

## CETACEAN STRANDINGS IN THE PROVINCE OF BRINDISI (ITALY, SOUTHERN ADRIATIC SEA)

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### ABSTRACT

Relatively little is known about the cetacean fauna inhabiting the southern Adriatic Sea. Cetacean strandings are therefore an important source of information to gain insight on the species inhabiting these waters. Between January 2002 and May 2008, a total of 46 cetacean stranding events were recorded in the Province of Brindisi, on the south-eastern coast of Apulia, Italy, over approximately 100 km of coastline. Strandings always concerned single individuals and included 2 Cuvier's beaked whale *Ziphius cavirostris*, 16 common bottlenose dolphins *Tursiops truncatus*, 9 striped dolphins *Stenella coeruleoalba*, 4 small *Delphinidae* (most likely *S. coeruleoalba*), 11 small *Delphinidae*, and 4 unknown cetacean species. This dataset complements information recorded by the Italian Centre for Cetacean Studies since 1986, confirming that common bottlenose dolphins and striped dolphins are the cetacean species predominantly found stranded in the Province of Brindisi. The two findings of Cuvier's beaked whale are new records for this sector of the Apulian coast. The first animal was found on February 22<sup>nd</sup>, 2003, with its rear part possibly cut off by a ship's propeller. The second stranded on July 6<sup>th</sup>, 2003. Absence of confirmed records of short-beaked common dolphins *Delphinus delphis* corroborates the presumption that the species is now rare or absent in this part of the Mediterranean Sea.

**Key words:** cetaceans, strandings, southern Adriatic Sea, Brindisi, Italy

## SPIAGGIAMENTI DI CETACEI NELLA PROVINCIA DI BRINDISI (ITALIA, MARE ADRIATICO MERIDIONALE)

### SINTESI

La fauna cetologica dell'Adriatico meridionale è relativamente poco conosciuta. Pertanto, gli spiaggiamenti di cetacei costituiscono un'importante fonte di informazioni per conoscere meglio le specie che vivono in queste acque. Nella Provincia di Brindisi, sulla costa sud-orientale della Puglia (Italia) abbiamo registrato un totale di 46 spiaggiamenti di cetacei da gennaio 2002 a maggio 2008, su un tratto di costa di circa 100 km. Gli spiaggiamenti, sempre relativi a singoli individui, comprendono 2 zifii *Ziphius cavirostris*, 16 tursiopi *Tursiops truncatus*, 9 stenelle striate *Stenella coeruleoalba*, 4 piccoli *Delphinidae* (probabilmente *S. coeruleoalba*), 11 piccoli *Delphinidae*, e 4 cetacei di specie ignota. Questo dataset integra le informazioni registrate dal Centro Studi Cetacei a partire dal 1986, confermando che il tursiopo e la stenella striata sono le principali specie che spiaggiano nella Provincia di Brindisi. I due ritrovamenti di zifio costituiscono nuove segnalazioni per questo settore della costa pugliese. Il primo individuo è stato ritrovato il 22 febbraio 2003 con la parte posteriore del corpo mancante e forse amputata dall'elica di una nave. Il secondo individuo è stato esaminato il 6 luglio 2003. L'assenza di ritrovamenti di delfino comune *Delphinus delphis* conferma che in questa parte del Mediterraneo la specie è oggi rara o del tutto assente.

**Parole chiave:** cetacei, spiaggiamenti, mare Adriatico meridionale, Brindisi, Italia

## INTRODUCTION

Relatively little is known about the cetacean fauna inhabiting the southern Adriatic Sea. Research at sea in this area has been scant and mostly limited to short-term or opportunistic sighting campaigns. Cetacean strandings are therefore an important source of information to gain insight on the species inhabiting these waters and the threats that may be affecting them.

