

Agenda Item 5.2: Post-mortem and stranding schemes

Recording of cetaceans strandings in Brittany in 2001

Submitted by: France



ASCOBANS

NOTE:

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Recording of cetaceans strandings in Brittany in 2001



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This document presents the results of cetacean strandings observed in Brittany in 2001. Many persons have been involved in the project, among which the correspondents of the Brittany Stranding Network. We'd to like to thank for their participation and constant working effort: Stéphane Auffret, Jean-Louis Baranger, Vickie Beduneau, Gilles Bentz, Yves Brien, Didier Cadiou, Patrick Camus, Yannick Cherel, André Clique, Annette Collomb, Monsieur Coupa, Nathalie Delliou, Pierre Floch, Olivier Galant, Jacques Garreau, Gérard Gautier, Yvon Guermeur, Claude Hautefeuille, Christian Kerbirou, Jean-Michel Lair, Jean-Yves Le Gall, Jean-Claude Le Gars, l'équipe de l'ONCFS de la région Bretagne, Catherine Pichot, Béatrice Pleven, Jo Pourreau, Catherine Robert, Jacques Ros, François Siorat, Eric Stéphan, Jean-Jacques Turbin as well as the technical services of the coastal cities and the different fire brigades involved.

Inter-annual variations

During 2001, 181 cetaceans stranded on the coasts of Brittany, among which 8 were still alive and released to the sea. Compared to 2000, this figure represents a 43% increase though no massive stranding was observed (only 6 common dolphins stranded alive in Kerlouan and released at sea). If we only take into consideration dead animals found between 1996 and 2001, the total number of animals recorded this year is above the average of 135 animals per year (Fig. 1).

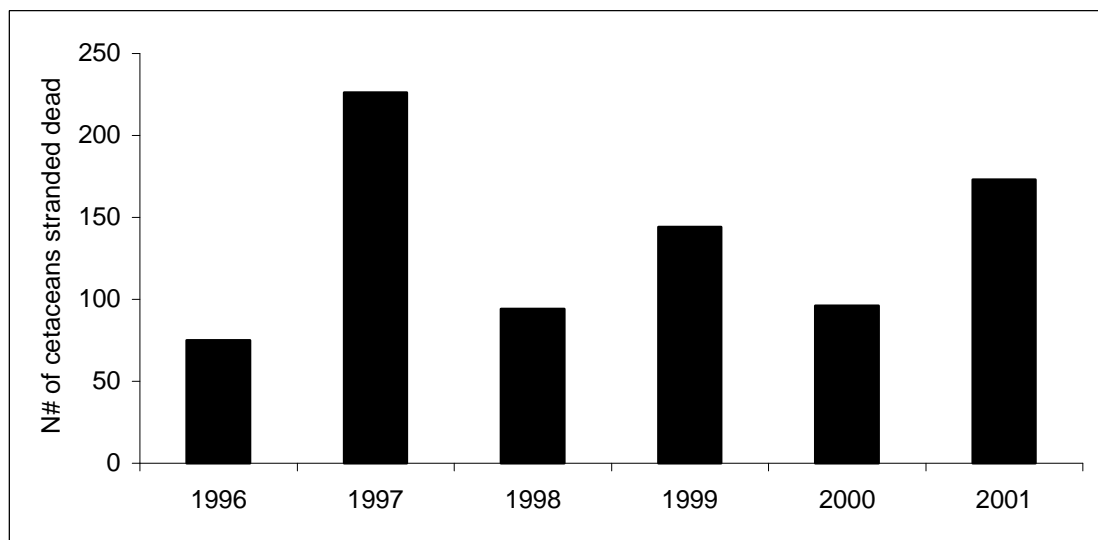


Fig 1: Cetaceans found dead in Brittany between 1996 and 2001.

