

*Chapter 2*  
**Getting Organized**

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**2.1. The Stranding Network**

The **objectives** of a stranding network are:

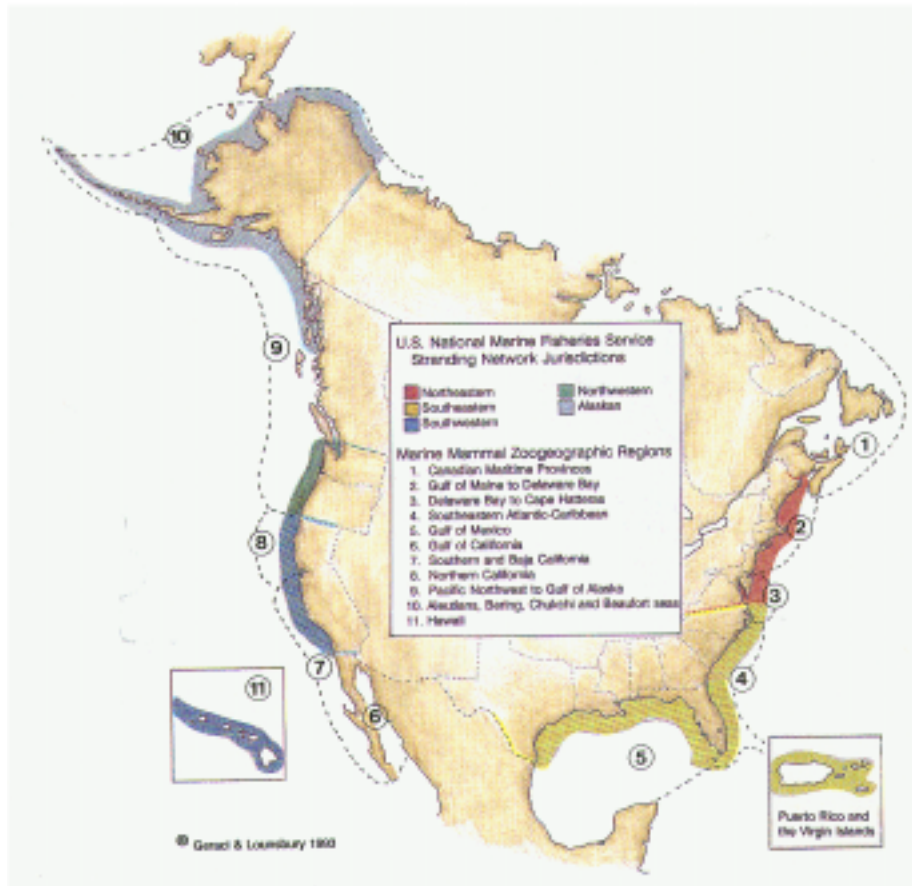
- to provide rapid and effective action that will best serve the well-being of the stranded animal(s)
- to protect the public while acting on its concern
- to gain maximum scientific information

**Essential elements** of a network include an emergency response team with a veterinary component; logistic support and equipment for moving animals; a facility for medical treatment and rehabilitation; and a complement of scientists able to collect, analyze, and archive specimens and data. To function as a unit, the network requires formal training programs and practice drills, uniform protocols, and a spirit of group effort maintained through solid lines of communication.

Stranding networks in the U.S. are nominally based on the **administrative regions of the National Marine Fisheries Service (NMFS)** For the purposes of this field guide, it is more practical to establish **zoogeographic zones based on species distribution and stranding records** (Fig. 2.1). This scheme disregards state or national boundaries, as well as regions established by NMFS, but will help to predict the types of activity one may expect in a particular area (see **5.3, 5.12, 6.3, 6.13**).

