

Stranding Network Comments on Minimum Standard Qualifications for a Marine Mammal Stranding Program Agreement (New Applicants and Renewals)

Background. In December 2004, NMFS requested input from the stranding network on the draft *Minimum Standard Qualifications for a Marine Mammal Stranding Agreement* and on several questions regarding minimum qualifications of key personnel carrying out the requirements of the Stranding Agreement under Articles III, IV, and V (see below). This document provides the comments from the stranding network on the Minimum Standard Qualifications and related questions. The names have been redacted for privacy.

DEFINE REQUIRED EXPERIENCE:

Please provide comments to the questions below under sections A, B, and C. Refer answers by A1, A2, B1, B2, C1, and C2

A. Qualifications for Response to Dead Stranded Marine Mammals - First Response (Stranding Article III Authorization)

“The prospective Stranding Network Participant must have and maintain at least two employees or volunteers each with a minimum of one year of continuous hands-on experience in marine mammal stranding response or comparable training, one of whom will be on-site or supervising when animals are being examined”

1. What constitutes one-year of hands-on experience?
2. What constitutes comparable training?

B. Qualifications for Response, Triage and Transport of Live Stranded Marine Mammals (Article IV Authorization):

“The prospective Stranding Network Participant must have and maintain at least two employees or volunteers each with a minimum of one year of continuous hands-on experience in marine mammal stranding response, triage, transport, and/or euthanasia, or comparable training, one of whom will be on-site or supervising when animals are being examined.”

1. What constitutes one-year of hands-on experience?
2. What constitutes comparable training?

C. Qualifications for Rehabilitation and Release of Live Stranded Marine Mammals (Article V Authorization):

“The prospective Stranding Network Participant must have at least two staff members each with a minimum of three years of continuous hands-on experience in marine mammal care and rehabilitation (i.e., by apprenticing with or working in an experienced institution for three years) and are familiar with any applicable NMFS rehabilitation facility and release guidelines and regulations.”

1. What constitutes three-years of hands-on experience?

“The prospective Stranding Network Participant must have and maintain an attending veterinarian experienced in marine mammal care who is willing to assume responsibility for diagnosis, treatment, and medical clearance for release.”

2. Review the suggested definition below of “Attending Veterinarian Requirements” and provide comment.

ATTENDING VETERINARIAN REQUIREMENTS

MINIMUM

The attending veterinarian shall:

- Be available to examine animals on a regular schedule and emergency basis
 - Be available to answer veterinary questions on a 24 hour basis
 - Have marine mammal experience or be in regular consultation with a veterinarian who has marine mammal experience
 - Be licensed in state of practice
 - Have access to a list of expert veterinarians to contact for assistance
 - Be able to draw blood and give injections to marine mammals
 - Have a contingency plan for veterinary backup when the attending veterinarian is not available
 - Have a drug license and the ability to obtain necessary medications for the animals housed at that rehabilitation facility
 - Be able to conduct a full post-mortem exam on all species of marine mammals (pinnipeds or cetaceans) treated at the facility
- Shall cooperate with other members of the NMFS [Region] Stranding Network and the National Marine Mammal Stranding Program as well as Federal, state, and local officials and employees in matters relating to stranded marine mammals or their disposition and comply with NMFS laws, regulations, policies and/or guidelines applicable to or promulgated by NMFS that apply to activities under this Agreement;

RECOMMENDED

- All of the above plus
- Membership in the International Association for Aquatic Animal Medicine
- Complete a course which offers basic medical training with marine mammals such as Seavet, Aquavet or MarVet
- Have at least one year of clinical experience outside of veterinary school
- Have access to the 2nd Edition CRC “Handbook of Marine Mammal Medicine”
- Have basic hands-on veterinary experience with the marine mammal species most frequently rehabilitated at the facility

Stranding Network Comments on Minimum Standard Qualifications for a Marine Mammal Stranding Program Agreement (New Applicants and Renewals)

#1 COMMENTS

General Comments:

Comments are also requested on NMFS' draft guidelines for "Minimum Standard Qualification for a Marine Mammal Stranding Agreements." On criteria for categories A, B, and C, our comments are general:

It is essential that the director or primary representative of the prospective Stranding Network Participant be trained in the species of animal with which that individual will work, cetaceans or pinnipeds, for example, and be trained in the type of stranding activity with which he or she will be associated -- dead or live stranded animals. The agency must also take into consideration the number of events or marine mammals with which the director or primary representative has had experience in addition to the years the individual has worked with stranded animals. Experience with a facility that rehabilitates a few marine mammals vs. those who care for numbers of animals in the same time frame is not comparable. Similarly, experience with recovery and necropsy of just a few animals in the course of a year, or three years, would not provide adequate experience. The agency and the network might be better served if "experience" was defined in terms of the number of animals treated or recovered rather than years of service. Specifically, we do not believe that one year's experience working with dead animals may be sufficient, particularly for those working with cetaceans. -- especially if a sufficient number of fresh (code 2) animals are not examined. These (code 2) animals provide the most data about pollution and disease, which has important relevance to the health of wild populations.

Proposed Definition of Attending Veterinarian Requirements:

On the issue of veterinary requirements, we recommend the following language:

- Be available to examine animals daily, if needed, and available in the case of an emergency.
- Be available to answer veterinary questions on a 24 hour basis
- Have a minimum of one year of clinical veterinary experience post graduation.
*Have one year clinical experience working with the marine mammal type(s) most frequently admitted to the rehabilitation facility; or, have a written consulting agreement with an experienced marine mammal veterinarian which assures the availability of consultation when required.
- Meet any state requirements for veterinary practice on beached or stranded marine mammals,
- Have access to a list of veterinarians, with marine mammal expertise, to contact for assistance
- Be able to perform routine diagnostic and medical procedures on the marine mammal types most often admitted to the rehabilitation facility

- Have a contingency plan for qualified veterinary backup when the attending veterinarian is not available
- Have the ability to obtain necessary pharmaceuticals for the animals housed at that rehabilitation facility
- Be able to conduct a full post-mortem exam on all species of marine mammals (pinnipeds or cetaceans) treated at the facility
- Shall cooperate with other members of the NMFS [Region] Stranding Network and the National Marine Mammal Stranding Program as well as Federal, state, and local officials and employees in matters relating to stranded marine mammals or their disposition and comply with NMFS laws, regulations, policies and/or guidelines applicable to or promulgated by NMFS that apply to activities under this Agreement;

RECOMMENDED

- All of the above plus
- Membership in the International Association for Aquatic Animal Medicine

Have access to the most recent edition of the CRC “Handbook of Marine Mammal Medicine”

#2 COMMENTS

Comments on Document:

A. Qualifications for Response to Dead Stranded Marine Mammals – First Response (Stranding Article III Authorization):

Note Comment: The phrase ‘...the Agreement may be extended...’ implies that the agreement may not be extended. However, if NMFS anticipates not always wanting to issue agreements with longer expiration dates it might be best to state that NMFS reserve the option of issuing only annual extensions.

Paragraph 1: No comments.

Paragraph 2: No comments

Paragraph 3 Comment: Recommend changing ‘...for at least three years...’ to ‘...for the equivalent of at least three full time years.’ Recommend changing ‘...Participant may apprentice...’ to ‘...Participant must apprentice.’ Recommend changing ‘...or NMFS...’ to ‘...or NMFS in a position that has frequent direct contact with marine mammals.’

Paragraph 4 Comment: The intent of the word continuous needs explanation especially if part time experiences do not count at all. Recommend changing ‘...continuous hands-on experience...’ to ‘...continuous full-time (or the part time equivalent of full time, e.g. 2 years of half time equals one year of full time) hands-on experience...’ Recommend changing ‘...when animals are being examined...’ to ‘...when animals are being examined or handle.’

Paragraph 5: The consequences of the turnover of key personnel is important enough to warrant its own paragraph additionally, a time limit to the reporting requirement should be established.

Paragraph 6: No comments.

Paragraph 7: The extent of the equipment list needs to be described or some sort of check list provided. The equipment on hand may not adequately reflect an organizations capability as they may rely on borrowing or buying items as the need arises. Also the purpose of the list needs to be explained, what NMFS will use this equipment list for.

B. Qualifications for Response, Triage and Transport of Live Stranded Marine Mammals (Article IV Authorization):

Comment: This title is not the same as the title of Article IV in the Draft Agreement which is 'Live Stranding: First Response.' However, this title, 'Response, Triage, and Transport of Live Stranded Marine Mammals,' is more descriptive.

Note Comment: See comment on Note in Section A.

Paragraph 1: No comments.

Paragraph 2: No comments

Paragraph 3 Comment: See comment in Section A Paragraph 3.

Paragraph 4 Comment: See comment in Section A Paragraph 4.

Paragraph 5: No comments.

Paragraph 6: No comments.

