

Extended Abstract

Volunteer Training for Mobile Bird Cleaning Unit - Simulation Training on a New Level

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Introduction

The amount of crude oil transported through the Gulf of Finland has quadrupled in the last decade, significantly increasing the risk of a major oil spill in the area.¹ The Baltic Sea is a vulnerable sea area², hosting a great number of threatened wildlife populations and containing several unique ecosystems³. Finland has a national oil and chemical spill response strategy, which is mainly focused on preparing for large scale oil clean up in open water with lesser attention paid to cleaning up oil from the shoreline and even lesser attention paid to the rescue and rehabilitation of oiled wildlife.⁴ To assist the rescue and rehabilitation of oiled wildlife, the Finnish Environment Institute (FEI) has, with funds from the national Oil Pollution Compensation Fund (OPCF), commissioned a mobile Bird Cleaning Unit (BCU) to be used as the central structure in a wildlife rehabilitation effort.⁵

The BCU consists of three cargo containers and requires a variable amount of supporting peripheral structures. The containers have been designed to function on any sufficiently large flat surface. The Eastern Uusimaa Fire and Rescue Services are responsible for the deployment and maintenance of the BCU in the event of an oil spill response.⁵ The unit is manned by volunteers recruited through the network of the World Wide Fund for Nature Finland (WWF). This network is part of the Voluntary Rescue Services, a central national organization coordinated by the Finnish Red Cross, which is responsible for all volunteer rescue services in Finland. This organization structure ensures that the volunteers work as a coordinated part of the national, state authority run oil spill response. Being a part of the national organization also means that volunteers have proper insurance cover and that most of their oil response equipment can be funded from the OPCF.⁶

During recent oil spills, where significant numbers of wildlife species have been affected (e.g. Erika 1999, Prestige 2002), the capture and rehabilitation of wildlife has been accomplished with the help of an ad hoc organized group of mostly previously untrained volunteers. In many cases the volunteers have had no prior experience in handling injured birds or other wildlife or sufficient knowledge about the effects of oil on the wildlife or even on themselves.⁷

Methods

WWF has organized volunteer training for the BCU biannually starting in May 2007, with the first volunteers to get hands on experience with the completed BCU containers being trained in May 2008.⁸ The goal of WWF is to train a substantial amount of volunteers in the basics of oiled bird rehabilitation. This would ensure that a sufficient amount of trained volunteers could be called to assist in case of an oil spill, whenever and wherever it might occur.

During the training volunteers acquire both theoretical and practical experience on how the BCU functions and what its possibilities and limitations are. The framework for the training has been set up WWF staff in cooperation with specialists, and is mostly based on protocol used by the Oiled Wildlife Care Network⁹ and a handbook prepared at a European workshop on cleaning and rehabilitation of oiled wildlife^{10,11}

The first day of lectures covers such topics as general oil spill preparedness in Finland, arrangements for oiled wildlife care, an introduction to the BCU, and the capture and handling of wild birds. Representatives of the FEI, the Finnish Rescue Departments and ornithologists have usually held these lectures.¹² The first day also includes several lectures on different aspects of the actual rehabilitation process including species selection, veterinary aspects, awareness of infectious disease, volunteer, non-government organization (NGO) and government agency involvement and how prolonged intensive care of select species is handled. Members of the University of Helsinki OILECO project, practicing veterinarians or veterinary students from the University of Helsinki, researchers from the Finnish Food Safety Authority (EVIRA), representatives of WWF and representatives of the Heinola bird sanctuary have usually been given these lectures.¹²

After a day of lectures the volunteers attend several workshops next to and inside the BCU containers for hands on experience. The workshops handle such topics as the capture of live birds and the use of safety equipment. The volunteers also practice force feeding and washing of birds (with bird carcasses) and get to observe a bird necropsy performed by a veterinarian. During most of the training events the capture of live birds has been performed on captive birds in the Heinola bird sanctuary. The bird carcasses have been received from the wildlife sanctuary of the Helsinki zoo and the Heinola bird sanctuary.¹²

The cost of one three day training event including meals, transportation, and safe and other equipment is estimated at around three to five thousand Euros for WWF. Most of the lecturers, trainers and training facilities receive only nominal fees.¹¹

Results

So far about 130 volunteers have been trained. The backgrounds of the volunteers span from no earlier experience in voluntary work to having participated in one or more oil spill responses in the field.¹³ The trained volunteers include veterinary students, biologists and ornithologists as well as less formally qualified citizens.