**2.2. Regulatory Authority**

The network must function within the legal framework established by various federal, state and regional authorities, and cooperate with them to ensure effective action and long-term goals. The **U.S. Marine Mammal Protection Act** specifically prohibits the collection of animals (live or dead) or parts from them, or any form of harassment, detention or restraint, however temporary. Exceptions are permitted for government officials acting in the course of their duties, and for other authorized



**Fig. 2.1.** U.S. National Marine Fisheries Service Stranding Network jurisdictions compared to regions based on marine mammal distribution in U.S. and adjacent waters. Areas 3 and 8, notably smaller than the others, are transition zones between generally differing northern and southern fauna. The few strandings that do occur in these zones may be of animals from either of the adjacent regions.

individuals, when the action is essential to protect the animal's or the public's welfare.

It is clear that a person wanting to help an animal on the beach must first obtain permission. One approach is for an individual or organization to apply to **NMFS** for a **letter of authorization**, which will allow work with cetaceans and all pinnipeds except the walrus. Walruses, sea otters and manatees are under the jurisdiction of the **U.S. Fish and Wildlife Service**, which must authorize any work involving these species. A more common way to become involved is to associate with persons or

institutions already authorized as members of marine mammal stranding networks.

Many coastal states have enforcement officers with statewide (Marine Patrol, Fish and Game personnel) or local (park rangers) jurisdiction. The geographic limits and laws governing these jurisdictions must be respected by network members. In some areas, state law enforcement officers may be under formal contract with the regulating federal agency to assist in strandings.

Local **police** are invaluable participants in a stranding response. They have legal authority over all activities on the beach and can maintain order and protect animals by limiting access to the site, erecting barriers if necessary, and controlling crowds and vehicles. Police must supervise the use of firearms and may agree to oversee the distribution of controlled substances such as anesthetics and euthanasia solutions. During mass strandings, a representative of the Law Enforcement Branch of NMFS may assist local police in support of network activities. Harbormasters and animal control officers may render additional assistance.


The **Coast Guard's** obligatory role in a stranding is limited to situations involving risk to human life or hazards to navigation. They have excellent equipment and trained personnel and often go far beyond their duties to provide valuable support in transporting team members to remote stranding sites, providing foul-weather gear, and hauling beached carcasses to sea.

### 2.3. The Operations Center

Each NMFS region has a stranding coordinator and at least one stranding Operations Center, served by satellite units that might include aquariums, dedicated stranding facilities, research stations, museums, and state departments of wildlife or conservation.

The basic role of the Operations Center is to provide a **continually monitored telephone service** for receiving and verifying stranding reports and to coordinate the response. Those organizations of potential benefit to the stranding network (police, Coast Guard, municipal authorities, centers for education and research, wildlife and conservation groups) should be informed of the Center's existence. The Operations Center should also:

- organize and administer the regional network
- train staff and volunteers

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- notify and work with federal and local authorities
  - maintain a communications link among all network elements
  - promote public awareness of the network's activities
  - coordinate the response from the Center or closest satellite
  - gather and archive data
  - report findings to the appropriate government agency
  - keep track of samples dispersed to authorized individuals

The Center's effectiveness hinges on **local resources and attitudes**, which will vary seasonally and among communities. It is unrealistic to expect an enthusiastic response on all holidays or during foul weather. Local officials must be presented with a strong plan of action and the reasons behind it. Otherwise, the townsfolk may be tempted simply to push a live animal out to sea, in hopes that if it does re-strand, it will be somewhere else.

The Operations Center should maintain current files on the capabilities of each coastal community within the region—physicians or hospitals in the vicinity (for emergency care of staff), beach conditions and obstacles likely to impede or influence the safety of the rescuers—and plan responses accordingly. Personnel must be aware of ordinances regulating such activities as carcass dissection (on the beach), disposal, and transport across town or state lines.

Except in areas where the coastline is continuously monitored by wildlife agencies, strandings are usually reported by the public. Each town may have its delegated or volunteer contact person, perhaps the animal control or conservation officer, harbormaster, or others with a particular interest. Once familiarized with the network's program, these liaisons can expedite the stranding response, while keeping the community informed.

