THE BEAUTY OF TRAINING: THE STORY OF GRAY BEAUTY, A RESCUED, BLIND, GRAY SEAL.

Abstract

Gray Beauty is a wild gray seal (Halichoerus grypus) who was rescued in 1997 by the Riverhead Foundation for Marine Research and Preservation (RFMRP), which operates the New York State Marine Mammal and Sea Turtle Rescue Program. Gray Beauty had several ailments, but after rehabilitation, she was left with chronic cataracts. She was eventually deemed non-releasable by the National Marine Fisheries Service. Atlantis Marine World, a new aquarium in Riverhead, New York, which houses the RFMRP, decided to provide her with a permanent home. She was to live in the seal exhibit at the entrance of the aquarium. There were many challenges to successfully relocate her. A training and husbandry program was implemented, and difficult behaviors had to be trained, such as crate training, tactile, and opening her mouth on cue. This is Gray Beauty's and her trainers' story, the challenges and the rewarding satisfaction of success in working with a rescued and blind animal.

Introduction

On April 30, 1997 the Riverhead Foundation for Marine Research and Preservation rescued a sub-adult, female gray seal (Halichoerus grpupus) from a beach in East Hampton, New York. She was diagnosed with a severe respiratory infection, chronic cataracts, and she was underweight, at only 104.7 pounds. After many months of rehabilitation, her respiratory infection was cured and she was brought back to a healthy weight, but she still suffered from chronic cataracts. After further examination by Dr. John S. Sapienza, a veterinary ophthalmologist, it was determined that corrective surgery was too risky. The RFMRP nursed her back to good health and named her Gray Beauty, but it was eventually determined by the National Marine Fisheries Service in August of 2000, that she could not be released back to the wild. Attantis Marine World, which is home to the RFMRP, decided to provide a permanent home for her. She was to be introduced into the collection of 2.2 captive born and raised harbor seals.

While with the Ruperback Equipment (REMRD) Control Control (Research 2004).

While with the Riverhead Foundation (RFMRP), Gray Beauty lived in a circular pool in which she swam in a counter-clockwise pattern. During rehabilitation, she ate her herring off the bottom of the pool, tearing and ripping the heads of before eating them. After being deemed non-releasable by NMFS, the Riverhead Foundation decided that it would be beneficial to start an enrichment program to help prepare her for her relocation to the seal exhibit at Atlantis Marine World. So, in October of 2000, a husbandry and training program was implemented.

In April of 2001, Gray Beauty was transported from the Riverhead Foundation's rehabilitation facility to a temporary, isolated holding pool at Atlantis Marine World. For the transport, she had not been trained to go into a crate voluntarily, so she had to be physically restrained. This was not an easy task since she was a fairly large animal. It took several people to get her into the transport crate, but she was successfully transported to the holding pool. Gray lived in this pool for several months under quarantine, and during this time we were able to move forward with the training program to prepare her for her relocation into the harbor seal exhibit.





Crate Training

We needed to train Gray Beauty to go into a transport crate voluntarily, to make her transport to the seal exhibit easier and less stressful. We obtained a wooden crate and modified it so that both ends had a door that could slide up and down, and we also made the handles removable to enter the exhibit more easily. We wanted to make sure that we desensitized her to as much of the crate as we could without scaring her. We were afraid to use the real crate right away, because if she got spooked and wanted to dive into the water, she might hit the sides in a panic and injure hereal. Therefore we had to find want to might be read first before upon the complete the craft first begins upon the case first before upon the complete the craft first begins upon the case first before upon the case of the control of t

herself. Therefore, we had to find ways to mimic the crate first before using the real one.

The crate training took place at the edge of the pool, for comfort and "quick escape" if she was spooked, and we "built" the crate around her. First, using a target on a stick, we got her used to traveling over the door of the crate; we placed it flat on the ground so she could get used to the feeling of the crate under her body. Then we held up one of the doors and trained her to move past it and travel next to it so she fell the "side" of the crate. Once she was comfortable with these two steps separately, we combined the two together so she was traveling over the "floor" and next to the "side" of the crate. Then we held up two blocking boards on either side of the door on the ground to mimic the two sides of the crate with the floor. In each of these steps we made sure that she was aware that these objects were around her by moving her head close to the objects (using a target stick), so that her whiskers touched them first. Finally we introduced Gray Beauty to the real crate. With both doors removable, we were able to enter the crate on one end with a long target pole and ask Gray to follow the target into the crate through the other end. Gray Beauty proved to be extremely brave and eventually learned to go all the way into the crate, and to back herself out of it. In the off we had her go all the way in, we shut the door behind her, and then she backed up and we closed the front door.

