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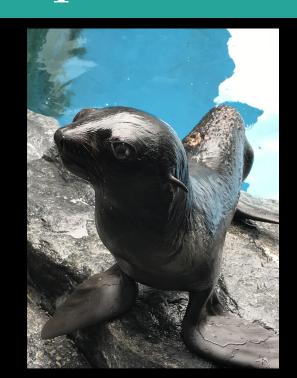
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Veterinary Training Practices in Pinnipeds

Samantha Hatfield







Husbandry Care of Animals in Zoological Facilities

- What is it?
 - Health Care Behaviors
- Why we do it?
 - Most efficient & less stressful on animal
- How we do it?
 - Through positive reinforcement training
- Examples?
 - Layout
 - o Open Mouth
 - Ultrasound
 - Weights
 - \circ Blood
 - Injection
 - Endoscopy
 - o Radiographs



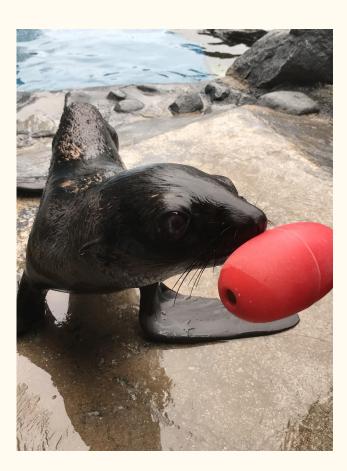






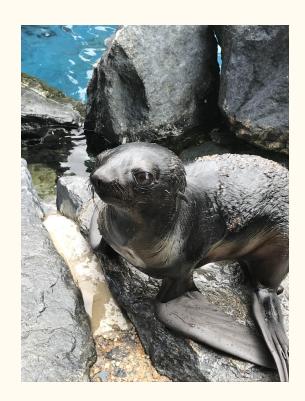
Training

- Positive Reinforcement
 - Reinforce correct behavior
 - Primary & Secondary Reinforcers
- Relationship with trainer
- Desensitization
 - Aversive stimulus becomes neutral or positive



Avila's Story

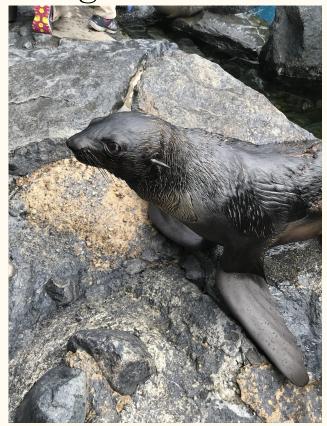
- Rescued from California
- Rehabilitated at the Marine Mammal Center
- Taught how to eat
- Deemed non-releasable
- Northern Fur Seal
- 3 years old
- 19 Kg
- Now resides at Mystic Aquarium



Avila's Husbandry Training

Steps Taken to begin training husbandry behaviors:

- 1. Develop relationship with trainer
- 2. Train basic targets
- 3. Train tactile behavior
- 4. Desensitization to objects & veterinarians
- 5. Trained individual behaviors
 - Flipper Present
 - Injection & Blood Draws in Layout Position
 - o Eye Exam
 - Toweling



Develop Relationship With Trainer

- How is this developed?
 - o Time
 - \circ Food
 - o Enrichment

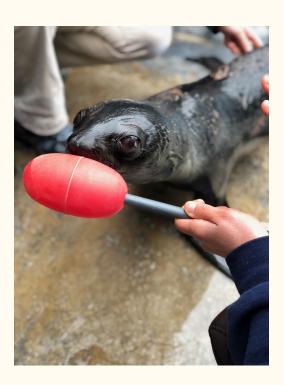
Trainer knows animal's behavior & capability











Train Basic Targets

- Target = Touch Muzzle
- Train to follow targets
- Targets used to focus animal & train husbandry behaviors

