

International workshop. Cetacean echolocation and outer space neutrinos:
ethology and physics for an interdisciplinary approach to underwater
bioacoustics and astrophysical particles detection



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ARION - Systems for Coastal Dolphin Conservation in the Ligurian Sea

Monday, 21 October 2013 11:30 (30 minutes)

ARION "Systems for Coastal Dolphin Conservation in the Ligurian Sea" - LIFE09 NAT/IT/000190.

The bottlenose dolphin (*Tursiops truncatus*) is a Mediterranean cetacean listed as "vulnerable" in IUCN Red List. It is estimated that 200-300 individuals live in the project area. As a coastal species, bottle nose dolphins are the most threatened by habitat degradation and loss. The main threats come from coastal urbanisation, port construction, boat traffic, shipping, pollution by industrial and agriculture activities, overfishing and over-exploitation. The Ligurian Sea and the Portofino coastal area are subject to intensive boat traffic, especially during the summer season, which significantly increases underwater noise pollution. This kind of impact represents a serious threat for cetaceans as they communicate and orient by underwater sonar-waves. Moreover, human interaction with bottlenose dolphins has to be regulated during the summer season when newborns and calves are present with adult individuals.

The main objective of the project is the improvement of the conservation status of the bottlenose dolphin in the MPA of Portofino. To this end, an acoustic monitoring system has been designed to detect and track the species. A network of hydrophones, communicating with an on-shore computer centre, has been installed at the boundaries of the Portofino MPA to identify and follow dolphins in real time. Human activities and underwater noise are being recorded as well.

A description of the system as well as the summary of the first three months of activity will be presented.

Presenter: TAIUTI, Mauro Gino (GE)

Session Classification: Advanced marine research for conservation