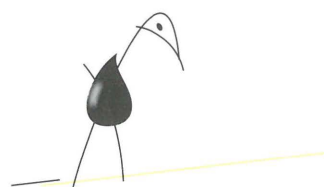


Handbook
on Good Practice for the
Rehabilitation of Oiled Birds
in the aftermath of an
Oil Spill Incident





This publication

This publication was developed as part of an European project [European workshop on the development of good practice guidelines regarding the cleaning and rehabilitation of oiled wildlife (particularly oiled birds) during a spill incident], which was co-financed by the European Commission (Grant Agreement 07.030900/2005/429215/SUB/A5) and carried out by Zoomarine, Sea Alarm Foundation, International Fund for Animal Welfare (IFAW) and Istituto Centrale per la Ricerca Scientifica e Tecnologica Applicata al Mare (ICRAM).

Editor

Hugo Nijkamp, Sea Alarm Foundation

Photography

Sea Alarm, Project Blue Sea, International Fund for Animal Welfare, Royal Society for the Prevention of Cruelty to Animals, Wildlife Response Centre Ostend, Oil Spill Response / East Asia Response Limited, Bird Protection Flanders

Acknowledgements

The content of this Handbook was developed during a workshop that was held October 21-23, 2006 in Portugal, which was attended by 41 delegates from 18 coastal European countries. The contribution of all the participants to the discussions at the workshop is gratefully acknowledged.



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European Workshop on the development of good practice guidelines regarding the cleaning and rehabilitation of oiled wildlife (particularly oiled birds) during an oil spill incident



European Union

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This Handbook is based on the experience of many wildlife rehabilitators and people that have otherwise been involved in the response to a number of oiled wildlife incidents in Europe and elsewhere in the world, in which attempts were made to rehabilitate oil affected birds.

The key to the successful rehabilitation of birds in an incident is not only the techniques that can be applied to a single animal, but also the management challenges that are connected with dealing with hundreds or sometimes thousands of oiled animals that arrive at the nearest coasts in a short period of time. The success to such a large scale incident needs a well organised and coordinated approach, additional skills from rehabilitators, and use of permanent or temporary facilities that can potentially deal with large numbers of casualties.

Because the success of a response is so much dependent on the contribution of local responders, it is important that anyone who might potentially get involved in such a response could obtain at least a basic understanding of the key issues, hence the objective of this Handbook.

During a workshop in Portugal, on October 21-23, 2006, these and other issues were discussed by a group of 41 European experts from 18 coastal European countries, including rehabilitators, authority representatives and scientists.

This Handbook has been developed based on the outcome of those discussions.



Introduction

Chronic oiling of the marine environment is a widespread phenomenon in all seas surrounding Europe, and causes the oiling of thousands of seabirds every year, especially in the winter months. Oiled birds are frequently found on beaches near areas where seabirds gather in so called wintering populations.

In most of the European countries facing these winter pollution effects, coastal rehabilitation centres have developed a specialisation to clean and rehabilitate oiled birds. Over 140 European centres are known to deal with the rescue and rehabilitation of marine wildlife, some better equipped and experienced to deal with (large numbers of) oiled animals than others.

An oil spill incident may suddenly confront the nearest rehabilitation centres with many more casualties than they can handle in terms of their standard capacity. Also the management of such a developing large scale problem needs an approach beyond the scope and flexibility of a single rehabilitation centre. In such a case, the involvement of many stakeholders is needed in order to deal with the situation, such as the competent authorities whose involvement is essential with regards to the efficient use of limited resources and the integration of the wildlife response into the overall oil spill response.

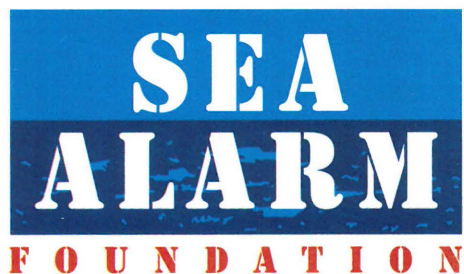
An important aspect of dealing with eventual wildlife effects of an oil spill incident is how to manage animal welfare issues connected to the arrival of hundreds, if not thousands, of live oiled animals on beaches in only a short period of time. Experiences from past European oil spills (e.g. *Braer*, *Sea Empress*, *Erika*, *Prestige*, *Tricolor*) in which wildlife issues were at stake, but also similar incidents that happened in other parts of the world, provide a rich resource of lessons learnt under various local conditions in different countries.

It has been the objective of this European project to bring together a representative group of European wildlife responders (wildlife rehabilitators, authority representatives, scientists) in order to discuss animal welfare issues that have appeared in past incidents with regards to the rehabilitation of birds and develop a Handbook with a set of guidelines on how rehabilitation could be dealt with more effectively in future events.

The project intentionally avoided developing a prescriptive and detailed protocol on all the different aspects of oiled bird rehabilitation. It was the objective to limit the handbook to 26 pages of essential information on key issues. The Handbook provides the details of a number of expert organisations that can be contacted and references to sources of additional information.

In the event of an oiled wildlife incident

In the event of an oiled wildlife incident for which you need advice or assistance, please call Sea Alarm in Brussels. Sea Alarm is accepted as an international coordinator of expertise and advice in cases of European oiled wildlife emergencies.



