

# Basic Oiled Wildlife Response Manual



**EUROWA**  
EUROPEAN OILED WILDLIFE ASSISTANCE

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Common Scoter • Picture by Sea Alarm Foundation (SAF)

### Back cover:

Long-tailed Duck • Picture by Agni Kaldma

## Basic Oiled Wildlife Response Manual

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### Preface

This manual is based on the oiled wildlife response manual that was developed in 2012-2013 under leadership of Sea Alarm as part of the POSOW project (Preparedness for Oil-polluted Shoreline cleanup and Oiled Wildlife Interventions). The project was co-financed with a grant received from the EU Civil Protection Mechanism, and managed via a partnership of ISPRA, CEDRE, Sea Alarm Foundation, CPMR and REMPEC.

The manual was published in 2020 by Sea Alarm as Part G of the EUROWA Guidelines, for which the POSOW project partners granted their explicit permission. Sea Alarm owns the copyrights of the manual contents. Chapters and information from the original POSOW manual, that were specifically important to the Mediterranean Sea, have been omitted from

this EUROWA publication. This makes the manual better suited for teaching oiled bird rehabilitation in a wider international context.

During 2022, version 1.0 of Part G was slightly modified within the framework of the EUROWA-2 project, co-financed by the EU under the Union Civil Protection Mechanism. The content of the manual was not modified, only some minor changes in branding and layout were applied to be consistent with the rest of the EUROWA Guidelines.

### EUROWA Qualification

This manual is an integral part of the EUROWA BASIC Responder course. Via the training course, successful participants can obtain the qualification of EUROWA BASIC Responder via registration in the EUROWA database.

### Authors

The POSOW Oiled Wildlife Response Manual was originally developed by the Sea Alarm Foundation in close consultation with POSOW Project Partners and with contributions from the CVFSE (Centre Vétérinaire de la Faune sauvage et de Écosystèmes, France) and WWF Finland.

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More information about EUROWA can be found at [www.eurowa.eu](http://www.eurowa.eu)

## Purpose of the manual

The EUROWA BASIC Responder Course is designed for individuals without previous experience who wish to assist in the rescue and rehabilitation of oiled birds. The course will help them to understand and implement basic wildlife response skills, which they can perform under supervision of experienced responders.

A number of operational activities should not be undertaken by BASIC Responders as they require more in-depth training and experience to be conducted safely and effectively. Throughout this manual, it will be made clear which wildlife response tasks BASIC Responders may undertake under supervision and which tasks should be left to experts of a higher qualification.

The document is divided into two parts:

**PART 1:**

background, general principles of oiled wildlife response and a presentation of wildlife response actions and tasks which can be undertaken by BASIC Responders

**PART 2:**

technical sheets to be used in the field and on the work floor of a facility

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PART 1 GENERAL PRINCIPLES

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## Oiled wildlife response

Some marine animals, such as marine and coastal birds, sea turtles, seals and otters are extremely sensitive to oiling. This is because these animals use the water surface (where oil floats) to rest, dive through from above to feed, or to break through from beneath to breathe. The effects of oiling may be lethal and many animals affected by the oil will die at sea. However, a certain number of oiled animals (dead or alive) may arrive at the nearest coast. Depending on the circumstances this could range from only a few animals to hundreds or thousands if the oil spill occurs in the middle of an important habitat and season. Large numbers of animals arriving ashore may cause a serious challenge to the affected country and this needs special consideration as part of the oil spill response activities. It needs an integrated oiled wildlife response which is best planned within the framework of a local or national oil spill contingency plan. An oiled wildlife response includes any activity that can be undertaken to deal with wild animals that are/may be affected by oil following a marine oil spill:

- Pro-active measures to minimise the impact on wildlife (removing the oil before it reaches sensitive areas, protecting these areas by keeping the oil out, or taking animals, nests or eggs away from the threatened areas, by disturbing through hazing or capturing/collecting them).
- Measures to mitigate the effects of oil on animals (attempting capture, cleaning and rehabilitation in specialised facilities, or alternatively ending suffering by euthanasia). Sometimes, circumstances and weather conditions do not allow active mitigation, or health and safety considerations (which come first at all times) can even prevent activities from being undertaken at all.

Amongst the greatest challenges of wildlife response is the question of how many animals will be affected, at what scale resources (manpower, experts, equipment ...) will have to be mobilised, and how to deal with public/media expectations. Especially in the first days after the spill, important decisions have to be made and it will take time before a wildlife response can become operational. If in those days animals already start coming ashore, they need to be taken care of by nearby responders. These responders could include volunteers, if well-coordinated and supervised.

This manual describes what a group of volunteers could establish and how to do so in the case of live animals coming ashore during an oil spill, focusing on birds as these are likely to be affected in larger numbers. This manual and associated training will lead to basic knowledge and skills that volunteers should have to be able to respond in self-coordinated groups or work under supervision of professional wildlife responders. This material can be used to start developing local capability in countries that aim to establish some level of wildlife response preparedness.

Volunteers being briefed on arrival



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## The use and position of response volunteers

The work of volunteers is crucial for the labour intensive activities of a wildlife response. The more trained volunteers are, the more valuable their contribution to the success of an operation will be. Therefore it is always worthwhile to invest in volunteer training programmes before an incident happens.

Depending on the level of pre-spill planning and preparedness, there are two main settings that need to be considered with regards to the position of wildlife response volunteers:

### 1. The response is led by experienced and qualified oiled wildlife responders

Experts will oversee the response and create the environment in which volunteers can operate effectively under supervision. Volunteers are taken care of and do not have to worry about the important decision-making, coordination and logistics of the whole operation they are working in.

### 2. Experienced responders are not there or have not (yet) arrived

This situation may occur in the first few days following the incident. Although experts may be on their way, animals are probably already arriving on the coast and need to be collected, transported and cared for. This sometimes means that (a group of) volunteers need to organise themselves to take care of these tasks, and make sure the animals stay alive until further assistance has arrived.

Volunteers need the same knowledge and skills in both situations, but in the second situation one or two volunteers from the group need to take a leadership role to ensure that all activities are at least wellcoordinated and resources are used optimally, in close cooperation with, and under supervision of the authorities in charge.

If not yet identified within the national or local contingency plan, authorities should designate a competent person to supervise volunteer support. Because the success of any wildlife response is strongly dependent on the activities of volunteers, they should be respected and treated well. Whoever is in charge of a group of volunteers should be a good communicator and try to organise and motivate them to work together and in teams. Volunteers should also be registered and receive clear instructions as to where they are expected to work and who will supervise them. They need to understand what their particular role is and how their individual activities contribute to the bigger picture. They must receive appropriate health and safety instructions, personal protective equipment (PPE), and must be provided with drinks, snacks and other food during breaks in designated areas. As for volunteers they must communicate well with their supervisors, other volunteers and those who are responsible for their well-being. This will help to prevent misunderstandings and frustrations and work towards greater success of the operation. Refer to POSOW Oil Spill Volunteer Management Manual for guidelines on general management issues for volunteers.

Volunteers being instructed in a temporary wildlife rehab centre



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Jobs for volunteers

Volunteers can carry out a wide range of jobs as part of the wildlife response. Not all tasks are “hands-on” (working with animals), but each single task does in the end contribute to the wellbeing of the animals, and a successful response. It is therefore important that those who want to volunteer in a response are aware of their personal qualities, talents, skills and preferences. A volunteer coordinator will use this information to find the best match so that

volunteers can do what interests them most and where they can make the greatest contribution. An example of jobs that are needed and can be undertaken by volunteers in a wildlife response (situation 1, situation 2, see previous section) can be found in the tables below.

1. RESPONSE LED BY EXPERIENCED AND QUALIFIED RESPONDERS				
	Outdoor activities		Indoor activities	
	Search and collection	Transport	Animal facilities	Administration
Hands-on	Capturing live animals Collecting dead animals	Rehydration of animals on long trips	Reception Triage assistant Stabilisation and pre-wash care Wash assistant Pool assistant Preparation of animal food	Record keeping assistant
Not hands-on	Communication Support to capture teams	Driving	House keeping Building/construction Record keeping Coordination Catering	Financial administration Documentation Secretary Logistics administrator

2. RESPONSE BY (A GROUP OF) VOLUNTEERS ON THEIR OWN				
	Outdoor activities		Indoor activities	
	Search and collection	Transport	Animal facilities	Administration
Hands-on	Capturing live animals Collecting dead animals	Rehydration of animals on long trips	Reception Stabilisation and pre-wash care Preparation of animal food	Record keeping assistant
Not hands-on	Communication Support to capture teams	Driving Logistics coordinator	Facility coordination House keeping Building/construction Record keeping Catering	Financial administration Documentation Secretary Logistics administration Response coordination

This Manual gives guidance for volunteers on operating in both situations, with a particular focus on situation 2 in which volunteers may have to undertake tasks on their own without assistance from experts.

Example of hands-on (working with animals) and not hands-on jobs that volunteers can carry out, both indoors and outdoors

Health and safety for volunteers

There is a big difference between health and safety in everyday life and during an oiled wildlife response. The response environment has a number of risks, but volunteers can protect themselves by understanding the health and safety issues relating to their work and by using appropriate control measures.

General health and safety information for volunteers is given in the POSOW Oil Spill Volunteer Management Manual. The organisation coordinating volunteers must ensure that all activities comply with relevant legislative health and safety requirements in the affected country. This may include suspending wildlife response operations if necessary from a health and safety viewpoint. Supervisors should ensure that a risk assessment is conducted for each work site or task and that each volunteer is informed about the identified risks and the behaviour required to manage them. Remember – health and safety of volunteers always comes first: if activities cannot be carried out safely, they should not be carried out at all.



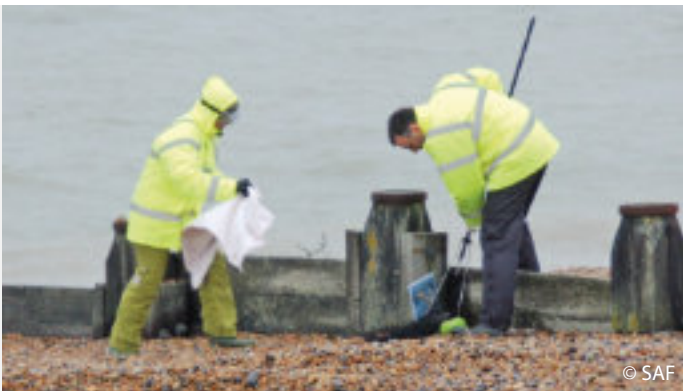
Always wear your full PPE

IMPORTANT RECOMMENDATIONS FOR VOLUNTEERS IN WILDLIFE RESPONSE	
Age	All wildlife response volunteers MUST be over 18 years of age.
Pregnancy	Pregnant women should NOT take part in wildlife response work.
Medical conditions	People with suppressed immunity and/or taking immune related medication, those allergic to feathers or suffering from asthma, should NOT take part in hands-on wildlife response work.
Physical ability and fatigue	Work can be physically demanding, with long shifts, much bending and lifting. Volunteers should not feel pressured into working very long hours over a prolonged period – take regular breaks, eat and drink enough, and get enough sleep. Serious fatigue is unsafe.
Stress	Working in a situation where animals are in distress can be traumatic and can put pressure on anyone. Take regular breaks and talk to colleagues or supervisors.
Personal Protective Equipment (PPE)	Basic PPE consists of gloves, goggles, and protective overalls. Always wear PPE as directed, including suitable footwear and make sure it is fastened/fitted correctly. Used PPE should be disposed of properly. Refer to POSOW Oil Spill Volunteer Management Manual.
Clothing	The working environment can be hot or cold and smelly. Wear clothes which you don't mind getting dirty and wear suitable clothing for the conditions (layering is ideal).
Injuries	Report all injuries or serious illnesses immediately as they may compromise your effectiveness as a volunteer (Refer to POSOW Oil Spill Volunteer Management Manual accident/near miss report technical sheet). First-aid services must be available on site.
Hygiene	Keep areas tidy, wash your hands properly and regularly, keep animals separate from human activities. No smoking eating or drinking is allowed inside a wildlife rehabilitation facility. Do not wear rings or bracelets.
Stay alert	Keep up-to-date with all written information and notices issued by supervisory staff. Follow instructions and listen carefully to briefings – they are for your own safety. Use your common sense at all times: health and safety is everyone's responsibility, including you and those around you.



