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Abstract title:	SATELLITE TRACKING OF WILD MEDITERRANEAN MONK SEALS: A NON INVASIVE INNOVATIVE TOOL
Abstract:	<p>The available knowledge about movements and feeding grounds of Mediterranean monk seals, one of the most endangered mammals of the world, is very scarce. The absence of telemetry studies is limiting the elaboration of conservation measures based in the knowledge of the spatial specie's ecology. The difficultness for this kind of studies is due to the scarcity of the species, its high sensitivity towards disturbances, and their use of marine caves. Here we describe the development of a new satellite tracking methodology of monk seals without the need of capturing, restraining and sedating the animals, and therefore notably minimizing the impact. Field observations allowed us to identify that at the beginning of some dives, rear flippers of the seals would surface for a very brief period of time. This fact allowed us to design a special bracelet which houses a fast-acquisition GPS (Fastloc®), which is able to obtain locations in second's fraction, and to deploy it on the ankle of the rear flipper of an adult male while sleeping. The device was able to obtain locations in 97.78% of the days, with a mean of 6.29 and 4.62 locations per day, during two different periods of 41 and 49 days. The deployment in the bracelet of a Time Depth Recorder during the second period allowed us to evaluate the effectiveness of the gps during different diving behaviours of the animal, being effective in all of them. Field observations showed no changes in the diving or swimming behaviour of the animal with the bracelet deployed. Also, after the removal of the bracelet, no injuries were observed on the ankle of the seal. Therefore, we consider this new methodology as an effective and non invasive tool to determinate critical habitats of the species, which are essential for the design of protection measures.</p>