

Temporal and spatial variation in the feeding habits of the Southern sea lion, *Otaria flavescens* on the coasts of Rio Negro province, Argentina.



Pinnipeds are top predators in several marine ecosystems, and therefore have a potential influence on the food webs and population dynamics. Consequently, the study of their feeding habits constitutes an important tool to interpret their ecological role in marine ecosystems. The South American sea lion, *Otaria*

flavescens, is distributed from southern Brazil to southern Argentina (southwestern Atlantic Ocean) and along the Chilean and Peruvian coasts (southeastern Pacific Ocean). The population inhabiting the Argentine coast dramatically declined between the 1930s and 1950s due to commercial hunting, but is currently increasing at a rate of nearly 6% per year. However, they didn't achieve their original levels. Knowledge of the diet and trophodynamics of these colonies is essential to apply adequate measures for management and conservation of the species. Our aims were to analyze its diet and establish whether or not there existed geographical and seasonal differences in their feeding habits.

Otaria flavescens consumes a wide variety of prey items with only a few species predominating in the diet. Fish species were the most frequent prey throughout the sampling period. Significant changes in their diet composition were observed through time. These we attributed in part to the period of the life cycle of the species, spring coincides with the pre-reproductive period and is the time when individuals should store as much energy as possible to meet the cost of the reproductive phase, during which they fast.

The grant awarded by The Society of Marine Mammalogy was used to carry out field work at the rookeries of Río Negro province. This information was essential to develop my PhD thesis and results obtained were used for a publication and research meetings.

I wish to express my acknowledgment to The Society of Marine Mammalogy for their support which was really important to carry out this project.