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FORAGING ECOLOGY

The foraging strategies of individual seals evolve through life as a series of trade-offs between maximising energy gain and reproductive output, and minimising risk. They vary depending on the availability of prey, which changes temporally and spatially, and the age, experience and body condition of the individual seal. Fish, cephalopods, crustaceans, seabirds and occasionally other seals can contribute to the diet of otariid seals. The prey generally exhibit patchy distributions with concentrations around oceanographic or benthic (bottom) features, such as current boundaries, upwelling zones, seamounts and reefs. Seals forage in different zones within the ocean (Figure 6.1). Fur seals tend to be pelagic (open water) foragers that target mobile prey that occur in large, patchily distributed schools. In contrast, sea lions tend to be benthic foragers that target both benthic prey, whose availability changes over time through settlement, growth or temporary emergence from a cryptic habitat, and demersal (at or near the bottom) prey that school in association with the sea floor. Benthic and demersal prey also will have a patchy distribution. While pelagic foragers often source prey

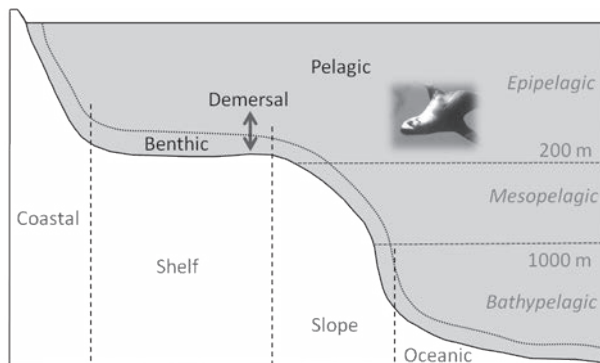


Figure 6.1. Stylised zonation of the ocean indicating benthic (associated with the bottom), demersal (migrate on and off the bottom) and pelagic (open water) foraging habitats utilised by seals.