

First record of a Humpback Whale *Megaptera novaeangliae* (Borowski, 1781) in the Tyrrhenian Sea (Cetacea Balaenopteridae)

Nicola Maio^{1*}, Vincenzo Maione² & Riccardo Sgammato²

¹Dipartimento di Biologia, Complesso Universitario di Monte Sant'Angelo, Università degli Studi di Napoli Federico II, Edificio 7, via Cinthia 26, 80126 Napoli, Italy.

²Centro Sub Campi Flegrei, Via Miliscola 165, 80078, Pozzuoli, Frazione Lucrino, Napoli, Italy.

*Corresponding author: e-mail: nicomaio@unina.it

ABSTRACT

It is reported the sighting of a Humpback Whale *Megaptera novaeangliae* (Borowski, 1781) (Cetacea Balaenopteridae) in the Gulf of Pozzuoli, near the coast of Baia (Bacoli, Napoli, Campania, Southern Italy). This record represents the first in the Tyrrhenian Sea, the eighth in the Italian Seas and the twenty-fourth in the Mediterranean Sea.

KEY WORDS

Megaptera novaeangliae; Humpback Whale; sighting; Tyrrhenian Sea.

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INTRODUCTION

The Humpback Whale, *Megaptera novaeangliae* (Borowski, 1781) (Order Cetacea, Suborder Mysticeti, Family Balaenopteridae) is a cosmopolitan species widely distributed and far-ranging migrant, found in both hemispheres and in all the major ocean basins. During the winter, at the period of mating and calving grounds, all the populations migrate to tropical waters, usually near continental coastlines or island groups; during spring, summer and autumn they move to productive colder waters in temperate and high latitudes, where most of the feeding takes place. In the North Atlantic, during the summer the Humpback Whale ranges from the Gulf of Maine in the West and Ireland in the East, and in the North but not into the pack ice; the northern extent of the Humpback's range includes the Barents Sea, Greenland Sea and Davis Strait (but not the Canadian Arctic), where they occur

mainly in specific feeding areas. During the winter, the majority of whales migrate to wintering grounds in the West Indies, and an apparently small number use breeding areas around the Cape Verde Islands.

In the Mediterranean Sea, the Humpback Whale is not regularly present; in fact it is considered as an irregular or occasional “visitor species”, according to the Reports of Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS), entering the region from the Strait of Gibraltar (Reeves & Notarbartolo di Sciara, 2006; Notarbartolo di Sciara & Birkun, 2010; Cagnolaro et al., 2015). Since 1990 the number of observations has increased and the range of sighting locations has expanded so as to include both basins of the Mediterranean Sea (Frantzis et al., 2004).

Humpback Whale, *Megaptera novaeangliae*, is well known for his long pectoral fins, which can be up to 4.6 meters in length. The dorsal fin is

variable in size and shape, from small triangular knob to larger sickle-shaped, placed nearly two-thirds along back. Head and body are black or grey, white on throat and belly. The adult can measure up to 17 m.

sighting occurred from the Aragonese Castle of Baia (District of Bacoli Municipality, Province of Naples) at about 70 m of height. The camera equipment consisted of a Digital single-lens reflex camera Canon EOS 650D with 75-300mmEF-S lens mounted.

MATERIAL AND METHODS

We take into consideration the sighting of one individual photographed in the Bay of Pozzuoli; the

