

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

- A. PROJECT NUMBER AND TITLE:** NETC 21-3: Seed Production for NE Roadsides
- B. PRINCIPAL INVESTIGATOR(S) & UNIVERSITY(S):** J. Kuzovkina, University of Connecticut
- C. WEB SITE ADDRESS (If one exists):** NA
- D. START DATE (Per NETC Agreement):** May 18, 2022
- E. END DATE (Per NETC Agreement):** June 30, 2024

F. ANTICIPATED COMPLETION DATE: June 30, 2024

*If different from the END DATE in paragraph E., the reason must be given. It is the responsibility of the Principal Investigator to insure that the project, including review of the draft report by the Project Technical Committee and the printing of the Final Report, is completed prior to the Agreement End Date. Costs incurred after the Agreement End Date cannot be reimbursed. **Requests for extensions of the Agreement End Date must contain the reasons for the request and be submitted so as to arrive in the Coordinator's office at least 90 days prior to the Agreement End Date.***

G. PROJECT OBJECTIVES: The objective of this project is to increase native plantings and pollinator habitats with seed from local ecotypes along roadsides throughout New England. The proposed work is designed: 1) to promote ecotypic seed production for effective establishment of native plants on roadsides in New England and 2) to expand management practices that result in the proliferation of existing native plant communities along the roadsides in New England.

H. REPORT PERIOD: January 1, 2023 - March 31, 2023

I. ACCOMPLISHMENTS THIS PERIOD:

Task 1: Current knowledge and practices (seed zones, seed mixes, BMP etc.)

- Compiled a draft of the Task 1 report (34 pages) and submitted to the TC on March 1, 2023. Subtasks 1-4. Subtasks 5 is under development.

Attended the Connecticut Lands Conservation Council interacting with various groups regarding this project (Connecticut Botanical Society, Conservation Partnerships and The Green Corridor Initiatives). Wesleyan University, CT, March 25, 2023. Involved the collective ecological expertise of the local botanists to define various soil aspects important for native habitats - information will be included into the BMP.

Task 2: Investigate local seed production opportunities

Northeast Seed Network activities related to the ecotypic seed production:

- Review and discuss the network's vision, values, direction, and leadership. January 31, 2023.
- Refined and submitted the lists of native species for the roadsides to the Northeast Species List Development Sub-Working Group for the distribution to the producers/farmers to initiate the ecotypic seed production. Met with the group on February 9, February 17, March 3 and March 24, 2023 to discuss the feasibility of these species for the production in the Northeast region.

- Contributed to the panel discussion and presentation by Eve Allen at the National Native Seed Conference March 27-30, 2023 in Washington DC.

Task 3: Establish and monitor roadside demonstration plots for training and research purposes.

During January 2023 conducted discussions with CT, MA, VT DOTs about the site selection. The sites located along I-91 were identified during February 2023:

CT: Southbound Exit 38

MA: Southbound Exit 27 in Northampton, at Allen Road and adjacent to Route 5

VT: Wheelock, Vermont – median on I-91

Visited the 3 potential sites in MA with Rob Natario from Mass DOT and selected one for the demonstration site (February 24, 2023).

Visited the site in CT (March 15, 2023) for initial evaluation.

Discussed the plan and confirmed sites with TC during meeting on March 7, 2023.

Planning the establishment of the demonstration sites.

The following consultations were conducted:

- Consulted with the weed scientist Randy Prostack at the University of Massachusetts regarding the weed control and herbicide license at the MA demonstration site. Dr. Prostack indicated the need to be licensed for the ROWa (Category 40).
- David Roach of the All Habitat Services LLC: recommended that we apply a 3/8” layer of ProGanics Biotic Soil Media, an advanced Engineered Soil Media to the VT site before we broadcast seed it.
- Peter Pecone: reserved the Truax seed drill for the establishment of the CT site.
- Mark Fiele, Ernst Conservation to confirm seed mixes.
- Evan Abramson, Landscape Interactions, MA, discussed the installation protocols. March 2023.

J. PROBLEMS ENCOUNTERED (If any):

We are still searching for the company with Category 40 ROW pesticide license to assist with the herbicide treatment of the MA site, as per Terri Mitchell’s request.

Terri Mitchell provided a list, and we contacted all eight companies that have been approved by MassDOT Landscape Design Section for Invasive Plant Management Strategy to inquire about herbicide treatments with Category 40 license.

One company - Ecological Land Management - replied that they conducts herbicide treatment under the Core license. Another company from this list - SWCA Environmental Consultants from Amherst - did not know what a Category 40 license and asked us to clarify what does it mean. There was no response the rest of the companies.

Preparation of the Task 1, **Subtask 5: Summarize existing seeding, establishment, and management practices to promote pollinator habitats on New England roadsides** is under development and a draft will be provided by June 1; the final version will be completed by the end of the project.

The development and formulation of the BMP will be based on existing knowledge and practices. It will be revised as we are gaining throughout the length of the project, including the establishment of the demonstration sites. As we proceed through the project, we are learning many details through practice, which

provide additional information for the BMP. When uncertainties arise, they will be clarified through discussions with various specialists, analyzing and aggregating data from other regions of the country. Already written Subtask 1, 2, 3, 4 are included into the BMP.

K. TECHNOLOGY TRANSFER ACTIVITIES: *List any reports, papers, presentations published/presented during the report period or anticipated for the next quarter.* NA

- The Conservation. March 28, 2023. Kuzovkina and Campanelli. “A shortage of native seeds is slowing land restoration across the US, which is crucial for tackling climate change and extinctions”
<https://theconversation.com/a-shortage-of-native-seeds-is-slowing-land-restoration-across-the-us-which-is-crucial-for-tackling-climate-change-and-extinctions-199049>
- Hartford Currant. February 26, 2023 “UConn plant scientists imagine CT’s I-91 as one long pollinator garden. Here’s why and what it would mean for butterflies and people.”
<https://www.courant.com/news/connecticut/hc-news-uconn-wildflowers-roadside-i-91-20230225-32wcm3e75rb2ba5tosenxclile-story.html>
- UConn Today. January 20, 2023. “The Road(side) to a Thriving Native Ecosystem”
<https://today.uconn.edu/2023/01/the-roadside-to-a-thriving-native-ecosystem/>

L. STATUS BY TASK: *Show Work Task Number, description and % complete for each task including those completed, those underway, and those not started.*

Task1: Current knowledge and practices 60%

Task 2: Investigate local seed production opportunities 50%

Task 3: Establish and monitor roadside demonstration plots for training and research purposes 20%

Task 4: Draft Final Report and Technology Transfer Strategy and Toolbox 25%

Task 5: Deliverables: Final Report 0%

M. PERCENT COMPLETION OF TOTAL PROJECT: 40 %

N. ACTIVITIES PLANNED FOR NEXT QUARTER:

- Address TC comments on deliverables and finalize both Task 1 summary report and BMP manual
- Preparation for the establishment of the demonstration sites for the roadsides in NE; finding companies to help with establishment in MA and VT.
- Continue the development of Task 1, Subtasks 5. Provide a draft to the TC by June 1.

O. FINANCIAL STATUS:

As of: April 1, 2023

Total Project Budget: \$ 200,000

Total Expenditures: \$ 70,000

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 ten (10) working days after the end of each calendar quarter.