

9-20-2016

Migratory Conectivity in the Canada Warbler (March 2015)

Len Rietsma
Plymouth State University

Follow this and additional works at: <http://digitalcommons.plymouth.edu/plymouthclusters>

Recommended Citation

Rietsma, Len, "Migratory Conectivity in the Canada Warbler (March 2015)" (2016). *Clusters*. 201.
<http://digitalcommons.plymouth.edu/plymouthclusters/201>

This Text is brought to you for free and open access by Digital Commons @ Plymouth State. It has been accepted for inclusion in Clusters by an authorized administrator of Digital Commons @ Plymouth State. For more information, please contact ajpearman@plymouth.edu, chwxson@plymouth.edu.

PSU Non-IC-Funded Project Profile Form

The intent of this form is to capture project information for both active and proposed projects associated with an Integrated Cluster (IC) which **do not require specific IC funding**.

Note that PSU has created a separate process for funding Integrated Cluster projects. For additional information on that process and the associated forms, review the collateral posted on the PSU site: <https://www.plymouth.edu/clusters/project-proposal-submission/>

Instructions for the PSU Non-IC-Funded Project Profile Form:

- ✓ Download this form to your computer

- ✓ Complete the form and save it on your computer; include the title of your project in the file name

- ✓ Forward the file via email to the IC Project Manager, Ross Humer at rhumer@plymouth.edu

- ✓ Project Profile will then be logged & forwarded to the appropriate IC Guide Team(s)

Instructions for the PSU Non-IC-Funded Project Profile Form: Please complete all of the elements of the following form in the spaces provided before saving and then submitting the document.

PSU Integrated Cluster Project Proposal Form

Title: Migratory connectivity in the Canada warbler

Project Status:

This is an active project which began: 3/12/2015

This is a proposed project which is expected to begin:

Project Leadership: (Identify Project Director/Manager or Co-Manager(s) Len Reitsma

Project Description: My graduate student and I are working with a host of collaborators deploying light-level loggers (geolocators) by harness onto Canada warblers during the breeding season in North America to record the timing and route of their fall migration and the location in South America where they spend the nonbreeding season. We deployed 17 in June 2015 and retrieved 6 (highest proportion of any working group). We deployed 30 more in May and June of 2017. Analyses are co-conducted by Amelie Roberto-Charron and my graduate student, Christian Burns. The collaborators include Erin Bayne and Anjolene Hunt of the University of Alberta, Keith Hobson of the University of Western Ontario, Kevin Kardynal and Junior Tremblay of Environment and Climate Change Canada, Amelie Roberto-Charron and Kevin Fraser of the University of Manitoba, Peter Marra and Michael Hallworth of the Smithsonian Migratory Bird Center and Sam Merker and Richard Chandler of the University of Georgia.

Project Goals and Outcomes:

- 1. Project Goals – Briefly identify and describe the objectives of this project** 1) determine of the migration route and timing of Canada warblers in the Fall of 2015 and 2016; 2) determine where populations across the breeding range spend the nonbreeding season
- 2. Student Learning Outcomes – Outline the expected student learning outcomes** This is a collaboration among many graduate students from multiple universities throughout North America and thus necessitates high degrees of coordination, data sharing, deployment scheduling, and will also involve coordinated manuscript-writing. Christian Burns is deriving great benefit from this collaboration.

Rationale and Impact:

Considering the questions below, please write your project rationale and impact statement.

Include how this project will further the Mission and Vision of PSU with respect to 1) fostering collaboration across disciplines; 2) addressing a relevant societal issue, and 3) establishing relationships with community partners, external institutions, companies, non-profits, schools, government agencies, etc. and 4). Making an impact

How does this proposed project advance the Integrated Cluster mission and vision? How does this project facilitate high impact teaching and learning, cross disciplinary collaboration, student engagement and partnership involvement, and real world problem exploration? What are the anticipated impacts of this project?

Is this project an extension of work already in progress, or an entirely new endeavor? Does it integrate with areas that team leaders are already teaching or is it an opportunity to delve into unfamiliar content or a bit of both?

Project Rationale and Impact Statement: The primary means by which this work promotes the mission of PSU is to demonstrate the caliber of science being conducted at PSU and the willingness and preparedness for PSU faculty to join in large collaboratives to research questions needing answers as quickly as possible. This species, the Canada warbler, is a Species of Special Conservation Need in our region (BCR 14) and is threatened in Canada. Thus, we need to know as much as possible about its annual cycle to wisely craft a conservation plan for the species population. The project thus makes it clear that PSU is involved in helping to solve real-world problems in coordination with others in respective areas of expertise. The reason I have been asked to be a part of this is because no one has done more intensive work on this species during the breeding season and the Canadians knew we would get high retrieval rates of any deployed geolocators, and that is indeed what happened the first cycle.

Project Team

PSU Project Participants (essential core team participants including faculty and staff)

Name	Position/ Title	Project Role	Discipline/ Specialty	Email
Len Reitsma	Professor of Ecology	PI for NH contingent	Avian ecology	leonr@plymouth.edu
Christian Burns	MS in Biology candidate	Graduate student	Avian ecology	caburns1@plymouth.edu

Non-PSU Project Participants (stakeholders; partners; academic institution; etc.)

Name	Organization	Project Role	Discipline/ Specialty	Email
Amelie Roberto-Charron	Graduate student at University of Manitoba	Lead organizer	Avian ecology	
Richard Chandler	Assistant Professor of Ecology	collaborator	Avian ecology	
Junior Tremblay	Ecologist with Environment Canada	collaborator	Avian ecology	For full list, see project description above.

Student Participant Profile (Identify the student population(s) to be engaged in the project. Identify if this has been or is planned to be incorporated into curricula)

Class/ Student Organization/ Individuals	Role in Project	Academic Level (Undergraduate or Graduate)	Academic Discipline	Total Student Population
Christian Burns	See above			

If this is planned to be incorporated into curricula, provide a description: I always share my research as relevant in Ecology, Conservation, Ornithology, Vertebrate Zoology, and Current Env'tl Issues

Project Funding

- This project requires no funding (*skip to IRB Compliance*)
- This project has/requires funding from other sources than the IC budget (*complete the following*)

Cost Category	Requested funds
SOURCES OF FUNDS	
o Grants	
o External Partners	
o Other	
<i>Total: Sources of Funding</i>	\$ -

Describe the status of funding requests or approvals:

Note that any projects requiring grant funding will need to comply with the RAC process.

IRB (Institutional Review Board) Compliance

IRB Compliance: <http://www.plymouth.edu/office/institutional-review-board/>

- This project DOES NOT require IRB compliance
- This project DOES require IRB compliance (*complete below*)

IRB Approval Status:

IRB Approval Date:

Project Management: Timeline and Milestones

Identify the timeline for the project including start, completion, and major project milestones. A closing report will be required as a part of the project funding process.

Project Start Date: 3/12/2015

Project Complete Date: 10/1/2017

Project Milestone	Milestone Description	Target Completion Date
Analyze data from first to second field season	Determine timing and locations of three populations of breeding Canada warblers (Alberta, Manitoba and NH)	12/1/2016
Analyze data from geolocators retrieved in June 2017	Determine the same for more breeding populations including the three above and also one each in Quebec and North Carolina	10/1/2017

Please identify any pre-project education or training for students, faculty, and staff that would be helpful for your project team to have in advance to begin work on a strong footing (e.g., skill training, concepts), and identify any training and education that you are willing to help provide during the preparatory period for the project team before team work formally begins.

Student Education/ Training Requirements: NA