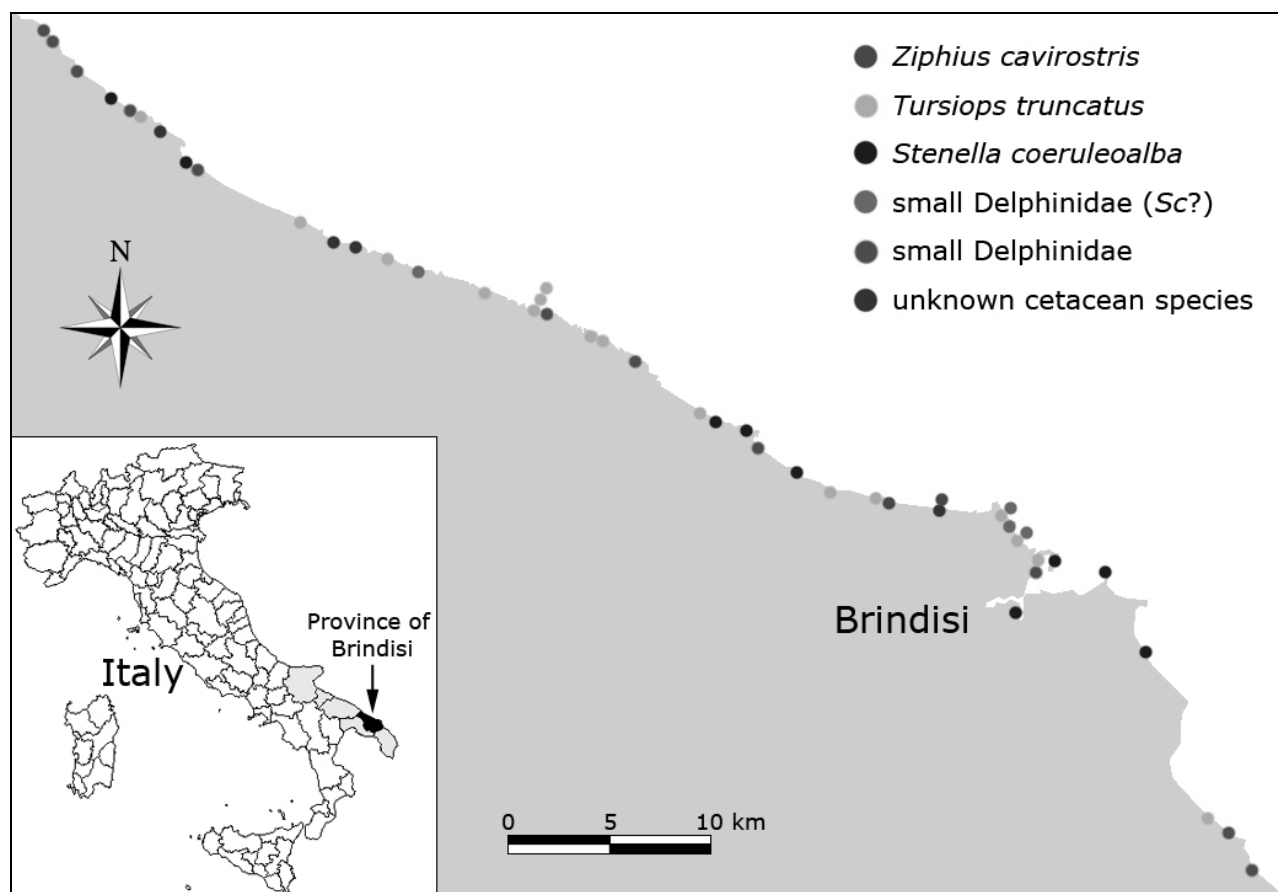
In the Province of Brindisi, south-east Italy, an important dataset was collected and published by the Italian Centre for Cetacean Studies (Centro Studi Cetacei 1987-2004; Podestà & Bortolotto, 2001; Centro Studi Cetacei Onlus & Museo Civico di Storia Naturale di Milano, 2004, 2006a, 2006b), documenting a total of 77 cetacean strandings recorded between February 1987 and July 1995. After 1995, a single event was reported, involving an unknown cetacean species stranded in June 2003.

Since January 2002, cetacean stranding events in the Province of Brindisi have been recorded systematically

based on an independent private initiative by the first author, a biologist engaged in the protection and recovery of wild fauna. Collaboration with cetacean experts from the Tethys Research Institute, initiated in 2007, contributed to bringing to light a remarkable dataset of 46 cetacean strandings, presented here prior to inclusion in the Italian Stranding Data Bank, an online database created in 2007 and managed by the Interdisciplinary Centre for Bioacoustics and Environmental Research, University of Pavia, and by the Milan National History Museum.

## MATERIAL AND METHODS

The study area is located in the southern Adriatic Sea, on the south-eastern coast of Apulia, Italy. Monitoring effort uniformly covered the whole Province of Brindisi, between Torre Egnazia and Lendinuso, totalling approximately 100 km of coastline (Fig. 1). This area includes both rocky and sandy shores. It is a highly patrolled portion of the Italian coast where strandings of



**Fig. 1:** Study area with the location of 46 cetacean strandings recorded between January 2002 and May 2008. The location of the Province of Brindisi relative to Italy is shown in the inset.

**Sl. 1:** Preučevano območje s 46 lokacijami, na katerih so med januarjem 2002 in majem 2008 nasedle različne vrste kitov. V okviru levo spodaj je prikazana lega province Brindisi na celotnem zemljevidu Italije.

cetaceans and other marine megafauna can hardly go unnoticed, regardless of the season. Year-round coverage of the study area was granted by an information network established by the first author, including local authorities, veterinarian officers, private citizens and a number of other collaborators (see Acknowledgements) who have been providing timely reports over the years. In addition to cetacean strandings, information collected between January 2002 and May 2008 in the context of this study included 214 records of stranded sea turtles (212 loggerhead *Caretta caretta* and two green turtles *Chelonia mydas*).

Information collected was carefully scrutinized to eliminate reporting biases. Species identification was based on photographic documentation and other clear-cut evidence. Uncertainty in species identification resulted in cautionary rather than unwarranted attributions. However, identification only took into account species known to occur in the Mediterranean Sea (Notarbartolo di Sciara & Demma, 1997; Reeves & Notarbartolo di Sciara, 2006).

