

NORTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE GRANT 2012 PROGRESS REPORT

Quarter: (circle one)

2012 1st

2012 2nd

2012 3rd

2012 4th

Grant Number and Title: NALCC 2011 (11) Mapping Marine Birds NW Atlantic: Phase 1

Grant Receipt/Organization: NCSU

Grant Project Leader: Gardner

Were planned goals/objectives achieved last quarter? Yes

NALCC Conservation Need Addressed:

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

1. Develop models for estimation of sea bird distributions, particularly in regards to potential areas of aggregation
 - After conducting a nation-wide search, we hired a post-doc to carry out the work. Earvin Balderama received his phd from UCLA under the direction of one of the leading statisticians in the country. He has background in point process analyses and we hope to utilize this skill in creating new models for sea birds.
 - Planned Goal for this fall – build initial models of sea bird distributions
2. Work with Dr. Brian Kinlan to incorporate some broader temporal scale components of the Biogeography predictive models
 - Beth met with Brian in July to discuss current work and to share ideas about how to move forward
 - Planned Goal for this fall – schedule meetings with Brian to introduce him to Earvin and Brian Reich (co-PI) on this project
3. Determine statistically appropriate models for assessing risk
 - No progress has been made towards this goal directly.
 - Planned Goal for this fall – continue to consider the best ways to talk about risk. Schedule a meeting with the risk assessment specialist on NCSU campus.
 - Planned Goal for next year is to build a modeling framework to assess risk (first by defining what the risk is – species richness, species abundance, etc.)

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

We hired a post-doc, Earvin Balderama, to work on the project and we have collected initial data from the seabird database housed at Patuxent Wildlife Research Center. Earvin started on September 10th, we purchased a computer, set up the computing cluster in the statistics department, and he is working initial data exploration. We are looking at different ways to approach the problem including how to deal with spatial extremes and clustering of points in space. In addition to this, we have been exploring the use of a Bayesian versus frequentist framework for analysis. Earvin recently took two short courses at the American Statistical

Association's Environmental Section meeting on spatial analysis and Bayesian analysis to improve our understanding of the latest models, software, and applications. Beth has also had meetings with Brian Kinlan to promote our collaboration and it is expected that another meeting will be scheduled for later this fall.

We plan to begin building models in the next few weeks and have selected a few species to start with including the common loon and northern gannet. We expect to have some initial findings by the end of this calendar year. Determining the best method for assessing risk will not be considered until sometime next year. The project is currently on track to finish by Dec. 2013 as originally stated.

Difficulties Encountered:

-How to best consider the available data? Point information, summarized by transect? What is the most useful spatial resolution for modeling the data?

Activities Anticipated Next Quarter:

- Collect relevant covariate information
- Build initial models for selected species
- Consider multi-species models

Expected End Date: 12/31/2013

Costs:

Funds Expended to Previous to this Report:

Amount of NALCC Funds Requested within this Report: 6,757.13

Total Approved Budgeted NALCC Funds: 115,000.00

Are you within the approved budget plan? yes

Are you within approved budget categories? yes

Signature:

Date:

NORTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE GRANT 2012 PROGRESS REPORT

Quarter: (circle one)

2012 1st

2012 2nd

2012 3rd

2012 4th

Grant Number and Title: Sub-award Number 2011-13: MAPPING THE DISTRIBUTION, ABUNDANCE AND RISK ASSESSMENT OF MARINE BIRDS IN THE NORTHWEST ATLANTIC: PHASE 1: SUBPROJECT – SEABIRD PREDICTIVE MONITORING INTEGRATION

Grant Recipient/Organization: CONSOLIDATED SAFETY SERVICES, INC.

Grant Project Leader: Brian Kinlan, Ph.D.

Were planned goals/objectives achieved last quarter? YES

NALCC Conservation Need Addressed: This proposal addresses the following Northeast Regional Conservation Needs (NEAFWA): Priority Topic Area #1 Develop Regional Base Maps for Analyses of Northeast (NE) Species of Greatest Conservation Need (SGCN) Data and Priority Topic Area # 7 Identify and Assess Threats to NE SGCN.

