**Past and Current Status of Osprey on the Connecticut River**

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**ABSTRACT**

Ospreys are an important part of the Connecticut River ecosystem. Their long-term survival not only benefits the Osprey species, but all other species that call the Connecticut River home.

The goal of my project was to help the Ospreys in two ways. First, by bringing awareness to the decline and rebound of Connecticut Osprey populations, and second, by helping with the maintenance of Osprey platforms that provide safe locations for Ospreys to build their nests.

**INTRODUCTION**

Essex, Connecticut has been a home to Ospreys since before it was a home to people (Fig. 2). However, due to human presence, the Osprey population suffered in the mid to late 20\(^{th}\) century. The birds that once occupied the banks of the Connecticut River were nowhere to be seen.

Their population has since rebounded, but many Essex residents are still unaware of the struggles the Osprey population went through, and the amazing progress they have made in recent years. In particular, nests built and maintained by the Essex Land Trust have contributed to the Ospreys’ success (Figs. 3 & 4).

The purpose of this outreach project is to inform the citizens of Essex about Ospreys as well as participate in maintenance of Osprey nests. I contributed to a book that contains information about the history of Osprey, their current status, and the efforts that the Essex Land Trust has made to help the Ospreys, specifically the nest on Thachbed Island.

**MATERIAL AND METHODS**

My project consisted of two parts: creating the sections of Osprey book and maintenance on the Osprey nests that the Essex Land Trust maintains.

**Working on the Nests**

- We canoed out to Thatched Island, a marshy island in the Connecticut River that is home to an Osprey nest platform (Fig. 4).
- The Osprey camera had to be disabled for the winter (Fig. 3).
- The wires that bring electricity from the solar panel to the camera had to be bagged up to keep them dry through the winter.

**Researching for the Book**

- I worked on a section about the history of Osprey and the Connecticut River.
- The other section was about identification and behavior of Osprey.
- The sources I used were: Birds of North America Online, National Geographic, Atlantic Naturalist, Hartford Audubon Society, Osprey Nation, and Connecticut DEEP Wildlife division.
- I surveyed 12 people to evaluate the effectiveness of the book sections.

**RESULTS**

**Information in the Book**

Through the research I conducted for the Osprey book, I found that the main cause of the decrease in population was the use of pesticides, specifically DDT. It was used to combat mosquitoes especially in farm areas and found its way into the food chain. Insects would be eaten by fish which eventually would be caught by Osprey. The insecticide impacted Osprey’s reproductive system by causing the thinning of their egg shells which would crack when the female Osprey incubated the eggs.

The result was nest failure.

**Impact of Book**

Many of the Essex residents that I surveyed had very little prior understanding of Osprey in this area (Table 1). Many people did not know that the Osprey population here nearly went extinct, and many did not know the cause of this near extinction. While the land trust and legislatures have put immense effort into helping the Osprey, Essex residents remained unaware. After reading the section I wrote, people were able to correctly answerer nearly every question, showing that the book was able to effectively inform them about the problems Osprey have been facing, and what they can do to help the Osprey’s continued success.

**CONCLUSIONS**

This book will help increase people’s awareness of the history and current status of Osprey in this area. If people better understand the reasons that the Osprey nearly went extinct, they can help make sure that it never happens again. Many people do not realize that their actions can have a drastic effect on the surrounding ecosystems. If people were aware of the potential damage that they were causing, they might change their behavior.

In addition, when people understand the importance of the work the Essex Land Trust is doing, they might want to become members themselves. They might chose to donate money or their time to help the land trust preserve and build habitat for animals like the Osprey that have been negatively effected by human activities.

It is difficult to fix a problem that you are not aware of. This Osprey book will make the residents of Essex aware of the problems Osprey have faced, so that they can become part of the solution rather than part of the problem.

**ACKNOWLEDGEMENTS**

Thank you to my community mentor, Jim Denham, along with Bob Nussbaum and Paul Greenburg from the Essex Land Trust. Thank you to the Essex Land Trust for sending me to the Natural Resource Conservation Academy. Thank you to Mrs. Kimmitt from the Valley Regional Science Department.