## 2.4. The Response Team

### Responsibilities

The composition of a response team depends on the type and frequency of animals coming ashore in the region. Different strategies are required for oiled sea otters, traumatized manatees and mass-stranded pilot whales. Common to all situations, however, is the basic need for the team to:

- respond rapidly
- contact local authorities upon arrival

- evaluate the situation
- provide emergency care
- arrange to take action (release, transport, necropsy, specimen and data collection, and photographic documentation)
- enlist local assistance
- provide information to the public and media
- protect public health and ensure safety
- maintain a communications link with the Operations Center

### **Recruiting**

The core team requires a wide range of expertise. Apart from the obvious priorities (rescue, first aid, euthanasia, necropsy, etc.) is the need to organize others, deal with the public and media, make phone calls, maintain records, run errands, and provide for the comfort of beleaguered colleagues too preoccupied to look after themselves. No individual can perform all these tasks. People differ in their interests, levels of skill, emotional make-up, and philosophical beliefs. **Know your team and utilize their potential.**

Experienced persons can be recruited from aquariums, research stations, veterinary clinics, academic institutions, and wildlife and conservation groups. A number of teams with similar training may be required to cover a wide geographic range. Additional volunteers with no previous experience can be recruited and trained by the core group to provide extended support.

The size of the team is determined by the species and number of animals, their distribution, and the conditions under which they strand. Situations demanding prolonged work in water or exposure to cold require additional personnel for auxiliary teams (see Chapter 12). An archive of information on the size and composition of teams required under similar conditions in the past will aid in future planning.

### **Training**

Training programs can use lectures, workshops, demonstrations and audio-visual material to develop and maintain essential skills. Topics should include:

- purpose of the Network
- marine mammal biology
- stranding theories
- expected types of events; planning for each
- work standards; importance of persisting with assigned tasks

- rationale and criteria involved in decisions (see Chapter 4)
- handling and transport procedures
- first aid
- marking and tagging
- public and media relations (see Chapter 3)
- personal needs of the field party
- dissection techniques (see Chapter 10)
- collecting specimens and data (see Chapter 10)
- disposal of carcasses (see Chapter 11)
- health and safety concerns (see Chapter 12)
- the follow-up (see Chapter 13)

Trained team members can offer basic instruction to satellite groups, communities where strandings are frequent, local authorities, and volunteers enlisted at the site. Interest can be sustained through periodic workshops, demonstrations, simulated stranding drills, and the distribution of literature and newsletters.

**All strandings require a core team with a high level of skill. Mass strandings also need auxiliary personnel, not necessarily trained, whose greatest assets are their energy and willingness to cooperate. Their tasks must be clearly defined and supervised.**

The importance of working within the person's level of skill should be stressed. An identification card given to each member, coded to indicate the dates and degree of training, will facilitate task assignments at the site. Those familiar with equipment and animal handling can be quickly assigned to teams providing basic care and support. Others may be more qualified for dissection and sampling, or for staff support, communications or administrative duties.

### **Practice Drills**

Practice drills are an exercise in getting the team to a given place on time. A poor system of notification will be apparent at this point, and members who consistently fail to appear may be generally undependable. Drills reviewing each stage of the response are an effective way to check the condition of equipment, test strategies, practice safety measures, and correct defects before problems occur. Game plans can be developed for the types of animals and strandings in the region. A beach cleanup is an example of a good organizational drill that, in addition, generates positive media and community support.

## 2.5. Logistic Support

### Equipment

The Operations Center should maintain a depot of basic equipment for restraint, transport, dissection and sampling, medical procedures and supportive care (*see also Appendix A: Suggested Field Equipment*). Cranes, front-end loaders, boats, vehicles and other large items, are usually borrowed at the site from sources identified in advance. One team member should be responsible for coordinating this effort. At the stranding site, medical, dissecting and marking equipment, and data forms are best secured in a central store supervised by a trained person responsible for their distribution to team members.

### General categories of equipment

**Heavy machinery and haulage equipment:** obtainable from state, county and municipal public works departments, and from private sources (a professional operator or contractor can help with the selection). Establish availability and financial responsibility in advance.