Paragraph 7: No comments.

C. Qualifications for Rehabilitation and Release of Live Stranded Marine Mammals (Article V Authorization):

First Note: No comments

Second Note Comments: See comment on Note in Section A.

Paragraphs 1 and 2 from Section A and Section B are not incorporated here. While the document does mention that the requirements for Section C are in addition to those listed for Section B this is still confusing. Additionally, there is a precedent whereby Authorization has been given to an organization to rehabilitate animals (Section B in this document) but NMFS has requested that they not to respond to animals on the beach. (Section C in this document). If this is anticipated to happen again then each section should stand alone.

Paragraph 1: There should be a time requirement for experience.

Paragraph 2 Comments: See comment in Section A Paragraph 4. The consequences of the turnover of key personnel is important enough to warrant its own paragraph additionally, a time limit to the reporting requirement should be established.

Paragraph 3 Comment: Recommend changing ‘...is willing to assume responsibility for...’ to ‘...is responsible for.’

Paragraph 4: This paragraph requires a trained volunteer base without giving any credit to having professional staff which would be better. Furthermore, what is the intent of ‘...direction of the veterinarian?’ Does this mean the veterinarian is on-site when procedures are performed? Or is direction from the veterinarian communicated via written orders or over the phone sufficient? Or does this mean that personnel approved by the attending veterinarian can perform procedures without consulting the veterinarian? It would be best if this point be elaborated to be more explicit about NMFS direction on this point.

Paragraph 5 No Comments

Footnote 2: It is only waives requirements for Alaska and Pacific Islands Region for Section A and B. Waivers may also be needed for Section C activities.

Proposed Definition for “Required Experience”

A. Article III Authorization

1. Comparable marine mammal stranding response experience may include but not be limited to experience with the biology, anatomy, and pathology of marine mammals along with some, a minimum of one year full time equivalent, experience with dead stranded marine mammals. This experience should be described in detail complete with references. These experiences could be with aquariums with captive marine mammals, working for the government or a university in a job with regular hands-on experience with marine mammals, among others. International experience can count.
2. One-year of hands-on experience should be the equivalent of one full-time work year in which the employee is directly involved in the biology, anatomy, and pathology of marine mammals along with some experience with dead stranded marine mammals. This experience should be described in detail complete with references. These experiences could be with aquariums with captive marine mammals, working for the government or a university in a job with regular hands-on experience with marine mammals, among others. International experience can count.
3. Comparable training may include courses that involve ‘wet-labs’ or hands on activities involving the biology, anatomy, and pathology of marine mammals. Comparable training can only be substituted for a portion, less than half, of the time requirement and should be documented with course descriptions, training certificates, and references.

B. Article IV Authorization

1. Comparable marine mammal stranding response experience may include but not be limited to experience with the handling, transportation, husbandry, nutrition, pathology, and treatment of clinically ill marine mammals along with some, a minimum of one year full time equivalent, experience with stranded marine mammals. This experience should be described in detail complete with references. These experiences could be with aquariums with captive marine mammals, working for the government or a university in a job with regular hands-on experience with marine mammals, among others. International experience can count.

2. One-year of hands-on experience should be the equivalent of one full-time work year in which the employee is directly involved in the handling, transportation, husbandry, nutrition, pathology, and treatment of clinically ill marine mammals along with some experience with stranded marine mammals. This experience should be described in detail complete with references. These experiences could be with aquariums with captive marine mammals, working for the government or a university in a job with regular hands-on experience with marine mammals, among others. International experience can count.

3. Comparable training may include courses that involve ‘wet-labs’ or hands on activities involving the handling, transportation, husbandry, nutrition, pathology, and treatment of clinically ill marine mammals. Comparable training should only be substituted for a portion, less than half, of the time requirement and should be documented with course descriptions, training certificates, and references.

C. Article V Authorization

1. See comment under B 1.

Proposed Definition for Attending Veterinarian Requirements

As all animals presented to rehabilitation centers are by definition sick or debilitated, the minimum requirements for a program of veterinary care should exceed the requirements of the Animal Welfare Act, associated technical notes, and policies referenced below. Furthermore, these policies put the burden of responsibility for having an adequate veterinary program on the facility rather than a veterinarian.

APHIS Technical Note

<http://www.aphis.usda.gov/oa/pubs/tneavc.pdf>

Policy Notes on Veterinary Care

<http://www.aphis.usda.gov/ac/policy/policy3.pdf>

Animal Welfare Act Section 3.110 Veterinary Care

<http://www.aphis.usda.gov/ac/cfr/9cfr3.html#3.110>

The following site contained useful information about Minimum Standards for Wildlife Rehabilitation, including their Veterinary Policy, from the National Wildlife Rehabilitators Association.

<http://www.nwrawildlife.org/documents/standards3rdEdition.pdf>

Recommended requiring the Stranding Network Participant to be responsible for the following points:

- Be familiar and comply with the veterinary practice law of their state;
- Be familiar and comply with the standards of veterinary care in the Animal Welfare Act;
- Employ a chief or attending veterinarian (on a full-time, part-time, consulting, or volunteer basis) to oversee the Program of Veterinary Care of the facility. The director of the Stranding Network Participant facility must give the veterinarian sufficient authority to ensure adequate veterinary care for the animals;
- Have a written Program of Veterinary Care, to include documentation of how the Stranding Network Participant fulfills the obligations listed here (documentation used for APHIS certification would be sufficient);
- Have the necessary licenses or arrangements to obtain and store medications required for the animals housed at the rehabilitation facility;
- Have the provisions/capability in house, or access to facilities, where the following can be performed: physical exams, minor medical procedures, hematology, serum chemistries, radiology, and post-mortem exams;
- Maintain a list of expert veterinarians with extensive marine mammal experience to contact for assistance;
- Have a backup veterinarian or contingency plan for when the chief veterinarian is not available;
- Have provisions to perform an entrance physical exams within 24 hours of admitting a marine mammal and regularly scheduled follow-up exams;
- Have 24 hour on-call coverage for emergencies or to answer veterinary questions;
- Maintain medical records to include but not be limited to the recording of physical exam findings, morphometrics, identification of all medical and physical problems with proposed plan of action, all medications and treatment an animal receives, results and interpretation of diagnostic testing, and necropsy findings. A copy of these records will be maintained by the Stranding Network Participant for a minimum of 3 years following the animal's release, death, or transfer to another facility;
- Have provisions for performance of humane euthanasia. (This point should be reflective of the language discussing euthanasia in Article V Section A Paragraph 5 of the Draft Marine Mammal Stranding Agreement);
- Have veterinary review and approval of the Program of Veterinary Care, quarantine protocols and other operating procedures as they relate to veterinary care;
- Have provisions for completion of medical clearance by a veterinarian as part of the release (or non-release) determination of an animal that has completed rehabilitation (This point should be reflective of the language discussing clearance for release in Article V Section B Paragraph 3 of the Draft Marine Mammal Stranding Agreement);
- Have the provisions, ability, and willingness to conduct full post-mortem exams, including obtaining histopathology samples, microbiological cultures, and other specific biological samples as requested by NMFS;

- Provisions for the participation of an attending veterinarian in teleconferences with NMFS, other Network Participants, or marine mammal experts for discussions that may include but are not limited to individual case discussion, release determination, human interaction, disease outbreaks, diseases of concern, and unusual mortality events;
- Cooperate with other members of the NMFS [Region] Stranding Network and the National Marine Mammal Stranding Program as well as Federal, state, and local officials and employees in matters relating to stranded marine mammals or their disposition and comply with NMS laws, regulations, policies and/or guidelines applicable to or promulgated by NMFS that apply to activities under the Agreement;

The Stranding Network Participant shall ensure that at least one of their veterinarians has at a minimum the following:

- Have marine mammal experience consisting of 1 year full time (or equivalent) experience and the completion of a course covering the basic medical care of marine mammals.
OR
- Be in regular consultation with a veterinarian mentor who has marine mammal experience (as defined above), AND
- Has reviewed the basic veterinary procedures for and the common clinical problems of the marine mammal species most frequently rehabilitated at the facility with a veterinarian who has marine mammal experience, AND
- Has participated in a physical exam of a marine mammal belonging to the same order as the species most frequently rehabilitated at the facility with a veterinarian who has marine mammal experience, AND
- Be able to draw blood and give injections to marine mammals.

#3 COMMENTS

General Comment:

It would be prudent on all qualifications to note that the decisions will be made by the Regional Administrator with input from the Regional Coordinator and National Coordinator, since these individuals will have the information regarding regional needs, etc.

