

Agenda Item 5.2: Post-mortem and stranding schemes

**Cetacean strandings along the French coasts in 2004
(English-language summary of AC13/Doc.39(P))**

Submitted by: France



NOTE:
**IN THE INTERESTS OF ECONOMY, DELEGATES ARE KINDLY REMINDED TO BRING
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Observatory of Natural Patrimony Action Plan for the Marine Mammals

Cetacean Stranding along the French coasts in 2004

Concise translation of the National Annual Report, made by Sami Hassani, Marine Mammals Research Laboratory, Oceanopolis Brest

This report analyses the distribution of the stranding of cetaceans along the French coasts in 2004. These data have been collected by the members of the national stranding network (RNE) managed by the CRMM. The spatial and temporal distributions are described and compared for the period 1990-2003.

For the cetaceans, the year 2004 is characterised by different phenomena of high mortality. On the one hand a new set of numerous stranding in winter along the Atlantic coast concerning the common dolphins for 70% of the 300 stranding observed during 3 months. On the other hand, a high number of harbour porpoises, 59 along the Channel coast and 55 for the Atlantic coast, the total representing an increase of 70% compared to 2003 and the highest level ever recorded. In most cases, the by catch is seriously suspected.

In 2004 597 cetaceans were stranded, 14 different species were recorded: 9 fin whales, 2 Minke whales, 228 common dolphins, 80 striped dolphins, 41 bottlenose dolphins, 18 pilot whales, 5 Risso's dolphins, 1 white beaked dolphin, 1 white sided dolphin, 2 killer whales, 114 harbour porpoises, 4 sperm whales, 2 Cuvier's whale, 1 North Sea beaked whale, 1 unidentified cetacean, 15 unidentified odontocetes, 71 unidentified delphinids, and 2 unidentified balaenopteridae.

1.1 General results

Along the coast of France, 597 cetaceans were recorded in 2004:

568 were found dead,

19 stranded alive

2 drifting dead whales (2 fin whales in Mediterranean sea, 1 by collision with high speed ferry)

8 confirmed by catch (5 harbour porpoises, 2 common dolphins and 1 bottlenose dolphin).

The table 2 gives the details of the encountered species, number of animals and the location by area (Channel and North Sea, Atlantic and Mediterranean Sea), for each area the Department is given by the corresponding number.

Stranding along the Channel and North Sea coasts represent 15% of the total animals stranded (88 carcasses), this percentage is similar to 2003. The Atlantic coast represent 74% of the stranding in 2004 (443 animals), the percentage was lower in 2003 (57%), the Mediterranean coast 11% (66 animals) against 28% in 2003.

19 animals were stranded alive, 7 species were concerned, common dolphins (n=5), striped dolphin (n=5), bottlenose dolphin (n=1), pilot whale (n=1), Risso's dolphin (n=1), harbour porpoise (n=2), unidentified delphinids (n=2), fin whale (n=2).

The table 3 gives the details of these alive strandings (date, location, species, sex, long, and becoming).

1.2 Results by shoreline

1.2.1 All coasts

The figure 1 indicates the total number of stranding per year, the number of stranded animals for 2004 is close to the average calculated for the period 1990-2003, nevertheless, there is significant fluctuations from year to another.

The figure 2 is the monthly distribution for 2004, it appears that the majority of the stranding occurs during the first 4 months of the year, which is conform to what happen usually.

The figure 3 represents the distribution by shore and by department in 2004, while **the figure 4** gives the species distribution. The common dolphins represent 45% of the total number of the stranded animals, the striped dolphins 22% and the harbour porpoises 16% maintaining its third position.

1.2.2 Channel-North Sea

The figure 5: annual number of stranded cetaceans, the general trend is the increase of this number since the 90. In 2002 an exceptional event occurred, a mass stranding of about a hundred common dolphins stranded alive, 53 dead during this event.

The distribution by decades for 2004 indicates 3 picks of stranding, one late January and a second early March, a third one in June unusual for the region, corresponding mainly to harbour porpoises. This species is the main encountered for this shore (70% of the stranding) as indicates **the figure 7** for the species distribution.

1.2.3 Atlantic

The main trend regarding **the figure 8** (annual distributions) is an evidence of fluctuations, the record is for 1997. These inter annual variations reflect the picks of the numerous winter stranding. The weather conditions (wind direction) influence certainly these variations. Even the level for 2004 is in the average, there are two distinct picks, late January-early February and late March-early April (**Figure 9:** intra- annual distribution of the cetacean stranding).