Uncertainty involved primarily small dolphins of 2 m total length (TL) or less, in advanced decomposition, having a rostrum and about 35-50 teeth in each jaw. These could be either striped dolphins *Stenella coeruleoalba* or short-beaked common dolphins *Delphinus delphis*. As the latter species was never found stranded in the Province of Brindisi and has declined dramatically in central Mediterranean waters (see Discussion), uncertain species with the attributes mentioned above were classified as 'small Delphinidae (most likely *S. coeruleoalba*)'. If information about key identification features was absent, dolphin-like carcasses were classified as 'small Delphinidae'. Body length was not considered as a reliable feature to discriminate between the two categories above, considering that a small carcass could also be of a young common bottlenose dolphin *Tursiops truncatus* specimen.

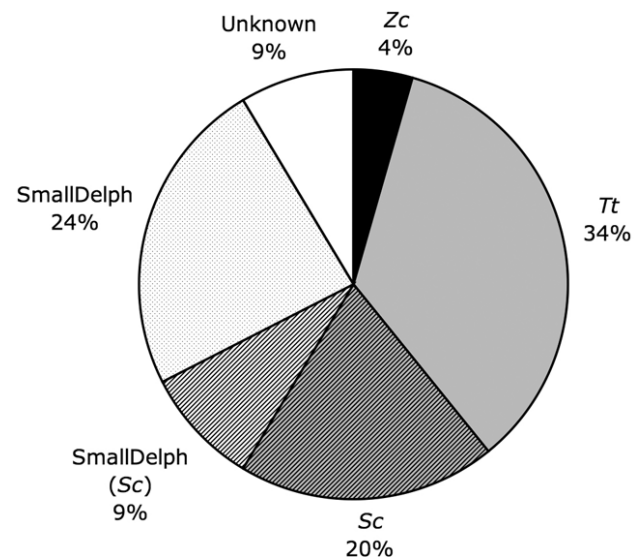
## RESULTS

Between January 2002 and May 2008, a total of 46 cetacean stranding events were recorded. Of these, 36 carcasses were inspected by the first author, 8 by veterinarian officers of the Brindisi Local Sanitary Unit (ASL BR01) deputed to carcass disposal, and two by private citizens. Information on 10 animals not directly inspected by the first author was obtained based on interviews conducted immediately after the inspection. In these cases, species identification could never be confirmed. Photos useful for identification purposes were available for 30 of the 46 records. In a few cases, species identification was confirmed through osteological inspection, particularly of the palatal bones that allow discrimination between striped and short-beaked common dolphins (Notarbartolo di Sciara & Demma, 1997).

Strandings were always of single individuals and included 2 Cuvier's beaked whale *Ziphius cavirostris*, 16 common bottlenose dolphins, 9 striped dolphins, 4 small Delphinidae (most likely *S. coeruleoalba*), 11 small Delphinidae, and 4 unknown cetacean species (Tab. 1). The distribution of these strandings in the study area is shown in figure 1. Table 1 provides the precise location and other relevant information.

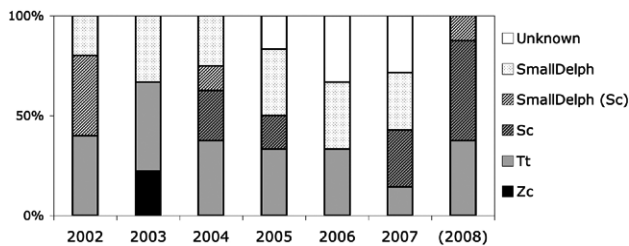
The relative distribution of cetacean strandings by species is shown in figure 2. Common bottlenose dolphins and striped dolphins were the most abundant records. These two species are also likely to be included in the 'small Delphinidae' component, although in unknown percentages. Figure 3 shows the annual distribution of cetacean strandings by species, while figures 4 and 5 their overall annual and monthly occurrence.

The two findings of Cuvier's beaked whale are new records for the Province of Brindisi. The first animal was found stranded near Giancola, Contrada Lupia, on February 22<sup>nd</sup>, 2003, with its rear part missing and possibly cut off by a ship's propeller (Fig. 6). The foresection was 2.05 m long. This animal was fresh and either a female or a young male based on teeth not protruding from the lower jaw (the genital area was in the missing part of the body and could not be inspected).



**Fig. 2: Relative distribution of cetacean strandings by species.** Zc = *Ziphius cavirostris*, Tt = *Tursiops truncatus*, Sc = *Stenella coeruleoalba*, **SmallDelph (Sc)** = **small Delphinidae (most likely *S. coeruleoalba*)**, **SmallDelph** = **small Delphinidae**.

**Sl. 2: Relativna razporeditev nasedlih kitov po posebnih vrstah.** Zc = *Ziphius cavirostris*, Tt = *Tursiops truncatus*, Sc = *Stenella coeruleoalba*, **SmallDelph (Sc)** = **male pliskavke Delphinidae (po vsej verjetnosti *S. coeruleoalba*)**, **SmallDelph** = **male pliskavke Delphinidae**.