Proposed Definition for “Required Experience”

- For dead animal response, live animal response and rehab: three years of comparable marine mammal experience should include significant volunteer and/or staff time at a NMFS authorized stranding organization (perhaps a minimum of 2 years paid and one year of volunteer work for the Director/lead and at least 250 hours of volunteer work for staff members).
- One year of hands-on experience should include participation in all potential aspects of the proposed work at a NMFS authorized institution. Whether as volunteer or staff time, it must include a minimum average of 8-10 hours per week of volunteer time.
- Comparable training should include training courses from authorized network members in good standing, course work, and relevant professional experience, but must also include a hands-on portion with the appropriate species.

All of the above qualifications must also be accompanied by written documentation and letters of reference detailing the nature of the work (paid or volunteer), hours worked, responsibilities and authority. Letters of reference from the current LOA holder under which the “apprenticeship/experience was gained are absolutely necessary. These LOA holders must also be in good standing.

Proposed Definition for Attending Veterinarian Requirements

- An attending veterinarian for a rehab facility MUST have hands on marine mammal experience. This can easily be achieved by requiring at least one week of hands-on work with an already authorized veterinarian at an authorized rehab facility. This will not only help the new vet to perform better, but will also promote cooperative relationships and easy communication between organizations and vets to allow for consultation on cases and improved care for all animals.
- The requirement of access to the CRC Handbook should be a minimum requirement, as it is easy to achieve.

#4 COMMENTS

Comments on Document:

A. Qualifications for Response to Dead Stranded Marine Mammals – First Response (Stranding Article III Authorization):

1. The NMFS Regional Administrator must determine that there is a **geographic** need for a Stranding Network Participant in the proposed response area.

COMMENT: Change to “programmatic and or geographic”. The proposed new Letters of Authorization mark a significant change to the MMHSRP and the relationship between NMFS and LoA holders. Early letters established a rough geographically based organizational structure and had few programmatic responsibilities or requirements above basic activity reporting. Since that time, the MMHSRP has become better defined and the needs and requirements for organizations have become far more complex and sophisticated. The new LoAs and these guidelines essentially outline programmatic needs and requirements for stranding organizations. I feel that the additional language is needed to explicitly state the importance of programmatic as well as geographic coverage of an area. This also supports the structure of new LoA agreements where organizations may be working at different levels of response within the same geographic area.

This determination is within the NMFS Regional Administrator’s discretion based on, but not limited to, the following factors: [x, y, and z; e.g., the historic amount of stranded marine mammals in an area, the amount of personnel and resources of stranding network participants with existing agreements in the proposed response area, the geographic extent of the proposed response area, the proximity of the existing and prospective stranding network participants to the proposed response area].

COMMENT: I suggest adding a factor of support from other LoA holders in the area. The new organization would be responsible for demonstrating that they had the support of and working agreements with other organizations in the area.

2. The prospective Stranding Network Participant must be an [established] organization or facility [or affiliated with an agency, university, or organization] that abides by the Marine Mammal Protection Act (MMPA), Endangered Species Act, and Animal Welfare Act and promotes the conservation of marine mammals.

COMMENT: Specify the MMHSP. This should emphasize the importance of program goals of the MMHSP.

3. The director or primary representative of the prospective Stranding Network Participant should have apprenticed under the direct supervision of an existing Stranding Network Participant or NMFS [for at least three years] or have comparable experience in marine mammal stranding response.(2) The prospective Stranding Network Participant may apprentice under a “designee” status to obtain this experience. If it is a new organization or facility, then it must fulfill a need specifically identified by the NMFS Regional Administrator. The NMFS Regional Administrator shall require the prospective Stranding Network Participant to submit documentation of experience [e.g., CV, resume, certificates, etc.] for review prior to entering into any Stranding Agreement and the documentation shall be kept on file at the NMFS Regional Office.

COMMENT: “must fulfill a need specifically identified” – change to “must fulfill a programmatic or geographic need as identified by ...” See first comment.

“documentation of experience” In addition, prospective participants should present documentation of support from other stranding organizations. In particular organizations that have been apprenticeship sponsors. Sponsors should provide assurances that the new organization can support both the geographic and programmatic needs in an area. This reinforces the importance of cooperation and program building within a geographic area (not simply a “lack of an organization” in a given area).

5. The prospective Stranding Network Participant must have participated in NMFS approved training or have documented and approved experience necessary to obtain accurate Level A stranding data and to conduct basic tissue sample (Level B) collection. The NMFS Regional Administrator shall require the prospective Stranding Network Participant to submit documentation of experience [e.g., CV, resume, certificates, etc.] for review prior to entering into any Stranding Agreement and the documentation shall be kept on file at the NMFS Regional Office. In the event of key personnel and/or key volunteer turnover, the Stranding Network Participant will notify the NMFS Regional Administrator in writing and provide CVs of new personnel and/or volunteers.

COMMENT: “have documented and approved experience necessary” Add “and allow for inspection and review of facilities, records and procedures by NMFS authorized inspectors”. Assuring compliance with proposed guidelines is critical to program operation. This can only be

done through inspection and review of operations and facilities. This should also be a part of stranding agreements.

6. The prospective Stranding Network Participant must communicate in a professional manner, and **cooperate** with NMFS, other network members, the general public, local and state **agencies**. We also encourage cooperation with authorized marine mammal researchers.

COMMENT: “cooperate” Change to “ demonstrate ongoing cooperation with”. I feel that it is the responsibility of the participant to demonstrate the ability to work cooperatively. This is a core value for an organized network and would be one of the highest standards for participation. I feel the more specific language is needed.

“agencies” add “and support the goals of the MMHSRP”. I feel this additional language emphasizes the importance of support for the specific program goals as outlined in the LoA.

B. Qualifications for Response, Triage and Transport of Live Stranded Marine Mammals (Article IV Authorization):

4. The prospective Stranding Network Participant must have and maintain at least two employees or volunteers each with a minimum of one year of continuous hands-on experience in marine mammal stranding response, triage, transport, and/or euthanasia, or comparable training, one of whom will be on-site or supervising when animals are being examined.(2) The NMFS Regional Administrator shall require the prospective Stranding Network Participant to submit documentation of experience [e.g., CV, resume, certificates, etc.] for review prior to entering into any Stranding Agreement and the documentation shall be kept on file at the NMFS Regional Office. **In the event of key personnel and/or key volunteer turnover, the Stranding Network Participant will notify the NMFS Regional Administrator in writing and provide CVs of new personnel and/or volunteers.**

COMMENT: Suggest addition of language indicating a requirement to replace personnel with staff or volunteers of comparable experience. I feel that turn over – particularly in new organizations – can be rapid and this should not change the overall capability of the organization. This should also be subject to inspection and review.

C. Qualifications for Rehabilitation and Release of Live Stranded Marine Mammals (Article V Authorization):

3. The prospective Stranding Network Participant must have and maintain an attending veterinarian experienced in marine mammal care who is willing to assume responsibility for diagnosis, treatment, and **medical clearance for release**. The attending veterinarian will provide a schedule of veterinary care that will include a review of husbandry records, visual and physical examinations of all the marine mammals in rehabilitation, and a periodic visual inspection of the facilities. The NMFS Regional Administrator shall require the prospective Stranding Network Participant to submit documentation of the attending veterinarian’s experience [e.g., CV, resume,

certificates, etc.] for review prior to entering into any Stranding Agreement and the documentation shall be kept on file at the NMFS Regional Office.

COMMENT: medical clearance. Medical clearance should include a statement by the veterinarian certifying that the animal to be released meets the standards for release as set by NMFS.

ADDITIONAL COMMENT FOR THIS SECTION: There should be an additional requirement for organizations to be able to submit disposition plans for animals in rehabilitation at the request of NMFS. These plans should include proposed options for animals should they be releasable or non releasable (including a euthanasia plan). Organizations should be able to provide disposition plans within one week of notification by NMFS. These plans would be non binding, but could be used extend the planning time for problematic cases.

#5 COMMENTS

Proposed Definitions for “Required Experience”

A1: Our Network feels that "three years of comparable marine mammal stranding response experience" should include several of the following criteria:

- * hands-on experience with wildlife or large animal rehabilitation
- * hands-on experience working on stranded sea turtle response
- * hands-on experience working with animals at a veterinarian clinic, zoo, university, or other institution
- * hands-on experience should include active knowledge of necropsy techniques, collecting and disseminating data and samples, and writing reports
- * experience working with marine mammals but not specifically with strandings such as:
 - captive marine mammals
 - acting as the Primary Investigator of a research project or as a technician that is directly involved with the completion of a project that involves wild marine mammals, live capture/health assessment studies, or other wildlife research projects

* if the experience is not gained under the direct supervision of an existing Network Participant, the individual needs additional experience (4 - 5 years)

A2: One year of hands on experience includes being:

- * actively involved with necropsies
- * familiar with data and sample collection and processing
- * familiar with evaluating Human Interactions, species, sex, and age determination
- * familiar with data organization

These experiences should be conducted under the supervision of an individual who possesses these qualifications.