Species concerned:

The 173 cetaceans found dead in 2001 are divided as follows depending on the species:

- *Balaenoptera acutorostrata*: 1
- *Delphinidae sp*: 37
- *Delphinus delphis*: 101
- *Globicephala melas*: 7
- *Phocoena phocoena*: 18
- *Stenella coeruleoalba*: 5
- *Tursiops truncatus*: 4

These results show that the species could be identified in 79% of the cases. Generally speaking, the absence of identification resulted from a significantly advanced state of putrefaction or from the absence of jaws. In 2000, the identification rate was 76% and 77% in 1999. This value

remains relatively stable in time, except in 1997 during the massive strandings, during which a great number of animal remained unidentified (52%).

On our coasts, the most frequently stranded species is the common dolphin, which represented more than 50% of cetaceans stranding in 2001 (58%). This situation was also observed between 1998 and 2000 (Fig. 2). The small proportion recorded in 1997 results from the high number of unidentified cetaceans. In 2001, the second most frequent species was the harbour porpoise, as in 1999 (Fig. 2). Eighteen animals were found, which represents a relative frequency of 10% (maximum value observed since 1997). The number of harbour porpoises stranded increased by 72% in 5 years. Conversely, the number of strandings of other species remains in the proportions observed the previous years.

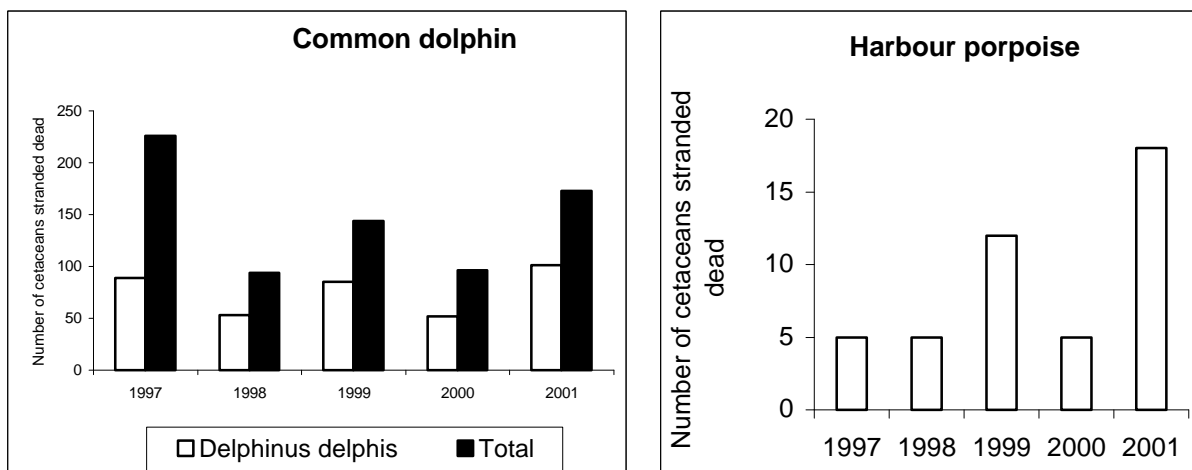


Fig. 2 Total number of common dolphins and harbour porpoises found dead in Brittany between 1997 and 2001.

The increase in the number of harbour porpoise strandings could reveal an increase in the abundance of the species along our coasts. The fact that these animals can be found on the littoral 12 months a year concurs with this hypothesis (Fig. 3). It does not seem to be a seasonal or temporal presence in our coastal waters. Moreover, the state of decomposition of stranded porpoises reveals that they could not drift on long distances in the open sea (78% of them were between "fresh and putrefied").