The years of training have made it necessary to produce supporting materials for the training events. These include introductory brochures on the care of oiled birds, feeding guides for roughly fifty species of waterfowl likely to be affected by an oil spill, and estimates on the number of personnel required for operating a certain sized oil spill response. The brochure on the care of oiled birds was created as a joint effort between WWF, FEI, the University of Jyväskylä and the Estonian Fund for Nature (ELF) and edited by Toni Jokinen from WWF.¹⁴ The feeding information for the bird feeding cards was created in cooperation with representatives of the wildlife sanctuary of the Helsinki zoo and edited by the authors. Other information on the cards was collected from international sources by the authors. The photographs for the cards were donated by Finnish nature photographers.

A wiki-style project website was created by the authors for use as a resource to develop and collect training material, plans and operation protocols. All steps of the bird rehabilitation process from capture to release including the maintenance of the staff and the BCU itself has been documented. The documentation includes spill size dependent estimates of personnel and equipment requirements. The systematic approach has revealed areas in need of more attention, such as waste processing as well as sparked the first concrete deployment site plans, concerning the area of Helsinki.

Discussion

The training gives volunteers the means to serve as group leaders during an oil spill response. The trained volunteers will be able to instruct and lead other untrained volunteers during the oil spill response and thus help free specialists and other response personnel to other tasks. The theoretical part of the training ensures that the volunteers have an idea about the decision making process and the protocols used during the rehabilitation process. This way volunteers know who to turn to for directions and guidance and who to contact when in doubt. The volunteers also have an understanding about the harmful effects of oil, and the need for safety measures to protect themselves. After the veterinary perspective lecture volunteers are also prepared to accept the psychologically demanding parts of an oil spill response such as triage and the euthanasia of birds in situations where adequate treatment cannot be provided.

The BCU has also proved to be an excellent setting for oiled bird rehabilitation simulations. The BCU contains most of the important equipment needed in the rehabilitation process like water, veterinary facilities, washing equipment, cages and pools. This means these basic facilities are constant wherever the BCU is deployed. Thus, volunteers get to train in exactly the kinds of facilities they will be using during much of the rehabilitation process. This has been useful in finding out and correcting any problems or shortcomings of the original BCU designs before their first real deployment.

Since the unit is mobile, the volunteers, trainers and rescue department officers have to plan for different terrains and surrounding facilities in order to make the BCU functional. Planning and training for these differing situations has involved cooperation between the rescue departments and WWF to define the amount and availability of

water, other non-stocked equipment, food and personnel in different locations around Finland.

The close cooperation has also made it possible for WWF and the volunteers to participate in one official Rescue Department oil spill simulation in which all parts of the response system, from oil collection and destruction measures in open water, to the chain of command during the response, to operating the BCU on a sandy beach, were tested. Another full scale oil spill stimulation in which WWF will be taking part has been scheduled for this fall. Some WWF volunteers have also gotten the opportunity to do practical training at the animal rescue unit of the Helsinki Rescue Department, thus improving their skills on handling injured birds and other wildlife.

The mobile bird cleaning unit and the training events held with them have also awoken some media interest. Several national papers and a few TV channels have published stories, videos and pictures from the training events. This has given the public a better understanding of the oil spill and oiled wildlife rehabilitation preparedness of Finland and about the key players involved.

One of the most valuable outcomes from the training events has been the increased cooperation among key players like NGOs, government agencies and rescue service professionals. The volunteer training has given all these parties a common forum where they can test their ideas and develop them further in unison. As a result, measures needed for true preparedness have become clearer and steps required to achieve them more concrete.

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