

Preparedness to oiled wildlife incidents in Belgium

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Abstract:

The accident with the *Tricolor* in January 2003, causing 9.117 beached birds -of which more than 50% were alive at the time of beaching- and max. 170 ton of spilled oil, led to the general awareness that Belgium needed a more structured approach towards oiled wildlife response. The official order to start the process of drawing up an Intervention Plan, was given in autumn 2003 by the Minister of Environment of the region of Flanders.

The Intervention Plan not only includes measures for handling oiled birds, but also useful background information in case of an (oil) spill affecting the beach, such as address lists, logistical and material necessities, and filing cards on the plan's co-ordination and activation, costs and finances, animal treatment and waste management.

The Oiled Birds Intervention Plan aims to provide a structure for the safe, efficient and professional response for a small to considerable (oiled) wildlife incident involving dead and/or live stranded birds, including a phased approach for the application of man-power and equipment.

The Intervention Plan has been signed by the governor of the province of West-Flanders, the regional Minister for Environment and the federal Minister for the North Sea on 14 July 2005. This signing was a crucial step in endorsing the plan at a political level.

In this paper the process of drawing up the plan, the content and the learning points are addressed.

1. Introduction

1.1. The *TRICOLOR* incident

Following a collision on 14 December 2002, the *Tricolor*, a Norwegian car carrier, sank off the coast of Dunkerque, France, in one of the major shipping routes of the North Sea. After sinking in relatively shallow waters (30 metres deep), the vessel lay only a few metres below the surface of the sea at high tide. The wreck caused an immediate threat to shipping, in what is one of the busiest sea lanes in the world. Within 48 hours of the sinking, the *Nicola* crashed into the wreck. She was, however, pulled clear and appeared to have suffered no serious damage. Two weeks later, on 1 January 2003, the *Vicky*, carrying 70,000 tonnes of highly inflammable oil also struck the submerged *Tricolor* and some of its dangerous cargo was lost, The *Vicky*, too, was pulled clear and sailed to Rotterdam. On Friday, 23 January, a new serious problem developed when the lid of an oil compartment was damaged during oil pumping operations undertaken by salvage company Smit International, and some 170 tonnes of fuel oil leaked into the sea. Although a relatively small amount when compared with international records of other oil spill incidents, the effect on wildlife quickly grew into one of the more serious incidents for European birdlife (Nijkamp & Conroy, 2004).

1.2. Effects of the *Tricolor* incident on oiled wildlife in Belgium

In total, **9.117 birds** were beached as a result of the Tricolor oil spill. During three specific periods a remarkable large number of beachings could be counted: the first one on 24 January 2003 – one day after the oil was spilled, the second one a few days later, and the third one between 3 and 8 February, following a second spill with different oil, possibly also coming from the Tricolor. More than 50% of the birds were alive at the time of beaching.

The specific characteristics of the Tricolor incident need to be seen in terms of potential environmental risk (Nijkamp & Conroy, 2004):

- Firstly the accident occurred relatively close to shore, near the Flemish Banks, an extremely shallow area of the North Sea, an area for wintering seabirds of European importance.
- Secondly, although relatively little oil was spilled (170 tonnes of fuel), this oil immediately affected tens of thousands of seabirds which were over wintering on the Flemish Banks at the time.
- Thirdly, notification of the incident to the oiled wildlife response network was relatively late; almost 24 hours after the first oil spill occurred. This coincided with the first oiled birds reaching the Belgian coast. Hence, by the time the notification reached the officials, hundreds of oiled birds were already being washed ashore and collected from the beaches.
- Fourthly, it was a further 24 hours before a crisis management team was established. A first meeting was held on 25 January 2003 to define the responsibilities and an operational structure for the wildlife response. By that time, more than 600 birds had been collected and were awaiting treatment in a deserted building without basic facilities such as warm water, heating, etc.
- The number of casualties over the first two days grew to such an extent that it immediately became clear that they could not be dealt with at a single rehabilitation centre, and that it had become a serious welfare issue.
- The *Tricolor* incident occurred at the end of a two-month period during which many of the coasts of Western Europe had already received large numbers of oiled birds, and most rehabilitation centres and experts were fully occupied.

