

Marine Mammal Training in the Open Ocean

A Marine Skill Report in Fulfillment of
the Requirements for the Marine Option
Program

by

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I have worked at the Naval Undersea Center (NUC), under the Marine Option Program contract since January of 1975. While working at NUC I've experienced and learned a variety of marine skills. These skills range from deckhand aboard an experimental ship named the SSP (semi submerged platform), to marine mammal training. Most of the work was classified and some of it useful but not too interesting to write about. I've chosen to write about basic marine animal training in the open ocean because it is a fascinating subject for those that love the ocean and also because I may wish to continue working in this field.

The process of training marine mammals for the U.S. Navy is quite similar to that employed by trainers at aquariums except for recall training necessitated by working animals in the open ocean.

Emphasis is placed on recall and gate training if the animal is to be released in the open ocean and task training if the animal is to remain in a tank or pool. The need for highly developed gate training and recall training for open ocean working animals cannot be overemphasized.

Recall training is given ^{to the animal} to the task of getting an animal to return to the trainer after performing a task. It is a secondary reinforcer that tells the animal to come home and get food. It is trained by placing a beeping device in the water and when the animal answers the tone by bumping it gently with its rostrum, rewarding it with a fish. If the trainer works on recall training to the exclusion of all other behaviors, the animal can easily become bored with the finger response and will begin to wobble. If the training is mixed with other basic behaviors the animal will respond more readily to the finger.

Gate training can be frustrating for the naive trainer. Extreme patience must be exercised to entice rather than drive or crowd the animal through the gate. A fish is held progressively near the gate, in the gate and past the gate as the mammal gradually overcomes its distrust of the opening and proceeds through on command. If it persistently refuses to pass through the gate then food is withheld from the animal. Procrastination may continue for the remainder of the day or even the next day. The chances are great that passage will finally be accepted by the animal if it sees that food is waiting beyond the gate. Only if all else fails should the net be used to crowd the animal through the gate.

Releasing the mammal from its pen is the next step in training. First the animal is released from its small pen to a larger fenced off area. At first the animal will not recognize the passage into the larger area for what it is. Gate passage usually will be followed by immediate reentry into its pen in search for a reward. It is generally the second passage out of the pen that animal recognizes the spaciousness of the outer enclosure.

This discovery is followed by excitement. The water churns with the animals activity.

Once the animal has become calm, the task of coaxing it back through the gate begins. Most animals return either immediately or by the end of the day. If the animal doesn't return it cannot be easily forced back by pingers as was the case in basic training. Live fish pass into the fenced area from the local environment so that if hunger attraction is used the mammal begins to feed on the live fish. At this time, then, the large capture net is deployed and the mammal is caught as it was originally. It is then returned to basic recall and gate behaviors.

Distance recall is the next step. It can be initiated within the large enclosure but must be completed in the open ocean.

If recall has become a strong enough response little problem will exist when releasing the animal. Most animals will refuse to proceed more than 30 to 50 yards from the gate. Return to the security area seems to be their primary concern. Others refuse to return to the enclosure, but remain in close proximity to the outside of the gate.

These animals can usually be induced to returning to the pen by tempting it with food. Occasionally an animal will depart with a great burst of speed. These animals must be chased down by boat and caught.

Patience is of prime importance with animals newly released from the enclosed area. The animal should be eased out a few more yards each day until it becomes fully adapted to working in the open ocean.

Boat following is the next behavior to train. First the decision must be made where the animal is to follow the boat, the bow wake, the stern wake, or at a certain distance from the boat. After releasing the animal from the enclosed area it is rewarded with fish for following the boat at the desired position. If the animal doesn't follow the boat, the pinger is used to call the animal at successive distances until the animal catches on and gradually follows the boat.

Upon completing boat following the marine animals are ready to learn the open ocean test. The basics must be kept well trained while new behaviors are trained.

I have enjoyed the opportunity the MOP
has given me. The experience and practical
education has opened my future job opportunities
immensely.

Thanks for all the help.

Scott Shoye