Emergency Contact – Business Hours

Please use Sea Alarm's office telephone number:
+32.2.2788 744

Emergency Contact – Outside Normal Office Hours

Please phone one of Sea Alarm's mobile numbers:
+32.494900012 or
+32.495528242

Essential Information required for making an appropriate first assessment of the situation:

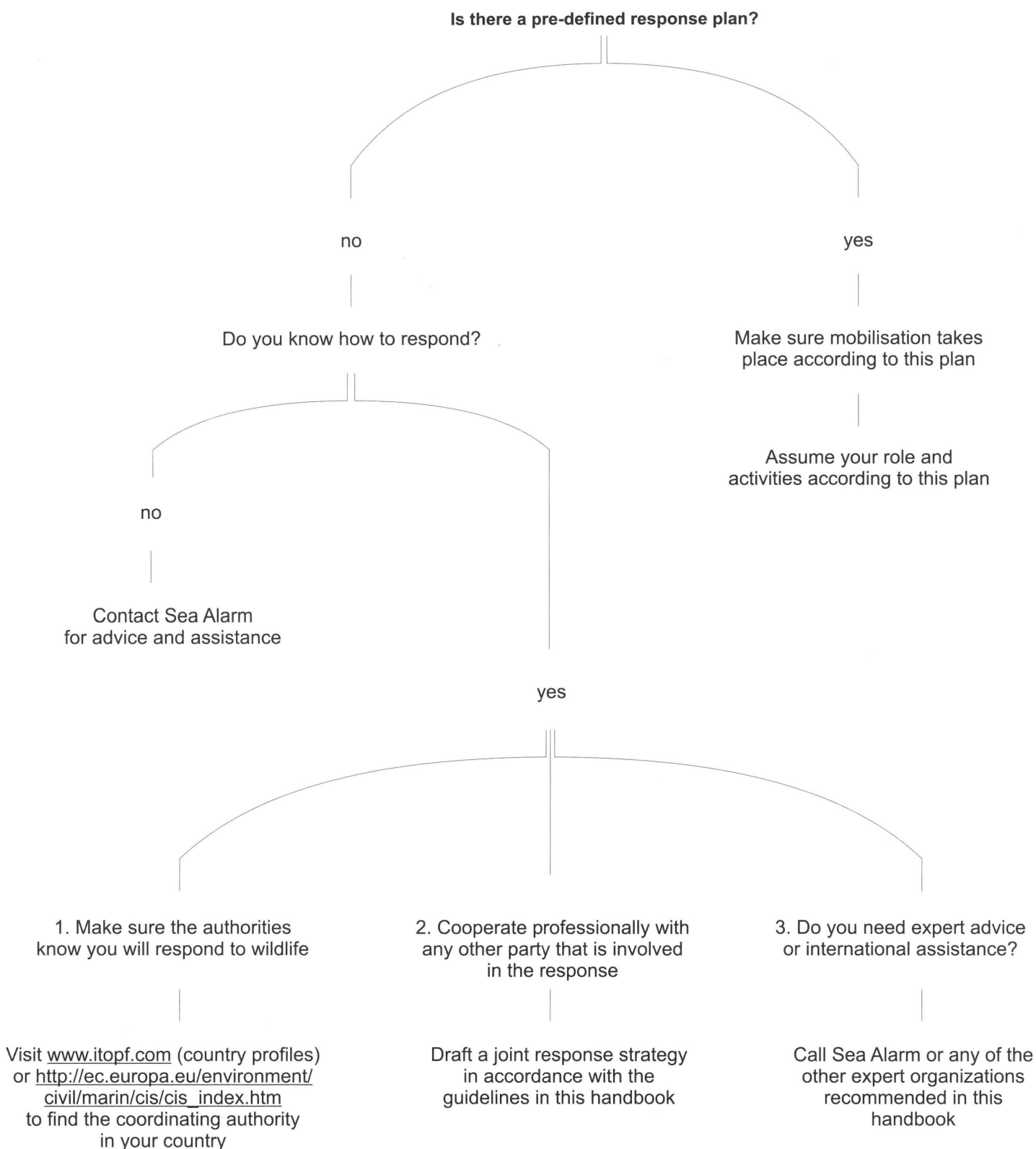
Cause of the pollution

- Contact details of the person reporting the incident
- Country where the incident took place
- Date and time of the incident
- Name of vessel or other source of the pollution
- Cause of the incident (if known)
- Type of oil or oil substance (if known)
- Estimate of the quantity spilled or likelihood of spillage

Oiled animals

- Involved species
- Estimates of live oiled animals and dead oiled animals
- Action, both taken and intended (and by whom), to set up a wildlife response
- Immediate needs that have been identified for this response

Before you start to respond...



Use of sound protocols

Principles of Animal Welfare

The main motivation for oiled wildlife rehabilitation is to increase an animal's welfare in the long term.

All the handling of oiled animals in the rehabilitation process adds to the level of distress and can only be justified if there is a high level of probability that the animal will survive treatment and resume its life as a wild animal without any long term effect of the oiling or the received treatment.

As a guidance as to how animal welfare standards can be kept throughout the rehabilitation process, the so called "Minimum Welfare Standards for Permanent or Temporary Centres Dealing with Oiled Wildlife" have been developed (see box).



Rehabilitation as a response option

An attempt to rehabilitate oiled animals should always be carefully considered in relation to other response options (see ethical discussion on pages 25-26) and the availability of human and other resources. The supportive involvement of the competent government authorities greatly benefits the success of the activities.

The aim of oiled wildlife rehabilitation

Rehabilitation of oiled animals should aim at the release of cleaned and rehabilitated animals that, as regards their fitness, behaviour and survival perspectives, cannot be distinguished from a non-rehabilitated wild animal of the same species. Ideally, a rehabilitated bird should be seen breeding some time after its release.

Successful oiled wildlife rehabilitation

The process of caring for oiled wildlife that leads to the release of healthy animals, using established husbandry and veterinary protocols that have been scientifically developed with the objective to maximise post-release survival.

Methodology

There are many existing methods for the rehabilitation of oiled birds. Some are well documented and many others are not, although they may be equally effective. Most of the more effective methods have been developed over the course of decades, often by single rehabilitation centres and always through the process of trial and error.

Successful approaches and methods have been developed by the Oiled Wildlife Care Network, International Bird Rescue and Research Center, Tristate Bird Rescue and Research Center, the Royal Society for the Prevention of Cruelty to Animals and promoted by the International Alliance of Oiled Wildlife Responders, the umbrella under which these groups cooperate. It is of critical importance to use these proven methodologies, especially in the circumstances of an incident.