## Health and safety on the oiled shoreline

Search and collection requires volunteers to go out along the shoreline to find oiled animals, pick them up and put them into containers to be taken to a rehabilitation facility. This brings about a number of risks related to the capture and handling of wild animals, all of which are potentially dangerous and could cause serious injury. Search and collection could also be taking place at the same time as shoreline



Wildlife response volunteers should always work in pairs on the beach

cleanup or assessment operations, adding to the level of activity on the beach and therefore the potential risks.

RISKS		CONTROL MEASURES
Bites, cuts and scratches, stab wounds from sharp bills/beaks Serious lacerations, broken bones (large birds, turtles, seals, otters)	✓	Wear PPE as directed. See 'Search and collection of animals' for proper handling procedures.
Zoonotic diseases and parasites	✓	Follow instructions for disease control. Maintain separation and hygiene procedures (see below).
Back damage (lifting heavy animals)	✓	When lifting, keep your knees bent and back straight, keep the load close to your body. Get help for very heavy loads.
Hyperthermia (including: heat stress, heat stroke, sunburn)	✓	Heat stress can occur in very hot/humid conditions, particularly when wearing non-breathable protective clothing. Take sufficient rest breaks (shaded areas or climatecontrolled areas preferable) and drink fluids regularly. Use a sunhat and sun cream.
Hypothermia (cold exposure)	✓	Wear warm clothing, ideally in several layers (together with PPE provided as necessary). Use gloves and a hat to avoid heat loss from hands and head. Heated shelters/rest areas should be provided. Take regular breaks.
Slips, trips and falls (cuts, breaks, concussion)	✓	Be vigilant to potential hazards when moving around the shoreline, be careful on rocky/slippery surfaces.
Toxic fumes (early on when oil is still fresh, in confined spaces etc.)	✓	No smoking. If in doubt, do not enter an area where fumes are present. Supervisors should carry out gas monitoring activities and advise on which areas volunteers can enter.
Drowning (including work in tidal areas, on jetties and harbours)	✓	If working in or near the water, a life jacket is recommended.
Unauthorised visitors (e.g. passers-by, media)	✓	Be aware that persons not involved with the response may interfere or get in the way of your work. Use common sense to try and avoid accidents. Volunteers should generally not speak with the media – supervisors will advise on security and media arrangements.
Machinery/vehicles for shoreline cleanup	✓	Stay aware of traffic and follow instructions given. Supervisors should advise which areas of the coastline volunteers can enter (check if in doubt).

## Health and safety in a rehabilitation facility

A wildlife rehabilitation facility can be a complex operation, in a hectic working environment with many people and animals.

RISKS		CONTROL MEASURES
Bites, cuts and scratches, stab wounds from sharp bills/beaks Serious lacerations and broken bones (large birds)	✓	Wear PPE as directed. See sections on search and collection for proper bird handling procedures.
Zoonotic diseases and parasites	✓	Follow instructions for disease control. Maintain separation and hygiene procedures (see below).
Skin allergies (latex, feathers ...)	✓	Always wear gloves (if allergic to latex, use alternatives e.g. surgical gloves).
Back damage (lifting heavy animals)	✓	When lifting, keep your knees bent and back straight, keep the load close to your body. Get help for very heavy loads.
Slips, trips and falls	✓	Take care on wet/slippery floors and wear footwear with a good grip. Walk, don't run.
Chemical spillages and exposure to fumes	✓	Cleanup spills as soon as possible (check information on packaging). Good ventilation is important. No smoking.
Injuries from medical equipment (needles, syringes)	✓	Volunteers should not be using needles (trained personnel only or under veterinary supervision), but be aware of sharps when cleaning or assisting others. Dispose of used equipment properly and safely.
Electrical injury and thermal burns	✓	Take care when operating electrical equipment in a facility where lots of water is being used (e.g. for animal washing). Seek first-aid for serious burns. Supervisors should ensure that fire extinguishers (suitable for all types of fire) are available.



Provide proper waste disposal



Always wear gloves

## Benefits from separation and hygiene measures in a facility

### Animals:

to prevent disease transmission, animal groups should be segregated according to their condition. Oiled and clean animals should be kept separate. Animals under intensive veterinary care should be separated. All equipment used in these separate areas must be assigned to and kept within each designated area. Disinfectants and sterilisers should be used according to local/national legal requirements or advice. Keep clean and dirty equipment separate.

### Animals and volunteers:

kitchen facilities, eating areas and those used for relaxation by responders, volunteers, visitors and everyone else must be kept separate from animal areas. There must be no common equipment between animals and humans e.g. towels, blankets, knives, forks, spoons, electrical appliances must not be shared. Do not eat or drink in the animal areas.

### General hygiene:

keep areas as clean and tidy as possible without causing significant additional disturbance to animals in care. Put all tools and equipment away cleaned and ready for their next use and keep them in their designated places. Report any damaged equipment or tools at the first opportunity.

### Hand washing:

frequent and efficient hand washing is important – whether you have been wearing gloves or not. As a minimum, wash your hands with soap or antiseptic handwash between jobs, before and after preparing animal food, or eating food and before leaving the premises/site.



Signs can encourage better hygiene



© SAF

A clean and well organised facility makes a safer workplace

search and collection • transport • arrival and reception • intake and triage • pre-wash care (stabilisation) • washing • post-wash care • release

## SEARCH AND COLLECTION OF ANIMALS

**Search and collection is a demanding activity as it will require spending many hours on the beach and walking long distances sometimes in bad weather. Apart from capturing live animals, volunteers can contribute by searching for dead animals, carrying collected animals or taking on other supporting tasks.**

For the search and collection operation to be safe and effective, it needs to be well planned including the briefing of field teams, the availability of PPE and all necessary safety and collection equipment.

No search and collection attempts should be made without explicit authorisation from the command centre. Safe access to beaches needs to be guaranteed and planned in such a way that wildlife activities do not disturb other shoreline response activities and vice versa. Decontamination zones should be set up and respected to avoid secondary pollution. Transportation for both people and animals must also be arranged. Volunteers must realise that using vehicles on oiled beaches may make shoreline cleanup more difficult by spreading contamination or driving oil into the sand.

A field coordinator should coordinate the work of the different field groups, organise the required vehicles for transportation (boats, cars for volunteers, vans for bird transportation), provide PPE and equipment and gather information from salvage, shoreline cleanup or assessment teams. For a successful capture and for safety reasons, people should always work in pairs as a minimum and be overseen by a supervisor.



© WRCO

Oiled bird on the beach



© WRCO

Don't capture a stranded gannet without proper equipment



© WRCO

Write all collection data on the box or bag



## Live animals

A successful attempt to rescue and rehabilitate oiled animals starts with a quickly organised and effective search and collection operation. The faster a debilitated animal receives appropriate treatment in a rehabilitation centre, the better its chances of survival will be. Capturing live animals quickly from the shoreline will also stop them from moving inland, spreading the pollution to a clean environment.

Team work is essential for the successful capture of oiled birds. If possible, ornithologists or biologists with sound knowledge of the affected species and their behaviour should be included in the teams.

Most catching will be done from the shore. In some cases, when proper equipment and trained personnel are available, catching operations can also be conducted by boat. In areas where the shoreline is rocky and steep, this is the only available option. Early morning is often the best time for capturing oiled seabirds on the beach.

On arrival, teams must first get a good overview of the area. If they spot target animals, they should see how the terrain can be used to their advantage. Tactics normally aim to catch an animal by surprise so that it does not use its last remaining energy trying to escape. The movement of a team should not scare the target animal before the attempt has started. If capturing a bird, first make sure it cannot escape into the sea. Walk slowly and quietly towards the bird along the shoreline (not straight towards the animal!) using the features of the shoreline (breakwaters, shrubs,

rocks ...) to conceal yourself where possible. Your goal is to place yourself between the bird and the water. Never approach the bird from the shore and drive it towards the sea as once back in the water, it will probably be impossible to catch. When you are level with the bird, you can attempt a catch with your net. Refer to Datasheet n°2.

Remove the bird from the net very carefully. Even though you should be wearing goggles, make sure to keep your face at a safe distance from the bird's beak since the birds may peck at your eyes or nose. Always handle birds using a firm grip, keeping the wings and, when necessary feet and beak, under control. Refer to Datasheet n°6.

Whilst on the shoreline, it is possible to transport the captured birds in pillow cases, duffle bags ... For transportation to a facility by car, it is best to put them in boxes. Write crucial information on each transport box as indicated below. If more than one animal is placed in the same box, make sure that this is clearly indicated on the box.

### Write on each box containing a live animal:

- |                           |                                      |
|---------------------------|--------------------------------------|
| > Species                 | > Received rehydration at            |
| > Location collected      | > name and contact details of finder |
| > Date and time collected | > Arrival date and time              |



Dead bird on the shore

## Dead animals

The systematic collection of dead animals from the shore is very important for a number of reasons:

- Prevention of scavenging from corpse (foxes, ravens, eagles, gulls ...), causing secondary oil contamination
- Impact assessment: enables a reliable scientific assessment of the total mortality caused by the oil spill on different species of fauna. Bringing them into a laboratory will allow a more reliable determination of species, sex ratio, age groups, and various biometrics. All these data will allow the mortality to be related to different breeding populations
- Individual data collection of scientifically ringed birds
- In some countries systematic collection is needed to provide legal evidence.

Corpses on the beach are sometimes completely covered in oil and it takes a trained eye to spot them (a hump in a slick of oil). If a corpse is found it needs to go into a plastic bag. One bag per corpse is needed: the corpses should be kept deep frozen shortly after collection and if individually bagged they can be more easily processed by a scientist. If samples are required for evidence collection, one in every 100 animals (or if possible one from every beach) should be kept in aluminium foil as plastic bags can contaminate the sample.

Once placed in an individual bag, all collected animals from the same stretch of beach can go into one large bag for transportation (keep them as cool as possible during transport). These large bags should to be labelled as indicated below.

### Write on each large bag containing dead animals (one large bag for each beach):

- |                                    |                                      |
|------------------------------------|--------------------------------------|
| > Number of corpses                | > Location collected                 |
| > Species included (if recognised) | > Date and time collected            |
| > Scientific ring numbers          | > name and contact details of finder |



## ANIMAL TRANSPORT

**Volunteers can fulfil an important task in animal transport. Driving safely between the location where animal collected points and a forward holding centre or rehabilitation facility, collecting and transferring animals and essential information are important responsibilities.**

For the rescue of oiled animals, time should not be wasted after their capture. The faster an oiled animal arrives at a forward holding centre or rehabilitation facility, the better its chances of survival will be. Animals that will be transported for more than 2 hours should receive warm fluids (36-38°C) before their departure (see Stabilisation section), to support their body functions.

To reduce stress and the risk of damaging skin or plumage, proper transport containers should be used, such as cardboard boxes, or pet carriers. It is important that the transport boxes have adequate ventilation holes and that they are not packed too tightly in the vehicle and not stacked on top of each other.

Make sure that each transport container is large enough and allows sufficient ventilation. As a general rule, the box should be large enough to allow the bird to stand, but small enough that it is not able to flap its wings. Line the bottom of the container with corrugated paper, newspaper or a towel to ensure that the bird does not slip during transport.



Each container has to be marked with the required data (see text box on p. 14), and also each bag with dead birds (see text box on p. 15). Ensure that these data are recorded at the time of transport; otherwise try to obtain the information.