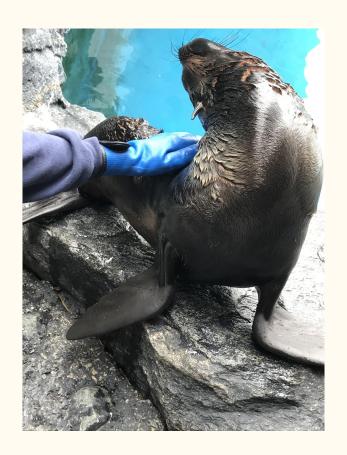




Train Tactile Behavior

- Pair with primary reinforcement (Food)
- Train for all parts of body
- Second person tactile

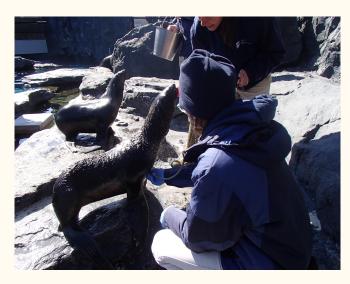




Desensitization to Objects and Veterinarians

- Acclimate Avila to different people & objects
- Eliminate any aversiveness

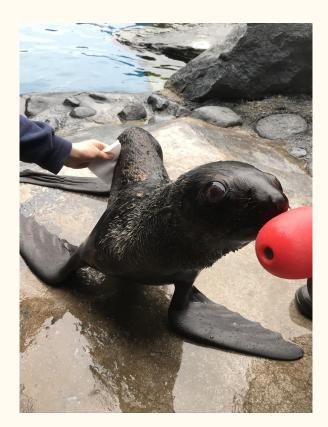






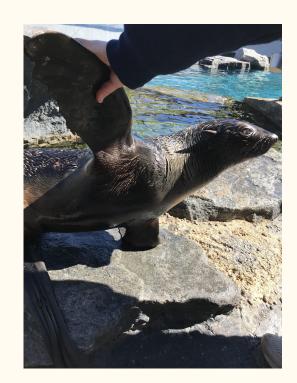
Husbandry Behaviors Focused On

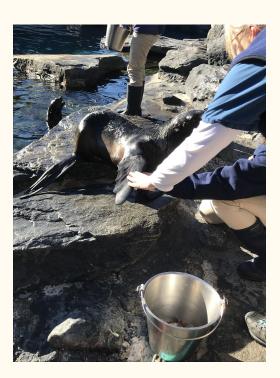
- Flipper Presents
- Injections and Blood Draw Behaviors in a Layout Position
- Eye Exams
- General Desensitization



Flipper Presents

- Use targets on muzzle & flippers
- Tactile on flippers
- Second person tactile
- Flippers prone to cuts & scrapes
- Need to be examined frequently





Injections and Blood Behavior with Layout

Layout Behavior

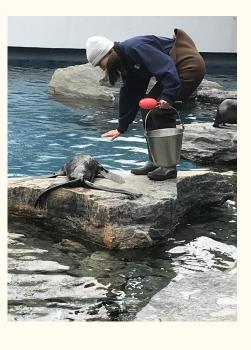
• Easiest for veterinarian & safest for veterinarian and animal

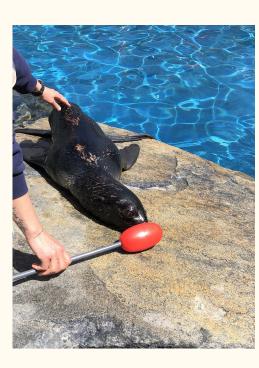
Desensitization

• Trainer touching of hind end and hind flippers

Simulation of a Injection or Blood Draw

- Simulate a real needle by use of the end of a paper clip
- Poke around site where injection or blood draw will be





Desensitization Steps for a Blood Draw from Flipper









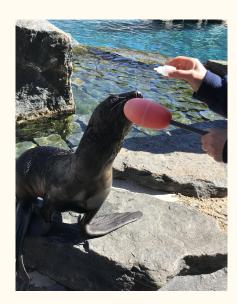
Injection Video

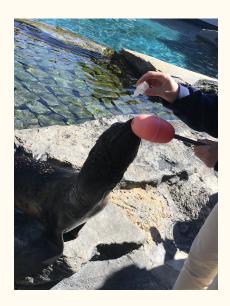
https://youtu.be/45bLQYMN0Ps

Eye Exam and Drops

- Desensitize to many eye exam instruments
- Eyes get cataracts or degrade as animals age
- Important because life expectancy is higher in facilities