**Foul-weather gear:** wet suits or dry suits can be rented from dive shops; dry suits are preferred for long exposure in cold water (*see 12.2*); wind-surfing suits are also useful. Everyone should be equipped with foul-weather gear (raincoat) and at least one change of clothing.

**Rescue and first-aid equipment:** the Operations Center should maintain a store of tarpaulins, buckets, shovels, ropes, lights, poles, and sheets. Additional supplies might be available from state and local fire, police and public works departments, and military installations.

**Medical needs:** human and veterinary hospitals and animal shelters may provide medical equipment and supplies, including antibiotics, fluids, administration sets, analgesics, blood sampling supplies, and euthanasia solutions. A collective of cooperating clinics and practitioners might stockpile supplies. Prepare in advance in areas where mass strandings occur.

**Diagnostic equipment:** some diagnostic techniques for hematology and blood chemistry can be adapted for field use, using compact equipment powered by a small generator. Coolers are needed to store blood and tissue samples. Local hospitals and veterinary clinics can provide more advanced diagnostic support.

**Marine equipment:** police, Coast Guard, and commercial and private boat operators often respond to the need for small vessels, foul-weather gear and radios.

**Team identification:** issue waterproof badges or wristbands coded for level of training (highly or moderately skilled, untrained), including name and institutional affiliation. Provide each person with reflective safety tape or a battery-operated or chemical light for night work.

**Animal identification:** kits for mass strandings contain:

- marking equipment (tags, tagging gun and replacement parts)
- waterproof pencil and logbooks (available from surveying supply companies)
- different colors of vinyl ribbon to identify animals for immediate release, rehabilitation, euthanasia, dissection or disposal
- large visible tags for recording vital information
- chemical lights for marking animals at night.

**Dissection and sampling equipment, protocols, data forms, photographic gear:** pre-assembled kits for obtaining, marking, and storing samples contain knives, sample bags, waterproof tags and markers, measuring tapes, and data forms (see Appendix A). In a pinch, acquire knives from commercial fishermen and butchers; make a flensing knife by fixing a machete blade (army surplus) to a long handle. Keep photographic supplies protected from moisture.

## 2.6. A Model Response

Strandings differ, as will the responses, and **basic goals and actions must be tailored to the nature of the event**. Animals in some regions come ashore singly and with predictable regularity, drawing little media or public attention and needing only a small team. Large whales and multiple strandings always attract attention and demand skillful organization. A group of ailing sperm whales, for example, will elicit an unmanageable amount of resources and help—hence the need for a plan.

### Organization

The response must be organized and structured, stressing the importance of each task that is assigned. **A clear chain of command is vital.** Each person rightfully expects to have the resources to get the job done, but must respect other overriding needs. Everyone, from the head of the operation to the person on the beach, must keep sight of the common goal.

### Notification

After learning of the event, the Operations Center requests the network representative closest to the scene to verify the report and