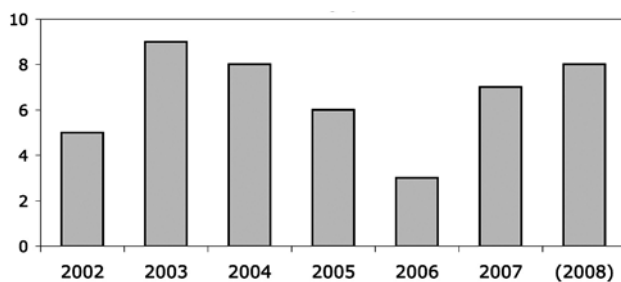
**Fig. 3:** Relative annual distribution of cetacean strandings by species. While years 2002–2007 refer to a 12-month annual coverage (January–December), the (2008) bar indicates the number of strandings recorded during 5 months (January–May).

**Sl. 3:** Relativna letna razporeditev kitov, nasedlih po posameznih vrstah. Medtem ko obdobje 2002–2007 zadeva 12-mesečno letno pokrovnost (januar–december), stolpič (2008) ponazarja število kitov, nasedlih v obdobju petih mesecev (januar–maj).

The second Cuvier's beaked whale was found near Acque Chiare on July 6<sup>th</sup>, 2003. This animal, found in relatively advanced decomposition, was 5.12 m long and a male based on teeth protruding from the lower jaw (Fig. 7).

## DISCUSSION

Cetacean strandings along the Italian coasts have been recorded by the Italian Centre for Cetacean Studies since 1986 (Centro Studi Cetacei 1987–2004; Podestà & Bortolotto, 2001; Centro Studi Cetacei Onlus & Museo Civico di Storia Naturale di Milano, 2004, 2006a, 2006b). The published dataset includes 77 stranding events recorded in the Province of Brindisi. A striped dolphin stranded in Costa Merlata on August 30<sup>th</sup>, 1991,



**Fig. 4:** Number of cetacean strandings by year. While years 2002–2007 refer to a 12-month annual coverage (January–December), the (2008) bar indicates the number of strandings recorded during 5 months (January–May).

**Sl. 4:** Število kitov, nasedlih po posameznih letih. Medtem ko obdobje 2002–2007 zadeva 12-mesečno letno pokrovnost (januar–december), stolpič (2008) ponazarja število kitov, nasedlih v obdobju petih mesecev (januar–maj).

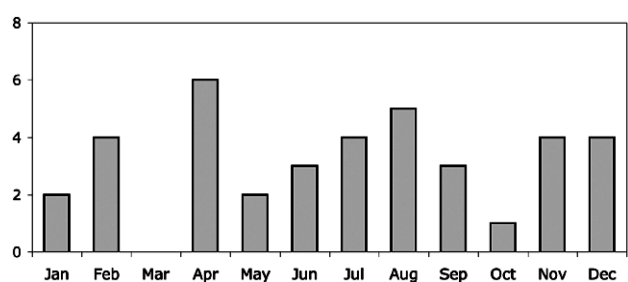
was attributed to the Province of Bari, but the location lies in the Province of Brindisi.

In 2007, this information was included and made available online in the Italian Stranding Data Bank (<http://www-1.unipv.it/cibra/spiaggiamenti.html>), together with data provided by other project partners. An additional record of a common bottlenose dolphin stranded in Torre Canne on November 11<sup>th</sup>, 1986, can be found in the Stranding Data Bank at the date of writing.

Most records in the dataset by the Italian Centre for Cetacean Studies (N=37) are striped dolphins found in 1991, when these animals stranded in large numbers along the coasts of Apulia and other parts of southern Italy, largely as a consequence of a die-off occurred between 1990 and 1992 over large portions of the Mediterranean region, from Spain to Turkey. The die-off predominantly affected striped dolphins and was caused by a morbillivirus infection of unknown origin (Bortolotto *et al.*, 1992; Aguilar & Raga, 1993; Aguilar, 2000).

Records by the Italian Centre for Cetacean Studies include one fin whale *Balaenoptera physalus* stranded in Carovigno in August 3<sup>rd</sup>, 1991, and two Risso's dolphins *Grampus griseus* (Torre San Gennaro, June 6<sup>th</sup>, 1987; Lendinuso, November 21<sup>st</sup>, 1994). All other animals are either common bottlenose dolphins or striped dolphins, with a few strandings of unknown species.

Cardellicchio *et al.* (2000) reported 31 striped dolphins, two common bottlenose dolphins and two Risso's dolphins stranded between 14 February and 30 June 1987 along the southern coasts of Apulia, including in the Province of Brindisi (based on the article's map). Similarly, Decataldo *et al.* (2004) reported 10 striped dolphins and three common bottlenose dolphins stranded between April 1991 and March 1999 in south-



**Fig. 5:** Number of cetacean strandings by month, 2002–2007. Strandings recorded between January and May 2008 are not included.

**Sl. 5:** Število kitov, nasedlih po posameznih mesecih v obdobju 2002–2007. Grafikon ne vključuje kitov, nasedlih med januarjem in majem 2008.