Minimum Welfare Standards

The Minimum Welfare Standards for Permanent or Temporary Centres Dealing with Oiled Wildlife (Thomas, 2006) prescribes action on the following items:

- Provision of Food and Water
 - Provision of a Suitable Environment
 - Provision of Animal Health Care
 - Provision of Opportunity to Express Most Normal Behaviour
 - Provision of Protection from Fear and Distress
- The full document is downloadable from www.oiledwildlife.eu



Involvement of experts

The rehabilitation of oiled animals is an activity that is best carried out by, or under supervision of, qualified experts. These are people that have first-hand experience in a wildlife response centre over many years, have dealt extensively with oiled animals and are familiar with international methods. Without the inputs of such experts it is unlikely that large numbers of animals can be rehabilitated successfully.

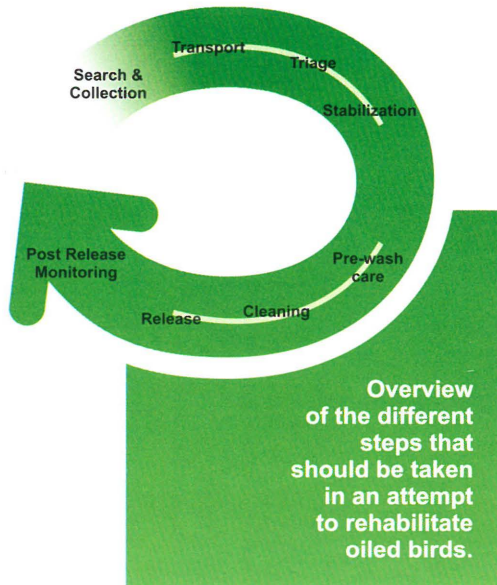
Keys to the success of rehabilitation

In past spills, variable results have been achieved, ranging from 6 to over 90% release. With hindsight, keys to the success of the response can be determined as follows:

- Action on the lessons learnt in previous incidents
- The supportive involvement of the competent government authority(-ies)
- Existing pre-spill wildlife response plans with guidelines based on best practice knowledge
- Fast decision making about the mobilization of a response
- The involvement of expert responders and response teams at an early stage
- Accurate search and collection and appropriate stabilisation of animals found on beaches
- General good physical condition of the birds on arrival in the facilities
- The species involved in the incident

Providing care: the rehabilitation process

The rehabilitation process starts with search and collection activities in the field and is terminated when the bird is released into the wild. In that process, the bird goes through a number of different stages which are described below.



Search and Collection

Search and collection can include the active search of contaminated marshes, beaches, rivers, or rocky shores to collect live and dead oiled wildlife. These activities need careful planning and preparation because they can be dangerous. Teams should be well equipped and have received a safety instruction before they leave for a predefined area. Oiled birds tend to come ashore at night, so the best time to carry out search and collection activities is in the early mornings (without compromising safety aspects). In consultation with the oil spill response coordination centre, areas where wildlife is likely to be encountered should be selected and visited as a priority, especially under the circumstances of limited resources.



Transport

Only rarely can birds be given a physical examination immediately on the beach. For practical reasons, collected birds are taken from the beaches into collection areas from where they are transported at coordinated times to more distant facilities. In these collection areas, where animals should stay a few hours at maximum, birds should be offered warmth, shelter and quietness as minimum conditions. First aid (e.g. hydration, pre-treatment for ingested oil) should be provided before transport if possible. If the distance to the nearest facility is longer than a 2 hours drive and the number of animals is high, the setting up of a nearer first aid centre or temporary holding facility should be considered.



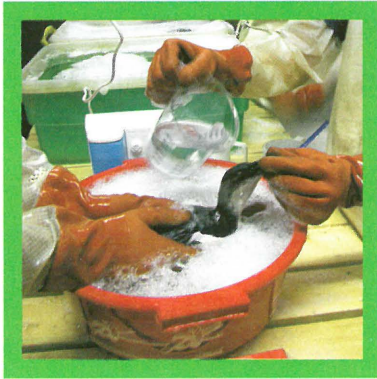
Triage (intake)

Birds that arrive in a facility are given a physical examination to determine their health condition. Various indicators can be tested such as injuries, body condition, body weight, temperature. If appropriate and possible (as it requires special equipment), blood values can be tested to determine the extent of oil-related damage. Blood values provide accurate additional data on an animal's physiological condition. Species specific triage criteria (see box next page) allow a veterinarian or an experienced rehabilitator to classify the birds into different groups for further treatment. As part of the intake process, oil samples from feathers may be taken for special testing that will help identify the source of the spill if this is otherwise unknown.



Stabilisation and pre-wash care

In the stabilisation process, the oiled birds which are normally dehydrated from not eating or drinking enough, are given an electrolyte solution and a chemical (activated charcoal) that will prevent absorption of any oil ingested, until it is naturally defecated. Stabilisation includes medical treatment, feeding and rehydration. Further pre-wash care, also providing long periods of quiet rest to the animals, aims at bringing back the body condition of an animal. Predefined criteria help to determine at which point an animal can be assumed strong enough to withstand the stress of the washing process.



Cleaning

Animals are washed in a series of tubs filled with dilute dish detergent and hot water (39-41°C). Water under sufficient pressure is needed to rinse off the detergent until the feathers have become water repellent (the water comes off in droplets). Washing and rinsing is very stressful for a bird as it can take as long as an hour (some protocols set species specific time limits and prescribe two sessions if necessary). Once cleaned and rinsed, animals are placed in covered pens equipped with pet dryers until completely dry.



Recovery and pre-release assessment

After the successful washing process, it may take up to 10 days for birds to restore their complete waterproofing ability through preening (the bird uses its beak to restore feather structure; this behaviour is enhanced by putting the birds on a pool in an environment free of stress). In preparation of their return to the wild, birds are placed in pools with constant overflow of the water to make sure they are again waterproof and able to maintain body temperature. To be ready for release, they need to have good body condition, a healthy weight, normal blood values, normal behaviour and foraging ability.