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

This project has one deliverable: “Participation in project-related meetings, workshops, phone calls, and email communication”. This goal was met this quarter through Kinlan’s participation in email and phone conversations with other sub-award PI’s and a face-to-face meeting with sub-award PI Beth Gardner in Silver Spring on July 24, 2012.

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

This sub-award supports a small amount of Dr. Kinlan’s time and his travel expenses to participate in workshops, coordinate with other sub-award PIs, and make his predictive modeling results for the New York Bight and Mid-Atlantic available for analyses by the larger group. Following initial discussions among sub-award PI’s via email and phone in the first 2nd quarter of 2012, sub-award PI’s Brian Kinlan and Beth Gardner (NC State) met in Silver Spring on July 24. They discussed recent seabird modeling results and approaches and made plans for coordinated work once the NC State Postdoc is hired this Fall. In the future, these communications will continue, face-to-face meetings and workshops will be scheduled, and Kinlan will provide modeling results to other sub-award PI’s as requested. This project is expected to be completed by December 31, 2013.

Difficulties Encountered: None.

Activities Anticipated Next Quarter: Kinlan will continue discussions and interactions with other NALCC sub-award PI’s including Beth Gardner (NC State) and Richard Veit (CUNY-Staten Island), and will begin interacting with the Postdoc hired by Beth Gardner at NC State.

Expected End Date: December 31, 2013

Costs:

Funds Expended to Previous to this Report: \$624

Amount of NALCC Funds Requested within this Report: \$624

Total Approved Budgeted NALCC Funds: \$10,000

Are you within the approved budget plan? YES

Are you within approved budget categories? YES

Signature:

A handwritten signature in black ink that reads "Brian F. Kline". The signature is written in a cursive style with a long, sweeping underline.

Date: October 1, 2012

NORTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE GRANT 2012 PROGRESS REPORT

Quarter: (circle one) 2012 1st 2012 2nd 2012 3rd 2012 4th

Grant Number and Title: 2011-14 Best Darn Bird Map

Grant Receipt/Organization: Biodiversity Research Institute

Grant Project Leader: Andrew Gilbert

Were planned goals/objectives achieved last quarter? No. The project has just begun, little work has been accomplished thus far.

NALCC Conservation Need Addressed: The Best Darn Bird Map project will pull together existing information on marine bird distribution and abundance, including modeled distributions, vessel and aerial survey information, and data from individually marked birds, and create mapping products useful for planning uses of the marine environment, including sighting alternative energy projects.

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

1. Consult with project PI and USGS to produce model data appropriate for BDBM.

Actual - We reached out to project PI to discuss the project, but have still not yet heard back. We are awaiting further guidance.

2. Deliver seabird model input for BDBM

Actual – NOT STARTED

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

We reached out to project PI to discuss the project, but have not yet heard back. We have been working with USGS to get new seabird data added to the Atlantic Seabird Compendium Database. One dataset was processed and submitted for updating. Having the most current data possible in the database will result in the best maps possible. We have more datasets to work with USGS on and will reach out again to modelers to start determining the way that they need data to be processed for their work.

The plan is to continue to process and upload new data through the winter 2012 and work out a process this winter to aggregate data for modeling over the winter 2012/2013. This will require close coordination with modelers. The majority of our assistance should be completed by spring, with project reporting continuing through spring 2013 and projected completion data of summer 2013.

Difficulties Encountered:

The project is just getting started, no difficulties as of this time.

Activities Anticipated Next Quarter:

Continue to process and upload new data.

Expected End Date: Summer 2013

Costs:


Funds Expended to Previous to this Report: \$769

Amount of NALCC Funds Requested within this Report: \$96.13

Total Approved Budgeted NALCC Funds: \$9967

Are you within the approved budget plan? Yes

Are you within approved budget categories? Yes

Signature: 

Andrew Gilbert, Data Management Director, BRI

Date: 10/15/2012