RESULTS AND DISCUSSION

Here we report the sighting of a Humpback

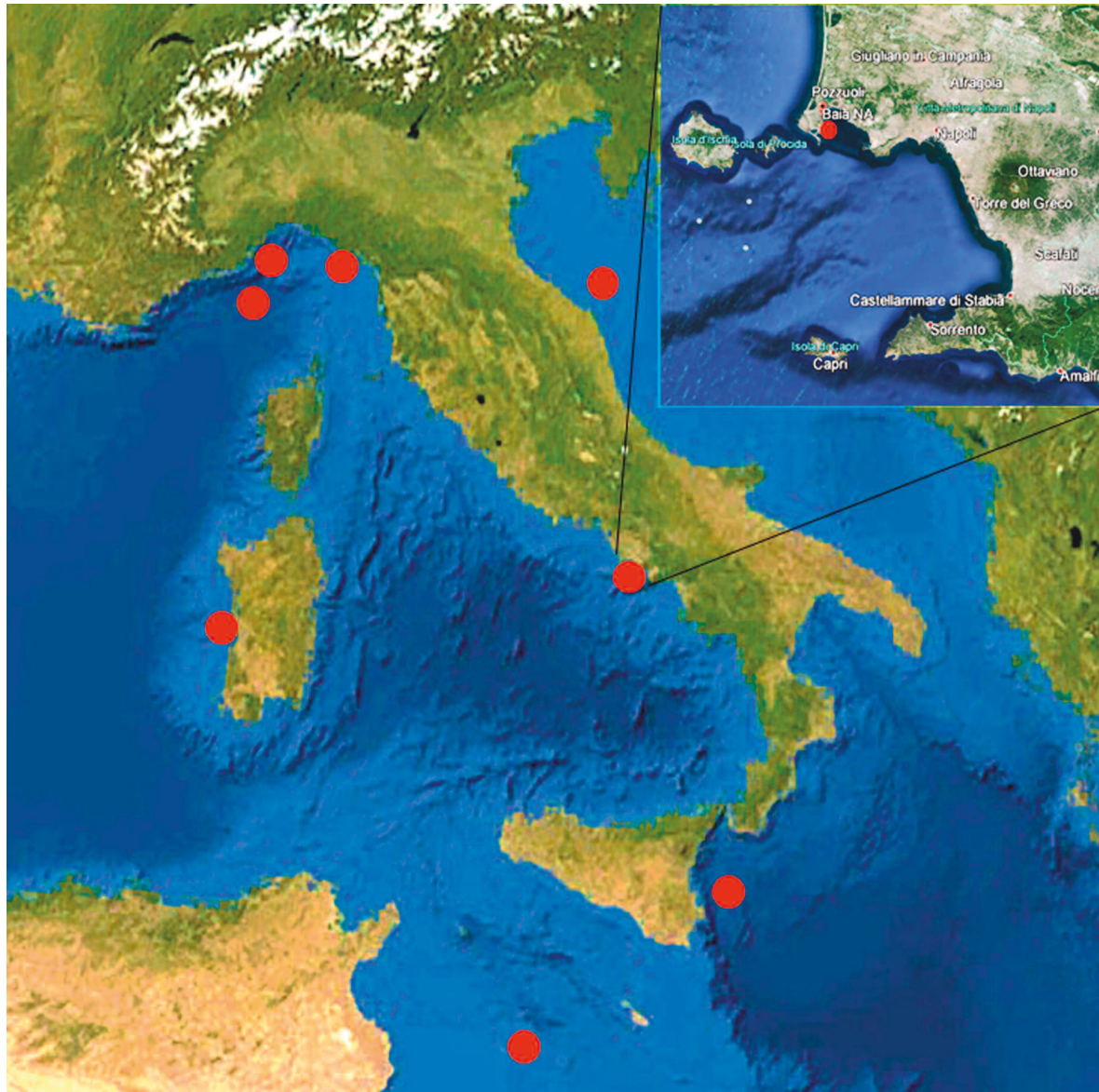


Figure 1. The locations of sightings of Humpback Whales, *Megaptera novaeangliae*, in the Italian Seas.



Figures 2–4. Humpback Whale, *Megaptera novaeangliae*, recorded near Baia, in the Bay of Pozzuoli, apparently in good conditions (Photos by R. Sgammato).

