

Marine mammal strandings: technical control on site

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Abstract

Strandings of marine mammals are always an unusual occurrence. Whether the animals are living or dead, these events require the input of many services and people. Techniques can be implemented to protect the animals, stabilise them, transport them or - when they are dead - dispose of them properly. Technical co-ordination on the beach is therefore an important factor for success. The paper examines the various possible types of strandings and the different methods of intervention.

Keywords: marine mammals, stranding, intervention techniques, co-ordination.

Résumé

L'échouage de mammifères marins est toujours un événement inhabituel. Que les animaux soient vivants ou morts, de tels événements réclament l'intervention de nombreux services et de personnes. Des techniques peuvent être utilisées pour protéger les animaux, les stabiliser, les déplacer ou - s'ils sont morts - les évacuer convenablement. La coordination technique sur place est par conséquent un important facteur de succès. L'article passe en revue les différents types d'échouage et les différentes méthodes d'intervention.

Mots-clés: mammifères marins, échouage, techniques d'intervention, coordination.

Introduction

Strandings of marine mammals are always an unusual occurrence. Whether the animals are live or dead, they require the involvement of many departments and people. Technical co-ordination on the beach is therefore an important factor. The Belgian intervention network for stranded animals has acquired some experience in these matters, particularly since the stranding of four sperm whales in 1994. We shall examine here the different methods of intervention in relation to the various possible types of stranding.

Report of small marine mammals stranded alive

Various species of dolphins, porpoises, and seals may strand alive. The technical co-ordinator is notified

through the network. He immediately contacts the local emergency services (fire brigade) and asks them to come as quickly as possible to give protection to the animal and to keep it wet. He then informs the veterinarian on call who assists and directs the members of the intervention network on site. An intervention network should have specially equipped tanks for the transport of live mammals (Fig. 1):

- a small tank for porpoises (in our case loaned to us by the Harderwijk Dolphinarium),
- a large tank for bottle-nose dolphins, white-beaked dolphins etc., (loaned to us by the Bruges Dolphinarium),
- a medical kit (donated to us on a sponsorship basis by Bayer s.a./n.v. Animal Health Division).

Once the animal has been stabilised, it can be transferred to a central point, e.g. the Marine Fishery Research Station or the Management Unit of the North Sea Mathematical Model laboratory in Ostend. The technical co-ordinator can contact the Harderwijk Dolphinarium, in consultation with various bodies such as the Flemish Administration for Environment, Nature Conservation and Land Management (AMINAL), the Federal office for scientific, technical and cultural affairs and the Management Unit of the North Sea and Scheldt Estuary Mathematical Models (MUMM) to arrange for transportation of the animal to the Rescue Centre.

Report of a small mammal stranded dead

The technical co-ordinator receives the report and immediately asks the nearest police or gendarmerie unit to guard the animal. Various animals have disappeared from the beach in the past. These animals were taken away by persons unknown. It is of the utmost importance for scientific research that as few animals as possible be lost. The technical co-ordinator informs the various bodies, including the Department of Coastal Waterways and the stranding intervention network, and then attends the scene. At the scene he makes sure of the condition of



Fig. 1 – Equipment available at MUMM, the marine management unit of the Royal Belgian Institute of Natural Sciences in Ostend, for intervention in the case of strandings of a small cetaceans (courtesy of MUMM).



Fig. 2 – Sperm whale stranding in Koksijde, Belgium, 18 November 1994: protection fences being installed at ebb-tide (aerial photograph courtesy of MUMM).



Fig. 3 – Sperm whale on Koksijde beach, properly fenced off (courtesy Municipality of Koksijde).



Fig. 4 – Removal of the remaining carcass for disposal (courtesy Municipality of Koksijde).

the animal and arranges for the necessary transport to the appropriate laboratory, university or institute for further research.

In the past, the services of Civil Protection were often called upon. To date, the Civil Protection has always been willing to attend day and night with appropriate and specialised equipment to salvage the carcasses and transfer them to the research institution for necropsy.

The technical co-ordinator also keeps the various interested parties informed about the stranding. A press release is drawn up with the scientific co-ordinator.

Report of large marine mammals washed ashore alive

These types of event are rare. Death usually occurs immediately after the animal is washed ashore, due to suffocation on the beach. Towing the animal back to the sea raises many questions as to whether it is scientifically justified or technically feasible.

Report of large marine mammals stranded dead

After the message is received by the technical co-ordinator, he immediately alerts the intervention network and all the services concerned with marine mammals. He immediately goes to the scene and begins consultations with the local authorities (the municipality). The municipality, in consultation with the technical co-ordinator, arranges for the guarding of the animal. In consultation with the burgomaster everything is made ready for the commencement of scientific investigation. The technical co-ordinator attends to various matters such as the following:

- The problem of accessibility to the stranding site. It may be necessary for heavy equipment to be brought onto the beach.
- Safety: he makes sure that the animal is secured so that it does not start to drift away at the next high tide and therefore pose a hazard to navigation.
- Intervention: he calls up the scientific teams and intervention network and takes actions required in advance of necropsy for ensuring that all the equipment arrives on scene.
- Security: makes sure that barriers are placed around the animal (Figs. 2 & 3), so that tourists or sightseers can look at the animal from a safe distance (since the cause of death has not yet been established and a risk of infection exists for people and animals).
- Expediting: in consultation with the proper authorities,

he ensures that scientific research can be carried out as quickly as possible. For this purpose, he makes sure that all the facilities are present to make the research operations run as smoothly as possible. Consideration is given here to:

- the necessary lighting (fire brigade or Civil Protection unit)
- the equipment for taking away the entrails and the waste (cranes, bulldozers, etc., via contractor or Civil Protection)
- the equipment for transporting all the waste (non-leaking containers or lorries)
- the safety of scientists during the necropsy.
- In consultation with the local authorities and the authorised services he ensures that the carcass is taken away (Fig. 4), observing all practical hygiene and safety precautions.

This complete technical co-ordination on the beach proceeds in consultation with the scientific co-ordinator. Finally, the technical co-ordinator also co-operates with this scientific co-ordinator on the press release which at an appropriate time is distributed to interested parties.

The difficulties associated with such an undertaking are not to be underestimated. Taking account of tide and darkness and the fact that necropsies must be carried out as quickly as possible, it is particularly difficult to get the required equipment to the scene on time.

Conclusion

Technical co-ordination is an important and necessary task on the beach because the scientific research should be able to proceed as smoothly as possible and under optimum conditions. It is only when the safety and technical requirements have been met that the scientists can adequately proceed with their work. When the animal is still alive, its chances of survival depend on sound decisions, co-ordinated action, and the availability of the necessary technical means. Here too, the presence of the technical co-ordinator may be essential for success.

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