# **FINAL REPORT**

# of the

# THREE REGIONAL WORKSHOPS FOR MARINE MAMMAL STRANDING RESPONSE IN THE DUTCH, FRENCH AND SPANISH-SPEAKING CARIBBEAN COUNTRIES AND TERRITORIES

















5 - 7 November 2009 CURACAO, NETHERLANDS ANTILLES

> 8 - 10 January 2010 BOUILLANTE, GUADELOUPE

22 - 23 April 2010 PANAMA CITY, PANAMA Three regional Marine Mammal Stranding Response Workshops were organized according to the priorities defined in the 2008-2009 "Workplan and Budget for the SPAW Regional Programme" (2.4) concerning the preservation of threatened and endangered species, and the Action Plan for the Conservation of Marine Mammals in the Wider Caribbean Region's General Timetable for Implementation (2.12 (2.7.2). These three workshops follow upon the first one organized by the Eastern Caribbean Cetacean Network (ECCN) in 2005 for the Eastern Caribbean region.

This report is a brief summary of the three marine mammal stranding workshops whose objective is to focus on the recommendations resulting from the workshops.

A complete and detailed report of each workshop is available on the SPAW-RAC website:

http://www.car-spaw-rac.org/

#### I. INTRODUCTION

1. The Regional Workshop for the *Dutch Caribbean Territories* in response to Marine Mammal Strandings from 5-7 November 2009 was held in Curacao, Netherlands Antilles.

Twenty-one participants representing Protected Area management organizations, government departments, and non-governmental organizations from six Dutch Caribbean islands attended including Aruba, Bonaire, Curacao, St. Eustatius, St. Maarten, and Saba.

Trainers and presenters included Charles Potter (Smithsonian Institute's Marine Mammal Laboratory), Dr. John Reynolds (Mote Marine Laboratory), Dr. Janet Whaley (NOAA Fisheries), Dr. Nathalie Ward (Eastern Caribbean Cetacean Network/U.S. Stellwagen Bank National Marine Sanctuary Program); Ms. Andrea Bogomolni (Eastern Caribbean Cetacean Network/Woods Hole Oceanographic Institution), and Helene Souan (SPAW Regional Activity Centre, Guadeloupe.) Paul Hoetjes was the Southern Caribbean Cetacean Network (SCCN) Coordinator in Curacao and Dr. Nathalie Ward (ECCN) served as coordinator for workshop training preparations. The US Marine Mammal Commission, Dutch Caribbean Nature Alliance (DCNA), the Netherlands Antilles' government, and the Curação Sea Aquarium/Dolphin Academy provided funding for the workshop.

2. The Regional Workshop for the *French-speaking Caribbean Territories* in response to Marine Mammal Strandings from 8-10 January 2010 was held in Bouillante, Basse Terre in Guadeloupe.

Thirty participants, representing Protected Area management organizations, government departments, and non-governmental organizations from five French-speaking islands and territories of Guadeloupe, Haiti, French Guyana, Martinique and St. Martin.

Trainers and presenters included Charles Potter (Smithsonian Institute's Marine Mammal Laboratory), Dr. John Reynolds and Dr. Dana Wetzel (Mote Marine Laboratory, Sarah Wilkins (NOAA Fisheries), Dr. Nathalie Ward (Eastern Caribbean Cetacean Network/U.S. Stellwagen Bank National Marine Sanctuary Program); Ms. Andrea Bogomolni (Eastern Caribbean Cetacean Network/Woods Hole Oceanographic Institution), Dr. Michael Moore (Woods Hole Oceanographic Institution), and Helene Souan (SPAW Regional Activity Centre, Guadeloupe.) Vincent Ridoux and Willy Dabin (CRMM/URL), Paul Hoetjes (SCCN Coordinator, Curacao), Caroline Rinaldi (Guadeloupe Archipelago Network / AET coordinator, Guadeloupe). Dr. Nathalie Ward (ECCN) and Caroline Rinaldi (AET) served as coordinators for the organization and workshop training preparations. Funding was provided by by U.S. NOAA Fisheries International, the French Ministry of Environment (DIREN Guadeloupe) and UNEP's SPAW-RAC.

3. The Regional Workshop for the *Spanish-speaking Caribbean Countries* in response to Marine Mammal Strandings from 22-23 April 2010 was held in Panama City, Panama.

Twenty-nine participants, representing Protected Area management organizations, government departments, and non-governmental organizations from Spanish-speaking islands and territories of Colombia, Puerto Rico, Costa Rica, Guatemala, Nicaragua, Panama, Islas Canarias, Venezuela, Dominican Republic, Argentina, Ecuador, Mexico, Cuba, Honduras, El Salvador.