A3: Comparable training includes one year of:

- * hands-on experience with wildlife or large animal rehabilitation
- * hands-on experience working on stranded sea turtle response

- * hands-on experience working with animals at a veterinarian clinic, zoo, university, or other institution
- * hands-on experience should include active knowledge of necropsy techniques, collecting and disseminating data and samples, and writing reports
- * experience working with marine mammals but not specifically with strandings such as:
 - captive marine mammals
 - acting as the Primary Investigator of a research project or as a technician that is directly involved with the completion of a project that involves wild marine mammals, live capture/health assessment studies, or other wildlife research projects

Because the our Network does not respond to live animals, it does not feel that it is qualified to comment upon the questions pertaining to live animal response, rehabilitation, and release.

#6 COMMENTS

Comments to Document

- Apprenticeship of a prospective participant under an existing participant
 - This requirement should be referred to in the first note (page one of min. requirements) describing the issuance of a probationary, one year agreement
 - Note 1 at the end of the qualification document states “In order to renew...must demonstrate past compliance...”
 - What will be done in cases of existing participants who have not met the apprenticeship requirement nor have the comparable experience in lieu of the apprenticeship?
 - This is in fact the present situation for at least one such facility. It is our understanding that other organizations do not have participants with three years of rehabilitation experience or who have apprenticed with an organization to provide rehabilitation training, yet they have built a facility to house pinnipeds. We would be the appropriate oversight organization for apprenticeship in this case.
- In addition to the phrases and terms that are already put forth for comments by NMFS on the website, there are several more that need to be defined or further clarified.
 - Participants must cooperate with other stranding participants. Define cooperate
 - Key personnel/volunteers – this also affects the list of which we are required to send CV information on. Who is considered “key”?
 - Long term care, please define.
 - Short term care, please define.
- Specific training is required by NMFS for aspects of the program, for example Minimum Guidelines, Section A, number 5 states “...must have participated in NMFS approved training or have documented and approved experience necessary to obtain accurate Level A stranding data...”
 - Will fulfilling all training criteria be a requirement for the issuance of an LOA or a renewal?

- For example, what constitutes comparable experience for institutions that have been collecting data etc... for a number of years without NMFS specific training?
 - Is this a NMFS mandated oversight issue or will a statement of good faith from the institution describing the training that they provide their staff be accepted as compliance, if NMFS deemed the training provided is adequate.
 - Will training be offered by NMFS at their expense?
 - If it is at the institution's expense, what is the time line for compliance (taking into consideration the institutional budget cycles)?
 - How will this training be conducted?
 - How will certification be handled (institution wide or by individual)?
 - Will training and certification be broken into several categories, data collection, husbandry, transport and handling...
- We feel that any and all guidelines on facilities and animal contact and care need to be provided to all existing and potential participants. We would like direction on the following:
 - Rehabilitation facility guidelines – have rehabilitation facility guidelines been established? If so and they are similar to APHIS regulations but a facility still does not meet them, what is the course of action.
 - Animal husbandry minimum standards.
 - Animal handling
 - Transport
 - Required diagnostics
 - Enclosure minimums
 - Feeding
 - Interactions
 - Quarantine
 - Record keeping
 - Length of time animals are monitored
- Certain statements are too vague in nature to be effective
 - Qualifications Section C, 4 "...trained volunteer base sufficient to initiate and maintain adequate and appropriate marine mammal care and husbandry."
 - Care and husbandry need to be defined.
 - This would again be served by specific husbandry guidelines for all participating institutions
- Is there a schedule of compliance giving the facility a chance to resolve any delinquencies that would preclude the issuance of an LOA or a renewal? If so, what is the time frame for compliance and does a follow up by NMFS occur?

Proposed Definitions for "Required Experience"

A1 - Comparable experience should include working with an institution that would provide exposure to the animals and working conditions likely to be encountered by the prospective participant. Experience should include necropsy, sampling and data recording. Knowledge of marine mammal anatomy and physiology and the workings of the stranding network are also key

in building the proper experience to become a stranding participant who responds to dead stranded animals. The experience should also include public interactions. This person needs to be able to take the appropriate measures to ensure staff and public safety while directing any actions to be taken with the animal. Interpersonal skills are also needed to cooperate within the network as well as to establish support from outside agencies. In order for experience to be considered acceptable, time spent on stranding related activities should encompass the majority of the period of time that is being submitted for consideration.

A2 - Hands on experience should include routine activity as described above for those species that the facility expects to encounter within their response area for the one-year period. Both paid and unpaid positions (not a volunteer or internship position but rather as a professional in the field) at a stranding facility should be accepted as part or all of the one-year experience.

A3 - Comparable experience should expose potential staff members to the types of animals that are likely to be encountered within the area of response. Any position that required the use of necropsy, sampling, recording skills should be considered as part of comparable training whether directly related to an animal stranding facility or positions at universities or other research facilities.

B1 - Comparable experience should include the daily or routine activity in animal handling, husbandry, in-water and animal safety procedures, facility maintenance (mechanical and biological parameters), and interaction with veterinarians and veterinary technicians. The experience should include working with all species of animals that the stranding facility staff would expect to encounter in their assigned response area. The experience should also include public interactions. This person needs to be able to take the appropriate measures to ensure staff and public safety while directing any actions to be taken with the animal, which includes protocols for decision making on site regarding the disposition of the animal (immediate release/relocation, transport to a rehabilitation facility or euthanasia). Interpersonal skills are also needed to cooperate within the network as well as to garner support from outside agencies. In order for experience to be acceptable, time spent on stranding related activities should encompass the majority of the period of time that is being submitted for consideration. If the three years of experience is not at the same facility, the experience elsewhere should be comparable. A pattern of gained knowledge and responsibilities should be apparent over the course of the three years.

B2 - Hands on experience should include routine activity as described in B1 for those species that the facility reasonably expects to encounter for the one-year period in their area of response. Both paid and unpaid positions (not a volunteer or internship position, but rather as a professional in the field) at a stranding facility should be accepted as part or all of the one-year experience.

B3 - Comparable training needs to expose potential staff members to the types of animals that are likely to be encountered within the area of response. A distinction must be made during this experience highlighting the differences in working with “trained” or collection animals versus stranded animals (if the person is using experience gained from a zoo or aquarium). It is important to emphasize the differences that one would encounter during animal interactions as

well as the different theory and purpose behind the actions taken in rehabilitation verses in a permanent collection setting. Again, if the experience is not gained directly through a stranding facility, it should be from an institution that maintains standards of care for marine animals that one would encounter in a stranding facility and cover activities similar to those encountered in a stranding facility position.

C1 - Comparable experience should include the daily or routine activity in animal handling, husbandry, in-water and animal safety procedures, facility maintenance (mechanical and biological parameters), and interaction with veterinarians and veterinary technicians. The experience should include exposure to full animal cases, from rescue to release. Full rehabilitation of an animal involves problem solving beyond response, triage and transport and as such, this person must be prepared to handle situations that occur during a full rehabilitation (not only making difficult animal management decisions, but staffing, budget, other logistics). The experience should include working with all species of animals that the stranding facility would reasonable expect to encounter given its response area. The experience should also include public interactions. This person needs to be able to take the appropriate measures to ensure staff and public safety while directing any actions to be taken with the animal, which includes protocols for decision making on site regarding the disposition of the animal (immediate release/relocation, transport to a rehabilitation facility or euthanasia). Interpersonal skills are also needed to cooperate within the network as well as to garner support from outside agencies. In order for experience to be adequate, time spent on stranding related activities should encompass the majority of the period of time that is being submitted for consideration. If part of the three years of experience is not at the same stranding facility, it should be somewhere with equivalent internal standards for: animal care, husbandry, water quality, the development of training programs and materials etc.

C2 - Completing the course on basic medical training with marine mammals should be a requirement (would NMFS be able to assist with the funding of such courses?). In addition to the requirements listed, the attending veterinarian should have access to laboratory equipment for diagnostics on marine mammals, as small animal equipment can be size limited. The attending veterinarian must have access to and knowledge of marine mammal specific information. For example, blood value norms, dietary requirements, and pharmacology information.

#7 COMMENTS

General Comment on Document:

This document seems geared to new applicants and much more so then for renewals. The language in the document refers to the experience levels of program staff, and the numbers of required staff or volunteers. It is difficult to determine how current LOA holders will be evaluated. It is also not clear how renewals will affect current staff and volunteers in training if at all?

The document also refers to NMFS approved training but does not make it clear what that training is or who will be responsible for funding the training.

Lastly, there are three footnotes at the end of the document that seem to be very important issues. These should be incorporated into the body of the document and clarified. The first of the footnotes is the clearest indication of an issue pertaining to a Renewal Applicant and should be given more emphasis then

a footnote. The second of the footnotes deserves a more specific explanation. Other network participants are being held to high standards while covering vast coastlines such as in the state of Maine. We believe such a statement should be backed up by a sufficient explanation and justification.