In the transport vehicle, place the boxes on solid ground and slightly apart from each other to enable air to circulate. A closed and well-ventilated vehicle is preferable (not an open pick-up), with a separated driver cabin. Ideal temperatures during transport will depend on the condition of the animals: wet oiled animals need warmer temperatures (22°-26°C); dry oiled animals may be transported at slightly cooler temperature (18-22°C). Keep bags with corpses as cool as possible.

Keep different species separately. Generally, only one individual should be transported per box. In case of non-aggressive, social bird species, two or three individuals can be transported together, if the size of the box allows this.

Drive cautiously and try to avoid heavy side to side motion or sharp breaking. Do not use a radio in the car, do not smoke, and keep voices down. Birds should be transported directly to a forward holding centre (where they can be given pre-wash care) or directly to a rehabilitation facility where they can also undergo washing and post-wash care (see technical datasheets). Always call ahead to inform the centre or facility of the number and the species of birds you are transporting, as well as the estimated time of arrival. This allows the centre or facility to plan ahead.

Well ventilated boxes ready for transport

## ANIMAL ARRIVAL AND RECEPTION

**Volunteers can be placed at the reception of a facility, and the job of receptionist is ideal for those who combine administrative skills, lifting (boxes containing animals), communication skills, ability to work consistently and systematically, sometimes under stressful conditions.**

The reception is where the transported animals can be handed over to the forward holding centre or rehabilitation facility. Here it is important that a first count is made of the animals arriving, of which species they are, where they came from, when they were captured and by whom.

People working in the reception area must ensure that all available information for each animal is checked and that this information stays with that animal when it enters the facility. Proper data collection and transfer is very important as it helps in decision-making for further treatment and providing the data for impact assessment. If no information is provided on the box, the receptionist must get the essential information from the transporter before he leaves. The transporter should also tell the receptionist whether the animals have already received any treatment (e.g. fluids) which should be documented.

The information provided should be transferred to a medical record form for each individual animal. Refer to Datasheet n°5.

The receptionist keeps a count of animals that have arrived (a tally per species, preferably on display e.g. on a white board) and lines up the boxes for intake and stabilisation (see pre-wash care section). Priority should be given to the animals that are most in need of assistance, i.e. the animals that travelled the furthest distance and are probably most dehydrated. By the end of the day, the reception area must be empty: all animals should have moved through into the next stage of care. Labelled bags with dead birds should be stored in freezers for impact assessment later on. If the reception area is not empty, the receptionist should report this to the facility manager before he/she leaves.



Sometimes reception can be flooded with arriving animals

## INTAKE AND TRIAGE



**Intake and triage are activities that must be performed by experienced rehabilitators or vets. Volunteers can assist with administrative tasks. If trained personnel are not (yet) available, this step is best postponed until they are, so all animals immediately go to pre-wash care and stabilisation.**

Intake and triage aim to ensure that each animal accepted into the rehabilitation facility has a track record (of treatment) and receives the kind of treatment that best fits its needs, so giving it the best chance of survival.

In an incident, when many animals are arriving at a rehabilitation facility, intake and triage can help to invest limited resources (expertise, manpower, medicines, food ...) into animals expected to make the best recovery. An animal that arrives in a very poor body condition will probably die, even if it receives the best possible treatment. Experienced rehabilitators or veterinarians can make this judgement. Such an animal is best euthanised, and not subjected to additional suffering. The policy on triage should be defined by veterinarians according to national legislation, including for protected or endangered species.

All animals accepted for treatment need to be registered as patients – the process called intake. During intake each animal receives a ring/band with a unique patient number, and a record (form) in which the results of the first examination and subsequent treatment are documented.

Triage is the process in which all arriving animals are divided into different groups for treatment, on the basis of their health status. Animals that are too weak for treatment will be immediately euthanised by veterinarians according to the chosen policy; animals that need a lot of attention to survive will go into intensive care, and animals that will probably improve rapidly will be put into standard care. All dead animals should be properly stored for processing and eventual disposal.

Intake and triage are carried out together as part of a clinical examination, ideally shortly after an animal's arrival under the supervision of a veterinarian. The following data are recorded on a form that stays with the animal throughout its journey through the facility:

- species, age and sex
- weight
- temperature
- body condition and behaviour
- illnesses or injuries

Sometimes it may be necessary during intake to collect evidence (photo or feather sample) of the birds' oiling.

After intake and triage each accepted animal will go through a stabilisation treatment. The first treatment for stabilisation is already provided during intake: birds receive a tube feed (tubing) with rehydration fluids or ORS (50 ml/kg, warm 37-38°C) before they go to the stabilisation area. Euthanised birds should be stored in labelled bags in freezers for impact assessment later on.

During intake, different medical parameters are registered by experts



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## PRE-WASH CARE AND STABILISATION



**Volunteers are very useful in the pre-wash care stage. Teams work in a dirty (oil contaminated) environment where they must follow the proper procedures consistently and with patience, which is physically demanding. Main tasks for volunteers are cleaning cages, providing food and tubing the birds with rehydration fluids.**

Pre-wash care is undertaken immediately after an oiled animal's intake into a dedicated forward holding centre or rehabilitation facility. The first focus of standard pre-wash care is to stabilise the animal to ensure that its condition is not getting any worse. Once the animal is stabilised, continued pre-wash care aims to ensure that the animal will become fit and strong enough to be washed. Intensive care can be provided to animals with a poor body condition on arrival, or animals that do not make the expected progress via standard care. Birds that die during this phase should be stored in labelled bags in freezers for impact assessment later on.

### Stabilisation (first 48 hours)

The process of stabilisation aims to stop the declining health state of an animal. This is achieved by providing essential assistance to the animal, including a warm environment (to increase body temperature), rehydration (to re-establish the water balance), food (to re-establish energy balance), quiet environment (to reduce stress levels) and medicines (to combat any other identified problem). If these treatments are provided, an animal will quickly improve to a state in which it can continue to gain weight and restore body functions that are needed for withstanding the stress of washing. The table on page 20 explains stabilisation treatment for birds.

### Pre-wash care for stabilised animals (after 48 hours)

Some animals can be washed or transported immediately after their successful stabilisation. Others need additional time and care to make further improvement. Stabilised animals are often still low in body weight. Providing food and rest in a quiet environment will normally bring them to the point at which they eat by themselves and allow their condition to improve to the required level. This may take 1-7 days, depending on the individual animal and on the species. The table on page 21 explains pre-wash care for stabilised birds.

### Intensive care

If animals do not improve under the standard care regime, they can be placed under an intensive care regime. They go to a separate intensive care area on the work floor where they receive individual treatment and monitoring from a veterinarian. Intensive care can only be provided if the resources (people, equipment, space, medicines, food...) are available to do so.



Feeding of birds during stabilisation phase

© SON Network



Providing stabilisation care (the animals’ first 48 hours in the facility)

Work schedule	See Datasheet n°8 on stabilisation
Proper housing	It is very important to keep animals in a quiet, well ventilated environment. Housing (usually netbottom cages for birds) must provide enough space for the animal to feel comfortable and be kept clean.
Dealing with the loss of body temperature	Due to the loss of insulation of oiled feathers, cold weather can have a serious impact on a bird’s body temperature. Sea-water, rain and wind will cause the animal to lose body heat and become hypothermic. Bringing the bird into a dry warm area with an extra heat source (heat lamp or mat) is usually enough to bring the body temperature back to normal within 24 hours, if combined with rehydration and food. Conversely, warm weather and high temperatures may cause overheating of the body (hyperthermia). Bringing the bird into a dry cooler sheltered area is usually enough to bring body temperature back to normal within a few hours.
Dealing with dehydration	Due to lack of food, diarrhoea caused by oil-damaged intestines and sometimes due to the effects of sun and wind, an oiled bird is usually (highly) dehydrated. Normal body functions work slower or fail when the body is suffering from dehydration. It is possible to rehydrate orally within 48 hours if enough fluids are provided several times per day. Use warm (36-38°C), isotonic rehydration fluids and use one stomach tube per bird (can be reused if washed and disinfected). Administer 40-50 ml per kg of bodyweight (i.e. a 500 g bird will be given 20-25 ml each time). For initial rehydration, the birds need tube feeding 3 times per day at equally spaced intervals throughout the day.
Dealing with starvation	Animals often lose their ability to catch prey after oiling and therefore become deprived of food and water. Provide enough good quality food at all times that is appropriate to the species. Offer fresh fish in bowls with fresh water. Sometimes birds need to be encouraged to eat by tossing a fish in front of them. During the night, some bird species tend to eat a lot more, so provide enough food to last until the morning.
Dealing with stress	Oiled animals are stressed because of the disturbing effect of oil pollution, human interaction (humans look like giant predators), the unnatural environment and the noise. This stress has a negative influence on the immune system and healing process. Wherever possible, unnecessary disturbance should be avoided. Some effective ways to reduce stress are: <ul style="list-style-type: none"><li>• Minimise the surrounding noise and activities</li><li>• Cover cages with light-coloured sheets to reduce visual interference</li><li>• Cover the birds’ heads with a towel every time they are handled</li><li>• Minimise the number of times a bird is handled: clean cages and change food while at the same time tubing the birds</li><li>• Allow enough hours of rest between tubings</li><li>• Leave the birds to rest at night</li><li>• Social species should be kept in groups of 2-5 individuals</li></ul>

Normally after a period of circa 48 hours of stabilisation treatment, animals are fit enough to be feeding on their own again and quickly improve on their health condition.

Their stabilisation is achieved when:

- They have a stable, normal (41°C) body temperature
- They are rehydrated.



Rehydration of a bird during stabilisation

Providing pre-wash care to stabilised birds (after 48 hours)

Work schedule	See Datasheet n°9 on pre-wash care of stabilised birds
Proper housing	It is very important to keep animals in a quiet, well ventilated environment. Housing (usually net-bottom cages for birds) must provide enough space for the animal to feel comfortable and be kept clean. Regularly offer plenty of fresh food that is adequate for the species, ideally matching their natural diet.
Providing food	The interaction with the animals should be minimal, especially when they have started feeding on their own. The less stressed they are, the more they will eat.
Minimising disturbance	If an animal does not benefit from the minimum level of care at this stage, its body condition may further decline. Therefore animals in this department must be regularly observed. Animals that get worse must be taken out and placed under an intensive care regime.
Frequent observation	Animals that have clearly regained their body weight and fitness and are feeding on their own may be ready to be washed. This must be confirmed by a veterinarian or expert.
When ready to be washed?	An animal is ready to be washed when the following criteria are fulfilled: <ul style="list-style-type: none"><li>• Has been in the facility for a minimum of 48 hours and stabilised</li><li>• Demonstrates natural wild behaviour and is bright, alert and responsive</li><li>• Body weight is at an appropriate level, and not decreasing</li><li>• Blood value analysis provides a minimum score.</li></ul>

## THE WASHING PROCESS

**Oiled birds should only be washed by trained and experienced people – volunteers should not attempt it by themselves. Volunteers who have demonstrated useful skills in other parts of the rehabilitation centre can assist in the wash room.**

Washing aims to remove all the oil and other dirt (fish oil and faeces) from the skin, fur or feathers. This de-oiling is a crucial step in the rehabilitation of an animal. It is also extremely stressful, which is why the animal has to go through pre-wash care first and meet important criteria before being selected for washing.

The successful washing of a bird will bring the feathers back to their clean natural condition and restore the potential for barbs and barbules to perfectly hook into each other. It is this restructuring of cleaned feathers which enables a bird to float on the water, which is achieved by the bird itself when it is placed on the pool shortly after washing and starts preening its feathers. If washed incorrectly or inadequately, the bird will not be able to regain its waterproofing. It will need to be washed again, or else euthanised. That is why only trained and experienced persons should wash oiled animals.

Washing of large numbers of birds will need huge amounts of running hot water (at least 42°C) that must be available on demand without interruption and with sufficient pressure. The correct disposal of waste water (water, oil and detergent) should also be organised prior to starting washing.