1.3. Wildlife affected and lessons learned

At the Belgian coast 9.177 birds of 32 different species were collected. The largest proportion of the collected birds concerned auks (*Alcidae*): guillemot (*Uria aalge*, 67%) and razorbill (*Alca torda*, 25%). Other species that washed ashore in relatively high numbers were the great crested grebe (*Podiceps cristatus*), the common scoter (*Melanitta nigra*), the red throated diver (*Gavia stellata*), the little auk (*Mergule nain*) and the kittiwake (*Rissa tridactyla*).

The evaluation of the impact on birds of this incident made it clear that most affected birds came from colonies along the east coast of Scotland. Considering the fact that all auks were adults in prime condition, the impact of this rather small oil spill may have significant effects on the breeding population. That effect however is probably masked by a general decline in population sizes of these birds which is seen in the colonies of the north-western North Sea (Camphuysen, 2004). The analysis nevertheless demonstrates the importance of scientific data collection in the aftermath of a spill. The potential significant damage to wildlife demonstrated in the Tricolor not only highlights the importance of combating any spillage of oil at sea before it reaches vulnerable bird

areas, but also the importance to be prepared for an effective live saving oiled wildlife response.

And is wildlife response worth it?

Firstly, recent studies and observations prove that rehabilitation of oiled birds is possible, and successful results of more than 50% release of healthy birds is possible (Camphuysen, 2004). But even if the percentages of a successful release are lower, the rehabilitation of individuals can be crucial to the population as a whole.

Besides the positive effects on the population, rehabilitation is also important from an awareness raising perspective.

Thirdly, where the government does not structure the wildlife response, individual small scale initiatives will inevitably be set up, which a lesser degree of expertise and less professional means. Therefore, Belgium has clearly chosen for an governmental approach towards wildlife response.

Overall, the bird rescue operation in Belgium at the time of the Tricolor incident was well organised, and considering the speed with which the incident developed and the lack of preparedness to deal with it, the responsible authorities did a very good job. Many of the problems were not related to the actual operation of the response, but rather to unforeseen technical problems. These related mainly to the inability to establish adequate washing facilities at both rehabilitation centres. No fault can be placed either with the local or naval authorities in their attempts to rectify these problems. Their help and cooperation was always available and readily given. The main weakness in the operation, especially in the beginning, was the lack of clear command structure in the main centre. This inevitably led to people on the work floor not knowing who was in charge and to the wrong people taking the wrong decisions. This situation, however, did not last, and once identified, many problems were to a large extent solved. The links and the respect between the international groups and the local team greatly aided the operation.

The main strengths and weaknesses of the operation are listed below (modified after Nijkamp & Conroy, 2004).

Strengths

- A large number of volunteers were mobilised, also through radio and television campaigns.
- Good workforce
- Rather well co-ordinated
- Volunteer welfare reasonably good
- Rapid choice of response centres
- Good internal and external links
- A reasonably rapid and effective response from agencies invited to help e.g. RSPCA, Blue Seas Project
- Effective co-operation between international and local groups
- Well organised beach collection
- Effective administration
- Staff capable and prepared to make own decisions
- Good morale
- Good logistics
- Good links with civil and military authorities

Weaknesses

- Lack of structured command
- Other than the co-ordinator and vet, there was no clear indication of who was responsible for what – this improved in part as the incident developed
- Less than optimal statistics (i.e. poor record keeping, especially at first)
- Logistic failures in the operations at both sites
- Lack of security at main centre
- Lack of trained cleaners

The analysis above was a first step towards a more co-ordinated and systematic approach.

2. Towards a systematic approach

The dramatic effects of the Tricolor incident led to the general awareness that Belgium needed a structured approach towards the rescue of oiled birds. Thanks to many volunteers, lots of enthusiastic scientists and civil servants, the situation in January 2003 was approached in a sound way. But after the last birds were being taken care of, after the last oil was cleaned from the beach, questions were raised. Who would pay for all the costs made? What would we do with the toxic waste? How could we build a better equipped rehabilitation centre in the future? How can coordination be improved?