**Fig. 6:** Cuvier's beaked whale stranded near Giancola on February 22<sup>nd</sup>, 2003, possibly killed by a ship's propeller.  
**Sl. 6:** Cuvierjev kljunati kit, ki je 22. februarja 2003 nasedel v bližini Giancole; po vsej verjetnosti žrtev ladijskega vijaka.

eastern Apulia, including in the Province of Brindisi (based on the article's map). As the precise location is not given, these records may or may not be entirely included in the Italian Stranding Data Bank. Troncone *et al.* (1990) reported a total of 85 cetacean strandings occurring along the coasts of Apulia between 1987 and 1990. While most of these events are also included in the reports by the Italian Centre for Cetacean Studies (with minor discrepancies), two strandings in the Province of Brindisi were not published there: a common bottlenose dolphin of 2.16 m TL stranded in Torre Canne on November 11<sup>th</sup>, 1988, and another common bottlenose dolphin of 2.04 m TL stranded in Torre Guaceto on March 19<sup>th</sup>, 1990. In addition, there is a record of a common bottlenose dolphin of 2.16 m TL stranded in Torre Canne on June 26<sup>th</sup>, 1988, included in a report by the Region of Apulia (Anonymous, 1989). To our knowledge, since 1996 only one stranding in the Province of Brindisi has been published: an unknown cetacean of about 1.8 m TL stranded in Torchiarolo on June 12<sup>th</sup>, 2003 (Centro Studi Cetacei Onlus & Museo Civico di Storia Naturale di Milano, 2004).

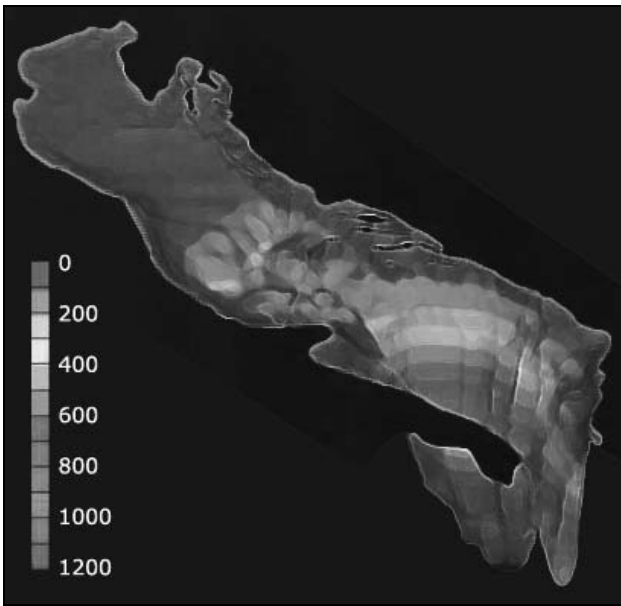
The dataset presented here (January 2002 – May 2008) is largely consistent with the published information and additional stranding records available online, and it confirms that common bottlenose dolphins and striped dolphins are the cetacean species predominantly found stranded in the Province of Brindisi. This is not unexpected based on the available information on cetaceans inhabiting the southern Adriatic Sea (e.g., Notarbartolo di Sciarra *et al.*, 1993; Bearzi *et al.*, 2004; Manoukian *et al.*, 2004). The steep continental slope near the coast and the deep waters of the southern portion of the Adriatic Sea (Fig. 8) are an ideal habitat for a pelagic species such as the striped dolphin (Notarbartolo di Sciarra & Demma, 1997; Aguilar, 2000). On the other hand,

common bottlenose dolphins may be either animals living on the narrow continental shelf and continental slope off south-eastern Apulia, or animals coming from farther away (including from the shallower central and northern Adriatic, south-eastern Adriatic coasts and western Greece, where habitat is suitable and the species reportedly is regular; Bearzi *et al.*, *in press*).

The two findings of Cuvier's beaked whale reported here are new records for the Province of Brindisi. However, they are not unexpected. Other strandings of this species along the eastern coast of Apulia (also see Holcer *et al.*, 2006) include: 1) Monopoli (Bari), June 6<sup>th</sup>, 1980, male, 5 m (Bello, 1990); 2) Bari, February 15<sup>th</sup>, 1982, 5.8 m (Podestà *et al.*, 2006); 3) Mola di Bari (Bari), May 22<sup>nd</sup>, 1986, female, 3.3 m (Centro Studi Cetacei, 1987); 4) Bisceglie (Bari), October 12<sup>th</sup>, 1992, female,



**Fig. 7:** Cuvier's beaked whale stranded near Acque Chiare on July 6<sup>th</sup>, 2003.  
**Sl. 7:** Cuvierjev kljunati kit, ki je 6. julija 2003 nasedel v bližini kraja Acque Chiare.



**Fig. 8:** 3-D topography of the Adriatic Sea showing the extension of continental shelf and pelagic waters. Modified from Dr. Christopher E. Naimie, Dartmouth College, Hanover, NH, USA (<http://thayer.dartmouth.edu/adriatic/bathymetry.html>).