Washing a small bird by hand is carried out by two people, one of whom (the assistant) holds the animal and the other (qualified washer) cleans the animal systematically and precisely. The bird is held in a tub filled with hot (42°C) water and an approved detergent. The washing process should be done as fast as possible in order to minimise handling stress (generally 15-60 minutes per bird).

Once the bird is completely de-oiled, it must be rinsed with 42°C water under pressure until all detergent is rinsed away. This may take another 10-15 minutes. If rinsing is not carried out well and detergent is not rinsed off completely, problems will occur with waterproofing in the post-wash care stage.

After washing, an animal spends some time in a drying room – basically a clean net bottom cage with a ventilator that blows warm air which helps the feathers to dry. When sufficiently dry, the animal must be placed on a pool to start the waterproofing process. If no pools are available, a washed bird will very quickly lose its cleanliness and have to be washed again. Therefore the number of birds that can be washed per day is not only dependent on the number of washers, but also on the number of available pools.

Successful washing is only achieved by experienced professionals



## POST-WASH CARE AND WATERPROOFING ON POOLS

**Pool management is another job that is best performed by trained and experienced people. Volunteers can assist with filling and cleaning the pools.**

After washing, a bird's feathers are clean, however their overall structure may not be fully waterproof. Waterproofing needs the barbs and barbules of each feather to link into each other, which is something only the bird can do through "preening" – the behaviour by which the animal perfects and maintains its plumage.

Once it is placed on a pool, a bird will start to preen, but it takes some time before fully waterproof plumage is regained. During this time, cold water will get to the animal's skin cooling it down, and it will struggle to stay afloat. A pool manager needs to monitor these animals continuously and remove them when they become too wet or show prolonged signs of distress. When birds demonstrate an active, voluntary use of the platform (a ledge that is fixed at water level, which allows the animal to step out of the water to have a rest), they can be left alone for longer. An animal may need repeated trips between the drying room and the pool until it is able to get itself out of the pool onto a platform.

Living on water again has a positive effect on their wellbeing, and if provided with enough food, their recovery can be rapid. Continuous preening will improve the waterproof qualities of the plumage, and this will allow the animal to stay on the water for longer and make it less dependent on the platform. Food should be provided in the water, to stimulate diving behaviour.

Birds on pools should further increase their body weight and fitness and their blood values will achieve levels that are close to those recorded in the wild. This means that they will soon be considered as fully rehabilitated, and fit for release. The decision to declare a bird "ready for release" is taken by a veterinarian or experienced rehabilitator after a pre-release check against a number of criteria. The bird must have been 24-48 hours on a pool without a platform.

High quality pool management is crucial to ensure that pools have a clean water surface at all times. Floating oil from food and faeces can re-contaminate the feathers and be detrimental to the bird's waterproofing. If this happens, it is likely that the bird will need to be washed again which will dramatically decrease its chances of survival. To keep the water in the pools as clean as possible, the surface should be skimmed continuously. Also droppings and old fish should be removed from platforms and the bottom of the pools on a daily basis.

Juvenile gannet regaining waterproofing on a pool





## RELEASE



**The decision to release animals at the end of the rehabilitation procedure is an important one, and can only be taken by an experienced rehabilitator or vet. Once the decision is taken, volunteers can assist with preparing the animals for release, their transport to the release site and the opening of the boxes to let the animals go. Participating in the release events is a very rewarding experience and important for the morale of volunteers and staff to continue their hard work.**

The ultimate goal of oiled wildlife rehabilitation is to release de-oiled, healthy birds back into their natural environment allowing them to continue their place and function in the ecosystem. Released animals therefore must be fit for survival, as if had they never been oiled.

This is why strict criteria have been developed that a bird must meet before it is to be released. The bird should:

- be 100% waterproof
- demonstrate normal behaviour: it eats, dives and swims, social species generally remain within the group
- have a normal weight
- have no diseases or injuries
- have blood values within normal ranges of a wild bird
- have been banded with a permanent official leg band/ring.

It is important that a rehabilitated animal is released in or near to its natural habitat, taking into consideration its migration behaviour and the time of the year. The release site must be free of oil so that the risk of recontamination is minimised. Also it is recommended that the way the animal is released should reflect its normal social behaviour, determining whether they are best released individually or in groups, depending on the species and/or season.

Banding (ringing) of the animals before their release is crucial as it makes it possible to keep track of their individual survival. Most of them will go to places where they cannot be followed by man but where they could be monitored e.g. breeding colonies, where scientists can read the band numbers. Sightings provide crucial information about whether rehabilitation has been successful in the long term and to assist in improving the quality of the rehabilitation methodology that was applied.

Releasing healthy birds is the ultimate goal of rehabilitation



© Tim Thomas

## What to expect as a volunteer

One of the most important issues in an oiled wildlife response is managing expectations. What is expected as an outcome? Will the response be successful? As a volunteer, the expectation of how successful your own contribution will be is an important thing to manage.

Being part of a wildlife response can be a very positive experience. However this is very much linked to the response being successful, which is often measured by the number of clean and healthy animals that are released into the wild after rehabilitation. In reality, success is dependent on very many variables, many outside of anyone's control, even if best practices are being applied. Losing animals despite everyone's hard work is difficult to accept, so being aware that this might happen helps to be prepared for such a disappointment.

Volunteers are badly needed to assist with the labour intensive care of animals and therefore have a key contribution to the success of the operation, but they cannot all be expected to be involved full-time for weeks on end. Volunteers should be aware that the longer they can be involved, the more satisfactory their contribution will be. Longer term involvement will offer an opportunity to know the job well, and even to take more responsibilities after some time. So a volunteer who is available for longer can make a more significant contribution than someone who can only join the response for a few days at most.

The system set up to register, train and manage volunteers will be important in meeting expectations. Under ideal circumstances a volunteer will arrive at the registration point and feel that everything is well organised i.e. he/she can choose from a range of different jobs and will receive the necessary instructions and training to do that job. Under these circumstances there will be a clear working environment where volunteers are taken care of and expectations can be well managed.



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Building pools

Under less ideal circumstances, a supporting structure for volunteers is not (yet) in place. This can be the case in the early days of an incident, when coordinators are working hard to put a response system in place; meanwhile oiled animals may already begin coming ashore. The absence of a clear structure and leadership may leave volunteers to interpret and improvise on their own, which could potentially lead to misunderstandings, competition and frustration.

There are several ways to maximise the satisfaction that everyone gets out of a response:

- developing a pre-spill defined wildlife response plan that provides a structure for the involvement and management of volunteers
- organising national pre-spill training, workshops and exercises for volunteers and volunteer groups
- providing training and instructions to volunteers as soon as they have registered
- attending international workshops and conferences where oiled wildlife response is discussed.



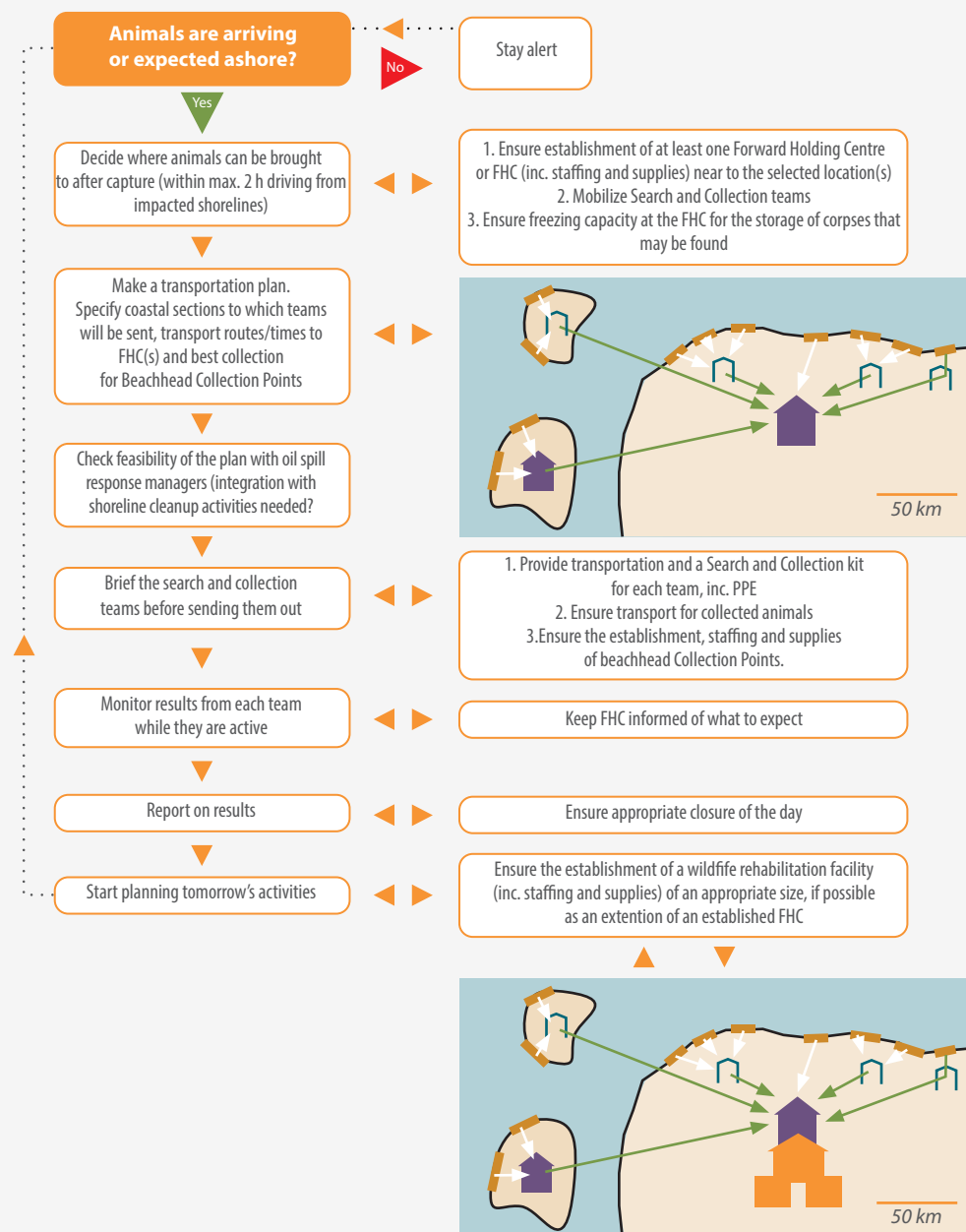
PART 2 FORMS AND GUIDANCE DATASHEETS

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## &gt; DATASHEET 1

## Managing the early days of a wildlife response

When an oil spill is reported, animals may already have started arriving on the shoreline. This sheet provides guidance as to how to start up an effective response: ensuring that animals are picked up safely and transported to facilities where they receive care for several days before being washed.



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### Beachhead collection Point (BCP)

A warm and ventilated place where live animals can spend a few hours before they can be transported. No animal stays here overnight!

### Forward holding centre (FHC)

A facility where animals can be provided with prewash care (see technical datasheets for set up, layout and procedures). Animals can stay here for many days, but are not released from here. Refer to Datasheet n°3.