Release

When an animal meets release criteria, it should be banded by an official bander. The choice of the release site is important. The animals should be released into clean habitats that are appropriate for their species, preferably near to existing colonies.

Post release survival

To understand the long-term effects of oil and cleaning on wildlife, and to make sure each treated bird survives, qualified researchers should look at post-release survival of rehabilitated animals. Radiotelemetry is amongst the techniques that sometimes are used to monitor survival and track movements of a particular animal or groups of animals. Observations of ring numbers on the colony or ring readings after a bird has been re-admitted for rehab or died, is another way of obtaining scientific proof of post-release survival.

Example of a triage regime

In this example, establishing a triage regime for birds involves dividing the casualties into three categories as follows:

Category 1 may include birds: that are physically fit; and or

- With temperature at, or above, a predetermined criterion; and/or
- with blood values at, or above a predetermined criterion; and/or
- That are known breeding adults

Category 2 (often divided into subcategories A and B, see below) may include birds:

- With a temperature and/or blood value at intake below predetermined criteria
- That are covered with additional and caustic substances and/or
- That are suffering from broken limbs

Category 3 may include birds that: are below a pre-determined weight criterion;

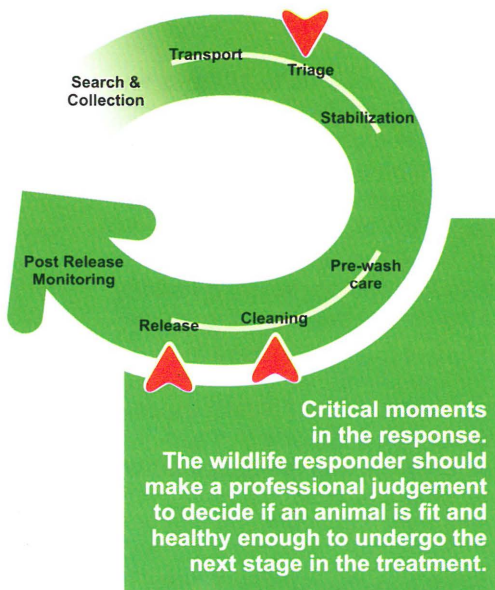
- Are suffering from multiple injuries; and/or
- Are in need of care that is not readily available

The process of triage involves a veterinarian or experienced wildlife rehabilitator making a decision as to how each individual casualty should be dealt with, e.g.:

- ① Euthanise if unlikely to survive (Category 3); or
- ② Invest professional care into selected casualties (subcategory 2A) which may make suitable candidates for moving to Category 1, otherwise (subcategory 2B) demote to Category 3 (euthanasia); or
- ③ Attempt (early) cleaning and release with good prospects for long-term survival in the wild (Category 1).

Towards optimised results

Three stages in the rehabilitation process are critical to ensuring that animal welfare principles are well incorporated and that a healthy animal is produced at the end of the process. Those stages are the selection of animals on intake (triage), the selection of animals that are ready to be washed, and the selection of animals that are ready to be released.



International protocols and internationally shared expertise allow for the determination of species specific criteria that can be used for any animal species that gets involved in an oil spill in Europe. The use of these international criteria is the best guarantee that animal welfare principles are applied and resources not wasted.

Triage

Triage allows the rehabilitator to select from amongst the admitted animals those animals that, based on past experience, would have the highest probability to survive the treatment and survive considerable time after release (ideally rejoining the breeding population). The selection process on the one hand offers an instrument by which the rehabilitator can ensure cost-efficient use of his available resources whilst guaranteeing an optimal success/survival rate. On the other hand, it offers an instrument to ensure animal welfare under various conditions. Animals that have a small probability of survival will not be admitted, meaning that they will not be exposed to unnecessary suffering. Criteria that are needed for the triage process need to be species specific. Ideally they are based on internationally agreed guidelines that are determined from a process in which the success rates of a large number of accredited rehab centres are reviewed. These criteria themselves should be made subject to continuous review.

Ready to wash

Each animal that is submitted to the washing procedures should be medically examined in order to document its health condition. Also here, criteria should be used that are species specific and that are based on review of the results from accredited rehabilitation centres.

Ready to be released

The release is also a critical moment in the rehabilitation process in which the rehabilitator should decide that an animal has fully recovered, needs no further treatment and is ready to go. This decision should be based on a thorough medical examination of the animal, and species specific reference data that describe the condition of animals that have demonstrated a long post-release survival in earlier occasions. Ideally, these references are shared at an international level and subject to continuous review.



Keeping birds

For the rehabilitation process, birds should be kept for as short time as possible, but long enough for the treatment to be effective. Captivity means stress to the birds and exclusion from their natural environment. Through the design and management of the holding facilities, the choice of food, their treatment, the adverse effects of captivity can be minimised.

The design of pens

The pens to hold oiled birds can be set up in different formats. The main objectives in the design of pens are:

- They must be in accordance with the natural behaviour of the animals (e.g. social animals can be put together; solitary animals should be kept separate).
- Provide shelter and reduce visual and acoustic stress
- Be easily cleaned
- Be strong enough to contain a bird safely
- Be designed to minimise impact on the birds' bodies, especially legs and feet
- Have substrates that minimise feather contamination and injury

Secondary problems

Holding seabirds in captivity has additional risks such as injuries from captivity and infectious diseases. They occur because the birds are under stress and because they are out of their natural environment. The risk of the occurrence of secondary diseases may be significantly reduced by correct accommodation design, nutrition and handling and hygiene.



Net bottom cages have many advantages in the prevention of secondary diseases problems and are easy to clean.

Herd health

In contrast to the rehabilitation of individual oiled animals that is normally carried out as a routine procedure in experienced wildlife rehabilitation centres, the rehabilitation of large numbers of casualties from an incident requires another approach, called herd health.

Herd health aims to provide appropriate care to a large number of casualties under the circumstances in which limited resources do not allow intensive attention to each animal individually.