Trainers and presenters included William Muntean (Embajada de los Estados Unidos), Diana Araúz (ARAP - Autoridad de los Recursos Acuáticos), Javier Arias (ANAM - Autoridad Nacional del Ambiente), Grisel Rodriguez (PR DRNA - Department of Natural Resources), Dr. John Reynolds (Mote Marine Laboratory), Nancy Daves, Laura Engleby and Sarah Wilkins (NOAA Fisheries), Miguel Iñiguez (Fundación Cethus), Antonio Fernández (Escuela Veterinaria, Universidad de las Palmas, Islas Canarias) and Gaëlle Vandersarren (SPAW Regional Activity Centre, Guadeloupe)

#### **II. GOAL OF THE WORKSHOPS**

The goal of the Workshops was to review the techniques and protocols for responding to stranding incidents for marine mammals and to facilitate possibilities for collaboration and harmonization of a French/Dutch/Spanish marine mammal stranding network for the Wider Caribbean Region to collaborate with an international network of stranding responders; and, the exploration and establishment of a centralized archive of samples and a database of findings of countries in the region. For the French Caribbean workshop, one priority was to harmonize the US and French protocols.

#### III. OBJECTIVES and STRANDING TRAINING TOPICS

The workshop helped to strengthen the standardization of protocols, methods of sample collection, archiving of samples, establishment of an online database for findings, and building a network to ensure sharing of information in cases of marine mammal strandings across the region.

Specific objectives of the Workshop included:

- Establishing standardized data collection methods and centralized database;
- Continued training of individuals in the English/Dutch/French/ Spanish-speaking Caribbean in marine mammal stranding response, allowing for maximum chance of successful recovery of stranded animals;
- Training participants in the use of standardized techniques and protocols for preparation, handling, transport and storage of marine mammal specimens when responding to marine mammal strandings to ensure effective sample collection for research to answer conservation questions;
- Establishing a clear "Incident Command System" (ICS) on each of the islands to organize stranding events with clearly defined roles for all involved agencies/organizations and a set pyramid of authorization:
- Reinforcing national and regional coordination needs for stranding response, analytical capabilities, and technology and information exchange; and,
- Creating a link with other sub-regional stranding networks in the Caribbean such as the Eastern Caribbean Cetacean Network and Southern Caribbean Cetacean Network, ensuring better communication and cataloging of stranding events.

#### IV. PRODUCTS RESULTING FROM THE WORKSHOPS

- CD-ROM ECCN Compendiums for French and Dutch Workshops
- CD-ROM with Power Point presentations by all lecturers on ECCN Website: www.eccnwhale.org
- Books, reprints, brochures, and other reference materials as requested by participants
  - Updated participant list and contact information
  - "First response" stranding kit list and "priority sample collection" list
- Final Workshop Report including data collected during internal and external examination of necropsied animal(s)
- Summary of available resources of workshop participants (e.g., professional expertise, institutional logistics)

#### V. RECOMMENDATIONS

The participants of the French, Dutch and Spanish workshops identified priority actions that they judged as being important recommendations for next steps to consider for the management of marine mammal strandings regarding future prioritization for the Marine Mammal Action Plan. (The idea is to use this list of recommendations to define the futures priority actions in terms of management of strandings).

These are the main recommendations resulting from the three workshops:

#### 1) CAPACITY BUILDING

- Consolidate existing capacity of networks, creating links with other sub-regional stranding networks in the Caribbean to ensure better communication and cataloging of stranding events, and implement capacity where it does not exist;
- Develop and improve practical access for each island such as improving collection methods and tools, provisioning stranding kits, facilitating training, storage facility, freezing/not freezing, holding tissues samples;
  - Establish standardized, centralized database for all marine mammal stranding;
- %• Archive facility for specimens;
  - Develop regional database (of resources, veterinarians, etc.);
  - Establish a working group to integrate existing data forms and protocols; and,
  - Develop future Workshop(s) with more advanced/specific topics.

#### 2) COORDINATION

- Develop a) focal point on each island, wherein island leadership will promote stranding efforts focused on central coordination with endorsement of local government; and, b) focal point at the regional level, will inform the SPAW-RAC. On practical implementation level, it is suggested that ECCN be the implementing agency (on regional level) with support from SPAW-RAC. In the future, the SPAW-RAC would host the database on its website;
- Develop database and contact lists for personnel capabilities and resources at most local level possible (hierarchy identified with contact person); and,
- Data collection (Adopt ECCN stranding Level A data form (as originally adapted from U.S. NOAA Fisheries).