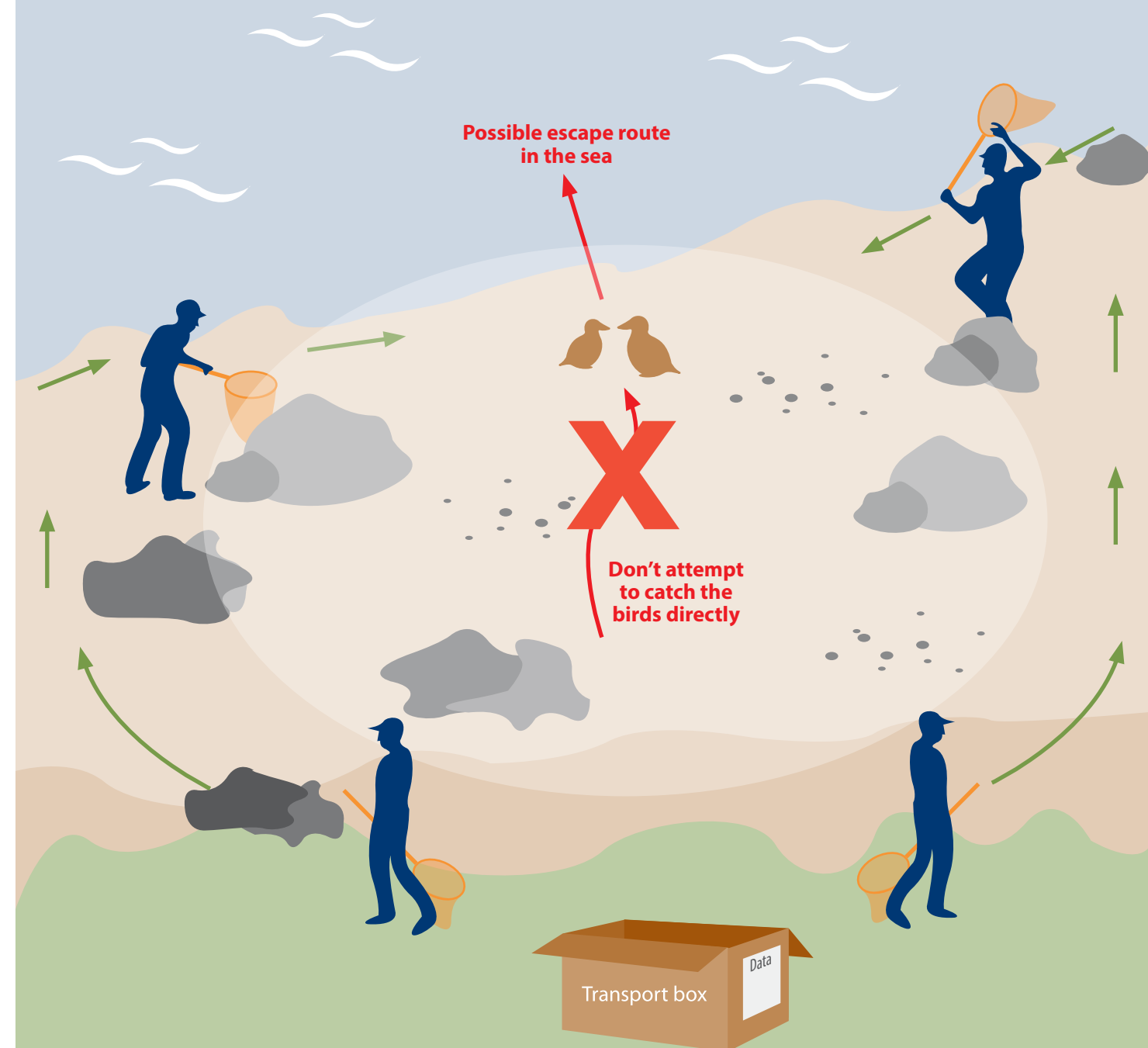
### Wildlife Rehabilitation Facility

A facility that is in fact a Forward Holding Centre extended with adequate washing and post-wash care capabilities. Setting up and running a Wildlife Rehabilitation Centre needs the involvement of qualified experts!

## &gt; DATASHEET 2

## Capturing live animals

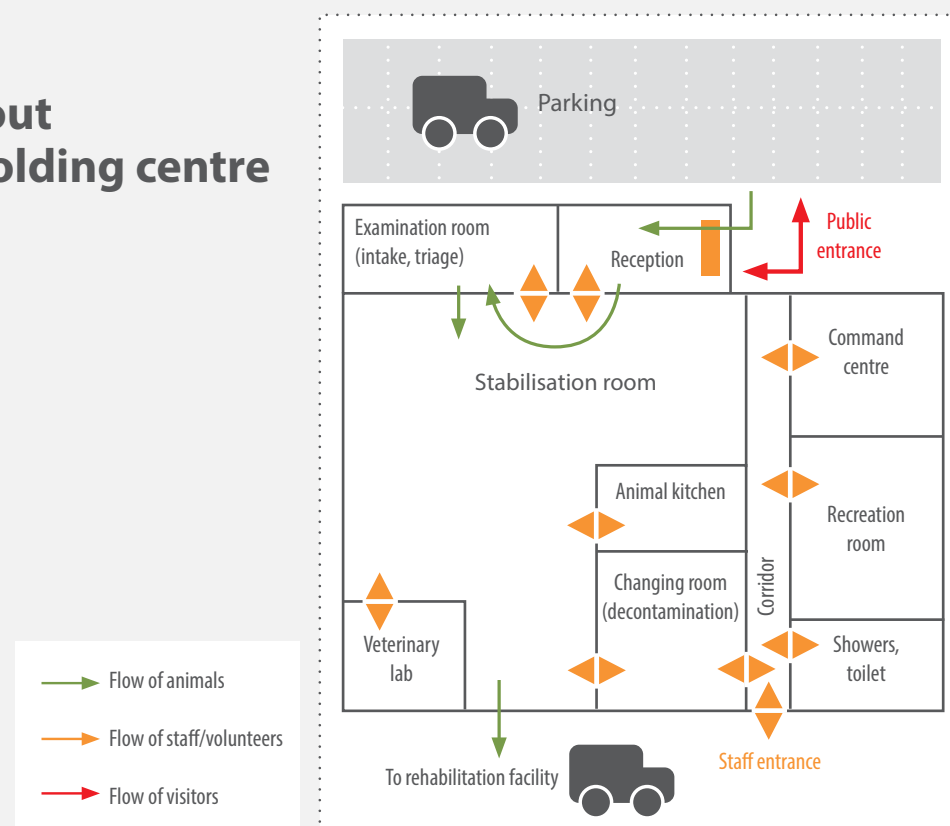
- .....▶ Use obstacles in the field (rocks ...) to hide
- .....▶ Keep net behind you
- .....▶ Walk gently toward the waterline from the birds
- .....▶ Run as close to the water as possible



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## &gt; DATASHEET 3

## Setup and layout of a forward holding centre



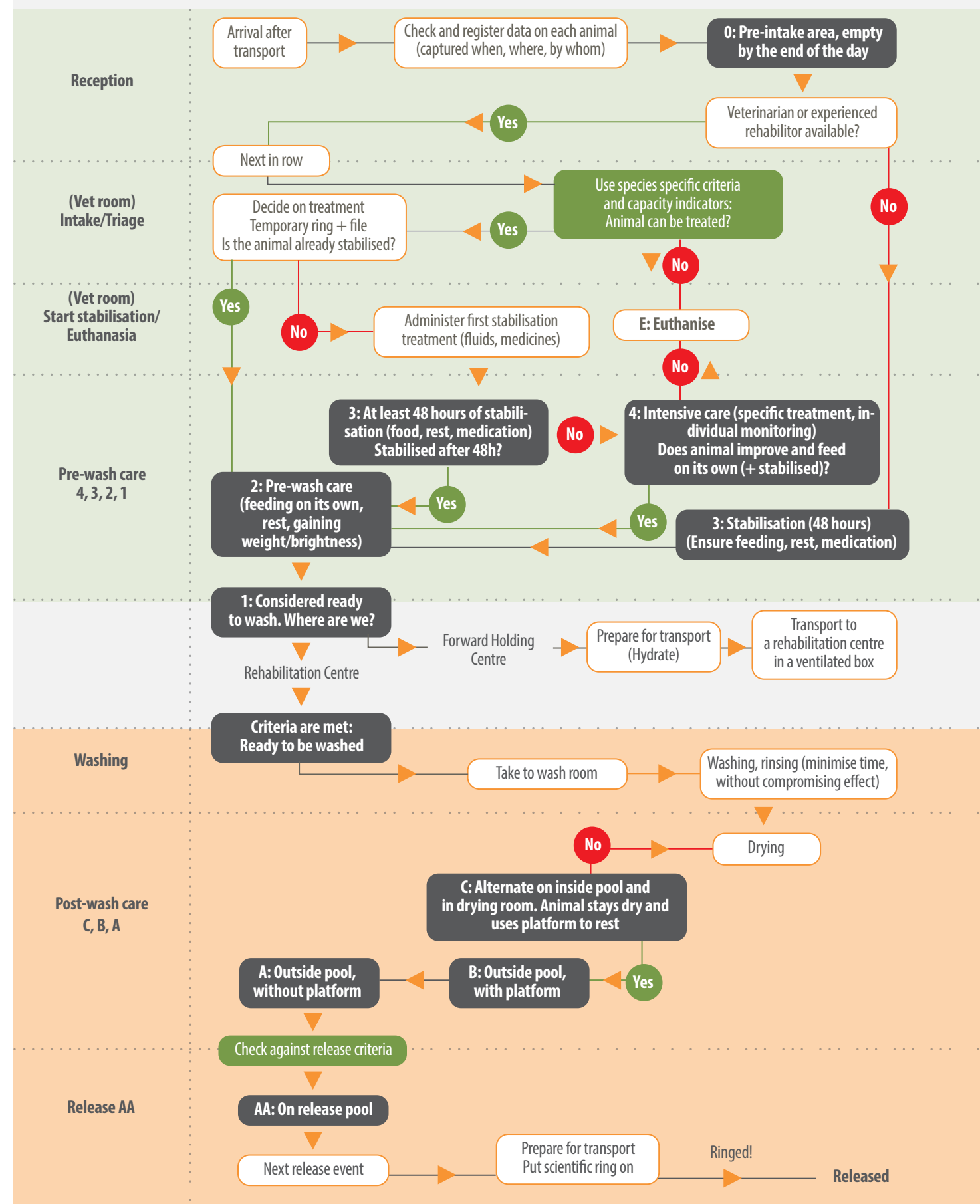
### Checklist of most important characteristics and equipment

- |   |  |   |
|---|--|---|
| <b>Reception</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Desk</li> <li><input type="checkbox"/> Space to put bird boxes</li> <li><input type="checkbox"/> White board</li> </ul>  | <b>Office/Command Centre</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Refer to datasheet n°10</li> </ul>  | <b>Recreation room</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Table(s), chairs</li> <li><input type="checkbox"/> White board</li> <li><input type="checkbox"/> Mugs, plates, cutlery</li> <li><input type="checkbox"/> Fridge with snacks</li> <li><input type="checkbox"/> Microwave</li> </ul>   |
| <b>Examination room (if vet available)</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Water, electricity</li> <li><input type="checkbox"/> Table</li> <li><input type="checkbox"/> Cupboard with medical equipment, medicine</li> <li><input type="checkbox"/> Scales</li> </ul> | <b>Veterinary lab (if vet available)</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Desk, chair</li> <li><input type="checkbox"/> Computer</li> <li><input type="checkbox"/> Centrifuge</li> <li><input type="checkbox"/> Freezer (for dead animals)</li> </ul>                         | <b>Parking</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Parking space</li> <li><input type="checkbox"/> Security checkpoint</li> <li><input type="checkbox"/> Signposted</li> <li><input type="checkbox"/> Waste storage containers</li> </ul>   |
| <b>Stabilisation room</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Clean working environment</li> <li><input type="checkbox"/> Good ventilation</li> <li><input type="checkbox"/> Net bottom cages and pens</li> </ul>   | <b>Animal kitchen</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Hot/cold water</li> <li><input type="checkbox"/> Work tables</li> <li><input type="checkbox"/> Fridge, freezer</li> <li><input type="checkbox"/> Microwave, mixers</li> </ul>  | <b>Facility as a whole</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Existing building or party tents</li> <li><input type="checkbox"/> Hot &amp; cold water, electricity</li> <li><input type="checkbox"/> Climate control (+ventilation)</li> <li><input type="checkbox"/> Space &amp; flexibility</li> <li><input type="checkbox"/> Near city/ main roads</li> </ul> |
| <b>Dressing room</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Benches and hooks</li> <li><input type="checkbox"/> Lockers for personal belongings</li> <li><input type="checkbox"/> Signs with instructions</li> </ul>   | <b>Showers, toilet</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> For women</li> <li><input type="checkbox"/> For men</li> <li><input type="checkbox"/> Hot/cold running water</li> <li><input type="checkbox"/> Benches/chairs</li> <li><input type="checkbox"/> Coat hooks</li> </ul> |   |
| <b>Corridor</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Connecting all indicated rooms</li> <li><input type="checkbox"/> Signposts</li> </ul>   |  |   |