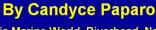




Relocation

One of the biggest steps of her relocation was transporting her to the seal exhibit. We were a little concerned that Gray was going to get picked on by the other seals because of her blindness. Fortunately, the pool was designed so that we were able to have a sliding gate built at one end so there was an adjoining holding pool. This allowed us to introduce Gray Beauty to the harbor seals slowly, instead of putting her in with them directly. The gate was made of steel bars so that the seals could feel, smell and hear each other, but not have full contact,

The day of transport was December 6, 2001. Gray Beauty, after a few hesitations, successfully crated voluntarily and we moved her into the holding pool of the seal exhibit. She went into the water, investigated her new pool and learned the "boundaries" with her whiskers. The harbor seals watched from the other side of the gate, but they were able to investigate each other through the steel bars. Gray Beauty ate without much hesitation a few minutes after her introduction to her new home. She was kept in this holding pool for one week, and then we decided it was time to allow her access to the main pool and the harbor seals. This was the last sen in Gray Beauty's relocation. We opened the gate, and after a few minutes she eventually found that her pool had a new outlet and she swam out and started to explore. Her introduction to the harbor seals and her new home went very smoothly and all of our womes soon dissipated as we watched her investigate and navigate her surroundings



Atlantis Marine World, Riverhead, New York



Tactile Desensitization

At her station in her new home, we resumed training for voluntary blood sampling from her rear flippers (this was started prior to her relocation). It took a long time to find the most comfortable position to have her hold a dorsal layout in her new exhibit. She would frequently get spocked and jump into the water, and we had to be careful that she didn't knock us into the water with her. We observed that she favored turning to her left when she entered the water. Therefore we shaped her layout so that she was positioned parallel to the water (previously she was asked to come straight up on the beach, perpendicular to the water), with the water close to her left side. In this position, we were safely on the opposite side of her if she got scared and jumped into the water. When working on her dorsal or ventral tactile behaviors, we found that she would often get startled if we touched her in different locations numerous times (example: if we started touching her by her shoulder and then went down and touched her by her rear flippers). After reading a paper presented at the ABMA conference in 2004 on visually impaired phocids, I decided to try maintaining a continual tactile throughout the entire behavior (Stevens, Michele M. 2004). We found that Gray was much more comfortable being touched if we were in contact with her body for the entire behavior, whether it was just an exam or if we were working on desensitizing her for injections or blood draws. Desensitization, with the help of Dr. Robert Pisciotta, our veterinarian, is going very well and we hope to try a voluntary blood sample in the near future. Using the same layout position, we also worked on conditioning her to receive a voluntary West Nile Vaccine, which is given next to the spine in the mid-dorsal region. To date she has successfully received her vaccine and two boosters voluntarily!







Opening Her Mouth

Shortly after Gray's relocation to Atlantis Marine World, I started to train her to open her mouth. First, I started to desensitize around her nose, mouth and jaw while she was on a hand target. I used the fingers of my target hand and approximated touching her very gently. Once she was comfortable with light tactile around her mouth, I started to apply gentle pressure on her lips (an upward motion on her upper jaw, and a downward motion on her lower jaw). I spent many weeks on this step without much progress. After speaking with Martha Flatt (Personal communication, June 2001) of the New York Aquarium, I started to target her head up higher before applying gentle pressure to her lips. The hope was that in this position she would be more likely to drop her jaw and open her mouth. After several weeks of using this method and little progress, I decided to a different approach. It field to capture the behavior as she opened her mouth to take a fish. I only tried this method for a short period of time. I decided against it, because I wasn't comfortable using this approach. Therefore, I went back to the approximations of targeting her head up high and using tactile desensitization around her mouth and paphying slight pressure to her lips. After about nine months we finally made some progress. I was able to move Gray Beauty's lips enough to see her teeth! This renewed my motivation and I kept moving forward. But after this hurdle, Gray reminded me that she was still wild and she nipped at my fingers on several occasions. I remained focused and calm and gave no reaction when she did this. Finally just fifteen days shy of one year (from when I started the behavior), Gray Beauty relaxed her jaws and opened her mouth a liny bit! From this point, I worked on approximating her mouth open duther. She made slow but steady progress, and reminded me once again that she was still wild. After a couple more weeks of approximating her mouth open until was going to be difficult to use just one hand with thumb and forefinger of a ni







Conclusion

Gray Beauty is very eager and shows much determination when learning new behaviors, and she is extremely brave considering her blindness. Much to our surprise and initial worries, she has actually established herself as the dominant animal in the seal exhibit.

Gray Beauty currently can distinguish over 35 different commands. She only knows verbal commands, which can be very challenging for the trainers. We have to make sure that each one sounds different. We also say her name before each command to make it less confusing for her if she is being fed near the other seals. She will follow a target almost anywhere in the exhibit. She gates almost always without fail, and will swim to a rock station in the center of the pool on her own, and waits there for her trainer. She nods her head yes and shakes it no, claps her pectoral flippers wille in a ventral position, splashes widly in the water, spins, rolls, circles, blows bubbles, waves both flippers, and does a "shame" with one flipper over her nose. Gray hauls out on the beach for a ventral and dorsal layout, both of which she allows second person tactile. She is currently learning to blow a kiss, and to retrieve a ball white she is in the holding pool.

Gray Beauty has been through many challenges in her life, but she continues to persevere with amazing strength and courage. She is a wonderful animal to work with and she continues to be an inspiration to all of her trainers and many of Atlantis Marine World's visitors.

References

Stevens, Michele M. (2004). Strategies for Changing Cues for Visually Impaired Phocids. Proceedings of the Animal Behavior Management Alliance

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