Proposed Definitions for “Required Experience”:

A. Qualifications for Response to Dead Stranded Marine Mammals - First Response (Stranding Article III Authorization)

"The director or primary representative of the prospective Stranding Network Participant should have apprenticed under the direct supervision of an existing Stranding Network Participant or NMFS [for at least three years] or have comparable experience in marine mammal stranding response. The prospective Stranding Network Participant may apprentice under a “designee” status to obtain this experience.”

1. Under this requirement, what constitutes three years of comparable marine mammal stranding response experience?

A 1. We recommend that the three years of comparable marine mammal stranding response experience be within the given region. Three years of experience in another region may not be comparable to the region in which the applicant is trying to establish a rehabilitation or response center. The culture of the network and the species will be different enough to pose the apprentice period. I would also suggest that language be added to reflect that the director or primary representative must be in good standing with NMFS and the network.

"The prospective Stranding Network Participant must have and maintain at least two employees or volunteers each with a minimum of one year of continuous hands-on experience in marine mammal stranding response or comparable training, one of whom will be on-site or supervising when animals are being examined”

2. Under this requirement, what constitutes one-year of hands-on experience?

A 2. One year of hands-on experience should be with species indigenous to the particular region. Since this section of Article III falls under dead animal response, maybe the last sentence should include the word necropsy. Such as: ...”one of whom will be on-site or supervising when animals are being examined and or necropsied”

3. Under this requirement, what constitutes comparable training?

A 3. This is a difficult question as there has not been unified training across regions or the entire stranding network. Sample and natural history collection methods and standards have been left to the discretion of the directors of each LOA. The NERS region has provided training on necropsy techniques and Life history collection techniques at our annual stranding meetings but we have yet to draft a written region wide protocol.

In light of this, we should aim for consistency in collection methods in a given organization. Comparable training could include a certain number of specimens examined with the Director or Primary Representative of the stranding network participant, such as minimum of 10 pinnipeds and 10 cetaceans (or some defined number).

B. Qualifications for Response, Triage and Transport of Live Stranded Marine Mammals (Article IV Authorization):

"The director or primary representative of the prospective Stranding Network Participant should have apprenticed under the direct supervision of an existing Stranding Network Participant or NMFS [for at least three years] or have comparable experience in marine mammal stranding response. The prospective Stranding Network Participant may apprentice under a "designee" status to obtain this experience."

1. Under this requirement, what constitutes three years of comparable marine mammal stranding response experience?

B1. Three years of comparable experience should be within the designated region and include experience with indigenous species.

"The prospective Stranding Network Participant must have and maintain at least two employees or volunteers each with a minimum of one year of continuous hands-on experience in marine mammal stranding response, triage, transport, and/or euthanasia, or comparable training, one of whom will be on-site or supervising when animals are being examined."

2. Under this requirement, what constitutes one-year of hands-on experience?

B2. Since these people will be performing supportive care to live animals we feel that the training requirements should be more specific. The requirements should include a quantitative unit of measure rather than a time frame. By stating that the employees or volunteers have a minimum of one year of continuous hands-on experience may not ensure that they receive the training needed. We should consider requiring a number of animals supported under the supervision of the director etc. If the "year in training" proves to be a relatively slow year (some LOA areas have far fewer strandings than others), then the employee or volunteer may have responded to only a few animals in that time frame. Also we should consider that volunteers at some centers only volunteer one day per week. This limits their experience further. In summary, I think we ought to have a number of animals responded to rather than a time frame.

3. Under this requirement, what constitutes comparable training?

B3. We feel that designated number of responses under the direction of an existing network participant in good standing with NMFS should be required in place of at time frame.

C. Qualifications for Rehabilitation and Release of Live Stranded Marine Mammals (Article V Authorization):

"The prospective Stranding Network Participant must have at least two staff members each with a minimum of three years of continuous hands-on experience in marine mammal care and rehabilitation (i.e., by apprenticing with or working in an experienced institution for three years) and are familiar with any applicable NMFS rehabilitation facility and release guidelines and regulations."

1. Under this requirement, what constitutes three-years of hands-on experience?

C1. Three years of experience is significantly different for a staff person then for a volunteer. In the rehabilitation setting staff positions carry greater responsibilities and require more expertise. As long as this is a full time position we feel confident that three years is sufficient for hands-on experience.

"The prospective Stranding Network Participant must have and maintain an attending veterinarian experienced in marine mammal care who is willing to assume responsibility for diagnosis, treatment, and medical clearance for release."

2. Review the suggested definition regarding minimum and recommended requirements for the role of the "Attending Veterinarian" and provide comment.

C 2. The last bullet under minimum requirements is open to a wide interpretation. As stated the veterinarian "*Shall cooperate with other members of the NMFS [Region] Stranding Network and the National Marine Mammal Stranding Program as well as Federal, state, and local officials and employees in matters relating to stranded marine mammals or their disposition and comply with NMFS laws, regulations, policies and/or guidelines applicable to or promulgated by NMFS that apply to activities under this Agreement*" leads the reader to believe that the vet should be performing these services on a regular basis. It suggests that the veterinarian is required to perform the role of the Stranding Coordinators. I would suggest that we change the language to reflect that this refers to matters of medical concerns and animal health issues.

#8 COMMENTS

Proposed Definition for "Required Experience:

Having two key personnel with a minimum of three years continuous hands-on experience seems unnecessarily restrictive. I believe it is essential to have one person who is responsible for daily animal care and program oversight that has three-years experience, but the second person could have a minimum of one-year's experience and be apprenticed and supervised by the program director.

Proposed Definition for Attending Veterinarian Requirements:

One veterinarian should be responsible for medical oversight of the rehabilitation program but as noted in the website that defines required experience can also have a veterinary backup plan that would allow other qualified veterinarians to substitute as needed. This wording should be included in the Minimum Standard Qualifications for a Marine Mammal Stranding Program Agreements document under C. 3.

Also on the website on required experience it states that the veterinarian should be able to conduct a full post-mortem exam. We work in cooperation with the local stranding network that performs necropsies for us since they have the most experience. The wording should be changed to state that necropsies will be performed on all deceased marine mammals but not specify that the attending veterinarian is required to perform them.

#9 COMMENTS

Comments on Document:

Section A

This office feels that the requirements for first response to dead marine mammals as written are too restrictive in general.

What does "designee" status entail? The answer to this question could negate most of our comments pertaining to A1.

A1: Three years seems an excessive time to "be under the direct supervision" for training to handle dead animal strandings. If this means that the potential participant (p.p.) is trained by the active participant (a.p.) and is periodically checked out then it would be ok, if a little long. If it means that the p.p. must attend necropsies with the a.p. for three years, it is quite excessive.

As comparable experience, being trained and checked out by an active participant would seem to be a sufficient qualification. A minimum number of necropsies could be assigned, perhaps ten or twelve. After assisting/performing several actual necropsies (not just measuring,) and acting as the primary on some checkout necropsies, the associated a.p. would be able to decide whether to sign off on the p.p. or train them longer. Attending a higher-level training session might be a suitable additional requirement to help insure continuity of methods, especially if offered at different parts of the individual states as needed.

The fly in the ointment is that in areas where the species being necropsied are highly variable, even twelve necropsies probably wouldn't provide enough experience. Instead of requiring a larger number of necropsies, a guideline that there must be in attendance at a necropsy someone with some similar species related experience (even if just assisting with previous necropsies,) would seem reasonable. Someone with even extensive experience with seals shouldn't be the primary investigator on a large whale if they have no experience with them.

A2-3 related topic: Potential participants should not be absolutely required to have employees or volunteers. *Tursiops* and smaller necropsies can be done by one person, and with a stranding network directory other nearby participants can be contacted easily or larger groups called first for larger animals. In addition, although most participants may have them, employee or volunteer pools can grow or shrink quickly depending upon season and semester. If an organization has too few, would it be dropped from the network?

A2: For employees/regular volunteers to be the primary investigator on a necropsy, a check out process similar to that described above but shorter or hands-on, small group, even individual, training would be suitable as comparable experience in a pinch and preferable to the "one-year of continuous hands-on experience," requirement, which few people other than those hired for the purpose or having animals brought to them will have. Again, this takes for granted that a supervisor will not send a novice to handle a sperm whale.

#10 COMMENTS

Proposed Definitions of “Required Experience:

A. QUALIFICATIONS FOR RESPONSE TO DEAD STRANDED MARINE MAMMALS – FIRST RESPONSE

"The director or primary representative of the prospective Stranding Network Participant should have apprenticed under the direct supervision of an existing Stranding Network Participant or NMFS [for at least 3 years] or have comparable experience in [dead] marine mammal stranding response. The prospective Stranding Network Participant may apprentice under a "designee" status to obtain this experience."

