

Project Update: October 2010

We deployed time-depth recorders (TDR) on 10 lactating sea lions and 14 lactating fur seals (Mk9 model, Wildlife Computers Inc, Redmond, WA, USA and Sensus Ultra, ReefNet Inc., Mississauga, Ontario, Canada) to obtain data on their diving behaviour.

The diving data indicated that the diving behaviour of lactating sea lions is benthic, which was also supported by diet studies. The diving records of lactating fur seal indicated that they are benthic and epi-pelagic divers. Lactating sea lion females foraged during any time of the day and fur seals had a diel pattern. Fur seal dived for longer periods and deeper during the night than during the day. Lactating fur seals dived deeper than sea lion. Sea lion dived to the benthic zone at depths ranging from 17 m to a maximum of 78 m and fur seal dived to the benthos and pelagic zone to depth ranging 84-187 m. However, sea lions dived for longer periods of time (mean 1.9 ± 0.7 min.) and spent more time at the bottom (mean 1.1 ± 0.6 min.) than fur seals (mean 0.7 ± 0.7 min; 0.3 ± 0.4 min, respectively). The preliminary analysis of the dive data may suggest that lactating fur seals may have different dive behaviour than sea lions and that their foraging strategy may allow them explore different habitat. The dive analysis will continue to further our description and comparison between the foraging strategies of sea lions and fur seals.

During February 2011, whisker samples will be processed in Pinniped Ecology Laboratory CICIMAR-IPN (Mexico), to determine the seasonal use of feeding resources according to sex in both, South American fur seals and South American sea lions.