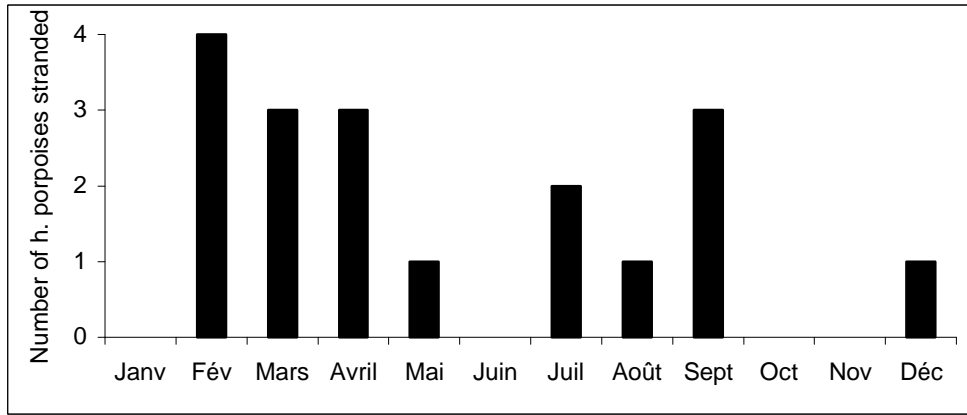


Fig 3. Temporal distribution of harbour porpoise strandings during 2001.

In 2001, harbour porpoises strandings occurred on all the coasts of Brittany. Yet, more than 50% were found on the coasts of Finistère, corresponding to the areas 4 to 12 (area one start in northeastern Brittany other area continue westwards southwards and eastwards until area 18 (Fig. 4).

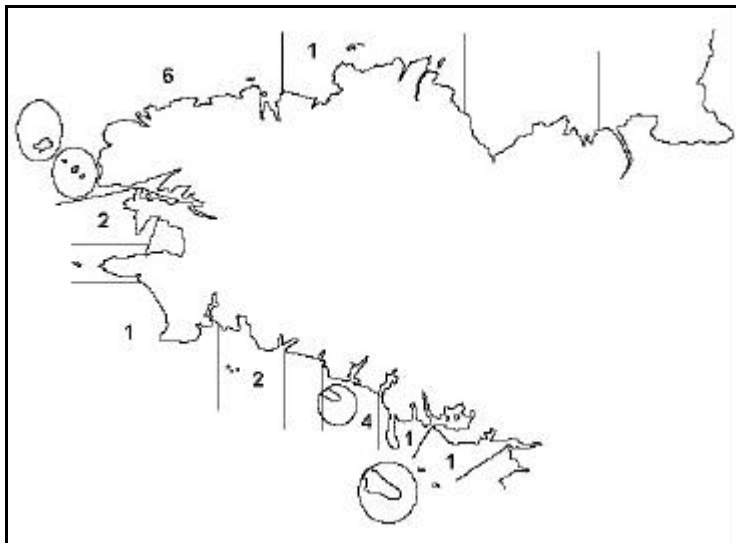


Fig 4. Spatial distribution of harbour porpoise strandings in 2001.

The study of strandings and the gathering of data at sea in the years to come will allow us to check the hypothesis of a “coming back” of harbour porpoises in the coastal waters of Brittany.

Geographical distribution

In 2001, cetacean strandings were concentrated within three main areas (4, 10 and 15), representing more than 50% of the total number of individuals. Conversely, certain areas correspond to very low values below 1%. It is notably the Bay of Mont St Michel, Ouessant Island, the Cap Sizun area, Sein island and the Eastern part of Lorient. Several explanations can be proposed: configuration of the area (current, topography...) which does not favour stranding in the area, observation sheet returned to the national correspondent only, and no copy transferred to the regional co-ordinator, non availability of the local correspondent for a given stranding. This last hypothesis was checked for the sector 10 corresponding to the southern head of Finistère. In 2000, only 2 cetaceans had been found, whereas in 2001, the number was 27. Between these two years, a new correspondent was integrated, with increased availability to intervene.

