

**A NOTE ON NICHE OVERLAP IN TEUTHOPHAGOUS WHALES
IN THE NORTHERN NORTHEAST ATLANTIC**

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ABSTRACT: Sperm whale (*Physeter macrocephalus*), Northern bottlenose whale (*Hyperoodon ampullatus*) and Cuvier's beaked whale (*Ziphius cavirostris*) are oceanic cetaceans occurring in the northern Northeast Atlantic and feeding mainly on deep-water cephalopods. The present paper uses previously published stomach contents data from strandings to examine niche overlap and niche breadth and test the hypothesis that northern bottlenose whale and Cuvier's beaked whale, both being considerably smaller than sperm whales, would take smaller squid.

Samples consisted of stomach contents of 24 sperm whales, 6 northern bottlenose whales and 4 Cuvier's beaked whales stranded in various parts of the North Sea and elsewhere in the northern Northeast Atlantic. The oceanic squid *Gonatus* sp. (probably *G. fabricii*) was the main prey of both sperm and northern bottlenose whale, whereas *Gonatus* sp. and another oceanic squid *Teuthowenia megalops* were the most frequent prey of Cuvier's beaked whale. Stomach contents of sperm whales and northern bottlenose whales overlap almost completely in the North Sea and the diets of northern bottlenose and Cuvier's whales overlap considerably elsewhere in the northern Northeast Atlantic. The latter species has a slightly broader diet.

Comparing the sizes of *Gonatus* eaten, sperm whales had eaten almost exclusively large, probably mature, squid (with some evidence that larger individual whales took larger squid). The stomachs of bottlenose whales contained mainly smaller, including post-juvenile, squid. Cuvier's beaked whale took the widest range of sizes of *Gonatus*, including all size classes taken by the other two whale species.