## &gt; DATASHEET 4

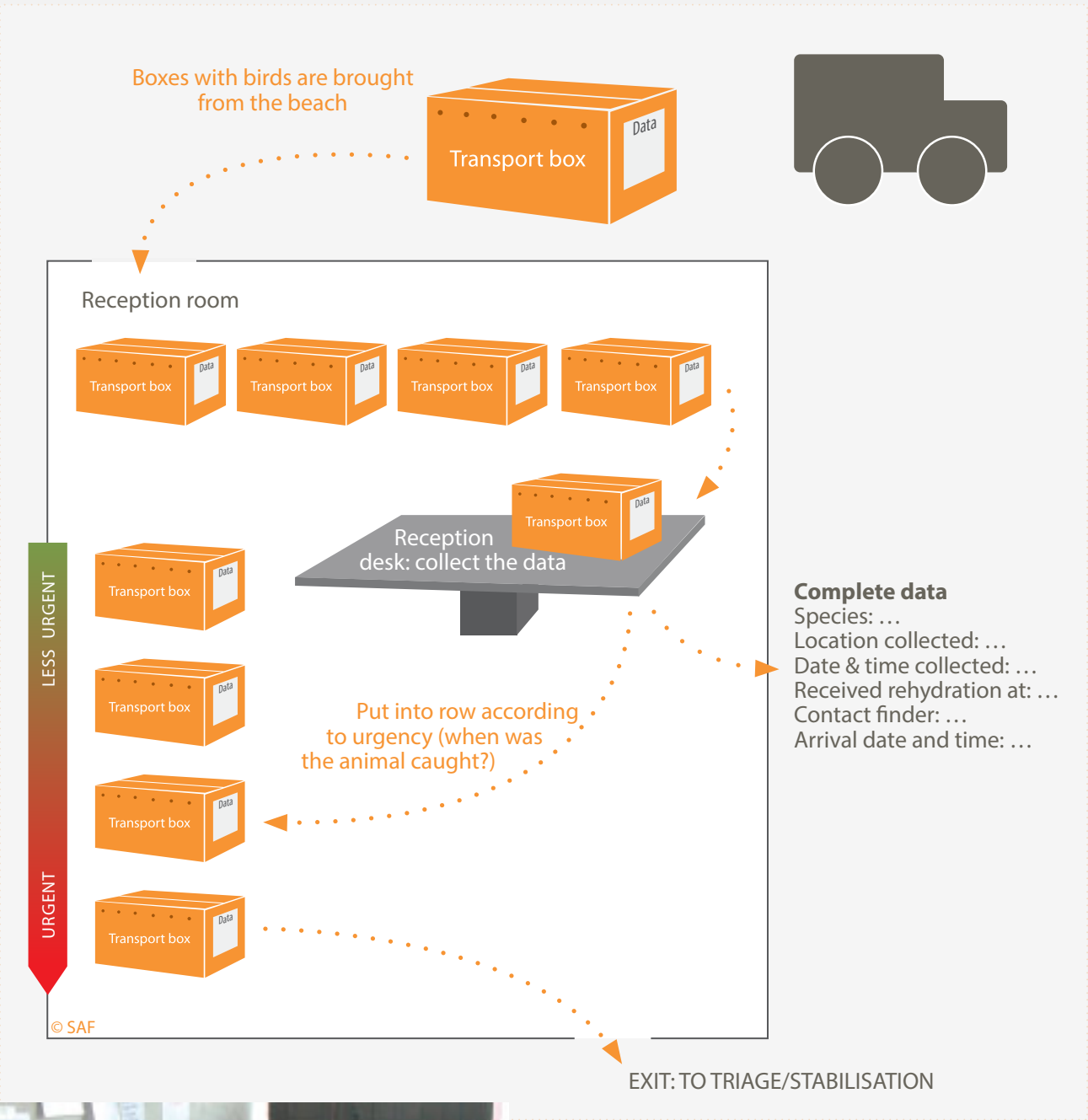
## Overview of oiled wildlife rehabilitation

The diagram below summarises the flow of animals through a Forward Holding Centre (green box) and a Rehabilitation Centre (green and red boxes together).



> DATASHEET 5

Working in the arrival and reception area



An improvised reception desk


> DATASHEET 6



Individual medical record for oiled birds

Oil spill: ..... Centre: .....  
Intake no.: ..... Internal ring no.: ..... Official ring no.: .....  
Species: ..... Date collected: ..... Time collected: .....  
Place collected: ..... Transported by: ..... Intake by: .....

First Examination

Sex: ☐ female ☐ male ☐ unknown  
Age: ☐ juvenil ☐ subadult ☐ adult  
Initials/vet: .....  
Plumage: ☐ summer ☐ winter ☐ moulting  
Temp. in C°: .....  
Oiled in %: ..... ☐ waterline ☐ above body ☐ in parts  
Weight in g: .....  
Dehydration: ☐ no ☐ mild ☐ medium ☐ severe  
Body condition: ☐ 1 ☐ 2 ☐ 3 ☐ 4  
Behaviour: ☐ BAR ☐ QAR ☐ NAR  
  
Injuries: ..... Lungs: .....  
Head: ..... Body: .....  
Wings: ..... Legs: .....  
Notes: .....  
.....  
.....

Washing

Date: ..... Start: ..... End: ..... Washer: .....  
Notes: .....  
.....  
.....

End Result

Date: ..... ☐ released ☐ dead ☐ euthanized ☐ transferred to:  
Behaviour at release  
☐ swim/flies < 100m ☐ flies 100 - 1000m ☐ flies out of sight  
Notes: .....  
.....  
.....



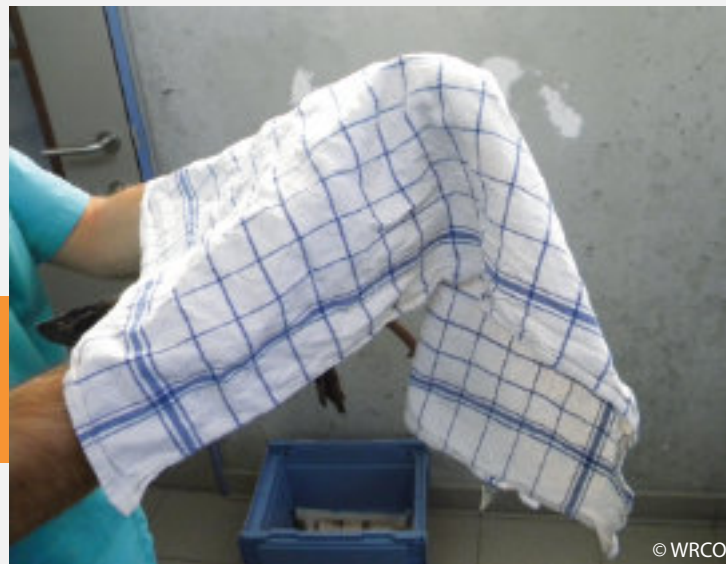
## &gt; DATASHEET 7

**Holding a bird**

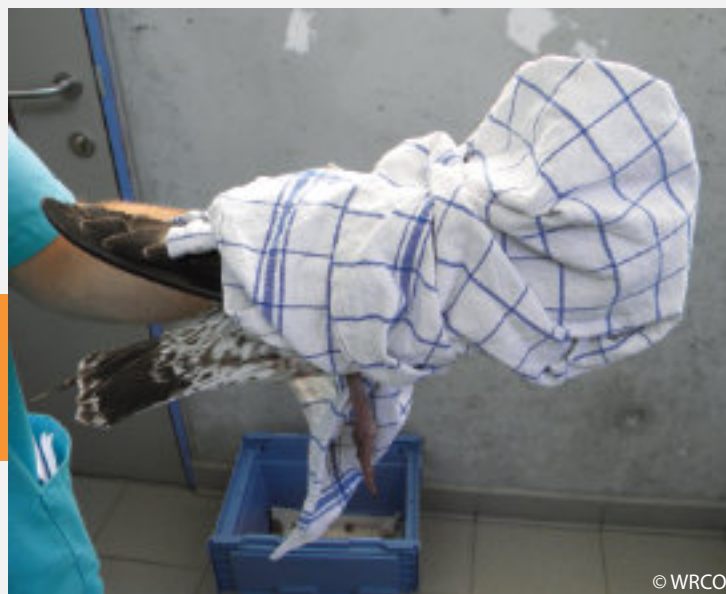
- 1** Grab and hold the bird firmly over the wings



- 2** A partner covers the bird's head with a towel



- 3** Wrap the towel over the bird's head and the bird stays calm in your hand



## &gt; DATASHEET 8

**Tubing a bird for rehydration**

- 1** Take a tube that is long enough to reach the stomach (approximately the middle of the belly)



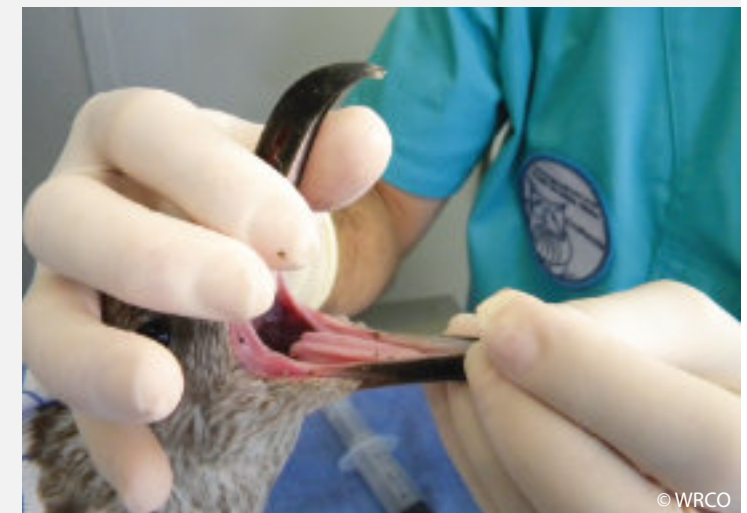
- 2** A partner brings the bird, wrapped in a towel



- 3** Uncover the head



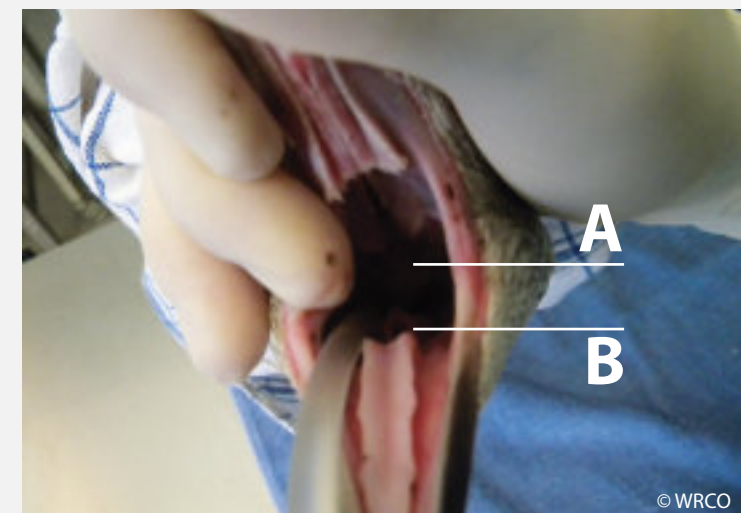
- 4** Open the beak firmly



- 5** Stretch the neck and bring the tube in on the left side of the glottis (the bird right side)



- 6** Check that the tube is in the oesophagus (A) and that the glottis (B) is free to breathe





> DATASHEET 8

Tubing a bird for rehydration (continued)