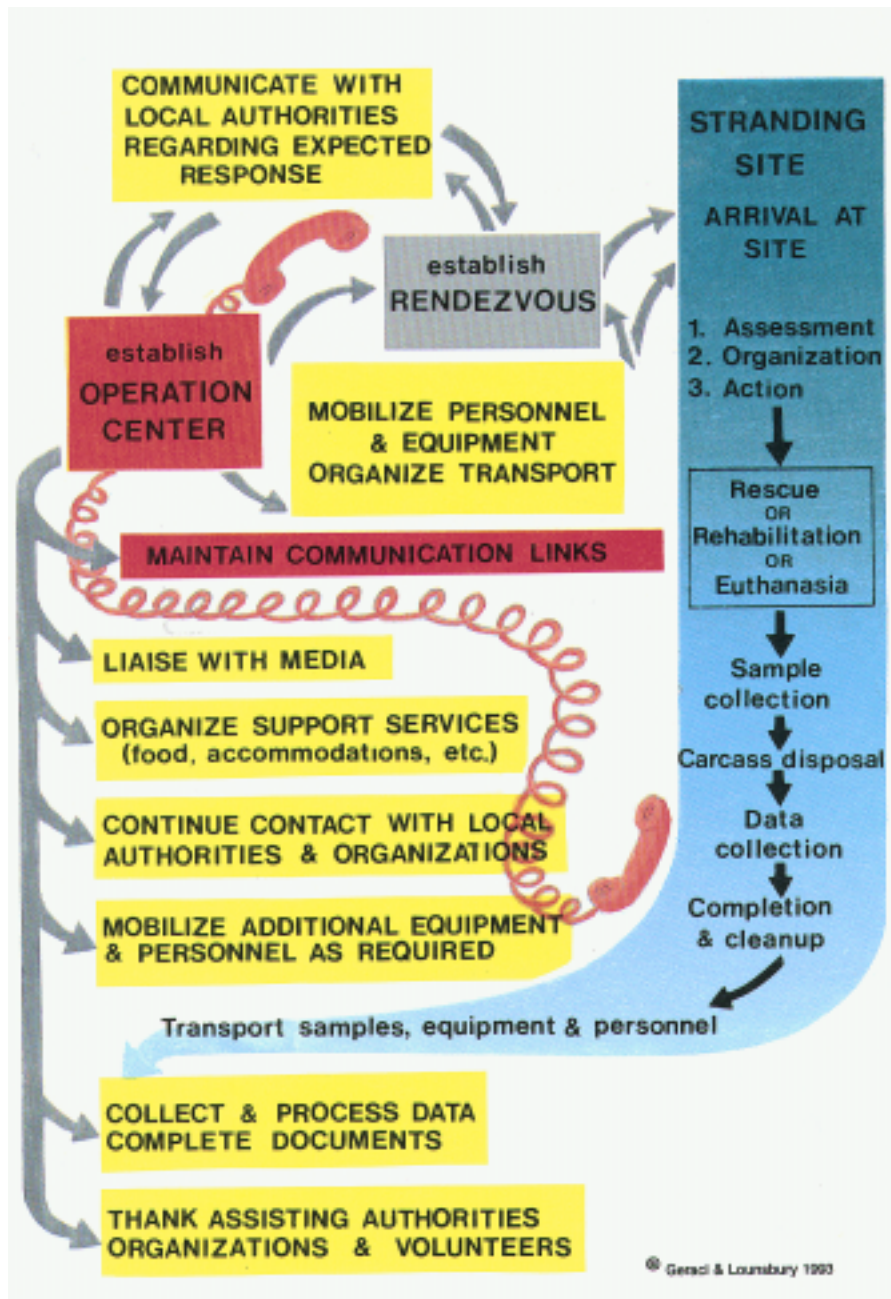
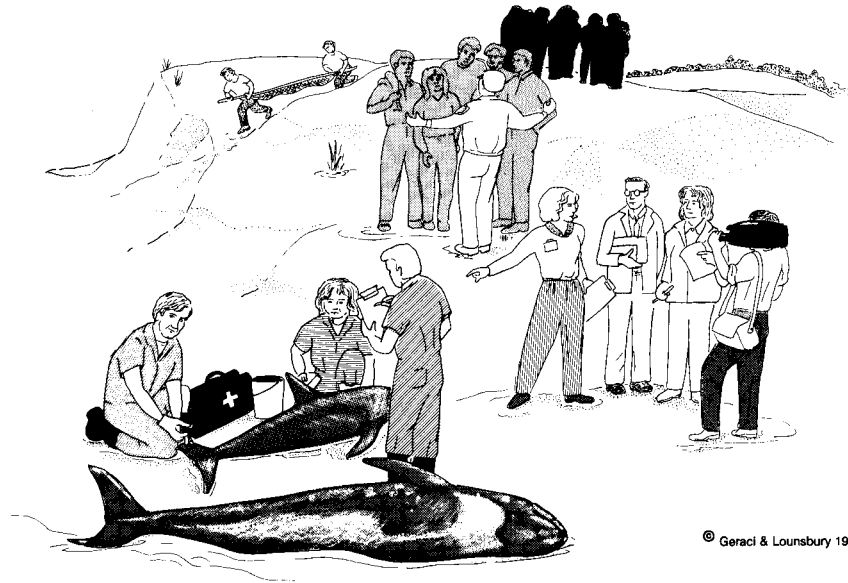


Fig. 2.2. The Stranding Response.