Triage is applied as an instrument to ensure the health of groups of animals rather than individuals. Triage considerations include the removal of diseased, injured, weak or thin birds to reduce the risk of spreading infectious diseases and to optimise the use of available resources. Other aspects of herd health practices include efficient infectious disease control protocols, effective feeding systems and variations in the wash/rinse process and adjustments in the rehabilitation process.

Recovery on the pool

Soon after washing, a seabird is ready to recover on water.

The renewed access to water is a significant improvement of the bird's environment. The placement on a pool stimulates the bird's natural behaviour, which means a considerable reduction of captivity stress and a giant step forward in the successful recovery of the animal's release conditions.

Secondary problems

Problems in captivity

- Bumblefoot, keel or hock lesions
- Cloacal impaction
- Infectious diseases

Aspergillosis

Because seabirds spend most of their time at sea and only minimum time in a terrestrial environment, their immunosuppression system is insufficiently developed against fungal agents such as *Aspergillus*.

Preventive measures include e.g.:

- Avoid hay or straw as a substrate
- Clean/desinfect the facilities before use and maintain good hygiene while birds are kept
- Provide adequate ventilation in the rooms where animals are kept
- Reduce stress
- Provide Itraconazole



Forward holding

In some incidents, oiled birds may come ashore in an extensive geographical area of which the more remote places may be too far away from the wildlife hospital where the cleaning and rehabilitation of the animals is being organised.

In this case, forward holding centres may be set up, where triage and stabilisation can be carried out. Animals are due to stay only for a number of days in such centre, until a washing facility is ready to receive them, and their health condition allows further transportation to such a facility.

The size of the forward holding centre should be dependent on the number of animals that are expected from the beaches that the centre is supposed to serve. Staffing should be chosen accordingly.

Forward holding is a technique that countries should be able to apply effectively as a minimum level of preparedness. It requires a small strike team that knows how to establish a forward holding centre, manage it, instruct volunteers, and apply the technique of stabilisation according to international standards.

In case of a large incident that is bound to overwhelm the local permanent resources, forward holding will “buy time” without compromising the health and treatment of the animals. While the strike team is stabilising and providing pre-washing care to the admitted animals, (international) expertise can be mobilised to assist with the establishment and management of a temporary wildlife hospital and take care of the further treatment (washing, waterproofing, recovery) of the stabilised animals.



Requirements for a forward holding facility

Space

- Intake desk
- Housing of birds
- Veterinary treatment and lab
- Staff/volunteer kitchen and relaxation room
- Restrooms
- Food kitchen animals
- Office (e.g. communication facilities)

Water

Electrical power and heating

Ventilation

Equipment

- Personal protective equipment
- Pens for bird housing
- Feeding facilities
- Heat lamps
- Communication facilities

Food

- Fresh fish (low fat content)
- Duck pellets

Medication



In the aftermath of the Prestige incident, a large temporary facility with a capacity of *circa* 1500 birds was built under supervision of the International Fund of Animal Welfare Emergency Response Team. A fire brigade facility was transformed into a holding and washing facility; recovery pools were built outside. Supporting units (consisting of a tent and several marine containers) were built on the parking lot. The tent is visible on the picture behind the building.

Temporary wildlife hospital

The selection of a building that could serve as a temporary wildlife hospital, the transformation of this building into appropriate and effective units, and its subsequent effective and safe management are critical activities that require a lot of experience and which are best carried out by, or under the supervision of, experienced experts. Choosing an inappropriate building, making mistakes in the planning of activities in this building, compromising on safety or building inappropriate working units can be detrimental to the success of the wildlife response as a whole.

If local expertise is insufficient to undertake the establishment of a temporary wildlife hospital, the job can be supported by international experts mobilised to site.

Requirements for a temporary facility for oiled bird washing and rehabilitation

Space

- Intake desk
- Housing of birds (25 m² per 100 birds)
- Washing, rinsing and drying
- Veterinary treatment and laboratory
- Waterproofing (inside, outside)
- Staff/volunteer kitchen and relaxation room
- Restrooms
- Food kitchen animals
- Office (communication, computer, internet)
- Adjacent outdoor area for storing equipment and conducting activities such as preparing birds for release

Water resources and installation

- Unlimited amounts of soft fresh water that can be heated up to 39 to 41°C, available in a constant flow with a pressure of 4-6 bar
- Means to dispose of used cleaning solution and rinse water

Electrical power and heating

- Min. 200 Amps, 120/240 volts, single phase service and (if possible) ground-fault interrupts
- Temperature control to maintain a draught-free, warm environment (24-29°C)

Detergent

- The use of Dreft/Fairy/Dawn is strongly recommended

Ventilation

- Good ventilation to prevent excessive oil fumes and humidity, and to help prevent (infectious) diseases

Equipment

- Personal protective equipment
- Pens for bird housing
- Pools
- Pet dryers
- Heat lamps

Food

- Fresh fish (low fat content)
- Duck pellets

Medication



If basic resources like water and electricity are meeting the required standards, an empty warehouse like this could be transformed into a temporary facility

Staff and volunteers

In larger incidents there is more work than can be done by staff only and therefore it is important to acknowledge the need and importance of volunteers. Volunteers inevitably come from a range of backgrounds, offering different skills and levels of ability, but there are many areas in which a volunteer's potential can be used in a spill. Coordinating responsibilities are best delegated to staff while volunteers are working under supervision in a responsible and motivating way.

Health and safety

Health and safety of staff and volunteers is of fundamental importance. Appropriate personal protective equipment must be provided with regards to the tasks given to staff and volunteers and the working environment where these tasks need to be carried out. Task instructions must always include a thorough briefing on health and safety. Facility safety plans need to be developed and implemented for any building where response activities take place.

Insurance

Explore the possibilities, for instance by consulting organisations that regularly involve large groups of volunteers, of concluding a group insurance for all activities carried out by staff and volunteers during the wildlife response.