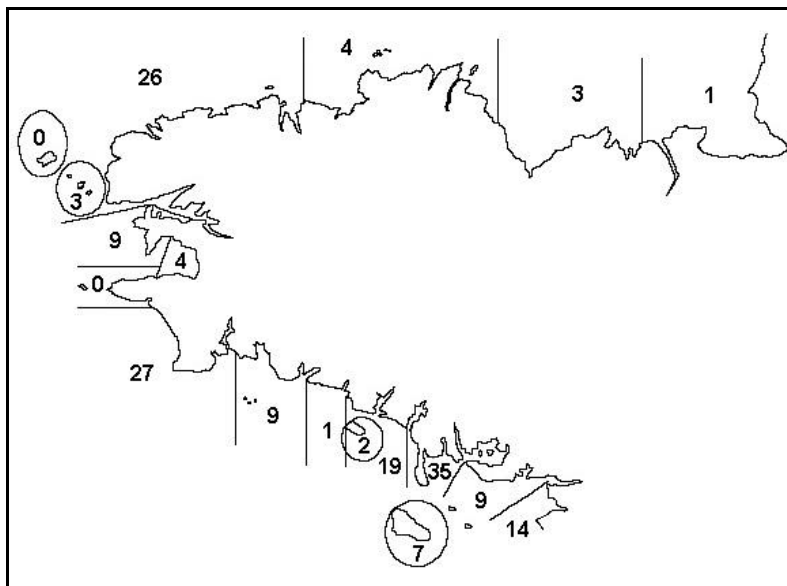


Fig 4. Geographical distribution of cetacean strandings during 2001.

By-catches

In 2001, thirty one stranded cetaceans presented capture marks, with 17 individual displaying evident by catch wounds. During the past five years this number has considerably increased except in 1997, a year that remains exceptional (Fig. 6). Yet, if it is compared to the total number of cetacean strandings per year, it reveals that the proportion of animals displaying

marks of capture was relatively stable in time between 1999 and 2001 these by-catch concern especially common dolphins (65% of the cases). Harbour porpoises and bottlenose dolphins represent about 10% each (3 cases of evident and probable captures for each species).

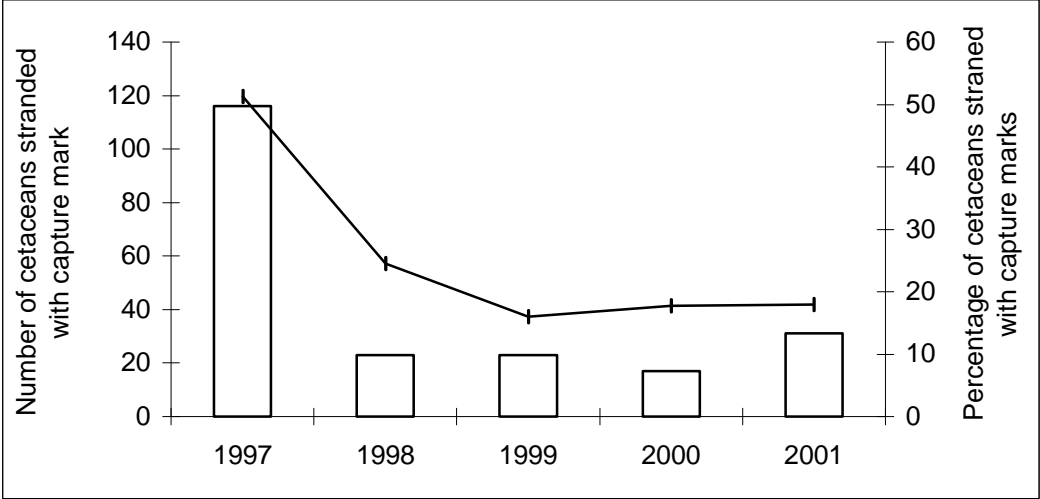


Fig 6. Number of cetaceans stranded in Brittany, displaying marks of by-catch between 1997 and 2001. The numbers are represented in the form of histograms and the percentages are given in relation to the total number of strandings, using points linked with one another.