**Sl. 8:** Tridimenzionalna topografija Jadranskega morja s podaljškom celinske police (šelfa) in pelagičnimi vodami. Prirejeno po Dr. Christopherju E. Naimieju, Dartmouth College, Hanover, NH, USA (<http://thayer.dartmouth.edu/adriatic/bathymetry.html>).

5.3 m (Centro Studi Cetacei, 1995); 5) Vernole (Lecce), March 26<sup>th</sup>, 2002; and 6) Morciano di Leuca (Lecce), April 12<sup>th</sup>, 2002. In addition to these, Storelli *et al.* (1999) report the stranding of a 5.3 m female Cuvier's beaked whale 'along the Apulian coast' between June and September 1996.

The additional two strandings reported in this study, and particularly that of a fresh mutilated animal (the other carcass was decomposed and may have been floating adrift for a long time before stranding), are consistent with the hypothesis that the southern Adriatic Sea is an important habitat for this species (Holcer *et al.*, 2006).

Only one sighting of short-beaked common dolphins in southern Adriatic waters has been reliably reported in the recent peer-reviewed literature (four animals sighted off south-eastern Apulia on September 3<sup>rd</sup>, 1990; Angelici & Marini, 1992). Common dolphins have declined considerably in central Mediterranean waters over the past decades and only a few relic groups may remain (Bearzi *et al.*, 2003, 2004, 2008). Absence of confirmed records of short-beaked common dolphins in the present study corroborates that the species is now rare or absent in this part of the Mediterranean Sea.

Evidence of human induced mortality as reported in Table 1 is likely underestimated, as such evidence could hardly be recorded in decomposed, mummified or in other ways incomplete specimens. Moreover, the carcasses in this study were not subject to specific inspection in order to detect evidence of bycatch in fishing gear (e.g., Kuiken, 1996).

**Tab. 1:** Cetaceans stranded in the Province of Brindisi between January 2002 and May 2008.

**Legend:** (\*) Body condition code based on Kuiken & Hartmann (1991); PPdA = Paola Pino d'Astore; V = veterinarian officer of Brindisi Local Sanitary Unit (ASL BR01); P = private citizen.

**Tab. 1:** Kiti, nasedli med januarjem 2002 in majem 2008 na obrežju province Brindisi.

**Legenda:** (\*) Oznaka telesnega stanja po Kuiken & Hartmann (1991); PPdA = Paola Pino d'Astore; V = veterinarski uslužbenec Lokalne sanitarne enote v provinci Brindisi (ASL BR01); P = zasebni državljan.

Date reported	Date inspected	Location	Lat. (N)	Long. (E)	Circumstances	Inspector	Species	Gender	Length (cm)	Body condition	Body condition code (*)	Notes
4.1.2002	4.1.2002	Lamaforca, Ostuni	40°46'03"	17°40'29"	Stranded (sand)	PPdA	Tt	Unknown	271 (measured)	Decomposed	Not recorded	
16.4.2002	16.4.2002	Contrada Betlemme, Brindisi	40°40'28"	17°56'47"	Stranded (sand)	PPdA	SmallDelph (Sc?)	Unknown	185 (measured)	Decomposed	Not recorded	
22.4.2002	22.4.2002	Contrada Betlemme, Brindisi	40°40'10"	17°56'50"	Stranded (rocks)	PPdA	SmallDelph (Sc?)	Unknown	185 (measured)	Decomposed	Not recorded	
26.4.2002	26.4.2002	Torre Guaceto, Carovigno	40°42'54"	17°48'02"	Stranded (rocks)	PPdA	SmallDelph	Unknown	<200 (estimated)	Decomposed	4	
13.11.2002	13.11.2002	Punta Penna Grossa, Carovigno	40°43'27"	17°46'02"	Stranded (sand)	PPdA	Tt	Unknown	290 (measured)	Decomposed	4	

