Report to the Nuttall Ornithological Club

New Hampshire Bird Records Data Conversion

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Principal Investigator:

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Summary

New Hampshire Audubon (NHA) began computerizing bird sightings in 1986 utilizing volunteers to enter reports into a database. In 2009, NHA changed to eBird as an on-line data entry system for New Hampshire bird sighting data. This improved the reporting framework, but the original NHA database that contains 22 years of birding data from 188,778 records could not be imported into the eBird system without significant preparation. NHA began the work necessary to import this data into eBird in 2011 and received a grant from the Blake-Nuttall Fund in 2012 to continue the process. We have now completed the data upload for 42 towns, with 15 more currently in process. Using the Blake-Nuttall Fund grant we were able to leverage an additional \$6,000 in funding for specific regions.

Overall objectives of the project:

- 1. Revise and consolidate location names in the *New Hampshire Bird Records* computerized data.
- 2. Import records into eBird and map all locations.
- 3. Review unusual reports flagged by eBird.

The eventual goal is to resolve all compatibility issues and import all bird sightings into eBird.

The data conversion to eBird provides long term storage and public accessibility for this valuable data. The geo-referencing that occurs as part of this process improves the value of our bird data resource, increases its quality, and broadens its potential uses. We very much appreciate the Blake Fund's support for this project.

Importation of Records

eBird is a geo-referenced database and this requires the text descriptions in the historic database to be converted to points on a map. The major task in uploading the data into eBird is reconciling, consolidating and finding the geographic position of location descriptions for bird sightings. Many of the locations are the same but with minor text differences in their names while others are unique and require research. The process is complicated and requires considerable time for each town because of the amount of research required to determine the

locations of some of the records. The more bird sightings there are for a given town, the more time it takes to prepare the locations for upload. This means that popular birding towns, such as Rye and Hampton on the New Hampshire coast, are particularly time-consuming. Once names are standardized the data can be imported and new locations mapped.

Data is imported into eBird on a town by town basis. This allows volunteers to concentrate on a given town all at once making the process far more efficient. During the grant period, NHA more than doubled the number of towns that had been uploaded. We completed the upload for 24 towns making the total of towns uploaded 42, with another 15 currently in process. This included some of the larger coastal towns of Seabrook, Portsmouth, New Castle, North Hampton, and Rye (Hampton is still in process) and nine towns in the Lakes Region. More than 38,000 bird sighting records have now been uploaded into eBird.

Funding and Volunteer Contributions

The Blake-Nuttall Fund grant also helped to leverage a \$2,500 grant from the Fuller Foundation for importing Seacoast Region town data, and a \$3,500 grant from the Samuel P. Pardoe Foundation for Lakes Region data import. Both grants provided only a portion of the necessary funding for these regions, and the Blake-Nuttall grant was critical in providing supplemental funding to augment these efforts. There are so many reports from towns in the Seacoast Region that additional funding is being sought from the Fuller Foundation to complete this area.

Volunteers are able to do the majority of the 60-120 hours of work for each town and put in more than 500 hours on this project in fiscal year 2013. It requires approximately 10-20 hours per town by the NHA Project Leader to address questions, coordinate the work, and make decisions regarding problematical records.

Challenges

One of the largest challenges is finding the location of sightings from older or vague place names, particularly from the late 1980s. Many of the written descriptions in the older data involve colloquial names (i.e. "marsh behind Joseph's" – a local restaurant no longer in business) or vague descriptions ("my house") that require either researching the original hand-written report or contacting the original reporter to obtain adequate information to map the sighting. Local knowledge is especially beneficial. Changes in addresses from the implementation of 911 have also created confusion.

The departure of two project volunteers for job reasons will require recruiting and training new volunteers. The loss of experienced, highly productive volunteers is a significant impact. The support from the Blake-Nuttall Fund has been critical in allowing us to provide training. It has been difficult to find a volunteer who can review the observations of rare and unusual birds to ensure they were properly documented and reviewed using the standard *New Hampshire Bird Records* process. These records are automatically "flagged" by eBird and must be reviewed by a qualified, approved individual before they will be accepted into the database. This provides an important quality control check and helps ensure quality data. However, we have not yet been able to find a volunteer with sufficient knowledge and experience to take on this task.