© WRCO

7 Bring the tube into the stomach and slowly give the calculated amount of fluids



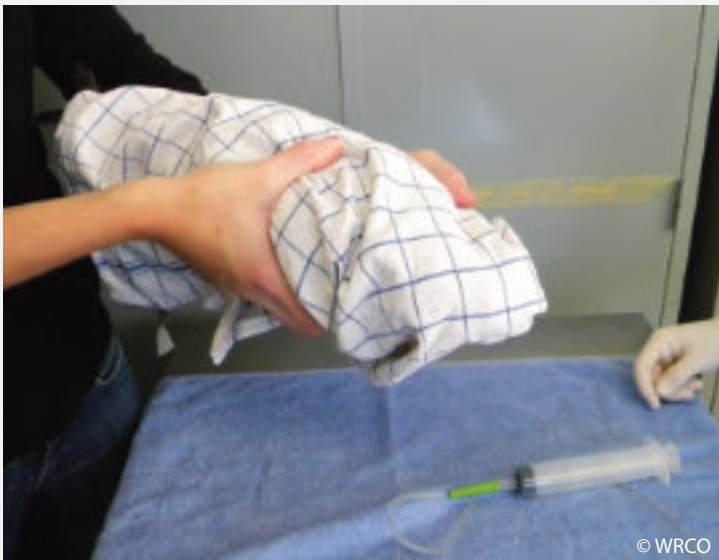
© WRCO

8 Watch attentively that fluids do not come back up into the throat, in order to avoid excess fluids entering the glottis. Pinch the tube and pull it out



© WRCO

9 Hold the head of the bird slightly lower than the body to prevent excess fluids entering the glottis



© WRCO

10 Cover the head of the bird again so that your partner can take it back

> DATASHEET 9

Daily routine – stabilisation

To reduce handling and stress for the animals, combine different actions!  
Approximately 2 people are needed per 20 birds

Example of daily time schedule  
for the first 48 hours after birds' arrival

	8am	9am	10am	11am	12am	1pm	2pm	3pm	4pm	5pm	6pm
Prepare rehydration fluids and cleaning tools											
Start rehydration at 50 ml/kg and cleaning the cages. Put the rehydrated birds in a cleaned cage and let them rest											
Put food in the cages; do not cause any other disturbance											
Lunch break for volunteers											
Prepare rehydration fluids											
Rehydration at 50 ml/kg bodyweight											
Put food in cages											
Rehydration at 50 ml/kg bodyweight											
Put double the amount of food in the cages for the night											

In between the activities, do not disturb the birds for checking, removing a dead bird or anything else.

This schedule offers enough time between rehydration and feeding for the birds to digest their food and rest. It also provides time for the volunteers to prepare animal food, do dishes, study, rest and eat. Once the experienced rehabilitators arrive, other tasks will be performed on the birds like weighing, examining, taking blood samples ... as part of intake and triage. These activities will again be combined as much as possible.



© SAF

Tubing a bird with fluids is a crucial step  
in the stabilisation process



> DATASHEET 10

Daily routine – pre-wash care of stabilised birds



To reduce handling and stress for the animals, combine different actions!  
Approximately 2 people are needed per 40 birds

Example of daily schedule in the pre-wash care area



In between the activities, do not disturb the birds for checking, removing a dead bird or anything else.

This schedule offers enough time between feeds for the birds to digest their food and rest. It also provides time for the volunteers to prepare animal food, do dishes, study, rest and eat.

Once the experienced rehabilitators arrive, the selection of birds to be washed will be determined through weighing, blood sampling etc. These activities should again be combined as much as possible.

Stabilised birds need a lot of food and rest

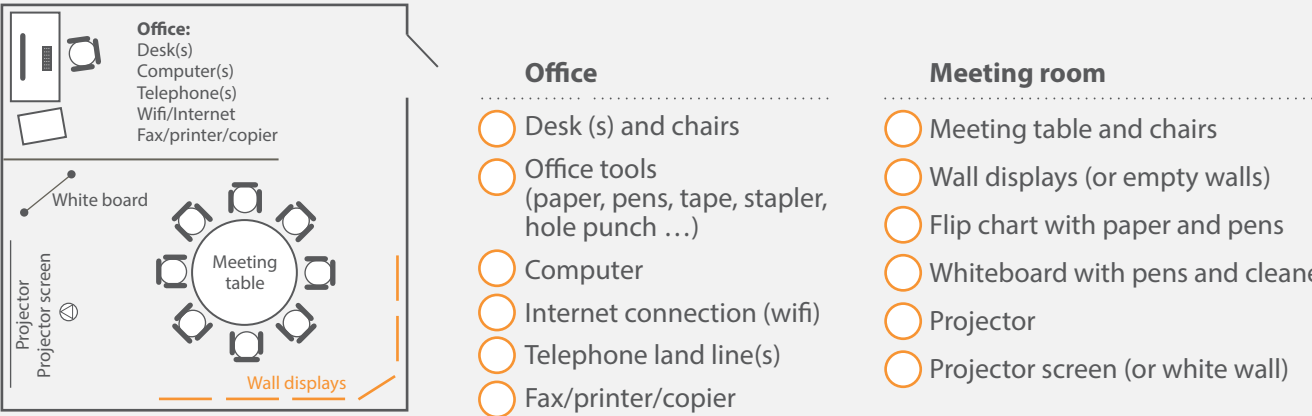


> DATASHEET 11

Setting up and running a command centre

The command centre is an important place in the wildlife operations. It must be set up as an integrated part of the overall spill management, so that decisions can be made overseeing all the relevant information on both sides.

Example of the physical set-up of the command centre with a checklist of its equipment



Suggestions for organising the information on display in the meeting room

Heading	Information presented (printed documents or hand written on flip chart sheets)
Spill history	The source of oil, date of spill, exact location, oil type, amount and properties, future issues and contact information for the spill advisor
Species information	Information on species affected, habitat, distribution, identification photos, life history, previous oil spill knowledge (post-release survival data) and care/washing information if available
Rehabilitation process	Description of process (with photos), triage policy and euthanasia policy
Key facts (Media)	Media lines, bird numbers (overview), news articles
Training programme	List of roles and trainers (with photo) for allocation of trainees
Maps	Showing oil spill area, sensitive areas, collection points and rescue facilities
Facility layout	Room plan and copy of health and safety protocols
Team information	Name, organisation, role and contact number with coordinators highlighted (can be arranged by organisation or by role)
Facility operations	Lists the number of birds in each part of the facility, updated twice daily. It helps to include a list of daily tasks, which can be ticked off when complete
Field operations	Shows who is in the field, their role and contact information, updated twice daily
Equipment requests	Central point for gathering requests, highlighted if urgent, to be checked daily

## &gt; DATASHEET 12

**Equipment for pre-wash care and stabilisation**

Equipment needed the first few days of care for approximately 100 birds.

**FOR REHYDRATION**

- 50 plastic/rubber stomach tubes: 40 to 50 cm long, 5 mm diameter
- 50-60 ml syringes, with catheter tip
- Measuring cup 1-2 litre
- Disinfectant
- Ingredients to prepare 30 litres of isotonic rehydration fluids
- Alternative: 9 grams of non-iodised table salt (NaCl) in 1 litre of water
- Bucket to keep syringes in (to keep fluids warm until use)
- Towels to handle the birds.



© WRCO

50 ml syringes and stomach tubes are needed for oral rehydration

**FOR OFFERING FOOD**

- About 30 food bowls
- Several buckets to distribute the food in



© WRCO

Different sized pet food bowls are suitable

**FOR CLEANING**

- Newspaper
- Sponges, brushes, hot water, disinfectant.



© PRO Bird

## &gt; DATASHEET 13

**Animal housing**

© SAF

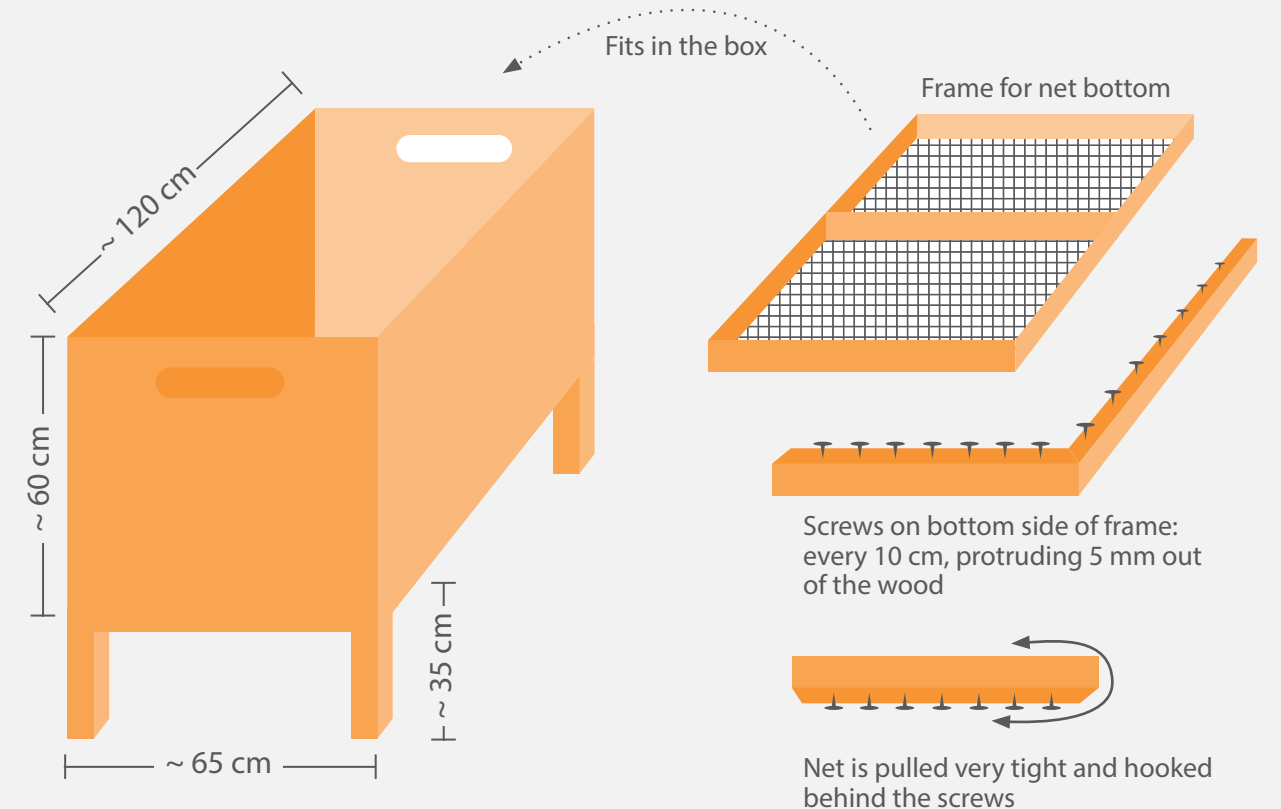


© SAF

Net bottom cage

**Building schedule for a net bottom cage – basic materials:**

- 16 mm plywood, square timber, minimum 4 cm x 4 cm
- nylon fishing net without knots, 10 mm mesh
- screws: long ones for construction, short ones for tightening the net



**PART 3 FURTHER INFORMATION**

46	Glossary and acronyms
48	Bibliography
48	Useful websites



## Glossary and acronyms

### Approved detergent

Dishwashing liquid of a certain brand, which has been extensively tested and is widely accepted as the most effective by oiled wildlife response experts.

### Barbs and barbules

Structural elements of birds' feathers.

### Beachhead collection point (or BCP)

A central point along a section of coastline where birds and other animals are collected during the day before being transported (in bulk) to another centre. By the end of the day, all the animals should be transported to a forward holding facility or alternatively an oiled wildlife rehabilitation facility.

### Command centre = operational centre = coordination centre = emergency central coordination centre

Crisis room with staff in charge of response management.

