

**ST153464**  
**NEW ENGLAND TRANSPORTATION CONSORTIUM**  
**QUARTERLY PROJECT PROGRESS REPORT**

**A. PROJECT NUMBER AND TITLE:**

NETC 14-2: Investigation of Northern Long-Eared Bat Roosting Sites on Bridges

**B. PRINCIPAL INVESTIGATOR(s) & UNIVERSITY(s):**

Scott A. Civjan (PI) – University of Massachusetts Amherst  
Elizabeth Dumont (Co-PI) – University of Massachusetts Amherst  
Alyssa Bennett (External Research Associate) – VT Fish and Wildlife department

**C. WEB SITE ADDRESS** (*If one exists*):

**D. START DATE** (*Per NETC Agreement*): **February 01, 2015**

**Notice to Proceed received May 07, 2015**

**E. END DATE:** **April 02, 2017\***

Project Technical Committee approved a no cost extension to accommodate the Notice to Proceed date.

**F. ANTICIPATED COMPLETION DATE:** **April 02, 2017**

**G. PROJECT OBJECTIVES:**

The main objective of the proposed research project is to develop a screening tool and to demonstrate its accuracy in determining the presence of NLEB roosting in New England bridges. Additional information will be collected and disseminated related to preferred structural types for bat roosting, New England bat population distributions and evaluation of existing public data already collected by State Fish and Wildlife Departments and Transportation Agencies throughout New England.

**H. REPORT PERIOD:** July 01, 2015 – Sept 30, 2015

**I. ACCOMPLISHMENTS THIS PERIOD:**

- Acoustic monitoring equipment and software received
- Infra-red software received
- Miscellaneous supplies purchased for field work
- GIS software used to integrate maps with National Bridge Inventory to determine routes for visual screening and instrumentation
- Completed Rapid Visual Screening of 182 bridges in VT, NH, RI, ME and MA to evaluate for signs of roosting to narrow down instrumented structures and evaluate structural characteristics of regional bridges and likelihood of roosting
- Selected 15 bridges for monitoring in Summer 2015
- Acoustic monitoring of 15 bridges during maternity roosting season
- Acoustic monitoring of 15 bridges during post-maternity roosting season
- Preliminary evaluation of thermal imaging camera and data from one bridge
- Initial screening of data
- Initial reporting of bridge characteristics including signs of structural causes of staining and signs of possible bat roosting

**J. PROBLEMS ENCOUNTERED (If any):**

- Acoustic monitoring equipment was on backorder, most received in late June.
- External battery cables delayed to end of summer. Order cancelled and internal batteries used.
- Memory cards stored 1 to 2 nights of call data. Larger cards will be ordered for Summer 2016 pending approval by Technical Committee.

**K. TECHNOLOGY TRANSFER ACTIVITIES:**

Paper submitted and accepted to Transportation Research Board Annual Meeting 2016.  
 Dissemination of preliminary field work activities to Fisheries and Wildlife and DOT personnel as well as other researchers nationally through personal, phone and email conversations.

**L. STATUS BY TASK:**

Task	% Complete
Task 1: Knowledge Summary including Literature Search	95%
Task 2: Regional Habitat Requirements	95%
Task 3: Create Standard Protocol and Survey Inspection Personnel	20%
Task 4: Protocol Survey of Bridges, Implementation and Field Observations	
4.1 Protocol Survey	60%
4.2 Implementation and Field Observations	30%
Task 5: Final Report	5%

**M. PERCENT COMPLETION OF TOTAL PROJECT: 35 %**

**N. ACTIVITIES PLANNED FOR NEXT QUARTER:**

- Analysis of data from Summer 2015
- Complete draft of background information for final report
- Technical Committee meeting on October 20, 2015
- Purchase borescope and take trial readings/observations at selected bridges
- Contact regional personnel for updated Summer 2015 data related to NLEB
- Develop monitoring plan for Summer 2016 for distribution to Technical Committee
- Prepare presentation for TRB Annual Meeting

**O. FINANCIAL STATUS:**

As of: Sept 30, 2015

**Total Project Budget:** \$ 205,554.00

**Total Expenditures:** \$ 54,653.88 (estimated)

**Note: This report should not require more than 2-3 pages & should be e-mailed to the NETC Coordinator so as to arrive no later than three (3) working days after the end of each calendar quarter.**