1. Under this requirement, what constitutes three years of comparable marine mammal stranding response experience?

Requirements need to be more specific than three years as each state (and regions within states) can differ drastically in their type of stranding response. For example, approximately 98% of the stranded cetaceans in Texas are dead, the majority of these being code 3's. In the Florida Keys, approximately 60% of the stranded cetaceans are alive. Years of experience should be changed to type of experience. For example, a director's experience in dead animal response should include:

- Participated in a minimum of 8-10 code 2 necropsies of 3 different species with a respectable Stranding Network veterinarian/pathologist. Led the response to and sampling of a minimum of 10 dead marine mammals (codes 3-5)**
- Have had a college course or comparable training course (i.e. FWC's training for Florida Stranding Network participants) in marine mammal anatomy and physiology**
- Knowledge of all necropsy tools, field equipment and sampling protocol and procedures**
- Knowledge of information to be recorded and the associated paperwork**

"The prospective Stranding Network Participant must have and maintain at least two employees or volunteers each with a minimum of one year of continuous hands-on experience in [dead] marine mammal stranding response or comparable training, one of whom will be on-site or supervising when animals are being examined"

2. Under this requirement, what constitutes one year of hands-on experience?

Again, years should be type of experience. If this person(s) is to be on-site for dead animal response and examination they should have the following experience:

- Participated in a minimum of 5 code 2 necropsies of 2 differing species with a respectable Stranding Network veterinarian/pathologist**

- **Assisted in the response to and sampling of a minimum of 5 dead animals (codes 3-5)**
- **Have had a college course or comparable training course by a respectable Stranding Network (i.e. FWC's training for Florida Stranding Network participants) in marine mammal anatomy and physiology**
- **Knowledge of all necropsy tools, field equipment and sampling methods**
- **Knowledge of information to be recorded and the associated paperwork**

3. Under this requirement, what constitutes comparable training?

I don't think there is comparable experience. A dead dolphin is a dead dolphin. You get adequate experience by dealing directly and hands-on.

B. QUALIFICATIONS FOR RESPONSE, TRIAGE, AND TRANSPORT OF LIVE STRANDED MARINE MAMMALS

"The director or primary representative of the prospective Stranding Network Participant should have apprenticed under the direct supervision of an existing Stranding Network Participant or NMFS [for at least three years] or have comparable experience in [live] marine mammal stranding response. The prospective Stranding Network Participant may apprentice under a "designee" status to obtain this experience."

1. Under this requirement, what constitutes three years of comparable marine mammal stranding response experience?

Again, change years to type/amount of specific experience. Directors should have:

- **Participated in/led the response of a minimum of 5 live marine mammal strandings including first-aid care at stranding site and stabilization for transport**
- **Participated in/led the transport of a minimum of 5 live animals with at least 2 different types of transport (boat/water, truck, plane, foam or box)**
- **Knowledge of first-aid care and vitals, what to look for in assessing the animal's condition, proper handling and restraint techniques, and what equipment is needed for a successful transport**

"The prospective Stranding Network Participant must have and maintain at least two employees or volunteers each with a minimum of one year of continuous hands-on experience in [live] marine mammal stranding response, triage, transport, and/or euthanasia, or comparable training, one of whom will be on-site or supervising when animals are being examined"

2. Under this requirement, what constitutes one year of hands-on experience?

Change one year of experience to hands-on experience in the following:

- **One year total time (can be a combination of more than one) in handling marine mammals in a stranding/rehabilitation setting**
- **Assisted with a minimum of 3 live animal responses/transports**
- **Knowledge of first-aid care, what to look for in assessing the animal's condition, proper handling and restraint techniques, and what equipment is needed for a successful transport**

3. Under this requirement, what constitutes comparable training?

There is no comparable training when it comes to direct, hands-on live marine mammal stranding response.

C. QUALIFICATIONS FOR REHABILITATION AND RELEASE OF LIVE STRANDED MARINE MAMMALS

"The prospective Stranding Network Participant must have and maintain at least two staff members each with a minimum of three years of continuous hands-on experience in marine mammal care and rehabilitation (i.e. by apprenticing with or working in an experienced institution for three years) and are familiar with any applicable NMFS rehabilitation facility and release guidelines and regulations"

1. Under this requirement, what constitutes three years of hands-on experience?

Change three years of hands-on experience to hands-on experience in the following:

- **Minimum of 18mo total time of actual hands-on rehabilitation work**
- **Minimum of a supervisory role in 3 different rehabilitation cases that each last more than one month, must have involvement in all 3 cases during the critical care period**
- **Be proficient and have experience in the following techniques:**
 - **Drawing blood from at least 2 sites**
 - **Taking both sterile and non-sterile fecal, gastric, and blowhole/nasal samples**
 - **Morphometrics**
 - **Weighing**
 - **IM injections**
 - **Tube feeding**
 - **Force feeding**
 - **Proper handling/restraint methods**
 - **Participation in a minimum of 3 diagnostic procedures (endoscope, x-ray, ultrasound, etc.)**
- **Be able to show a knowledge in taking vital signs and knowing what is normal/abnormal, signs of illness, normal/abnormal behavior, proper handling/restraint methods, behavioral husbandry, water quality, and general animal care**
-

Stranding Network participants that are in a Directors position should have a minimum of one of the following:

- **Master's degree in a biological/medical science**
- **Minimum of 5 years full-time work as a veterinary technician**
- **Bachelor's degree in a biological/medical science with a CVT**

Stranding Network participants that are in the "staff" positions as stranding/rehabilitation coordinators, animal care coordinators, etc should have a minimum of one of the following:

- **Bachelor's degree in a biological/medical science**
- **CVT**
- **RN**
- **Minimum of 3 years full-time work as a veterinary technician**

Captive marine mammal work should not be included in the amount of experience as care for captive animals differs greatly from wild animals.

#11 COMMENTS

Proposed Definitions for Required Experience:

A.1 - 'what constitutes three years of comparable marine mammal stranding experience?'

It is important that this person has practical experience in all aspects of dealing with the kinds of marine mammals (large whales, small cetaceans, pinnipeds, etc) that are likely to occur in the geographic area where the LOA holder will operate. This includes such things as knowledge of state and local laws that may affect stranding work, coordination with local authorities and, most importantly, the number of cases that the person has handled. In itself, three years of experience may not provide an individual with the experience to be a 'director or primary representative'. The individual must have sufficient experience dealing with animals from code 2 down to code 5 conditions. I believe that there should be some minimum number of cases, especially for code 2 animals, that the individual must have handled. For example, three years experience with dozens of pinnipeds in California will not, in my opinion, qualify an individual to deal with bottlenose dolphins in Florida. Handling large numbers of code 4 and code 5 animals will not, in my opinion, qualify an individual to properly handle code 2 animals.

'Comparable experience' is, in some respects, difficult to define. An individual who worked in Australia may well have acquired sufficient experience with code 2 dolphins to do the same work in Florida. However, it is not likely that this individual would have the necessary local knowledge and experience to supervise stranding operations somewhere in Florida.

The bottom line is that 'comparable experience' must include a minimum number of cases with the kinds of animals that will be handled in the area where the person will be working. This minimum number of cases must emphasize code 2 animals because the most information can be collected from them. I do not know what this minimum number should be.

A.2 - 'what constitutes one year of hands-on experience?'

The one year of experience must include a minimum number of animals of the appropriate type (i.e. dolphins, pinnipeds, large whales) worked on with emphasis on code 2 animals. I do not know what this minimum should be. It is certainly easier to gain experience with small cetaceans and pinnipeds than it is with large whales. In the case of large whales, a year may not be sufficient time to get the necessary minimal experience.

A.3 - 'what constitutes comparable training?'

'Comparable training' could be done almost anywhere in the world as long as a minimum number of code 2 cases of the appropriate species categories (pinnipeds, cetaceans) are handled.

B.1 - 'what constitutes three years of comparable marine mammal stranding response experience?'

As with the answers to question A, it is important that the individual have worked with a minimum number of live animals of the general type with which she/he will be working. In three years one could get more than adequate experience working with California sea lion live strandings but not necessarily with live strandings of delphinids. In addition, the person must have a working knowledge of national, state and local laws relating to live animal work. Working on pinnipeds in California would likely meet a minimum number of cases standard but may not fully prepare a person for working with pinnipeds in New England.

B.2 - 'what constitutes one year of hands-on experience?'

Here, too, I believe that a criterion of a minimum number of cases involving the appropriate species categories is more important than a time criterion.

B.3 - 'what constitutes comparable training?'

As long as the individual has worked on a minimum number of cases in the appropriate species category, this work could be done almost anywhere in the world.

Summary of A and B answers: A time criterion, in itself, is insufficient to guarantee that the individual will have experienced a minimum number stranding events with the appropriate species in the appropriate condition code categories. However, it is difficult to determine what these minima should be.

