackness Rock, one male, one female and a harbour seal pup (#1) believed to be weaned were hauled out (Figure 3).

10/09: 14:45: One male, two females and one weaned pup (#2) hauled out on Blackness Rock.

Figure 2. Harbour seal mother (above) and pup (#2), 16/08/2019.

Figure 3. Male, weaned pup (#1) and female harbour seal resting on Blackness Pontoon, 16/08/2019.

(b) 2020:

Between June and October, 16 observations totalling 80 hours were made on 16 days from Blackness Marina foreshore. The minimum number of harbour seals observed in 2020 was six: two males, two females and two pups (#3 and #4). Key observations were:

14/07: 13:45: Harbour seal mother and pup (#3) swimming close together in entrance to Dittisham Mill Creek. The birth of this pup was not observed so might have occurred elsewhere. 17/07: During the afternoon, the same harbour seal that produced the first pup in 2019 gave birth to a pup (#4) on Blackness Marina slipway. The birth was not observed by the author but by marina workers who had to sluice the afterbirth from the slipway afterwards.

20/07: 11:25: Mother photographed swimming with her pup (#4) about 50 m off Blackness Rock. After comparing this image with that taken in 2019, her identity was confirmed as the mother of pup (#1) in 2019. At this time, mother and pup never remained more than three metres apart over a period of two hours. Eight times the mother gave her pup a piggy-back ride, at the surface but also when diving. 04/08: The same mother and pup (#4) were present throughout the day. The mother-pup bond remained close but appeared less intense than previously, with the pup not taking piggy-back rides. Their time was spent overwhelmingly in the water. On three occasions, the mother hauled out for periods of five to eight minutes, but the pup continued to play in the water, not more than five metres from the mother. For three periods, totalling 53 minutes, while mother and pup were ashore together, the Blackness Rock haul-out site was shared with a mature female grey seal and with a mature male and female harbour seal. One suckling bout was observed, lasting six minutes.

DISCUSSION

Harbour seals are known to occur occasionally in SW Britain (Westcott 2002; Westcott & Stringell 2004) but this paper documents what are thought to be the first known births of harbour seal pups in the region. If the births imply the foundation of a breeding colony, it coincides with increasing harbour seal use of the Channel coasts of France and SE England. Satellite studies show harbour seal visits from French to English sites are not uncommon, indicating immigration might be important in the development of this very small colony. The site considered in this paper is subject to disturbance by boat traffic and it will be interesting to see whether the new colony develops. In addition, anecdotal accounts have been obtained of harbour seals at Galmpton Creek about two kilometres down-stream, which will be investigated in 2021. It is recommended that monitoring for harbour seals and pup production at Blackness and other sites in SW Britain should continue on an annual basis.

ACKNOWLEDGEMENTS

Thanks to Dart Pleasure Craft and to Blackness Marina for the provision of viewing platforms. Thanks to Dr Tom Stringell and Prof John Gurnell for reviewing this paper and helping it become more coherent.

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