The highest diversity of species is located in this area, with 13 species (**figure 10:** Species occurrence), the first species is the common dolphin which represents 60% of the total number. The harbour porpoise with 15% of the total number became the second species in place of the striped and bottlenose dolphins, this is observed for the last two years.

1.2.4 Mediterranean sea

No significant variation except for 1990 and 2003 (**Fig. 11**) linked in the first case to a *morbillivirus* epizootie for the striped dolphins, and probably also in 2003 (needs to be confirmed). The distribution by decade is abnormal in 2004, where usually, the pick of stranding is situated in the end of summer and not beginning March (**Fig. 12**). Five species were found stranded (**Fig. 13**).

1.3 Results by species

1.3.1 Common dolphin

1.3.2. Striped dolphin

1.3.3. Bottlenose dolphin

1.3.4. Pilot whale

1.3.5. Risso's dolphin

1.3.6. Other delphinids

1.3.7. Harbour porpoise

1.3.8. Physeteridae and Ziphiidae

1.3.9. Balaenopteridae

1.3.1. Common dolphin (*Delphinus delphis*)

Figure 14a: Inter annual distribution for the Channel coasts

Figure 14b: Inter annual distribution for the Atlantic coasts

Figure 15: Geographical distribution in 2004

Figure 16: Monthly distribution

There is less stranding of this species in 2004 than in 2003 along the Channel coasts. In 2002 the high level is linked to a mass stranding of a whole alive group (~ 100 individuals), 53 dead during the rescue (fig.14a). Along the Atlantic coasts, there is important fluctuations, min 60 individuals, max 508 individuals. In 2004 the level (218) was close to the general mean (222) (fig.14b).

The geographical distribution for 2004 showed no stranding along the eastern coasts of the Channel (fig.15).

The monthly distribution is similar to the other years with a pick in January, February and March (fig.16)

1.3.2. Striped dolphin (*Stenella coeruleoalba*)

Figure 17a: Inter annual distribution for the Channel and Atlantic coasts

Figure 17b: Inter annual distribution for the Mediterranean coasts

Figure 18: Geographical distribution in 2004

Figure 19a: Monthly distribution for the Atlantic and Channel coasts

Figure 19b: Monthly distribution for the Mediterranean coasts

13.3. Bottlenose dolphin (*Tursiops truncatus*)

Figure 20a: Inter annual distribution for the Channel and Atlantic coasts

Figure 20b: Inter annual distribution for the Mediterranean coasts

Figure 21: Geographical distribution in 2004

Figure 22a: Monthly distribution for the Atlantic and Channel coasts

Figure 22b: Monthly distribution for the Mediterranean coasts

Along the Atlantic and Channel coasts, the trend since 1994 is an increase in the number of the individual stranded (fig.20). The majority of the animals (68%) are found in the south of the Bay of Biscay, 28% in the north (fig.21).

There no particular seasonal pick regarding the monthly distribution, except a certain predominance during the spring.

1.3.4. Pilot whale (*Globicephala melas*)

Figure 23: Inter annual distribution for the Channel and Atlantic coasts

Figure 24: Geographical distribution in 2004

Figure 25: Monthly distribution for the Atlantic and Channel coasts

1.3.5. Risso's dolphin (*Grampus griseus*)

Figure 26a: Inter annual distribution for the Channel and Atlantic coasts

Figure 26b: Inter annual distribution for the Mediterranean coasts

Figure 27: Geographical distribution in 2004

Figure 28a: Monthly distribution for the Atlantic and Channel coasts

Figure 28b: Monthly distribution for the Mediterranean coasts

1.3.6. Other delphinids

Figure 29: Inter annual distribution

Figure 30: Geographical distribution in 2004

1.3.7. Harbour porpoise

Figure 31a: Inter annual distribution for the Channel coasts

Figure 31b: Inter annual distribution for the Atlantic coasts

Figure 32: Geographical distribution in 2004

Figure 33a: Monthly distribution for the Channel coasts

Figure 33b: Monthly distribution for the Atlantic coasts

The increasing trend of the stranding for this species is confirmed for all the coasts, with a level significantly higher in 2004 compared to the other years (fig.31). Along the Channel and North coasts, 59 animals were found in 2004 and 35 in 2003 representing an increase of 70% in one year. Along the Atlantic coasts the trend is similar. The carcasses are mainly found along the North Sea and the East Channel coasts, for the Atlantic shore, they are distributed along the coasts, and more frequently in Aquitaine (fig.32).

The stranding pick is marked during the first months of the year, for the Atlantic coasts, no stranding were mentioned during the summer (fig.33)