Peninsula Point Bird Survey

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Background and Research significance:

Only two known publications have examined avian migration on the northern shore of Lake Michigan (Grigg 1994, Haas 2010), though birdwatchers have known for years that Peninsula Point, the slender tip of a peninsula extending approximately 15 miles into Lake Michigan located in Delta County, is one of the best viewing spots in the entire region (Lafkas 2012). The Important Bird Areas (IBA) program has also recognized the special role this area plays in the life of numerous birds; of 102 IBAs in 83 counties throughout Michigan, seven are within Delta County (National Audubon Society 2013). Personal observations have revealed that large numbers of birds from nearly all avian orders rely on Peninsula Point and the surrounding area at some point during their annual cycle. In one striking example, experienced observers stationed at Portage Marsh and Peninsula Point recorded a combined total of over 70,000 Long-tailed Ducks flying past the mouth of Little Bay de Noc on May 19th, 2011, part of a trend which has now been observed at the site for several years (Kaplan, personal communication). This occurrence is likely of significance for the species; counts of even 15,000 individuals on Lake Michigan in winter are only occasionally tallied and represent some of the highest totals recorded anywhere on the continent (Robbins 1991).

This proposed research will be a valuable contribution to the body of knowledge regarding avian migrants in North America and the Upper Peninsula in particular. The entire Great Lakes region is clearly crucial for a plethora of migrating birds as a place to pause and refuel for the remainder of their journey and for many as their final destination. This project will serve to document the volume and diversity of birds which make use of the high-quality stopover habitat at Peninsula Point. It will also provide valuable information about individual species of birds of particular interest. Among the taxa monitored will be a number of species of conservation concern (BCC, US Department of the Interior 2008). Of the 23 species on the BCC 2008 list for Bird Conservation Region (BCR) 12, the boreal hardwood transition forest which encompasses the study area, at least 18 have been documented on the Stonington Peninsula during migration, breeding, or both (Haas 2010, Haas and Palmer personal observations).

A new addition to this ongoing project for the 2015 spring migration season is surveys of migrants in the evening. For the first two years of the study systematic observations were conducted only at sunrise lasting for up to four hours. Through observers occasionally remaining at the site throughout the day it has been discovered that on some evenings a very large number of ducks and shorebirds migrate past Peninsula Point. In addition to the significant Long-tailed Duck flight mentioned above, on two occasions in three years over 1000 Whimbrel, a species on the BCC list, have been tallied in a single evening. Better understanding when and where these species migrate will greatly assist efforts to conserve the birds as well as the habitats they require.

Preliminary results from the first two years of this study have been presented at the Michigan Bird Conservation Initiative workshop, the Midwest Bird Conservation and Monitoring Workshop, and are scheduled to be presented at a meeting of the Laughing Whitefish Audubon Society in March 2013. Upon completion of a third year of this study all data will be compiled and submitted for inclusion in the database maintained by the Midwest Avian Data Center and a manuscript prepared for submission to an academic journal such as Michigan Birds and Natural History.

Outcomes and Objectives:

The overall long-term goal of this project is to contribute to an improved understanding of the migratory movements through the Great Lakes region undertaken by a wide range of avian taxa. More specifically I seek to document the scale and phenology of avian migration that occurs at and around Peninsula Point. Data collected during the project will be submitted to the Midwest Avian Data Center for use by a wide variety of government agencies as well as the public. Delta County is already home to six Important Bird Areas (IBA) designated by the Audubon Society; it is anticipated that data from the PPBS will contribute significantly to one or several more, documenting the importance of this area for the survival of other sensitive species. Specific objectives for the Spring 2015 migration count primarily include conducting a morning survey of birds present at Peninsula Point on no fewer than 28 days. Additional surveys will be conducted on evenings through a select portion of the overall count period, with no fewer than 7 days to be sampled this Spring.

Methods:

The Peninsula Point Bird Survey (PPBS) seeks to use a combination of monitoring techniques to expand on previous research and document the scope of avian migration on and around the Stonington Peninsula, Delta County, Michigan. Data will be collected on all birds in the area, with daily visual counts of waterbirds, shorebirds, rails, raptors, and songbirds throughout the height of spring migration.

Waterbird counts will begin within 60 minutes of sunrise on each day which conditions and observer availability allowed. This survey consists of a complete census of all birds detected from a stationary point which allows an approximately 270 degree view of the Bays de Noc and any birds staging on the water in addition to any flying past the survey location. For a minimum duration of 60 minutes the observer will record all birds which could be detected from this point, with a primary focus on waterbirds. In past years it was not uncommon to observe landbirds coming toward land from over the bay during this period, in addition to the waterbirds which migrate past the location. In addition to a complete count of birds observed weather data will be taken at the start of each count period, with temperature, wind speed and direction, cloud cover, and precipitation recorded.

The second portion of the daily survey will consist of a transect loop approximately ½ mile long. This transect will commence upon completion of the waterbird count each day, or concurrent with the waterbird count depending on observer availability. Transects will be initiated within 120 minutes of sunrise and completed before 11 AM each survey day. During this transect the observer will maintain a slow and steady pace, pausing when necessary to confirm an identification, and typically will be completed in approximately 45-60 minutes. All birds detected during this period will be recorded regardless of their location and behavior.

Additionally, on select evenings a survey of migrating waterbirds and shorebirds will be conducted to better monitor passage of species such as Whimbrel, Long-tailed Ducks, and scoters among many others. As indicated by the previous several years of observation these species migrate past Peninsula Point in large numbers late in the day, typically observed between May 15th and 31st. In accordance with these findings, a systematic count will be conducted on no fewer than seven evenings within this date range. Evening surveys will begin at least three hours prior to sunset and continue for

one-half hour after sunset. As with morning surveys, this count will be conducted from a stationary position near the Peninsula Point lighthouse. All birds observed during these count periods will be recorded, with a primary focus on ducks and shorebirds.

All data recorded using the three count methods described above will be added to the existing database containing data from the first two years of the Peninsula Point Bird Survey along with informal observations from the site in previous years. It is expected than on a majority of survey days in Spring 2015 additional observations will be made outside the formal data collection times by myself and other birders at the site. These data will also be recorded when applicable and added to the database as 'general observations.' The data gathered in all three years of the study will be compiled for analysis upon completion of the Spring 2015 field season, with a report summarizing the findings to be completed soon thereafter and presented at the Michigan Bird Conservation Initiative Workshop in 2016.