

# 6° CONVEGNO NAZIONALE SUI CETACEI E SULLE TARTARUGHE MARINE

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## ABSTRACT

**Comunicazione** Yes

Contributo originale Yes

Titolo > **A survey of anti-bottlenose dolphin control at marine fish farm**

Autori > Bruno Díaz López & Julia Andrea Bernal Shiray

Istituzione > *Bottlenose Dolphin Research Institute - BDRI, V. A. Díaz N°4 Golfo Aranci 07020 Sassari Italy [Tel: 00 39 346 0815414, e-mail: [bruno\\_onda@yahoo.com](mailto:bruno_onda@yahoo.com)]*

Predatory and scavenging animals are present at most cage fish farms. Although there are great differences between farms in different parts of the world, marine farms tend to have more problems and attract a greater range of predator species than land-based and fresh-water farms. In this paper we report the results of our research on the interaction between bottlenose dolphins (*Tursiops truncatus*) with a fish farm on the Sardinian coast from 2004 to 2005.

Fish farm based observations were regularly undertaken throughout the research period. The manager of a fish farm was asked to list the anti-bottlenose dolphin (antipredator) controls that they used on the fish farm, information about the damages caused by dolphins and how often each type of antipredator control was used at his site.

A total of 117 sightings of bottlenose dolphins interacting with one fish farm were carried out in 97 days at sea, and 1 year of questionnaires.

To curb predation, fish farm deploys control methods that exclude, harass or remove the predators. Predator netting creates a physical barrier to exclude attack by airborne and underwater predators.

Dolphins were observed year round, but there was a seasonal variation in frequency of sightings (seasonal cycles). Group sizes ranged from 1 to 9 dolphins.

Bottlenose dolphin attacks on farmed fish represent a problem to the industry in terms of financial loss. Double walls of netting are the most often used deterrent, but present problems of fouling and reduced water circulation.

Even though these data are from only one bottlenose dolphin study site, it is appropriate to extrapolate to other areas. The significance of bottlenose dolphins in Sardinia should not be dismissed, because they have the potential to do most damage to marine fish farms.