



# Direct evidence for grey seal (*Halichoerus grypus*) predation and scavenging on harbour porpoises (*Phocoena phocoena*)

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Documenting predator-prey interactions and understanding the mechanisms and drivers of prey selection are important to predicting the potential effects of environmental changes on marine mammals. Here, we provide three direct evidences of grey seal predation and scavenging on harbor porpoises in the Strait of Dover (eastern English Channel, France) that occurred between February and April 2013. We also describe possible predation based on external body observations made on two harbour porpoises freshly stranded in January and March 2012 on the northern French coast. Our observations provide the first direct observations of a grey seal preying upon a harbour porpoise (and consequently upon a marine mammal) and evidence that grey seals had killed a least two dead-stranded porpoises. Seals likely appear to target young individuals that are not nutritionally stressed, as suggested by at least two of our observations as well as data from the two stranded porpoises. They also seem preferentially consume the skin and blubber of porpoises and were not observed consuming muscle. These observations add to growing evidence from Belgium and the Dutch coast that grey seals are feeding on harbour porpoises in the southern North Sea and nearby waters. Although only recently recognized, interactions between grey seals and harbour porpoises in the southern North Sea and eastern English Channel warrant further investigation to determine the frequency of interactions, the importance of porpoises to seals as food, whether seal predation is a result of an individual specialization in the foraging behaviour of grey seals.