Management of volunteers

Volunteers can range from long term helpers who have developed specific wildlife skills over a period of time at a rehabilitation centre, to those who turn up during a large scale incident in order to offer help. Volunteers inevitably come from a range of backgrounds, offering different skills and levels of ability but in a large scale response, there are many areas in which a volunteer's potential can be used. In some areas of the wildlife response the use of volunteers is vital to get all the work done.

Inform volunteers and express respect

Volunteers should be well informed about what is going on in the response operation so that they can understand their role and position. The response management must ensure that volunteers believe that their input is important and that they are treated with respect.

Volunteers: be prepared!

Be prepared to receive volunteers in early days of incident. People may volunteer before facilities have been set up and the tactics of the response have been developed and implemented. If badly treated, these people will lose interest and may express their criticism to third parties, including the press, with the possible result that volunteers will be hard to get by the time they are badly needed. A number of measures can be taken to avoid this and make sure that volunteers will be available when needed:

- Appoint a person who is charged with volunteer coordination Communicate a contact address where interested people can register.
- Use predefined registration forms, on which volunteers can fill out their personal details, backgrounds, skills, critical health information, and their availability.
- Identify and prioritise the positions that will be required and estimate the numbers of people that may be required for each position.
- Identify staff that will be charged with the task to train and support volunteers, including e.g. first aid, food, accommodation.

Source: Alliance of Oiled Wildlife Responders (2002)



Transportation of live animals

The transportation of live animals is a challenging activity in a response. Distances have to be bridged between beaches where animals are collected and the facilities where they can be treated. In general, the aim of a transport plan should be to minimise transportation time. If long journeys cannot be avoided, regular re-hydration stops should be considered. Small temporary first aid facilities in the periphery of the response could be considered at strategic location to prepare animals for a longer journey.

Essential requirements for transportation

- Good ventilation of the vehicle
- Good ventilation to every container; oil fumes can be toxic; a problem exacerbated by confinement
- Birds are best transported in cardboard boxes. Avoid polythene, plastic or plastic coated containers because of condensation
- If possible provide a soft non-slip substrate for the animals to rest on.
- Only one layer of transport boxes; ensure ventilation; boxes should be secured to avoid sliding; transport birds in the dark or near dark.
- Ensure species contained together are compatible; fighting can break out even between individuals of the same species.
- Keep animals at a reasonable temperature; neither too hot nor too cold and draught free.
- Well constructed cardboard pet containers, to allow for all the above, plus portability; these are often flat-packed for storage. For larger animals, purpose-built containers may be required.



After: IPIECA (2004), RSPCA (2006)

Organisation of the response

Any oiled wildlife response needs one place where all the information from day to day is brought together and where it can be analysed for decision making: a Wildlife Response Centre (WRC).

In a small incident, the WRC could be the office of a coordinator, who oversees the wildlife operation, but who does not necessarily have to be close to where the activities take place.

The more complicated the incident, however, the greater the need to establish a control room with appropriate staffing. This room ideally is part of an office building that is chosen in a relatively central location so that managers and coordinators of different facilities can easily meet.

In an integrated response, the WRC works in close cooperation with the control centre (incident command) of the overall response.

The wildlife response coordinator, ideally trained senior officer from the leading response agency, should be based in the WRC and work with a small staff that is collecting key information from all parts of the response.

The wildlife response coordinator works as the head of a team of coordinators, each of whom oversees and controls a part of the response (see diagram).

Ideally, this team is responsible for the execution of a pre-spill defined wildlife response plan, or a plan that has been agreed by all stakeholders at the beginning of the response.



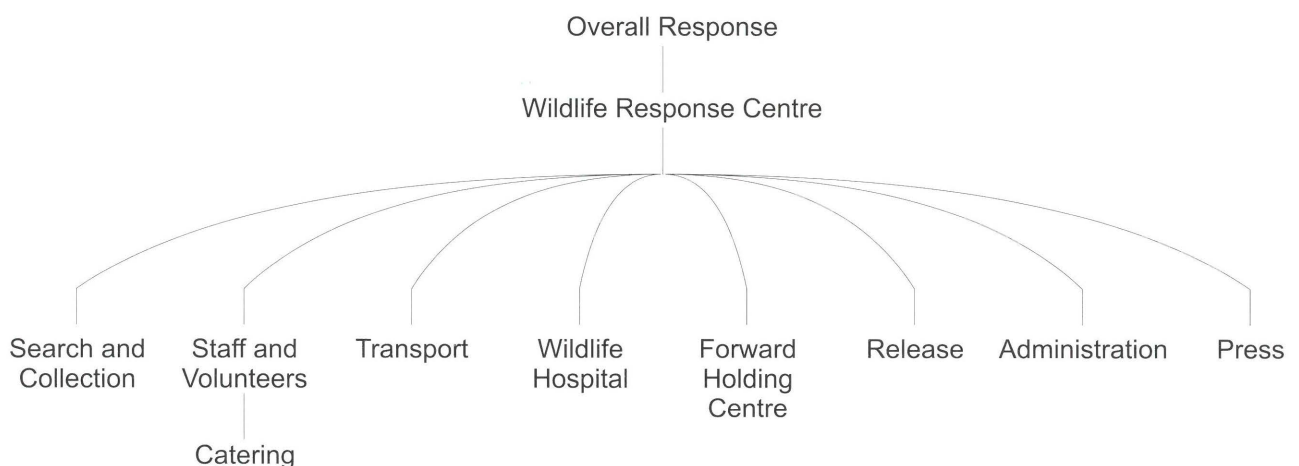
Requirements for a Wildlife Response Centre

A meeting room

- Meeting table with 8-12 chairs
- Data projector (beamer)
- White board or A2 note book

Office room / equipment

- Computer with internet connection
- Fax
- Copier
- Telephone land line



Cost recovery

Mechanisms for cost recovery depend largely on the source of the spill and the legislation of the country where the spill occurs.