#12 COMMENTS

Proposed Definitions of "Required Experience:

- A.1.) Any existing marine mammal facility and its director that qualifies under a USDA license and NMFS public display or research permit should automatically be eligible and qualified to serve as a stranding network participant and director or primary representative of a stranding network participant, respectively. These facilities already meet and exceed the requirements necessary for response to both dead and live stranded marine mammals.

For those facilities not meeting the above-mentioned circumstances, experience should be based on the number of animals that a given person has handled, and their responsibility level in handling those animals, as this is more indicative of actual experience than number of years. For example, a facility in an area that does not historically receive a large number of strandings each year will gain less experience than a facility that is in an area that has a large number of strandings each year, and this discrepancy will continue for whatever time period is chosen. In this same regard, “continuous” experience is not as important as cumulative experience in the field, and again, the actual number of animals handled during this time. To illustrate this point, an individual may work three years continuously at a stranding facility with only a handful of strandings a year, of which there is less than one live stranding per year, and not be very experienced. Another individual may work two years at another facility where he/she was one of the primary animal handler and caretaker of multiple animals at a time because that region received an average of 3 or more live strandings per year. The individual in the latter scenario has more experience. Also, if that same person from the latter scenario relocates to work with another facility after a lapse of time of 6 months where they are not working with any marine mammals, they should still be considered more experienced than the first individual.

Specifically, for this section, the prospective director should have “hands-on” participation with at least six (6) dead marine mammals under the direction of experienced personnel. Included in the handling of these 6 dead animals should be a minimum of three (3) full necropsies and experience completing the NMFS Level A Data Form.

Classroom or workshop training for marine mammal strandings is also important and can include instructional videos, books, articles, and attendance at pertinent workshops all totaling a minimum of eight (8) hours.

- A.2.& 3.) Again, experience should be based on the number of animals that a given person has handled, as this is more indicative of actual experience than the number of years. Rather than “one year of continuous hands-on experience” or “comparable training,” the responders for the prospective Stranding Network Participant should have received a minimum of four (4) hours of classroom/workshop time, which includes viewing the NMFS Level A Data training video, **and/or** hands-on participation (continuous experience not necessary) with at least one (1) full necropsy and handling of three (3) other dead marine mammals, including a NMFS Level A workup.

Therefore, in this scenario, the responders will need hands-on experience or classroom training. The necropsy should be done by experienced personnel, so if the responder(s) do not have necropsy experience, it can be done by the director himself/herself.

- B.1.) “Three years of comparable marine mammal stranding response experience” should only refer to those people who have been **fully responsible** for the care, maintenance

and transport of marine mammals at a public display or research facility where marine mammals are housed and maintained for a length of time. These people would include supervisors, managers, researchers, trainers, veterinarians who have all worked for at least two (2) years cumulatively for a research or public display facility. These candidates would all need to have proven experience in the collection, transport, training, care and maintenance of live marine mammals. In addition, they would need a minimum of eight (8) hours of classroom or workshop training time as discussed in number A1 on page 1 of this document.

Any existing marine mammal facility and its director that qualifies under a USDA license and NMFS public display or research permit should automatically be eligible and qualified to serve as a stranding network participant and director or primary representative of a stranding network participant, respectively. These facilities already meet and exceed the requirements necessary for response to both dead and live stranded marine mammals.

- B.2.) “One year of continuous hands-on experience” should be defined as handling live marine mammals at a public display or research facility housing marine mammals for a cumulative total of twelve (12) months. This year of experience should include the care and handling of at least two (2) to three (3) animals. This experience can be obtained by paid employment, internships, apprenticeships, or volunteer experience.

In addition, the sentence that reads “. . . one year of continuous hands-on experience in marine mammal stranding response, triage, transport **and/or euthanasia**, or comparable training . . .” should be changed to read “. . .one year of continuous hands-on experience in marine mammal stranding response, triage, and transport (**euthanasia experience is desirable**), or comparable training . . .” In that way, an individual with one year of experience euthanizing marine mammals, but not actually transporting live animals, will not be responsible for the triage and transport of a live animal not in need of euthanasia.

- B.3.) There is no “comparable training” for experience with live marine mammals. Unless an individual has experience handling live marine mammals, they will not be able to make decisions necessary in stranding response, triage, and transport.

- C.1.) Any existing marine mammal facility and its director that qualifies under a USDA license and NMFS public display or research permit should automatically be eligible and qualified to serve as a stranding network participant and director or primary representative of a stranding network participant, respectively. These facilities already meet and exceed the requirements necessary for response to both dead and live stranded marine mammals.

For those facilities not meeting the above-mentioned circumstances, experience should be based on the number of animals that a given person has handled, and their responsibility level in handling those animals, as this is more indicative of actual experience than number of years. Our suggestion is that “. . . a minimum of three

years of continuous hands-on experience in marine mammal care and rehabilitation . . .” should be replaced with the following sentence: “. . . a minimum of two (2) years of cumulative experience caring for marine mammals, having handled at least two (2) to three (3) animals during that time, including responsibility for the care, maintenance, husbandry, transport, and water quality for these animals.”

- C.2.) For this section, we agree with the minimum attending veterinarian requirements and would only add “A veterinarian who is consulting for a marine mammal public display or research facility for at least one year fulfills these requirements and is automatically qualified.”

For the section on recommended veterinarian requirements, we suggest eliminating the requirement to complete a course which offers basic medical training with marine mammals such as Seavet, Aquavet, or Marvet. IAAAM serves as continuous education for veterinarians. We also suggest changing the requirement that reads “Have access to the 2nd Edition CRC “Handbook of Marine Mammal Medicine” to “Have access to the **current** edition of CRC “Handbook of Marine Mammal Medicine.”

#13 COMMENTS

Comment on Document:

The use of the term “employee” to describe the staff member of an organization should be more thoroughly defined within the context of the agreement. “Employee” should be specifically defined as, for instance, an individual who is receiving financial compensation for performing specific skills pertaining to animal care. The term “employee” can also represent anyone who stands to gain financially from an affiliation with an organization and so this term needs to be more specifically defined.

The way the agreement is written thus far, it appears that an organization does not need nor will be required to maintain an “employee,” but can subsist only on volunteers (at least two volunteers with a minimum of one year of “continuous hands-on experience”). If this interpretation is correct, then we recommend that this point be clarified further and requirements be more specifically defined. It also appears as written thus far that if an organization chooses to hire an employee that the hired individual must meet the minimum requirement of at least one year of continuous hands-on experience and who can be on-site when an animal is being examined. However, an employee may be hired within the organization to perform tasks unrelated to rescue, rehabilitation, transport, research and release of marine mammals—an educational director, for example. Are then all employees hired within an organization required to meet the minimum hands-on experience with marine mammals whether or not the intended job description of that individual includes animal care?

Proposed Definition of Attending Veterinarian Requirements:

In addition to the description of “Minimum Attending Veterinarian Requirements,” having access to the 2nd Edition CRC “Handbook of Marine Mammal Medicine” should also be a requirement, not only a recommendation. The 2nd Edition CRC handbook contains the latest, most relevant information regarding marine mammal care.

Also, “...basic hands-on veterinary experience” (also listed under “Recommended” requirements) should be quantified in terms of contact hours with marine mammals and not years of experience. Frequency of strandings and/or opportunities to work hands-on with stranded marine mammals is highly variable. An individual with a greater amount of years experience within a stranding network may have relatively fewer hours of contact accrued, and thus less experience overall, with marine mammals.

#14 COMMENTS

Proposed Definition of Attending Veterinarian Requirements:

Instead of recommending having access to the 2nd Edition CRC “Handbook of Marine Mammal Medicine” it would have more future application to recommend access to the most recent edition of said resource instead of limiting it to the 2nd edition.

Additionally, what constitutes, "basic hands-on veterinary experience"? As a minimum the ability to draw blood and administer injections was previously detailed in the draft. Would being able to pass a gastric tube be listed since it is a critical procedure in triage for fluid administration? At a minimum the attending veterinarian should be able to conduct a physical examination on the marine mammal species treated at the facility as well as collect urine, feces, blow hole cytology.

In addition to being able to conduct a full post-mortem exam on all species of marine mammals (pinnipeds or cetaceans) treated at the facility. The veterinarian must also prepare a preliminary necropsy report with macroscopic (gross) lesions listed and/or described. A final report including the gross report, histopathologic report, other post mortem ancillary diagnostics (microbiology, toxicology, etc), and the final cause of death if known must be maintained by the stranding organization/ facility for a period of time and a duplicate of the report submitted to the regional stranding coordinator.

Lastly, the veterinarian is ultimately responsible for maintaining the animals medical records. The minimum criteria for the medical records I suppose will be covered elsewhere? Most likely in the rehabilitation guidelines?

