Avian Ambassadors:

Getting to Know the Birds that Utilize Skiff Mountain Preserve





Marvelwood School & UConn Natural Resources Conservation Academy



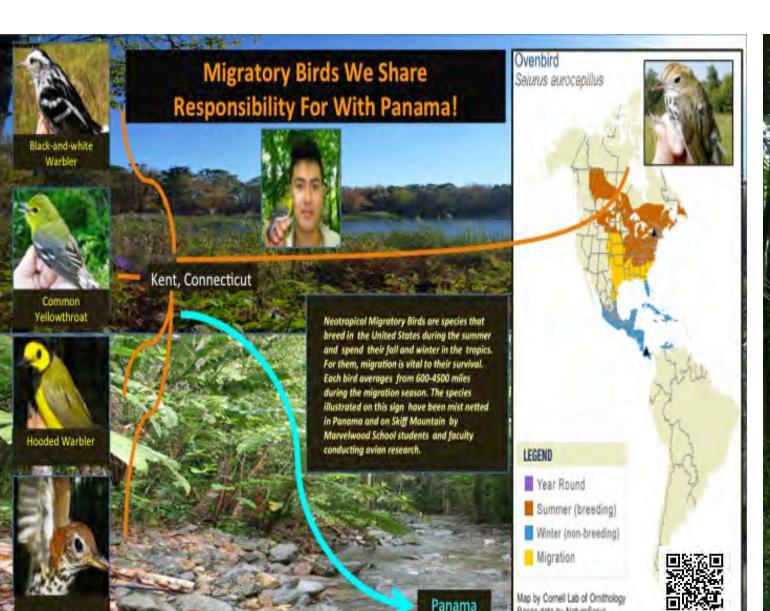
ABSTRACT

The northwest corner of Connecticut is rich in avian biodiversity, especially the Skiff Mountain area in Kent Connecticut, which the general population has little to no knowledge of with respect to this incredible avian richness. Our goal in creating trails on Kent Land Trust's Skiff Mountain South Preserve is to bring more people's attention to the birds utilizing the area and to stress the importance of habitat in preserving the variety of species. Because Marvelwood School has researched birds on this property for over a decade, we decided to share our knowledge of the avian richness on this Kent Land Trust property by creating a short walking trail to introduce people to the birds on Skiff Mountain. A 0.56 mile long trail was created on the property. The trail features birds previously seen, heard and/or banded, primarily during the school's summer banding programs and/or during spring and fall migration. We made and erected several interpretive signs introducing birds commonly encountered each season. QR-codes were inserted into the signs so that people can scan the code linking them to the Cornell Lab of Ornithology All About Birds where they can get more information about the species featured. By becoming familiar with images and sounds of the birds, people will be able to identify the birds on the trail or even their own backyard. Trial maps were also created using ArcGIS and Google Earth. In doing this project, I realized how difficult designing a comprehensive and educational project can be. However this experience helped me to get over the gap between high school and college level work. It has been proven that when people have direct experiences with wildlife they are more willing to invest in protecting these species and their habitats.

Natural Resources Conservation
ACCIONNY

INTRODUCTION

As environmentalists, we do our best to maintain the ecological balance, but we often feel powerless to reduce the destruction caused by humans. We need more people to become aware of the reality that the natural surroundings on which we all depend are facing collapse. In our community, the best thing we can do to reconnect people with nature is to build educational hiking trails. We have over 400 acres of public land resources around our school campus, which contain an abundant diversity of habitats and species. We intend to create trails that introduce humans to those species that share the land with us. These trails will attract people and encourage them to care about nature. Birds are everywhere; they are so common that most people usually fail to acknowledge them. We have designed a bird watching trail in order to introduce the general public to them. By providing information such as the unique features of each bird species, the types of resources they depend on, their ecological importance, and problems they face, we hope that people will pay more attention to birds and care more about doing what they can to help preserve and protect their habitat.









MATERIALS AND METHODS

I started my Project in the summer of 2012. Three mornings a week, my teacher Laurie Doss and I went to the trail area to identify some birds and collect data. We would set up twelve mist nets, then settle into our base camp and wait to check the nets every hour. During this period of field study, I began to organize my ideas for the trail design. When I returned to Skiff Mountain at the beginning of this school year, my project officially started. In order to plan the trail and highlight landmarks efficiently, Ms. Doss and I did several field hikes. We brought Garmin Map 60CSX GPS Units, field notebooks and cameras with us and did a lot of multi-tasking as we planned the trail and collected data. We used GPS to track our trails and mark the points of interest as waypoints. At each waypoint, we took photos of the special features and took notes on the idea that popped into our heads as we viewed the scenes. In the end, we marked a total of seven waypoints on the 0.56-mile avian trail.

