

NORTHEAST REGIONAL CONSERVATION NEED GRANT

Abstract

Summary of Progress: (Provide a paragraph describing progress, work to come, and timelines)

We designed, organized, and implemented the first field season of the BCR 30 / USFWS Region 5 tidal marsh bird surveys. This included hiring a graduate student to oversee the survey effort, hiring and training field survey technicians, working in partnership with co-collaborators from SHARP, drafting field protocols, and implementing the survey. From January – April we met with state, federal, and NGO partners to introduce the project, discuss logistics, and identify where effort or equipment could be shared. We also completed the design of the sampling framework that is based on a two-stage cluster sample with the National Secretive Marsh Bird Monitoring hexagons as the primary sampling units (PSU) and points randomly located within each PSU. We generated field maps for each selected hexagon and presented these maps along with a complete explanation of the design to all state, federal, and NGO partners. We initiated field surveys in VA on 15 April 2011 and from MD north on 1 May 2011. Collectively, the SHARP technicians and partners survey 1,347 sampling locations from ME – VA. Presently, we are organizing and QA/QCing the data from both the survey effort and the demographic studies. We are also preparing data summaries that will be submitted for presentation at the Northeast Fish and Wildlife Conference April 2012.

NORTHEAST REGIONAL CONSERVATION NEED GRANT QUARTERLY REPORT

Grant Number: 2010-03

Grant Title: *"Identification of Tidal Marsh Bird Focal Areas in BCR 30"*

Grant Receipt: 15 January 2011, University of Delaware

Grant Contact Name: W. Gregory Shriver

Report #- 2011 3rd Qtr

Were planned goals/objectives achieved last quarter? Yes.

Regional Conservation Need Addressed: RCN Topic 4: Identification of Regional Focal Areas and Corridors for the Conservation of Species of Great Conservation Need in the Northeast

Progress Achieved: (For each Goal/Objective, list Planned and Actual Accomplishments)

- 1) identify regional population centers for tidal marsh birds within BCR 30 from New Jersey to Virginia,

>> We conducted bird surveys using both passive and broadcast point count methods along the coast of BCR30+. To give a more complete assessment of tidal marsh birds along the northeast coast and to facilitate comparisons with historical datasets, we extended survey effort geographically beyond BCR30 to encompass marshes from Casco Bay in Maine (the northern limit of BCR30) to the Canadian border. We divided the entire study area into 9 subregions. In addition, we provided technical assistance to project collaborators throughout the coverage area to ensure consistent data collection. Point count surveys consisted of a five-minute, passive-listening period followed by a series of broadcast calls for secretive marsh birds. The total time to complete a point count ranged from 8 to 12 minutes, depending on the number of species included in broadcast calls for that subregion. During this time, we recorded all bird species detected by sight and sound. Surveys were completed between one half hour before sunrise and 1100 h. A few surveys were completed past 1100 h when transportation difficulties arose. The first season of surveys required that each point be ground-truthed before surveying to ensure the point selected did indeed fall within tidal saltmarsh and was accessible to survey crews. Although historical points were fairly accessible and accurate in habitat type, points that were selected using a Generalized, Random, Tesselated, Stratified (GRTS) sampling method in conjunction with the National Wetland Inventory sometimes required substantial adjustment before surveys at individual points could be completed.

The SHARP survey crew surveyed a total of 687 points between April 18 and July 20, 2011, spanning the coastlines of Staten Island, New York; New Jersey; Delaware; Maryland; and Virginia. Each point was surveyed on at least two occasions and most were visited three times throughout the survey period. At least 10 days elapsed between consecutive surveys at individual points.

- 2) combine these survey results with existing surveys for the northern states in BCR 30 (New York – Maine) to identify tidal marsh bird focal areas and produce population estimates for all bird species found in the high tidal marsh (including a global population estimate for saltmarsh sparrow),
 - >> Worked in partnership with the University of Maine and University of Connecticut to coordinate surveys, data collections, field tech. training, protocol development, and data entry for 1,347 sampling locations from VA - ME.
- 3) provide all states in BCR 30 with a detailed description of their regional responsibility for tidal marsh bird species,
 - >> Completed first field season of tidal marsh bird survey data collection that will be used to inform and meet this objective.
- 4) identify the most critical areas for the long-term preservation of the tidal marsh bird community within each state, and
 - >> Completed sampling design and implemented first field season of tidal marsh bird survey data collection that will be used to inform and meet this objective. We also initiated the demographic aspect of the SHARP (Saltmarsh Habitat Avian Research Program) in ME, CT, and NJ to begin to estimate demographic parameters that will be used to identify focal areas within each state.
- 5) relate the regional focal areas to past management actions.
 - >> Initiated conversations with state and federal partners to determine how best to quantify management actions surrounding tidal marsh bird survey points.

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Difficulties Encountered: Access to some tidal marsh areas is a major challenge. We ran three field crews that all needed boats to access the points. The major access issues occur in southern NJ, MD, and VA where it is nearly impossible to access tidal marshes w/o a boat. We are developing detailed SOPs (standard operating procedures) that will clearly outline how to access the points within each hexagon (boat launch to use, tides to follow, tidal creeks with deep bottoms, etc.) so in the future it will be easier to access these points. We also had a few issues related to correct implementation of the field protocol. These were caught and addressed early in the survey period and we are revising our training protocols for the field season 2012 to avoid these issues in the future.

Activities Anticipated Next Quarter: For the 4th Qtr we will continue to organize and summarize the data we collected during the 2011 field season as well as reviewing the SOPs to identify possible efficiencies for the 2012 field season. We will be preparing for the 2012 field season by identifying potential housing for the field crews, submitting permit applications to conduct surveys on different lands, advertising for field crews, and maintaining contact with partners.

Expected End Date: 15 January 2015

Costs:

Funds Expended to Previous to this Report: \$21,292.04

Amount of RCN Funds Requested within this Report: \$21,292.04 

Total Approved Budgeted RCN Funds: \$76,301

Are you within the approved budget plan? Yes

Are you within approved budget categories? No, Travel & Supplies are overspent.

Signature: 

Date: 11/16/11