Date reported	Date inspected	Location	Lat. (N)	Long. (E)	Circumstances	Inspector	Species	Gender	Length (cm)	Body condition	Body condition code (*)	Notes
22.2.2003	22.2.2003	Giancola, Brindisi	40°41'05"	17°52'37"	Stranded (sand)	PPdA	Zc	F?	205 (fore-section only, measured)	Decomposed	3	Rear part of the body missing and possibly cut off by a large ship's propeller.
25.6.2003	25.6.2003	Lendinuso, Torchiarolo	40°31'30"	18°04'52"	Stranded (sand)	P	SmallDelph	Unknown	Unknown	Decomposed	Not recorded	
28.6.2003	28.6.2003	Lamaforca, Ostuni	40°46'05"	17°40'29"	Stranded (rocks)	PPdA	Tt	M	300 (measured)	Fresh	2	Abandoned in situ. On June 30 <sup>th</sup> , 2003, re-stranded further south on a sandy beach near Specchiolla, Carovigno, 40 44 08 N 17 44 36 E. Re-inspected by PPdA.
6.7.2003	6.7.2003	Forcatella - Torre Canne, Fasano	40°51'16"	17°26'37"	Stranded (sand)	V	SmallDelph	Unknown	300 (measured)	Decomposed	5	
6.7.2003	6.7.2003	Acque Chiare, Brindisi	40°40'55"	17°54'11"	Stranded (sand)	PPdA	Zc	M	512 (measured)	Decomposed	4	
1.8.2003	1.8.2003	Sciaia a Mare, Brindisi	40°39'50"	17°57'27"	Stranded (rocks)	PPdA	Tt	Unknown	75 (measured)	Decomposed	4	
2.8.2003	2.8.2003	Specchiolla, San Vito dei Normanni	40°44'45"	17°43'48"	Stranded (sand)	P	SmallDelph	Unknown	Unknown	Decomposed	Not recorded	
11.11.2003	12.11.2003	Forcatella, Fasano	40°46'03"	17°40'29"	Stranded (sand)	PPdA	Tt	Unknown	170 (measured)	Fresh	2	
30.1.2004	30.1.2004	Contrada Betlemme, Brindisi	40°40'10"	17°56'50"	Stranded (sand)	PPdA	Tt	Unknown	256 (measured)	Decomposed	4	
8.2.2004	8.2.2004	Creta Rossa, Ostuni	40°47'09"	17°36'31"	Stranded (sand)	PPdA	SmallDelph (Sc?)	Unknown	200 (measured)	Decomposed	4	
12.2.2004	12.2.2004	Pan-tanagianni, Carovigno	40°45'17"	17°42'48"	Stranded (sand)	PPdA	Tt	Unknown	290 (measured)	Decomposed	4	
17.2.2004	18.2.2004	Apani, Brindisi	40°41'60"	17°49'04"	Stranded (sand)	PPdA	Sc	F	116 (measured)	Fresh	2	Necropsy by Prof. Nicola Zizzo, University of Bari.
12.4.2004	12.4.2004	Costa Merlata, Ostuni	40°46'31"	17°38'55"	Stranded (rocks)	PPdA	Tt	Unknown	318 (measured)	Fresh	2	
11.7.2004	11.7.2004	Porto di Villanova, Ostuni	40°47'33"	17°35'18"	Stranded (rocks)	PPdA	Tt	Unknown	272 (measured)	Decomposed	Not recorded	
15.8.2004	15.8.2004	Torre Canne, Fasano	40°49'58"	17°28'18"	Stranded (sand)	PPdA	Sc	M	153 (measured)	Fresh	2	Stranded alive. Necropsy by Prof. Nicola Zizzo, University of Bari.
23.8.2004	23.8.2004	Torre Egnazia, Fasano	40°53'16"	17°23'34"	Stranded (sand)	V	SmallDelph	Unknown	270 (estimated)	Fresh	Not recorded	Flukes reportedly cut off with a clear cut.
12.9.2004	12.9.2004	Torre Egnazia, Fasano	40°53'16"	17°23'34"	Stranded (sand)	V	SmallDelph	Unknown	300 (estimated)	Decomposed	Not recorded	
2.4.2005	2.4.2005	Savellettri, Fasano	40°51'32"	17°25'59"	Stranded (rocks)	PPdA	Sc	F	210 (measured)	Fresh	2	
5.8.2005	5.8.2005	Punta Penne, Brindisi	40°40'58"	17°56'08"	Stranded (sand)	PPdA	Tt	M	240 (measured)	Decomposed	4	
16.9.2005	16.9.2005	Torre Santa Sabina, Carovigno	40°46'04"	17°40'43"	Stranded (rocks)	PPdA	SmallDelph	Unknown	185 (measured)	Decomposed	Not recorded	
21.9.2005	21.9.2005	Torre Egnazia, Fasano	40°51'16"	17°26'37"	Stranded (sand)	PPdA	Tt	M	293 (measured)	Decomposed	4	
6.11.2005	6.11.2005	Mater Domini, Brindisi	40°39'38"	17°57'29"	Stranded (sand)	PPdA	SmallDelph	Unknown	170 (measured)	Decomposed	4	
30.12.2005	30.12.2005	Monticelli, Ostuni	40°47'45"	17°34'06"	Stranded (sand)	V	Unknown	Unknown	Unknown	Decomposed	Not recorded	
1.7.2006	1.7.2006	Acque Chiare, Brindisi	40°40'55"	17°54'12"	Stranded (sand)	V	Unknown	Unknown	110 (estimated)	Decomposed	Not recorded	