It was generally agreed that a **formal Intervention Plan for oiled birds** was needed.

The official order to start the process of drawing up an Intervention Plan was given in autumn 2003 by the Minister of Environment. After two start-up meetings, the Co-ordination Centre for Integrated Coastal Zone Management (ICZM) was assigned as –a neutral- co-ordinator and driving force behind the process.

The process

The plan was developed and agreed by means of a process in which all stakeholders were involved, including the Flemish and Federal Ministries, scientific institutes and NGO's.

The Co-ordination Centre was responsible for the smooth proceeding of the process (the Centre is a co-operation between different levels of authority, and its main aim is to tackle cross-sectoral questions in the Coastal Zone). Oil spills and its side effects fit nicely within the Co-ordination centres work package (several sectors involved, and on the scale of the whole coast), but the necessary expertise is not within the Centre. Therefore the Sea Alarm Foundation was approached to bring in technical expertise and a technical working group was established.

The composition of the working group is considered to be very important. Care was taken not only to involve all relevant authorities and the governor, but also relevant NGO's, scientists, institutions, and Wild life rehabilitation centres as part of the group.

3. Intervention Plan for Oiled Birds

Policy aim:

The Oiled Birds Intervention Plan aims to provide a structure for the safe, efficient and professional response for a small to considerable (oiled) wildlife incident involving dead

and/or living stranded birds, including a tiered approach for the application of manpower and equipment.

3.1. Content of the Intervention Plan

The Intervention Plan not only includes measures for handling oiled birds, but also useful background information such as address lists, logistical and material necessities and filing cards on the plan's co-ordination and activation (Who is responsible to co-ordinate the whole plan, and how can it be (de)activated?), costs and finances (Who pays for what, and how do you register the cost to facilitate the claim?), animal treatment and waste management.

The general aim was to end up with a practical plan, and not a voluminous book.

The Intervention Plan consists of three parts: firstly the **strategy** containing the introduction and background information, secondly the **operational** chapter containing all filing cards, and thirdly the **data** chapter. In case of an incident, the operational chapter is the crucial document which clearly instructs all parties on their responsibilities and tasks. For each of the tasks a co-ordinator (function) is assigned.

Team coordinators and their responsibilities:

Overall coordination: Flemish Department for Nature

Bird rehabilitation: Bird and Wildlife Rehabilitation Centre in Ostend

Volunteers, personnel and logistics: Bird Protection Flanders

Beach activities: Bird Protection Flanders

Media and information: Flanders Marine Institute

Scientific data & analysis: Management Units of the North Sea mathematical Models (MUMM) and the Institute for Nature Conservation.

Technical support and logistics: Federal Public Service for Public Health, Safety of the Foodchain and Environment.

Veterinary activities: University Liège.

Policy on culling or rehabilitation

It will be attempted to rehabilitate and release those birds that are considered fit enough to be taken through the rehabilitation process; Birds that do not meet the agreed criteria will be culled.

The Oiled Bird Intervention Plan only applies to birds that are affected by oil pollution. Should a pollution incident also affect marine mammals, then the response to stranded animals should follow the normal stranding procedures and protocols as defined by the federal government (MUMM).

Policy on impact assessment

The Intervention Plan aims to enable a sound wildlife impact assessment. This means that throughout the response, scientific data systematically are collected and analysed. All dead animals need to be collected from beaches, counted and kept for scientific analysis. The eventual fate of living birds that have been admitted to the rehabilitation centre will be monitored by scientists.

Cooperation between wildlife response organisations

The plan also deals with national and international cooperation between wildlife response organisations and rehabilitation centres.

In Belgium the Bird and Wildlife Rehabilitation Centre in Ostend is the only organisation that is based on the coast and has experience with the treatment of oiled marine and coastal birds according to internationally accepted standards. In case of a larger incident, the centre can draw equipment and manpower from other accredited and licensed Belgian Rehabilitation Centres. Veterinarian support will be provided by the Universities of Gent and Liege. Governmental scientific institutions will be charged with the wildlife impact assessment.