### Decontamination zone

A functional area between the environment where oil is (hot zone) and the area that is free from oil (cold zone). Any person or vehicle that comes out of the hot zone needs to be de-oiled in this zone, to ensure that the cold zone does not become contaminated.

### Endemic

Species native to or characteristic of a specific area or region.

### ETA

Estimated time of arrival.

### Forward holding centre (or FHC)

A centre provided for care of oiled wildlife, placed between a beachhead collection point and the main oiled wildlife rehabilitation facility. The Forward Holding Centre is likely to undertake the first activities in the rehabilitation process: intake, stabilisation and pre-

wash care, plus some additional examinations can be administered by a veterinarian if one is in attendance.

### Glottis

Bird's breathing hole.

### Hazing

Techniques or equipment used to scare or deter animals away from oiled areas.

### Impact assessment

The process of systematic scientific data gathering during and after a wildlife response, to allow an assessment of the impact of the spill on wildlife populations. Impact assessment includes gathering wildlife corpses for counting and analysis by experts.

### Intake

The process whereby an animal that is accepted for treatment in a rehabilitation facility is registered as a patient and whereby the animal undergoes a clinical examination by a trained person under veterinary supervision.

### Oesophagus

Muscular tube which passes food from the mouth to the stomach.

### Oiled wildlife response

Any activity dealing with wild animals that are or may be affected by a marine oil spill. This includes measures to avoid animals coming into contact with oil and active measures to mitigate the effects of oiling (wildlife capture, cleaning and rehabilitation or euthanasia).

### ORS

Oral rehydration salts.

### Personal protective equipment (PPE)

Clothing and equipment required to protect volunteers against the hazards of working in an oiled wildlife response.

### Post-wash care

The process in which cleaned animals are dried, regain their waterproofing on pools and reach the required strength and fitness to be considered for release back into the wild.

### Preening

Behaviour whereby a washed bird smooths, perfects and maintains its feathers with its beak to restore waterproofing and thermal insulation properties.

### Pre-wash care

Care given to an oiled animal to allow it to regain the required strength and fitness to withstand the washing process. Pre-wash care includes stabilisation treatment.

### Responder

Person engaged in or with responsibility for oiled wildlife response operations in the event of a marine oil spill.

### Risk assessment

A systematic process to identify the risks presented by a particular response activity, and to define measures to minimise those risks.

### SAF

Sea Alarm Foundation.

### Search and collection

Activities to locate and capture oiled animals (live and dead) from shorelines or the marine environment, for transport to a forward holding centre or rehabilitation facility.

### Stabilisation

The initial part (first 48 hours) of the pre-wash care stage which is designed to ensure that the animal's condition does not worsen any further. Once the animal is stabilised, continued pre-wash care aims to ensure that the animal will become fit and strong enough to be washed.

### Treatment

Any action or care given to an animal which improves its health and well-being as part of the rehabilitation process.

### Triage

The process in which all animals arriving at a forward holding centre or rehabilitation facility are divided into different groups for further treatment, on the basis of their health status.

### Tubing

The action of tube-feeding a bird with rehydration fluids and/or mashed food, which is an important part of the stabilisation and pre-wash care processes.

### Volunteer

(As used in this manual) a person with little or no previous experience in oiled wildlife response, who may carry out certain oiled wildlife response activities.

### Washing

The process in which trained experts remove all the oil and other dirt from an animal's feathers, skin or fur.

### Waterproofing

After washing, the process in which a bird restores the natural condition of its feathers. The bird must do this itself through preening behaviour whilst being kept on pools.

### Wildlife Rehabilitation Facility (or rehabilitation facility):

a specialised facility where oiled animals undergo care and treatments to restore them to their natural state (as they were before being oiled) for release back into the wild.

### WRCO

Wildlife Rescue Centre Ostend.

### Zoonotic diseases

Infectious diseases that can be transmitted from animals to humans or vice versa.



## Bibliography

EUROWA (2022).

Part B. Animal Care during an oiled wildlife response.

[www.euowa.eu](http://www.euowa.eu)

IPIECA/IOGP (2014).

Wildlife response preparedness. Good practice guide lines for incident management and emergency response personnel.

<http://www.ipieca.org/resources/good-practice/wildlife-response-preparedness/>

IPIECA/IOGP (2017).

Key principles for the protection, care and rehabilitation of oiled wildlife.

A technical support document to accompany the IPIECA-IOGP guidance on wildlife response preparedness.

<http://www.ipieca.org/resources/awareness-briefing/key-principles-for-the-protection-care-and-rehabilitation-of-oiled-wildlife/>

POSOW (2014).

Oiled wildlife response manual.

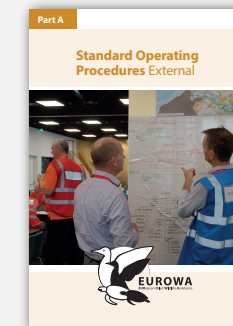
[http://www.posow.org/documentation/manual/manual/wildlife\\_manual.pdf](http://www.posow.org/documentation/manual/manual/wildlife_manual.pdf)

## Useful websites

**EUROpean Oiled Wildlife Assistance (EUROWA)**

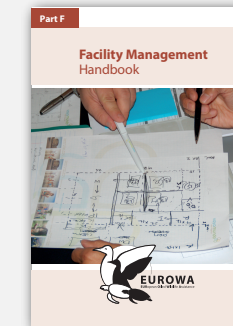
[www.euowa.eu](http://www.euowa.eu)

This Manual forms part of a set of technical guidelines developed under the EUROWA framework.



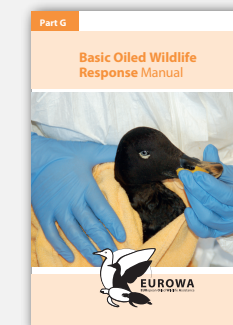
### Part A – SOP

This document – process of a Module mobilisation, procedures and job descriptions, tasks for the RP (entity requesting the EUROWA Module).



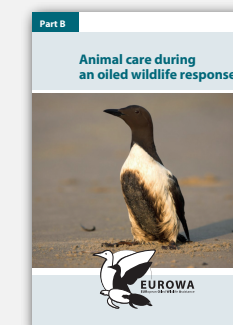
### Part F – Facility Management Handbook

How to set up and manage a wildlife rehabilitation centre as a conceptualised facility.



### Part G – Basic Oiled Wildlife Response Manual

Guidelines on first-aid of oil affected wildlife, focussing on seabirds.



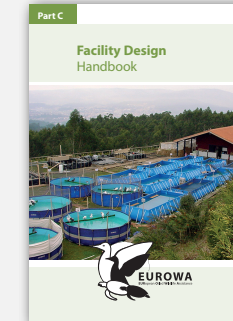
### Part B – Animal care during an oiled wildlife response

Joint protocol for oiled seabird rehabilitation.



### Part H – Oil Impact Assessment Handbook

Guidelines for designing a system of data collection and analysis to make a reliable assessment of impact on wildlife populations.



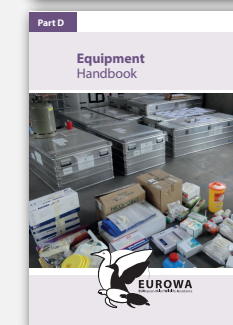
### Part C – Facility Design Handbook

Guidelines on equipment and supplies needed to set up and run a wildlife rehabilitation facility for oiled birds.



### Part I – Basic Oiled Sea Turtle Responder Manual

Guidelines on first-aid of oiled sea turtles.



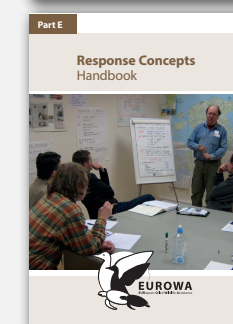
### Part D – Equipment Handbook

Description of EUROWA's equipment stockpile that can be mobilised to complement the capability or capacity of a local wildlife response.



### Part J – Advanced Oiled Sea Turtle Responder Manual

Best practices for rehabilitation of oiled sea turtles.

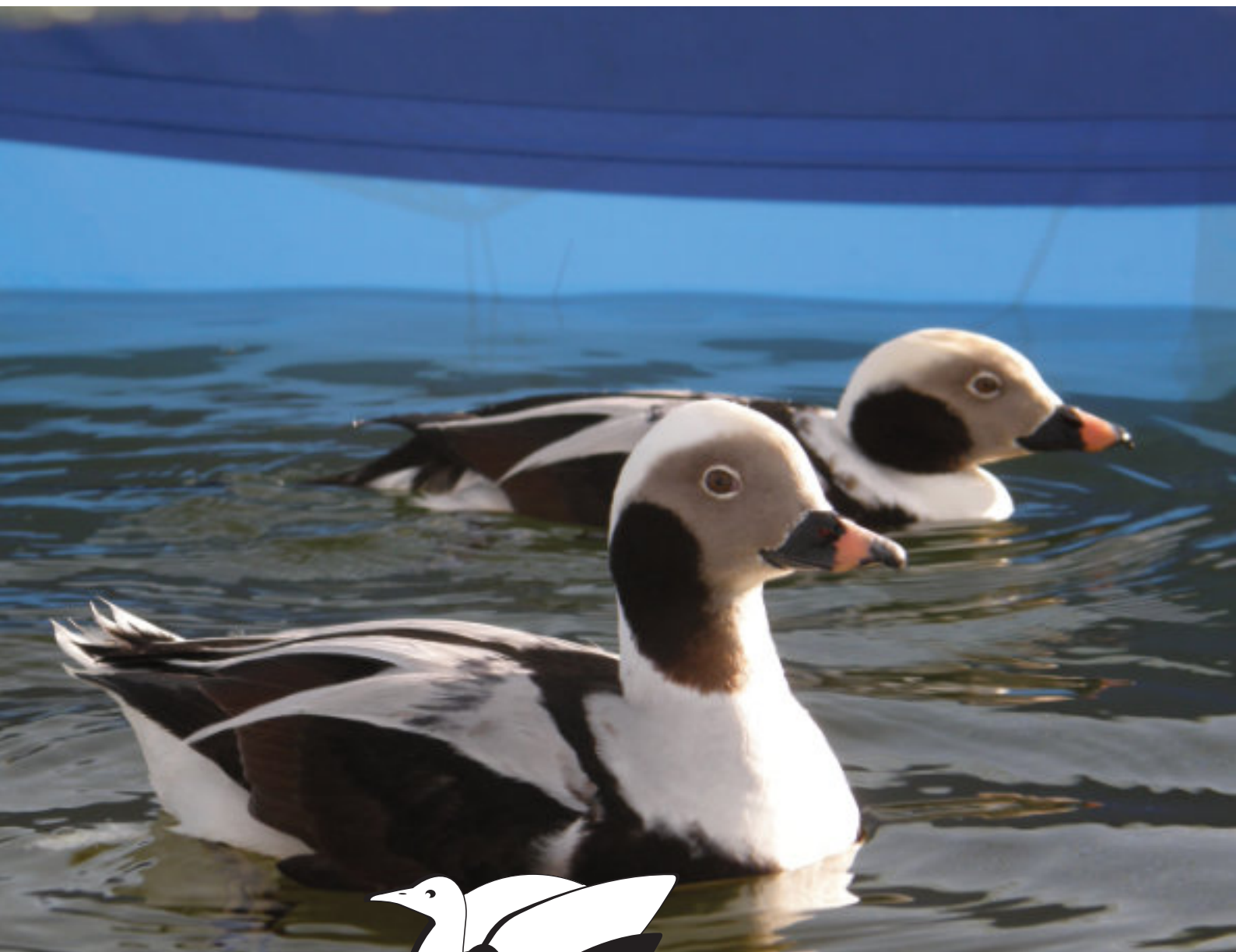


### Part E – Response Concepts

Handbook for in the field/on-site use, including key technical concepts and guidelines.

Notes





**EUROWA**  
EUROpean Oiled Wildlife Assistance

[www.eurowa.eu](http://www.eurowa.eu)