#15 COMMENTS

Comments on Document:

Page two 1. first sentence - add “or scientific” so the sentence reads “The NMFS Regional Administrator must determine that there is a geographic or scientific need for a Stranding Network Participant...”

Page three 7. A list, that could be provided as an amendment to this document, spelling out to the participant the minimum required equipment and the recommended equipment would make this statement more specific and clear.

Page four 1. There is no mention of how active a participant should be to maintain LOA or other status. This has been an issue in the southeastern region. Consider defining activity. For example, “in order to maintain active status and retain the institution’s LOA, response to one stranding annually is required”.

Page five 3. What is the level of interaction that defines apprenticeship in a live marine mammal response? (Same question in dead animal response.) Is this just on paper for three years, one actual day on the beach, five days at the beach, supervision of apprentice by cell phone good enough? Suggestion: To become boarded in a specialty in veterinary medicine, most colleges require a total number of hours of actual experience that must be logged in direct contact with a boarded advisor and a check list of skills that must be signed off on by the mentor. A structure similar to this precedent could be created.

Page five – add 8. DEA guidelines for management of euthanasia solution (pentobarbital or other drug) must be strictly followed. (or some appropriate verbage) Euthanasia solution should only be administered by a licensed veterinarian under the authority of NOAA. Also, should EPA guidelines be followed when euthanizing a large whale?

Proposed Definitions of “Required Experience”:

Page two A. See Page five 3. above. A participant may respond to one dead animal/year or 10-20 strandings including mass strandings/year. These are not equivalent experience levels and this verbage does not guarantee competence.

In my opinion, to be allowed to conduct a marine mammal necropsy, if you do not have a veterinary license or a veterinary pathology board certification, you should be required to go through a training class and perform 10 necropsies under the guidance of a mentor prior to being allowed to perform one.

Page two A 2. What is continuous hands-on experience? I picture someone holding a critter. Again, defining contact hours and general procedures would be helpful. Full time is 2,000hrs/year. I would say a minimum of five live cetacean strandings and x live pinniped strandings. Procedures should be included such as feeding, tube feeding, restraint, administration of oral medications, and potentially some techniques under the supervision of a veterinarian such as IM injection and venipuncture.

Page two A 3. Comparable training – SEAVET I or MARVET I or training certified by NOAA.

Page two B – see A.

Could members be “nominated by current members”?

Proposed Definition of Attending Veterinarian Requirements”

Can response to veterinary questions be over the phone? How soon does an animal have to have a physical examination after admission?

There is no comment on required response time in an emergency situation. What geographic radius or proximity does the veterinarian for the facility need to maintain prior requiring a “relief or on-call” veterinarian.

What does marine mammal experience mean? Who makes this decision? Is there a listing?

Post mortem – they should also be able to refer necropsies to a pathology facility within a four hour radius with whom they have a working relationship. This would eliminate this requirement for the veterinarian, who may not be skilled in pathology or want to perform a necropsy.

#16 COMMENTS

General Comments:

Designees and those apprenticing for eventual designee status should have continuing education requirements. Those requirements should include response/rescue methods, basic rigging course, medical evaluation, transport methods, stabilization techniques and methods, husbandry classes, necropsy classes, administrative requirements, familiarity with the MMPA, AWA and ESA and the relevant regulations, euthanasia protocols, medical and wound treatment, safety protocols/liability issues, just to name a few. Our organization presently have training manuals and requires all of these classes to be completed as well as actual hands on experience before any individual can be considered for designee status under an Article III, IV, V authorization.

Defining “designee” as it pertains to each specific authorizing article (response, necropsy, transport, and rehabilitation) with approved training methods and standardized qualifications would make the Stranding Network stronger. Continuing education classes would allow existing designees the chance to learn new techniques, methods and requirements. This would also allow NOAA Fisheries the ability to benefit from the network LOA Holders experiences, and designees to learn from other designee’s experience.

Proposed Definitions of “Required Experience”:

Three years of marine mammal stranding response experience should be defined as a minimum number of actual stranding responses, educational classes in response, rescue, public/spectator/media relations, medical evaluation, stabilization techniques, and necropsy classes. Members of our organization’s First Response Teams are required to meet these

educational requirements before they can be on a first response team. Potential Designees must have participated in at least five (5) Article V stranding events plus a stranding event where that individual is in charge of a specific aspect of an event (under the supervision of a designee) in order to be considered for designee status.

The sporadic nature of stranding events are such that some potential designees may not obtain the experience necessary in the time allotted or get the experience quickly long before the three year period. Experience should be defined by actual experience and not a definitive time period.

Specific educational and training requirements should be outlined and defined for LOA Holders to follow. Training guidelines from experienced response, rescue, transport, and rehabilitation teams should be gleaned for those requirements. The Florida Fish & Wildlife Conservation Commission's Prescott Grant funded Necropsy Training Class should be used as either a requirement for each region's designees to participate in or replicated for use in each of the regions. We, as do many organizations, have training protocols that can be used for training and continuing educational qualifications.

Designation under an LOA should not be given to individuals, organizations or institutions unless those individuals, organizations or institutions are fully qualified for that specific Article's responsibilities. Apprentices working to obtain a designee status should not be listed as designees as such a designation gives the appearance of qualification when no such qualification has been obtained.

All LOA Holders should have at least two primary designees and one or more apprentices with a minimum of actual response experience and qualified training. During a stranding response, necropsy, transport, rehabilitation or release a fully qualified designee should be on-site at all times.

NOAA Fisheries proposes that prospective participants in the Stranding Network be "established organizations". If this implies that the organization must be in being with actual marine mammal experience, newly formed, otherwise qualified organizations, would be eliminated from consideration for an LOA. Consequently, the minimum requirement for an organization to demonstrate it is "established" should be proof that it is duly incorporated and in good standing in the state in which it has its principal offices and will conduct its operations and if non-profit and tax exempt that it has qualified with the IRS as a 501(c) (3) corporation and has complied with all state statutes, laws and regulations applicable to such corporations.

The guidelines provide that LOA Holders shall have and maintain equipment appropriate to their stranding responsibilities. NOAA Fisheries does not define what it means by "appropriate" although it does appear to be establishing a minimum equipment requirement for Article III Holders. Article IV and V Holders are invested with the greater responsibility of responding, transporting and in the case of Article V Holders rehabilitating marine mammals. Therefore, it is critical that these LOA Holders possess the necessary facilities, equipment and experienced personnel to carry out these responsibilities. Consequently, NOAA Fisheries should establish minimum equipment requirements which Article IV and Article V LOA Holders must

have in hand and properly maintain. We, in its LOA application had to submit such a list and this list could be used to help define minimum equipment requirements. Additionally, the extent of our application required by NOAA Fisheries should be used as a template of requirements for any potential LOA Holder's application.

C1: Under this provision, NOAA Fisheries seems to suggest that three years of continuous hands on experience would be required. Even at full time rehabilitation facilities, this requirement would be difficult to meet as marine mammals undergoing rehabilitation are eventually released and the facility may not have marine mammals undergoing rehabilitation on a continuous basis. Trainers from Public Display Facilities should not automatically be considered experienced either as there is a great deal of difference in treating and rehabilitating wild marine mammals than there is in maintaining and training public display marine mammals. Unfortunately, there is no one size fits all minimum requirement for an Article V designee. Those facilities rehabilitating pinipeds will have different requirements from those rehabilitating cetaceans. Article V Holders that tend to rehabilitate only a few cetacean species will have different training criteria than those facilities and teams that rehabilitate several different cetacean species. Experience and training are paramount, but the individual being designated must also be an accomplished administrator, communicator, educator, and supervisor of personnel. Letters of recommendation as well as experience and training should all be considered before approval is granted to any potential Article V Designee.

#17 COMMENTS

Proposed Definitions of Required Experience:

A1 & B1. Comparable marine mammal stranding response experience for LOA applicants should include experience as an active staff or volunteer who is responsible for effecting stranding response with an established Stranding Network Participant. This should be documented by letters of reference from other LOA holders acknowledging the applicant's LOA application and documenting the applicant's relevant experience.

A2 & B2. Hands-on experience should include documented experience as a staff person or volunteer, working with dead- or live-stranded marine mammals, including (in the case of dead strandings) collection of Level A data, and (in the case of live strandings) demonstrating safe rescue and triage techniques.

A3 & B3. Comparable training could include formal training in marine mammal science or animal science or veterinary medicine or veterinary technical coursework. Comparable training could also include participation in NMFS-sponsored workshops and trainings, and/or taking training classes put on by established Stranding Network Participants.

C1. Hands-on experience for marine mammal care and rehabilitation should include experience as rehabilitation staff or volunteer for an established Stranding Network Participant.

C2. Attending veterinarian qualifications seem appropriate.