DATE	LOCATION	EVENT	ANIMALS, SIZE	SOURCE AND NOTES
1998, 24 January	Gulf of Oristano (Sardinia) Sardinian Sea	Sighting	1 (7-9 m)	(Frantzis et al., 2004)
2002, 4 August	Senigallia (Province of Ancona, Marche) Adriatic Sea	Sighting	1	(Affronte et al., 2003)
2004, 2 April	Syracuse (Sicily) Ionian Sea	Accidentally by-caught and released	1 (about 10 m)	Centro Studi Cetacei, 2006
2010, 26-28 August	Eastern Ligurian Sea: Versilia (Prov. of Lucca, Tuscany) Sestri Levante (Prov. of Genoa, Liguria)	Repeated sightings of one individual	1 (about 10-13m)	(Cagnolaro et al., 2015)
2011, 24 March	Near Savona (Liguria) Ligurian Sea	Sighting		(Cagnolaro et al., 2015)
2013, 12 March	Lampedusa Island (Sicily) Sicily Channel	Sighting of one individual already observed in French Ligurian Sea	1 (8–9 m)	(Panigada et al., 2014)
2013, August	Ligurian Sea	Sighting of the same individual of Lampedusa	1 (8–9 m)	(Panigada et al., 2014)
2015, 10 December	Baia, Bay of Pozzuoli (Province of Naples, Campania) Tyrrhenian Sea	Sighting	1	Present work

Table 1. Reports concerning specimens of Humpback Whale, *Megaptera novaeangliae*, recorded in the Italian seas.

Whale, *Megaptera novaeangliae*, in the Bay of Pozzuoli near Baia, a District of Bacoli Municipality (Province of Naples, Campania Region) occurred on 10 December 2015. The animal has been observed near the coast at a depth of about six meters, it was approximately 8–9 meters long (probably a juvenile) and with the uppersides of both pectoral fins of white color, apparently in good conditions (Figs. 2–4). This is the first documented record of a Humpback Whale in the Tyrrhenian Sea, and the first sighting for Campania Region (Maio & Quercia, 2006; Maio et al., 2012). Our finding suggests that the Tyrrhenian waters offer suitable habitats also for this species.

Since 1885, 24 records (16 sightings of which four with two individuals, three strandings and 5 by-caught individuals) have been reported from dif-

ferent locations across the Mediterranean basin. All individuals, ranging between 7 and 12 meters, were estimated to be 2–3 years old juveniles (Panigada et al., 2014).

The first occurrence in the Mediterranean Sea was a juvenile caught in 1885 off 15 km West of Toulon (France) (Pouchet, 1885; Beauregard, 1885; Van Beneden, 1889; Aguilar, 1989). Occurrences of Humpback Whales, *Megaptera novaeangliae*, are extremely rare in the Italian Seas being known only six sightings and one captures of single specimens. Date, location and size are given in Table 1. The first occurrence was of a 7–9 m long individual reported in the Gulf of Oristano (Sardinia), in January 1998 (Frantzis et al., 2004).

The last sighting was an individual approximately 8–9 meters long, observed in three different

locations: the first time it was observed in the French Liguria Sea, NW Mediterranean, in June 2012; then, the same animal was re-sighted off Lampedusa Island, Sicily Channel, in March 2013 over 1,000 km away in a straight line from the previous location and again in August 2013, in the “Italian” Ligurian Sea (Panigada et al., 2014). No specimens from Mediterranean Sea are preserved in Italian museums (Cagnolaro et al., 2014).

The Humpback Whale, *Megaptera novaeangliae*, is a species listed in the Appendix I of CITES, and it is considered an “Endangered or threatened species” in the Annex II of the Barcelona Convention for Protection against Pollution in the Mediterranean Sea. It is also included in the Appendix II of the Bern Convention on the Conservation of European Wildlife and Natural Habitats, considered as “Strictly protected fauna species”, and is a “species in need of strict protection” in European Union by the Annex IV of the Council Directive 92/43/EEC of May 21st 1992 on the conservation of natural habitats and of wild fauna and flora, known as “Habitats Directive”. Furthermore the species is classified as “Least Concern” on the IUCN Red List of Threatened Species (vers. 2015.4) (Reilly et al., 2008).

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