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Alimentary niche partitioning in the Galapagos sea lion, Zalophus wollebaeki

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Sea lions are generally considered opportunistic feeders. However, studies from different areas suggest their diet consists mostly of four to five types of prey. Previous studies in Galapagos sea lions have identified at least three feeding strategies for this species, suggesting diversification of their diet. Diet diversification is favored in organisms with relatively high trophic position and subject to high intra-specific and low inter-specific competition. Zalophus wollebaeki meet these criteria as the only pinniped on San Cristobal Island, where three sea lion rookeries are located within 11 km: a distance considerably shorter than their 41 km foraging range. To measure the degree of diet diversification, we used scats and stable isotope analyses. A total of 270 scat samples from lactating females and 142 fur samples from sea lion pups were collected during the breeding season 2006. The scat análisis identified distinct diets among rookeries, with minimal trophic overlap (Ck = 0.19), a trophic level TL = 4.5 (secondary–tertiary carnivore), and trophic breadth of a specialist predator (Bi = 0.37). The mean

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