

Dolar, M.L.L., Walker, W.A., Kooyman, G.L., Perrin, W.F. 2003. Comparative feeding ecology of spinner dolphins (*Stenella longirostris*) and Fraser's dolphins (*Lagenodelphis hosei*) in the Sulu Sea. *Marine Mammal Science* 19(1):1-19.

**Abstract:**

Fraser's and spinner dolphins are known to feed on mesopelagic prey, but their diets and feeding ecologies have not been compared in areas where they are observed together. In this study we examined the stomach contents of both species caught incidentally in a driftnet fishery for tuna in the eastern Sulu Sea. Importance of prey items was determined using the percent occurrence, percent number, and volumetric methods. Mesopelagic fishes, particularly myctophids (mainly *Ceratoscopelus warmingi*, *Diaphus* spp. and *Myctophum asperum*), were the most important component in the diet of spinner dolphins, whereas in Fraser's dolphins, mesopelagic cephalopods (*Abraliopsis*, *Onychoteuthis*, *Histioteuthis*, and *Chiroteuthis*), and crustaceans (*Notostomos elegans*, *Acanthephyra quadrispinosa*, and *Acanthephyra carinata*) appeared to be equally important as the myctophid species. Fraser's dolphins appeared to feed preferentially on larger prey and had more diversified prey (Shannon's diversity index = 1.2) than spinner dolphins (diversity index = 0.9). Vertical distributions of the prey items summarized from published literature indicate that spinner dolphins forage in the upper 200 m and probably occasionally to as deep as 400 m, whereas Fraser's dolphins have a wider vertical foraging range, from near the surface to probably as deep as 600 m.