

RISSO'S DOLPHIN HARASSMENT BY PLEASURE BOATERS OFF THE ISLAND OF ISCHIA, CENTRAL MEDITERRANEAN SEA

Miragliuolo, A., (1) Mussi, B. (2) and Bearzi, G. (3)

(1,2) StudioMare, via D'Abundo 82, 80075 Forio d'Ischia (Napoli), Italy,
(3) Tethys Research Institute, Viale G.B. Gadio 2, 20121 Milano, Italy

Abstract:

An example of the impact of pleasure boating on cetaceans - in this case Risso's dolphins (*Grampus griseus*) - is presented to highlight the disruptive potential of unregulated human-dolphin interactions in the Mediterranean Sea. The observation took place near the Cuma submarine canyon off the island of Ischia, Italy. In this area, a school of about 20 Risso's dolphins appeared to be seasonally "resident" and was regularly resighted nearshore, based on photo-identification data collected between 1998-2000. On 27 August 2000, a Risso's dolphin group including 16 adults and 3 calves was first sighted travelling above the 300m depth contour, 0.7 miles from the Ischia coast. This group quickly became the target of an ever-increasing number of pleasure boats, and was eventually "penned" into a large coastal enclosure where about 400 boats were randomly anchored. Between 13:00-15:20 the dolphins were surrounded by up to 100 boats with their engines turned on, on a sea bottom that was only 3m deep. Harassment behaviour by pleasure boaters included heading towards the animals at high speed every time they surfaced, sudden changes of route, and continuous attempts to approach the animals at close quarters to take photographs or "interact" with them. All group members showed clear signs of distress and seemed to be unable to orientate. High-speed erratic swimming, collisions with each other, spinning and swimming in circles with short interblow intervals were recorded. Through a 2h effort, members of StudioMare managed to create an area clear of pleasure boats, and the animals were eventually allowed to head offshore. The occurrence of this kind of dramatic human-dolphin interactions is becoming everyday routine in the busy summer months. Timely management measures are clearly needed in this key area, where productive submarine canyons seem to play a role in the nearshore abundance of cetaceans.

INTRODUCTION:

Since 1991, a long-term study on the cetacean fauna off the island of Ischia has been conducted by Studiomare. The geomorphology of the study area, including productive submarine canyons, seems to play a role in the nearshore abundance of cetaceans - possibly attracted by local prey availability. Risso's dolphin (*Grampus griseus*), striped dolphin, *Stenella coeruleoalba*, common dolphins, *Delphinus delphis*, and bottlenose dolphins, *Tursiops truncatus*, are seasonally present in these waters, used as a feeding and breeding ground (Mussi et al., 1998). The area is also used as a feeding ground by fin whales, *Balaenoptera physalus* (Mussi et al., 1999). Risso's dolphins appeared to be seasonally "resident" and was regularly resighted nearshore, based on photo-identification data collected between 1998-2000.

THE HARASSMENT EVENT:

An example of the impact of pleasure boating on cetaceans is presented to highlight the disruptive potential of unregulated human-dolphin interactions in the Mediterranean Sea. The observation took place near the Cuma submarine canyon.

On Sunday 27 August, at about 10:00, dolphins were sighted by pleasure fishermen 0,7 miles off the southern coast of Ischia. The Risso's dolphin group included 16 adults and 3 calves and was apparently travelling above the 300m-depth contour.

By 11:00 a number of pleasure boats had joined the travelling group of dolphins. The number of boats kept increasing (Fig. 1). At 12:00 the Harbour Master's office was alerted, and its officers contacted StudioMare members to prevent harm to the animals.

By means of the Harbour Master's inflatable we reached the group at about 13:00. By that time, the animals had moved to the northern side of the island, thus managing to cross and "survive" the heavy traffic of speedboats and hydrofoils that connects the port of Ischia with the nearby city of Naples.

StudioMare members found the Risso's dolphin group in Lacco Ameno, a large enclosure and popular beach where about 400 boats were randomly anchored. The dolphins were surrounded by over 100 other boats with their engine turned on (Fig. 2).

All these boats kept harassing the animals by heading towards them at high speed every time they surfaced (Fig. 3), with sudden changes of route and continuous attempts to approach the animals at close quarters apparently in order to take pictures or "interact" with them.

The animals were increasingly "penned" by the boats into the enclosure, and ended up on a sea bottom that was only 3m deep. By this time, all group members showed clear signs of distress and seemed to be unable to orientate. They swam erratically at high speed, with no directionality, often colliding with each other. One of the at least three calves observed in the group was seen spinning and swimming in circles, apart from the others.

"Breachings", "surfings", "tail slaps", "head stands" and "spy hops" were repeatedly performed by several adult individuals. Inter-blow intervals were relatively short (about 60sec). As StudioMare members tried to prevent a mass stranding by placing the inflatable boat between the animals and the beach, the group responded by splitting in two tight subgroups, one of which included the calves. None of the pleasure boaters appeared to realise what was really going on: they all seemed to be excited to see the animals at close quarters.

THE RESCUE:

Through a two-hour effort, StudioMare members finally managed to create an area clear of pleasure boats.

As soon as the "opening" was about 400m wide, the animals associated in a single tight group, and slowly started heading offshore. The group was "escorted" at distance while it moved in safer waters. At 16:00 the observations were stopped due to unfavourable sea conditions.

DISCUSSION:

The occurrence of this kind of dramatic human-dolphin interactions is becoming everyday routine in the busy summer months. On the day preceding the reported observation, a disoriented and distressed lone Risso's dolphin calf was found in the harbour of Mergellina (Naples). Moreover, the day after the reported observation we found a freshly dead striped dolphin calf with the skull wide-opened by a propeller strike. He was an 80cm long male.

Interestingly, national newspapers and television often provide quite a different picture to the wide public. Regarding the Risso's dolphin event, the news reported about dolphins enjoying a "summer party" in the coastal water of the island.

Timely management measures to protect and conserve cetaceans in this key area are clearly needed.

THANKS TO: Ischia Island Harbour Master

REFERENCES:

Mussi, B., Gabriele, R., Miragliuolo, A. e Battaglia, M., 1998. Cetacean sightings and interaction with fisheries in the Archipelago Pontino-Campano, South Tyrrhenian sea, 1991-1995. *European Research on Cetaceans* -12: 63-65

Mussi, B., Miragliuolo, A., Monzini, E., Diaz Lopez, B. and Battaglia, M., 1999. - Fin whale (*Balaenoptera physalus*) feeding ground in the coastal water of Ischia (archipelago Campano). *European Research on Cetacean* - 13: 330-335



Fig. 1 The number of pleasure boats that had joined the travelling group of dolphins kept increasing.



Fig. 2 The dolphins were surrounded by over 100 other boats with their engine turned on.



Fig. 3 All the boats were heading towards them at high speed every time they surfaced, with sudden changes of route and continuous attempts to approach the animals at close quarters apparently in order to take pictures or “interact” with them.