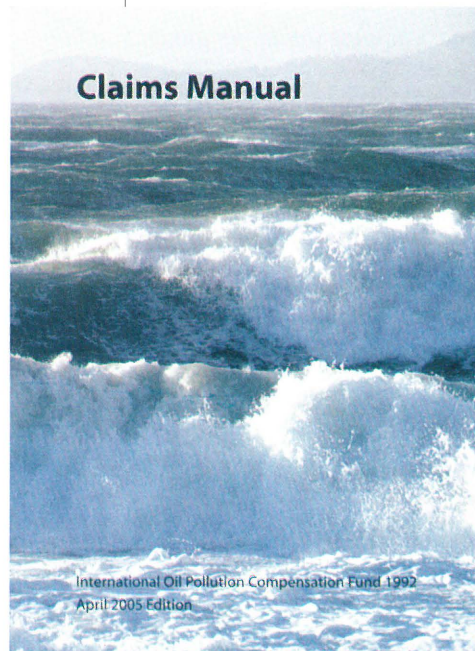
For oil spills from ships, the polluting vessel's third party liability is usually insured by a Protection and Indemnity Club (P&I Club). Wildlife responders should seek to make contact with representatives of the P&I Club early during the incident in order to advise them of wildlife concerns and ongoing and planned rehabilitation efforts. While in many cases there are no binding provisions on the Club to cover wildlife response expenditure, early dialogue will facilitate communication and increase the likelihood of cost recovery.

Oil spills from tankers are covered in many countries by special legislation and all coastal countries in Europe (except for Montenegro) are signatory to the 1992 CLC and 1992 Fund Conventions and/or the 2005 Supplementary Fund. These conventions enact the 'polluter pays' principle of strict liability and aim to ensure that claims for pollution damage or preventive measures are compensated swiftly. Such claims can include costs of wildlife rehabilitation (see box).

Specific guidelines on the submission of claims are given in the 1992 Fund Convention Claims Manual.

The 1992 Fund Convention Claims Manual (2004 edition) states on page 21, with regards to oiled wildlife rehabilitation:

“Claims for reasonable costs associated with the provision of local reception facilities appropriate to the scale of the problem, materials, medication and food are normally compensable, as are reasonable food and accommodation costs of volunteers. If several special interest groups undertake cleaning and rehabilitation activities these should be properly co-ordinated to avoid duplication of effort. Deductions will be made for funds raised from the public for the specific purpose of maintaining the field operations for a specific incident”.



In the case of pollution not caused by a tanker, but for instance by a spill of bunker oil from another type of ship, both aforementioned Conventions do not apply, and a straightforward international system of compensation is not available. If the ship involved is insured through a P&I Club, a claim for the wildlife response could be submitted and there is a chance that the P&I Club will at least seriously consider this. The chances of such claim can be improved by making sure it follows the guidance of the Claims Manual, but there is no guarantee that compensation will be paid.

At all times, wildlife responders should seek advice from the on-site representatives of the P&I Club, the IOPC Fund and/or ITOPF.

How do I increase the probability of compensation when responding to oiled wildlife incidents?

During the response:

- Before you start spending money in a response, make sure that your activities are officially recognised by, and linked into, the centrally led overall response organisation
- Aim at the most cost-efficient and justifiable solution for your expenses in any situation
- Keep proof of authorisation of expenses
- Keep all receipts and invoices of your expenses.

After the response:

- Where and if possible, make your claim part of the centrally submitted claim
- Justify each single receipt and invoice of your expenditure
- Write an accessible claim, as simple and straightforward as possible following the official guidelines from the Claims Manual.

Planning and evaluation

The best guarantee for a successful oiled wildlife response is the existence of an integrated national oiled wildlife response plan in which all key stakeholders participate. Only in that way, a number of key features of an effective oiled wildlife response can be realised.

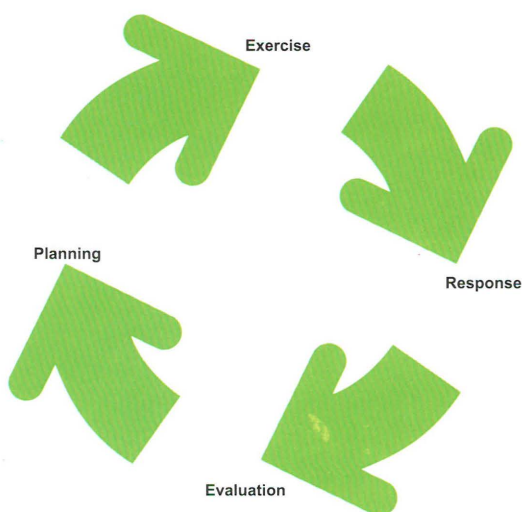
A few years ago, such plans were virtually non-existent in Europe but as a result of the Erika, Prestige and Tricolor incidents, the need for adequate planning and preparedness is increasingly understood. At present, different countries in Europe have established an oiled wildlife response plan and others are in a process of developing a plan.

For those parties that are interested in developing a national response plan, the IPIECA Guide to Oiled Wildlife Response Planning will provide a wealth of background and guidance. In addition, examples of response plans are available as well as experience from planning processes that took place in different European countries. The website www.oiledwildlife.eu will provide an updated overview of information.

Evaluation of an oiled wildlife response is key to improving strategy and methods. A SWOT (strengths, weaknesses, opportunities, thresholds) analysis may be carried out, ideally during meetings in which all stakeholders that were involved in the response are represented.

The evaluation ideally should result in the development of a response plan (if such a plan was non-existent) or the modification or update of an existing one.

Once a plan has been developed, it should be exercised. Based on the results from an exercise, a plan may have to be modified.



What are the key features of an effective oiled wildlife response?

1. Responders working safely
2. Joint primary aims of the response to mitigate the impacts on wildlife welfare and conservation values threatened or impacted by the oil spill event
3. Systematic objective data collection and analysis to facilitate impacts assessment
4. Responsible utilisation of resources and auditable documentation of costs
5. Cooperative and collaborative inclusion of wildlife and environmental stakeholders in planning and operations
6. Utilisation of widely accepted protocols and practices
7. Minimisations of the environmental impact of the wildlife response activities
8. Adherence to legal permitting requirements for wildlife interactions, including capture, holding, marking and release of wildlife
9. Wildlife response integrated into wider oil spill response effort.

