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How to train your opossum: Captive Virginia Opossum (*Didelphis virginiana*) Responds to the Color Red After Positive Reinforcement Training

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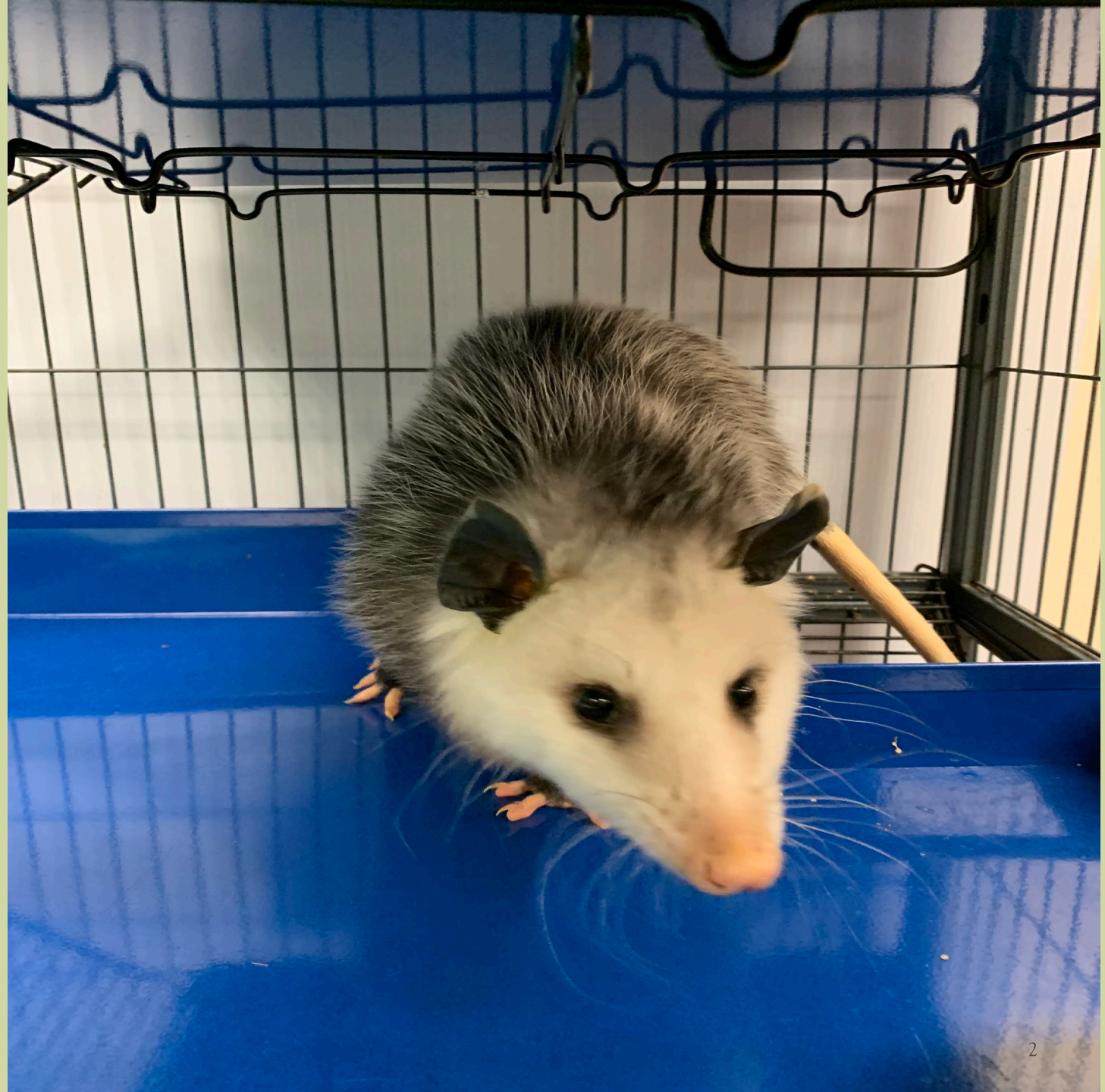
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How to train your opossum:
Captive Virginia opossum
(*Didelphis virginiana*) responds to
the color red after positive
reinforcement training

Leann Trout





Blossom





Introduction

- Benefits of positive reinforcement:
 - Retrain negative behaviors
 - Improve human-animal relationship
 - Zoos use positive reinforcement in captive animal training
 - PSU Nature Reach does this as well
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Research Question and Hypotheses

- **Question:** How well will Blossom respond to positive reinforcement training?
- **Hypotheses:**
 - 1 - Blossom will prefer cheese over the other food options
 - 2 - Blossom will get better at touching a training stick with her snout to get the cheese

Methods

FOCAL SPECIES

- Virginia opossum (*Didelphis virginiana*)
- Only opossum in NA
- Marsupial (pouched), born altricial
- Respond best to higher frequency sounds