**Fig. 2.3.** Organization at the stranding site includes preparation for crowd control, dealing with the media, and assigning tasks to team members and on-site volunteers.

obtain basic information (precise location, tentative species identification, number of animals, whether dead or alive, weather and beach conditions, number and level of trained persons on site, level of action required, and potential complications, i.e., crowded bathing beach).

For operations involving more than one small animal, the Operations Center notifies the appropriate federal agency and confers with regional and local authorities on the intended action. An appropriate team is dispatched, drawing from the Operations Center and the region. Area representatives are often willing to take control of the stranding site and to enlist available support and services.

### **Rendezvous**

A rendezvous point is established at or near the site, with continuously monitored telephone service—perhaps a police or Coast Guard station. Badges previously issued to network members will help law enforcement officers identify the persons allowed access to controlled areas. Arriving workers can be briefed and assigned to a team before going to the stranding site. **Be sure to provide clear directions—detailed maps may be necessary.**

A designated parking area near the rendezvous point will help avoid traffic congestion and damage to the beach environment. Transporta-

tion to and from the beach can be either by scheduled shuttle, or available on demand, assuming adequate communications.

### **Coordinators**

The response team is supervised by a coordinator who directs the overall plan and communicates with the Operations Center. Large events require additional coordinators for each of the main functions (e.g., veterinary care and support, equipment access/community liaison, public information and media support, specimen and data collection, volunteer organization, and staff support and safety).

**Fatigue can alter one's perspective**, and, without a break, motivation and enthusiasm on the beach can deteriorate to the point of increasing risks to health and safety (see Chapter 12). A trained individual should be appointed to look after the comfort and safety of all personnel. In a small-scale response, the duties may simply involve locating nearby facilities (bathroom, shower, telephone) and providing food. For more complex events, the coordinator will establish a staff support center to provide first aid, shelter, food and beverages, a portable lavatory, and hot water for washing. A main center might be located at (or near) the rendezvous point, with a smaller one at the stranding site.

The staff support coordinator should also **arrange off-site accommodations for the team**, being sure to familiarize the innkeeper with the nature of the event, the inevitable round-the-clock traffic, cumbersome equipment, and untidy appearance of the guests.

The media and public relations coordinator may designate areas for media representatives and the public to gather for periodic progress reports (see Chapter 3). Other team members must refer requests for information to this coordinator.

A large response requires considerable on-site administrative work. A coordinator of volunteers will organize support staff, keep records of participants and their affiliations, maintain a check-in/check-out system, and (with the safety coordinator) schedule and supervise revolving shifts. The safety coordinator will also keep a record of reported injuries, ensure their treatment, and follow up any complications.

Specimen and data coordinators maintain the supply of dissecting and sampling equipment and data forms, monitor procedures to ensure adherence to protocols, keep track of samples processed in field laboratories or off-site facilities, and collect and organize completed forms and material (see Chapter 10).

**Communications**

The stranding site, rendezvous point and Operations Center function as a unit, through a solid line of communication that requires continuous monitoring by radio, mobile telephones, or a planned courier system. Scheduled periodic meetings with the team leader help to determine needs, report progress, and boost energy and morale. Meetings of the group coordinators maintain overall organization and set the course for the following day's activities. The team leader issues progress reports to the Operations Center, informing the staff of any needs. The Operations Center responds to requests for support and relays information to the responsible regulatory agency.

**Know your capability, operate within those limits, and do not expect more than your resources allow.**