#### 3) RESEARCH

- Establish and maintain regional-scale database;
- Develop research plan with agreed upon research basics to include: basic life history, marine mammal populations and habitats;
- Integrate marine mammal strandings into larger research domain and other sources of data on marine mammals and the marine environment; and,
- Prioritize research from strandings to better understand the health of individuals and conservation status of species and populations, and to improve management decisions. Specifically, a priority research effort this year would focus on pollution and its impact on marine mammals.

#### 4) COMMUNICATION

- Improve communication within all Caribbean countries;
- Consistent dissemination of information to a variety of audiences, which should include scientific peer-reviewed literature. It was noted that the creation of new journal,

specifically on strandings, or a means to report consistently to scientific audience is needed:

- Organize specific meeting for strandings for Wider Caribbean Region, every two-three years joined with another event or meeting potentially, with emphasis broader than strandings but within the framework of SPAW/MMAP; and,
- Create stranding listserve/website/FTP site (SCCN model, and sharing of files, photos, news, etc.).

#### 5) PUBLIC AWARENESS

- Develop standardized educational materials and publish in various languages such as Creole, Papiamento, Spanish, English and French (e.g. ECCN and WIDECAST model):
- Use regional newsletter to disseminate results and research (i.e. ECCN newsletter as model); and,
  - Promote economic potential of marine mammals resources.

## 6) FINANCIAL SUPPORT

- Enhance and build network capabilities where they don't exist;
- Find funds for "first response kits" for all networks;
- · Identify necessary equipment and funding needs; and,
- Provide support for sampling analysis.

#### **VI. REGIONAL CONTEXT - NEXT STEPS**

In the Wider Caribbean Region, there is an urgent need for capacity building in the area of unusual mortality events of marine mammals, specifically on-the-ground response to animal strandings and collection of relevant data; training in methods of sample collection, archiving of samples and establishment of an on-line database for findings; and, as it applies to insight into ocean health. Because marine mammals are transboundary animals, successful conservation of marine mammals in the Wider Caribbean Region will ultimately depend upon the commitment of countries there to build and maintain, with international assistance, internal capacities for setting conservation priorities and achieving high standards of population and habitat protection.

Further to the adoption of SPAW's MMAP (2008) and with support from the Caribbean Environment Programme's Secretariat and from the SPAW-RAC, participants agreed to strengthen capacities and infrastructure within and between islands (and hopefully regional stranding networks such as ECCN) to identify and monitor threats to marine mammals, ecosystems, and humans by accomplishing priority activities as outlined in MMAP (2.7):

- Establishing inasmuch as possible, 'injury' networks which have a reporting mechanism to respond to marine mammal injury, wherein information which should be made available to all other countries. (MMAP 2.7.5);
- Creating appropriate archives of samples for diverse studies such as pathology, contaminants, parasitology and genetics. (MMAP 2.7.6); and,

• Building capacity to include standardized protocols, training in methods of sample collection, archiving of samples, and establishment of an on-line database for findings. (MMAP 2.7.7).

The attendees valued the opportunity to have a forum to address and discuss their shared challenges. The discussions addressed the future establishment of regional cooperation programmes to increase scientific, technical, and educational exchange among relevant national, regional, and international organizations. Specifically, it was recommended that a regional stranding database be developed, which would be attainable by the different stranding networks of the region and which would include the expert contacts from all the territories and countries. As part of networking, a strong effort should be made to transfer essential skills, resources and capacity building, throughout the Wider Caribbean region. Additionally, it was stated that, it is important to promote a precautionary approach when addressing risks and uncertainty when making decisions regarding conservation of marine mammals.

#### **VII. PRIORITY ACTIONS**

According to the recommendations compiled by the participants and the priority activities outlined in the MMAP (see paragraph above), some activities seem particularly urgent to apply. These priorities are a reflection of the SPAW-RAC; they are not "official".

- Consolidate existing capacity of networks and implement capacity where it does not exist;
  - Improvement of communication within all the Caribbean countries;
- Develop and improve practical access for each island such as improving collection methods and tools, provisioning stranding kits, facilitating training, storage facility, freezing/not freezing, holding tissues samples;
- Development of standardized, central database and contact lists for personnel capabilities and resources at most local level possible (hierarchy identified with contact person);
  - Develop educational materials in various languages; and,
- Standardize data collection {i.e., adopt ECCN stranding Level A data form (as originally adapted from U.S. NOAA Fisheries)}.

# VIII. CONTACTS

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