

A photograph of an American Oystercatcher, a large shorebird with a black head and neck, a bright red beak, and brown and white plumage. It is standing on a sandy beach, holding a small yellow object in its beak. Two small, fluffy grey chicks are visible in the background, one to the left and one to the right of the adult bird.

Monitoring the Effects of Human Disturbance on American Oystercatcher Nesting Behavior on Beaches in New York City

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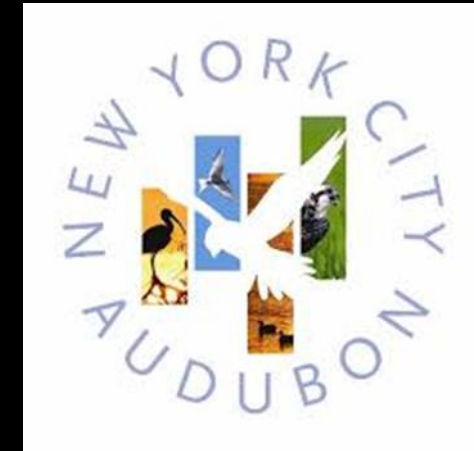
Felicity Arengo



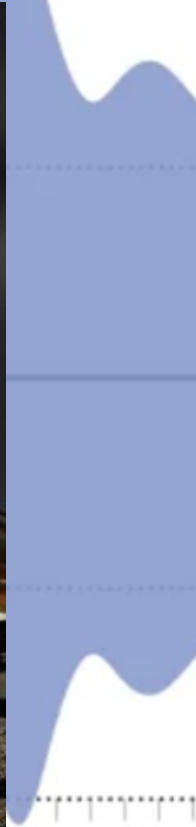
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The Team

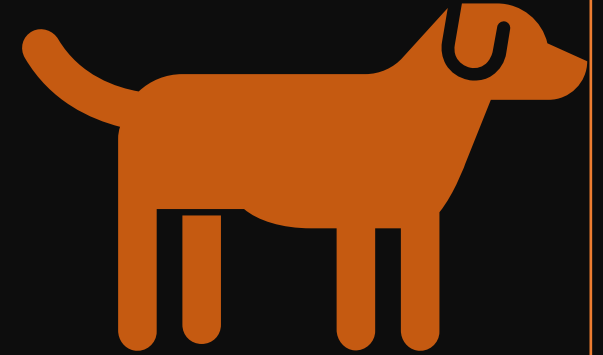


1975 1980 1985 1990 1995 2000 2005 2010

Shorebird Populations are at risk

Shorebird populations are at risk

- Anthropogenic disturbances can be both direct and indirect
- Direct effects :
 - Trampling
 - Handling of eggs
 - Dog predation on eggs
- Indirect effects:
 - A pedestrian walking by the nest
 - A dog walking by the nest
 - Any vehicular activity around the nest



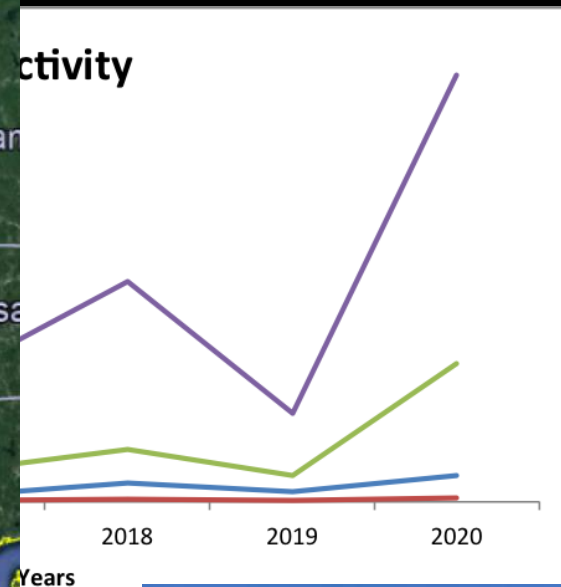


Highly Urbanized Study Sites

Questions to Consider

1. How do different types of disturbance affect the nesting behavior of the American Oystercatchers?
2. How does the frequency of disturbance change the behavior of the nesting American Oystercatchers?





The Study Site

Emilio Tobón



Methods-In-Person Observations

- Conduct in person observations during the egg-incubation and chick rearing phase
- Parameters measured:
 - Type of disturbance
 - Flight initiation distance
 - Time to return to the nest
 - Alarm calls
 - Standing
 - Number of people present around the nest



Methods-Trail Cameras

- Cameras will be placed at each of the American Oystercatcher nests at four different sites of varying levels of human disturbance during the egg rearing phase
 - The cameras are motion sensed and will take photos and video anytime anything moves in front of it
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Study Design Questions Left to Answer

- What should the protocol be post hatch when chicks are not at the nest?
- General feedback about trail camera set up costs and benefits
- What else can I do to prevent theft and tampering with trail cameras?



Summary

- This study will determine if human disturbance is contributing to the decreases in American Oystercatcher breeding success on the Rockaway beaches of New York City
- With this information we will be able to create informed management plans to support American Oystercatcher breeding efforts



Questions and Comments

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