Back in the lab, we organized our field work data on the computer. For my avian trail, we decided to create seven interpretive signs, including four common bird signs, one bird banding method sign, one bird migration sign, and one invasive species sign. Ms. Doss provided me the bird data that has been collected by Marvelwood students and faculty over the past 12 years. I filtered out four avian species for each of the three bird's hotspots on my trail. For each of the four bird species, I included one picture for it (some have two because of their bird's sexual dimorphism), and the common and scientific name. Near the picture of each bird, I included a QR-code which can be scanned with a smart phone, and links to a website that describes the bird in detail and provides a sound-track of its call or song. In this way, visitors can identify them easily in the future. To help people understand the serious problem that some birds are facing, I made a sign for Common Reed, an invasive species that has taken over our Early Critical Wetland and Successional Habitat around a beaver marsh. Because of the annual Panama trip that students take at Marvelwood, and which I have participated in, we were also able to identify several species of birds that breed on Skiff Mountain but also winter in Panama and other Neotropical regions. An educational sign about bird migration was created illustrating some species Kent and the country of Panama have in common. A sign illustrating the process of banding birds and our scientific research was also designed and placed on the trail.







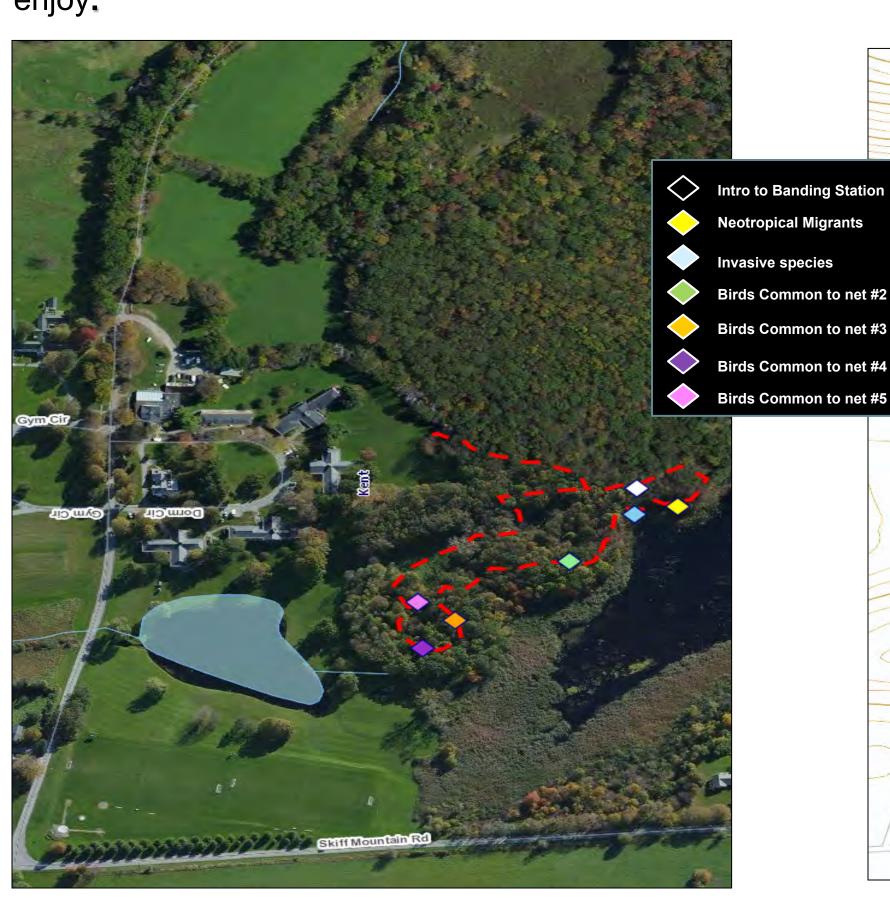


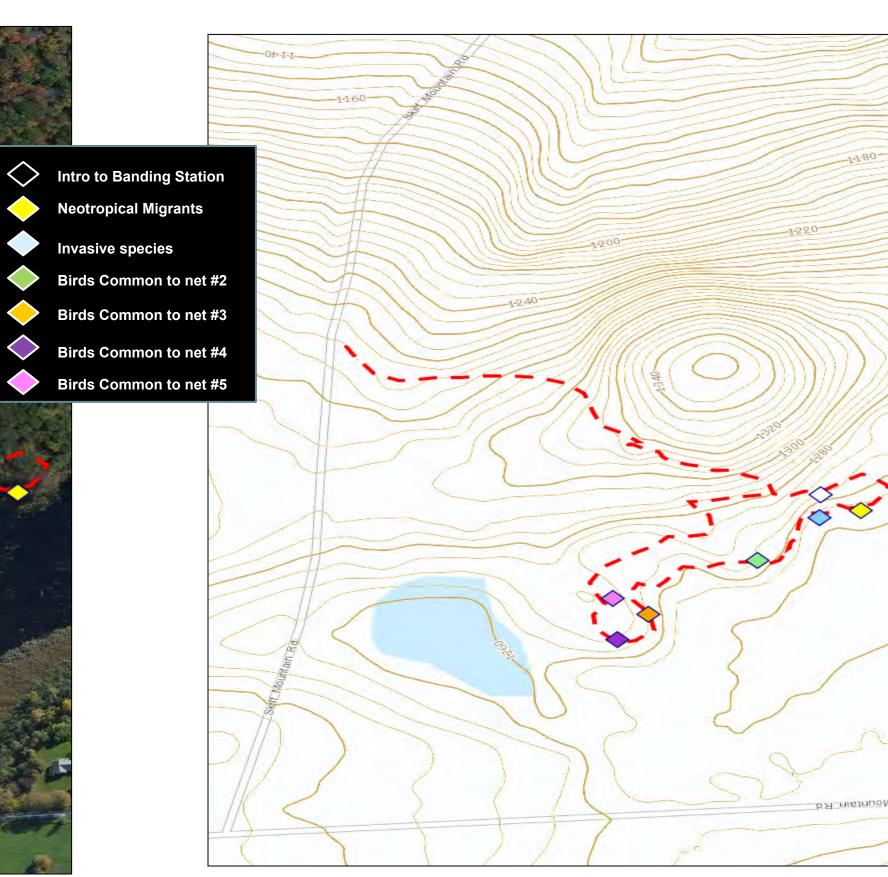




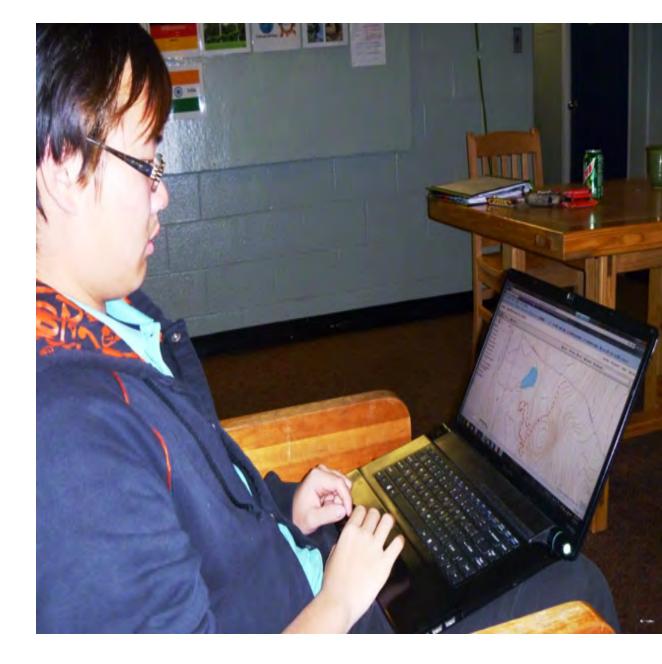
RESULTS/CONCLUSIONS