Date reported	Date inspected	Location	Lat. (N)	Long. (E)	Circumstances	Inspector	Species	Gender	Length (cm)	Body condition	Body condition code (*)	Notes
11.10.2006	11.10.2006	Giancola, Brindisi	40°41'12"	17°52'02"	Stranded (sand)	PPdA	Tt	Unknown	226 (measured)	Decomposed	4	
24.12.2006	24.12.2006	Torre Canne, Fasano	40°49'57"	17°28'21"	Stranded (sand)	V	SmallDelph	Unknown	200 (estimated)	Decomposed	Not recorded	
9.4.2007	9.4.2007	Campo di Mare, Torchiariolo	40°32'35"	18°04'02"	Stranded (rocks)	PPdA	SmallDelph	Unknown	200 (estimated)	Decomposed	5	
3.5.2007	3.5.2007	Porto interno Brindisi, Brindisi	40°38'07"	17°56'59"	Drifting in port	PPdA	Sc	M	206 (measured)	Fresh	2	In April 29 <sup>th</sup> , 2007, a dolphin was reported alive in the port of Brindisi. Possibly the same individual.
11.5.2007	11.5.2007	Pilone, Ostuni	40°48'23"	17°32'15"	Stranded (rocks)	PPdA	Tt	F	200 (measured)	Decomposed	4	
11.6.2007	12.6.2007	Forcatelle, Fasano	40°52'15"	17°24'48"	Stranded (sand)	PPdA	SmallDelph	Unknown	200 (measured)	Decomposed	4	
8.11.2007	8.11.2007	Rosa Marina, Ostuni	40°47'52"	17°33'36"	Stranded (sand)	V	Unknown	Unknown	70 (estimated)	Decomposed	Not recorded	
8.12.2007	8.12.2007	Isole Pedagne, Brindisi	40°39'18"	17°59'56"	Stranded (rocks)	PPdA	Sc	Unknown	114 (measured)	Fresh	2	Upper jaw broken.
29.12.2007	29.12.2007	Torre Canne, Fasano	40°50'48"	17°27'29"	Stranded (sand)	V	Unknown	Unknown	130 (estimated)	Decomposed	Not recorded	
4.1.2008	4.1.2008	Punta Penne, Brindisi	40°40'59"	17°56'06"	Stranded (rocks)	PPdA	SmallDelph (Sc?)	Unknown	196 (measured)	Decomposed	4	
13.1.2008	13.1.2008	Bocche di Puglia, Brindisi	40°39'44"	17°58'04"	Stranded (rocks)	PPdA	Sc	Unknown	Unknown	Decomposed	4	
16.1.2008	16.1.2008	Apani, Brindisi	40°41'24"	17°50'41"	Stranded (sand)	PPdA	Tt	F	204 (measured)	Decomposed	4	
18.2.2008	18.2.2008	Torre Guaceto, Carovigno	40°42'57"	17°47'33"	Stranded (sand)	PPdA	Sc	F	196 (measured)	Fresh	2	
20.2.2008	21.2.2008	Punta Penna Grossa, Carovigno	40°43'10"	17°46'38"	Stranded (sand)	PPdA	Sc	M	114 (measured)	Decomposed	2	Broken rostrum and severe head lesions.
4.3.2008	5.3.2008	Campo di Mare, San Pietro Vernotico	40°32'54"	18°03'20"	Stranded (sand)	PPdA	Tt	Unknown	167 (measured)	Decomposed	4	
14.4.2008	14.4.2008	Santa Sabina, Carovigno	40°45'28"	17°42'15"	Drifting near shore	PPdA	Tt	M	199 (measured)	Fresh	2	Four deep knife cuts in the chin.
12.5.2008	12.5.2008	Punta della Contessa, Brindisi	40°37'09"	18°01'14"	Stranded (sand)	PPdA	Sc	Unknown	205 (measured)	Decomposed	4	

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## PREGLED KITOV, NASEDLIH NA OBREŽJU PROVINCE BRINDISI (ITALIJA, JUŽNO JADRANSKO MORJE)

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### POVZETEK

O favni kitov, ki naseljujejo južno Jadransko morje, vemo razmeroma malo. Nasedli kiti so zatorej pomemben vir informacij, ki nam omogočajo vpogled v vrste kitov, ki naseljujejo te vode. Med januarjem 2002 in majem 2008 je bilo zabeleženih 46 primerov, ko so na kakih 100 km jugovzhodnega obrežja Apulije v italijanski provinci Brindisi nasedle različne vrste kitov. Vselej je nasedel po en sam osebek, seznam nasedlih živali pa je naslednji: 2 cuvierjeva kljunata kita *Ziphius cavirostris*, 16 velikih pliskavk *Tursiops truncatus*, 9 progastih delfinov *Stenella coeruleoalba*, 4 male pliskavke *Delphinidae* (po vsej verjetnosti *S. coeruleoalba*), 11 male pliskavke *Delphinidae* in 4 neznane vrste kitov. Ti podatki dopolnjujejo informacije, ki jih je od leta 1986 zbral italijanski center za študije kitov, in potrjujejo, da so velike pliskavke in progasti delfini tiste vrste, ki jih največkrat najdemo nasedle v provinci Brindisi. Dve najdbi cuvierjevega kljunatega kita sta novi za ta del apuljskega obrežja. Prvi, ki mu je zadnji del telesa bržkone odrezal ladijski vijak, je bil najden 22. februarja 2003, drugi pa je nasedel 6. julija 2003. Dejstvo, da nimamo potrjenih podatkov o navadni pliskavki *Delphinus delphis*, pa potrjujejo domnevo, da je ta vrsta danes redka ali pa je sploh ni v tem delu Sredozemskega morja.

**Ključne besede:** nasedli kiti, južno Jadransko morje, Brindisi, Italija

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