Facilities: In case of a larger incident (phase 3), a temporary bird rehabilitation facility will be set up in Ostend which will receive all birds from the Belgian coast, living as well as dead.

The Bird and Wildlife Rehabilitation Centre in Ostend is located in one of the wings of the Military Complex Bootsman Jonson. It keeps a stock of equipment that was brought together during the Tricolor incident, such as: wimming pools, net bottom cages

International assistance:

In case of phase 3 response, the Intervention Plan allows the Department for Nature to call in assistance from rehabilitation groups in U.K., the Netherlands or France, or internationally operating organisations.

3.2. Notification and activation of the plan

The assessment of whether the arrival of oiled wildlife at the Belgian coast should be viewed as alarming, will be carried out by a group of five institutes: the Bird and Wildlife Rehabilitation Centre in Ostend, MUMM (Management Units of the North Sea mathematical Models), the Institute for nature Conservation, the Departement of Nature (Flemish ministry) and the Federal Public Service for Public Health, Safety of the Foodchain and Environment. Amongst them, they will decide whether or not the Cabinet of the Governor should be notified, which is the only body authorised to mobilise a tier 3 response. In case of a lower emergency level, the five institutes together assess whether the problem can be dealt with by a single organisation as a matter of routine (tier-1) or that a larger coordinated joint effort is necessary (tier-2)

The Oiled Bird Intervention Plan has a three-tier structure and builds on close cooperation between all relevant stakeholders in pre-defined roles. In case of a large incident (tier-3), the Governor of West Flanders has the authority to mobilise the plan and he will install a policy group which will be chaired by him. This group will charge a Crisis Team with the task to run the incident. The direct involvement of the Governor in the Intervention Plan guarantees an optimal integration with the existing North Sea Contingency Plan (maritime incidents) and the Provincial Environment Contingency Plan (e.g. pollution by hazardous substances, shoreline cleanup).

3.3. Endorsement and evaluation of the plan

After the plan was approved by the technical working group, a next step was the endorsed at political level. In the Belgian case the authorising parties were: (1) the regional (Flemish) minister for Environment, responsible for the management of beaches; (2) the national minister for the North Sea, (3) the governor of the province of West Flanders, responsible for contingency planning at sea and on land. They officially signed the plan on 14 July 2005.

The process however does not stop after the official signing of the plan. The Belgian plan now needs to be tested for its efficiency, and optimising the plan will be a continuous process.

Apart from the Intervention Plan for oiled birds, a parallel process with the coastal municipalities was set up, in order to draw up guidelines for the role of municipalities in case of a coastal (oil) incidents. The guidelines for beach cleaning were presented by the minister for the North Sea on 25 January 2006. The plan foresees a crucial role for the civil protection services to clean beaches, not only in case of major desasters, but also for smaller calamities.

4. Conclusions

An incident such as happened with the Tricolor could have happened anywhere. Belgium was not well prepared to handle the huge number of oiled birds. Nor are many other countries at present.

In Belgium the images of the oiled birds triggered the process to set up a systematic approach via an intervention plan, for which the political will was expressed soon after the disaster. Getting all involved parties around the table, bringing in expertise where needed, appointing a neutral co-ordinator were keys to the success in finalising the Intervention Plan. Endorsement at political level is crucial to safeguard the functioning of the plan in case of future incidents.

Some extra learning points from the Tricolor incident and the process are:

- be sure the financial procedures are clear in the plan. If this is not the case, the willingness to co-operate might lack.
- Built-in a regular updating procedure
- Make sure your plan links up with existing contingency plans.
- Do not interfere with existing and successful plans already in place.
- Involve all relevant parties and municipalities from the beginning of the process. Split into thematic groups when needed.

But the process does not stop after the official signing. The Belgian plan now needs to be tested for its efficiency, and optimising the plan will be a continuous process.

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