

Project Update: July 2010

Individual sea lion females were equipped, to obtain diving behaviour data, with SPOT5 satellite platform terminal transmitters (PTT) (Wildlife Computers, Redmond, WA, USA), rechargeable Fastloc data-loggers (Sirtrack, Havelock North, New Zealand) and time-depth recorders (TDR) (Mk9 model, 65x18x18 mm, Wildlife Computers Inc, Redmond, WA, USA) and to locate the sea lions for instrument recovery when hauling out, we deployed VHF radio transmitters (MM170B model, 20x65 mm, 28 g, Advanced Telemetry Systems, Inc. Isanti, MN, USA). The diving behaviour of lactating sea lions was described as typically benthonic, which was supported by diet studies. Lactating sea lion females foraged during any time of the day, and dived to the benthic zone at depths ranging from 17 m to a maximum of 78 m. They made short duration diving (mean 1.9 ± 0.7 min) and spent a high percentage of the diving time near bottom (mean 1.1 ± 0.6 min.). We found no correlation between maternal body mass, foraging efficiency and diving parameters. Foraging trips lasted, on average, 1.3 ± 0.9 days and were done from near off the rookeries to a maximum of 135.5km away, all of them confined to the Uruguayan shallow continental shelf. Two patterns of dispersal direction were observed in sea lion females; those that travelled in one direction pattern and those travelling in an arc pattern. We also equipped 14 South American fur seal females and will analyse their data during next months. During September 2010, 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.