FOCAL INDIVIDUAL

- Blossom was 7mo at time of study
- Left mother too earlier (usually don't leave mom until day 96 in the wild)
- Took a while to get Blossom to eat solid foods

Methods

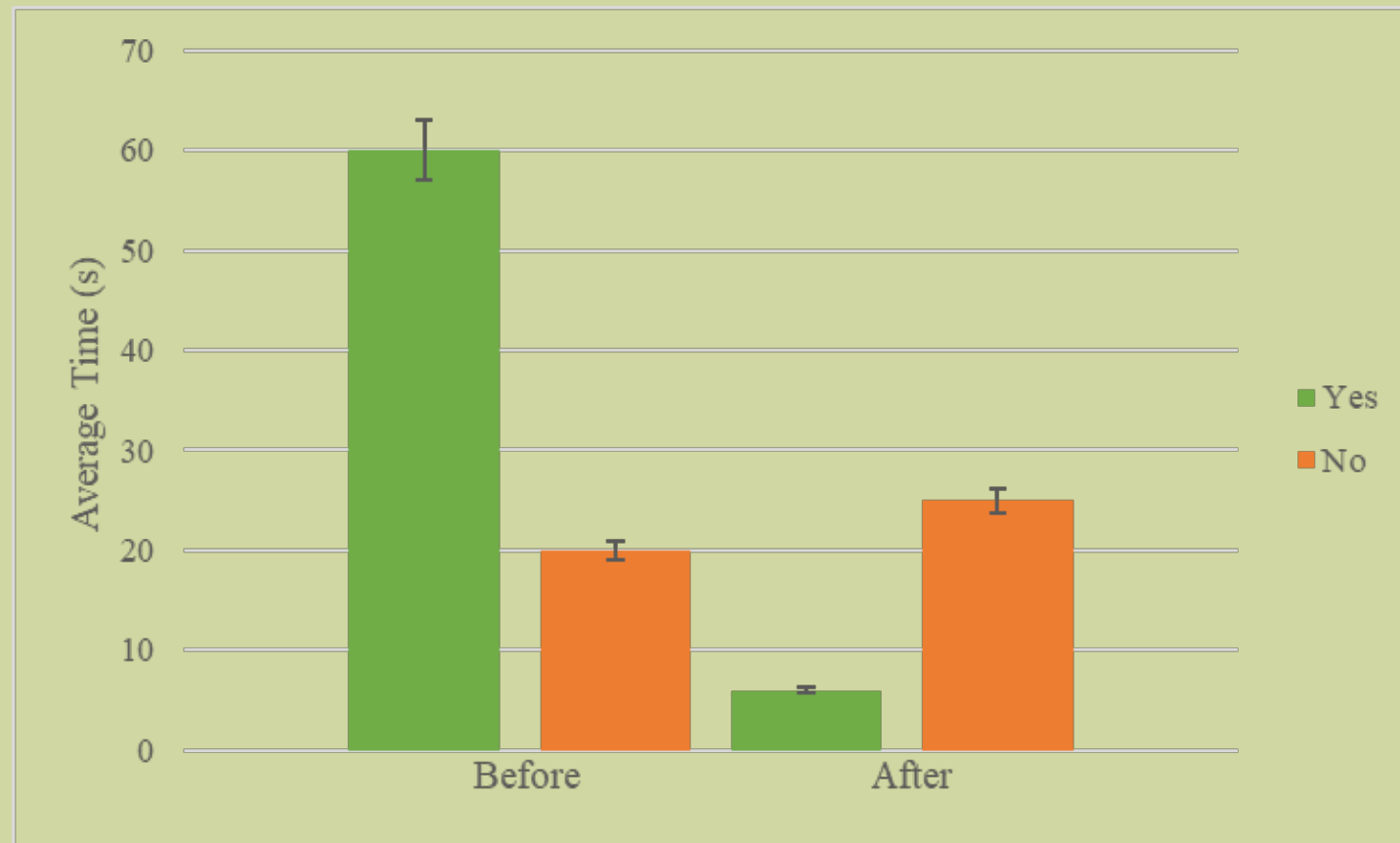
DATA COLLECTION

- All tests were performed on Oct 8th and Oct 25th
- Used cheese as a reinforcer
- Red Dot vs. No Dot Test
- Boop Stick Test



Results

Red Dot vs. No Dot Test before (Oct. 8th) and after (Oct. 25th) positive reinforcement training



Results

Boop Test before (Oct. 8th) and after (October 25th) positive reinforcement training





Discussion

Accepted Hypothesis #1:

- Blossom preferred to eat cheese from the red dot
- Did so more quickly, after positive reinforcement

Rejected Hypothesis #2:

- Blossom did not touch the boop stick with her nose as frequently after positive reinforcement



Conclusion

- Blossom associated red with cheese
- Will she like other colors more?
- Cheese can be used as a reinforcer for Blossom when harness training or crating