(after IPIECA 2004)



Incident response: what to do with live casualties?

An oil spill incident in which animals are affected may cause an immediate management problem as regards to what should be done with the live oiled casualties, especially if these appear on beaches in relatively large numbers.

From the moment animals start arriving on the shore, there are three actions that can be undertaken:

- Attempt to clean and rehabilitate the animals
- Euthanise the animals in order to terminate their suffering
- Do nothing, intentionally leave the animals to the natural conditions under which they will survive or die.

Each or a combination of these options may be considered as the most appropriate approach under certain defined circumstances and the table on page 26 aims to assist decision making. The best time to define what should be done with oiled wildlife is upfront, before an incident has taken place, as a matter of pre-spill planning. Different approaches may be needed for different parts of the country, based on risk assessment, the conditions at different times of the year and the resources that can be mobilised locally, nationally or internationally. The involvement of all stakeholders in a transparent decision making process may facilitate the public understanding of any agreed approach taken by the time response activities need to be mobilised.

Table: What to do with live casualties? - Some considerations to take into account

Option	When it may be considered appropriate	Additional remarks
Rehabilitate	<ul style="list-style-type: none"> • In countries where rehabilitation of (oiled) wildlife is an accepted activity and receives support from the competent authority. • In cases where expertise and resources are available and can be quickly mobilised so that rehabilitation has a high probability of success. • In incidents in which animals of high conservation value have become oiled and expectations are high to save them. 	<ul style="list-style-type: none"> • Triage should always be made part of the rehabilitation process. • Expectations from rehabilitation should be assessed in relation to the species involved. Some species (generally ducks, swans) are more easily rehabilitated or are less demanding to rehabilitate. Other species (auks) are more vulnerable and their rehabilitation may need specialised expert involvement.
Euthanise	<ul style="list-style-type: none"> • In case of severe suffering of animals. • In case of large numbers of casualties that overwhelm the capacity of mobilised rehabilitation resources. The application of stricter triage criteria allows keeping the population of a rehabilitation centre at a manageable size and prevents suffering of animals through the inability to provide adequate care for the number of animals admitted (i. e., it is better to look after a few animals well than to look after a lot of animals badly and thus cause them to suffer). Also looking after a few animals will maximise the chance of survival for those animals under treatment. Looking after a lot of animals badly may jeopardize the chance of survival of them all. 	<ul style="list-style-type: none"> • Euthanasia is a reasonable option in any oiled wildlife incident. • It should be borne in mind that euthanasia also requires pre-spill planning with regards to strategy, methods and resources. • The methodologies that are to be used for euthanasia should also be determined at the planning stage. Controversial methods should be avoided and it may be appropriate to license (and train) identified experts for this task • Euthanasia may require the use of controlled drugs which require veterinary documentation and supervision
Do nothing	<ul style="list-style-type: none"> • In case oiled animals are encountered in a remote area, far from any resources • Under extremely harsh or dangerous conditions, unsafe for humans • That are known to survive well with the rate of pollution observed 	<ul style="list-style-type: none"> • The damage to the natural environment caused by an oil spill is something that the public normally feels responsible for. In the case of stricken wildlife, the response option “do nothing” may not easily be accepted, unless arguments in favour of this approach are felt genuine and reasonable.

Human health and safety

Whichever approach may be chosen as the most preferred to respond to animal welfare issues, human health and safety must come first. Both rehabilitation and euthanasia are active interventions and require humans to enter the contaminated area, which may not be safe under the prevailing environmental or weather conditions. Also the public needs to be taken into account in an assessment of health and safety. The emotional aspects of oil affected wildlife may attract spectators or well-intended but careless volunteer responders to beaches where they safety cannot be guaranteed. The communication of the formal strategy and the existence of a dedicated response organisation will help to keep the public informed and avoid adverse situations.

Planning

It goes without saying that pre-spill planning is the best possible approach to make sure that the most appropriate and agreed methods will be put in place with the highest probability of success. Involving all stakeholders in the planning process may not always be considered easy, but if successful it will help to identify an effective and acceptable strategy that can be realised with the contributions and support of the most prominent and relevant stakeholder groups. It will gain a wider public support for this strategy and avoid controversy and anarchy during an actual response.

Information, contacts and links

The website www.oiledwildlife.eu has been developed as a portal to any information relevant to oiled wildlife response and planning in Europe. In addition, the table below provides access to the information provided by a number of key organisations.

Oiled wildlife response organisations

International Fund for Animal Welfare	www.ifaw.org
Sea Alarm Foundation	www.sea-alarm.org
Royal Society for the Prevention of Cruelty to Animals	www.rspca.org.uk

Leading oiled wildlife rehabilitation organisations

Oiled Wildlife Care Network	www.vetmed.ucdavis.edu/owcn
International Bird Rescue and Research Center	www.ibrrc.org
Tristate Bird Rescue and Research Center	www.tristatebird.org
Royal Society for the Prevention of cruelty to Animals	www.rspca.org.uk
References to oiled wildlife response planning	
IPIECA Guide to oiled wildlife response planning	www.ipieca.org

Regional agreements for oil spill response and preparedness

Bonn Agreement	www.bonnagreement.org
Helsinki Convention, Response group	www.helcom.fi/groups/response
Barcelona Convention, REMPEC	www.rempec.org
Copenhagen Agreement	www.ust.is/kph

Compensation

International Oil Pollution Compensation Funds	www.iopcfund.org
International Group (P&I Clubs)	www.igpandi.org

EU Organisations

Civil Protection - Marine Pollution	http://ec.europa.eu/environment/civil/marin/mp01_en_introduction.htm
European Maritime Safety Authority	www.emsa.eu.int

Other Organisations

International Tanker Owners Pollution Federation	www.itopf.com
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European Union