Four unique trails were created on the Skiff Mountain South Preserve. I was responsible for creating Connery Loop (red trail) and Novick/de la Renta Queen of Hearts (Blue Trail). This poster focuses on the Connery Loop, which is a self-guided trail with interpretive signs introducing people to the avian species found on Skiff Mountain. The creation of this trail will give visitors an idea of the species that they share the land with and for which we all have global responsibility of protecting and maintaining habitat to ensure their survival. All of the data used in the creation of these trails is based on over a decade of environmental and wildlife research conducted by Marvelwood School's faculty and students. This data clearly illustrates that we have tremendous biodiversity in our community, which others should be aware of and be able to enjoy,









Acknowledgments

I would like to thank Mrs. Everett and Ms. West for proofreading my poster. I would like to thank Hunter Brawley and Richard Novick who helped us clean the trails. I would like to thank Lori Pelech and Emily Wilson for technological support. I would like to thank Charlotte Rand and other NRCA members that gave me an incredible experience in the summer. I would like to thank Laurie Doss for supervising my entire project. Finally I would like to thank Kent Land Trust for permission to do this project on their property.

References

Brawley, H., Doss, L. & Sapse, A. (2010). Kent skiff mountain south habitat management plan

Tennessee Department of Environment and Conservation (2007). Pathways to trailbuilding. Retrieved from http:// atfiles.org /files/pdf / TNpathways.pdf

Connecticut Audubon Society (2011). Connecticut state of the birds 2011.

NYS Office of Parks, Recreation and Historic Preservation Planning Beureau (2010). Trail signage guidelines for the nys park system . Retrieved from http://www.nysparks.state.ny.us/recreation/trails

Cornell University. (2011). The cornell lab of ornithology: all about birds . Retrieved from http://www.allaboutbirds.org