Toweling to Improve Fur

- Unique to Avila
- She came to Mystic with matted fur
- Could not stand cold temperatures due to her fur during her first winter at Mystic (2016-2017)
- 30 degrees or below Avila was housed inside
- Fur Seals 2nd densest fur coat of marine mammals
- Water does not penetrate skin in fur seals due to its density
- Avila could be susceptible to penetration due to the condition of her fur
- Due to the toweling behavior Avila's fur improved & no longer is brought inside at temperatures below 30 degrees
- Avila was exposed to colder temperatures this past winter (2017-2018) & was successful

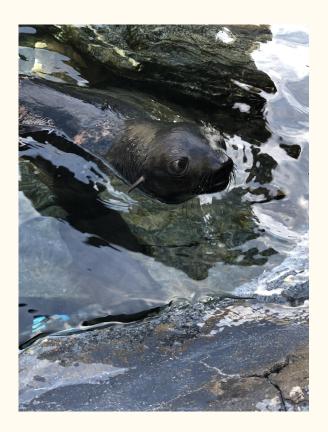


Behavioral Record Sheet: Avila

Date: 29-Jul-17	Session: 2	Diet %: 20	Flipper	Location: p1
	Time: 930	ABCDRO Ns	Comments: okay for brushing, good flipper presents with holding flipper	
	Trainer:JC	Rating: 3		
Date: 27-Aug-17				
Date. 21-Aug-11	Session: 2	Diet %: 55	Basics	Location: p1
	Time: 1315	ABCDRO Ns	Comments: good for flipper presents with second person tactile	
	Trainer:JC	Rating: 3		
Date: 28-Oct-17	Session: 3	Diet %: 40	Desense	Location: p1
	Time: 1145	ABCDRO Ns	Comments:great picture poses allowing vet to touch flipper	
	Trainer:JC	Rating: 3		

Future Goals

- Participate in all Husbandry Behaviors Voluntarily
 - Eye Exams
 - Tactile & Desense
 - Toothbrushing
 - Radiographs
 - o Blood Draws
 - Annual Injections
 - o Eyedrops
 - Ultrasounds

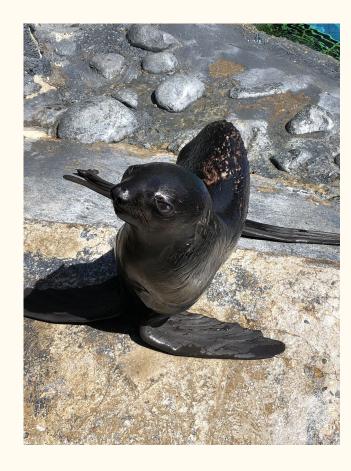


Acknowledgements

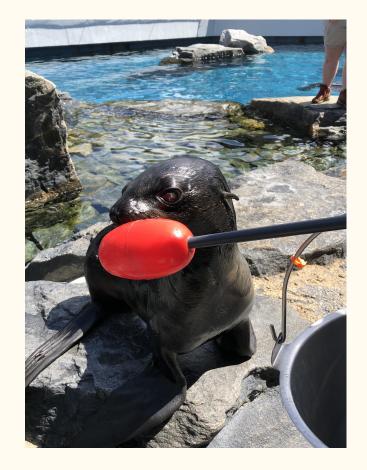
A special thanks to Mystic Aquarium, along with the animal trainers, Jesse Ciletti, Erin Gibbons, and Carey Richard for all their help with my presentation, and for allowing me to represent the marine mammals at Mystic!

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Thank You!



Work Cited

All data, training information, & pictures were collected from Mystic Aquarium and the trainers I worked alongside of.

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