# ECO AmeriCorps

2024-2025



## Field Ecology Technician (Plant-Pollinator Interactions)

Vermont Center for Ecostudies, 20 Palmer Ct, White River Junction, VT 05001

The Vermont Center for Ecostudies (VCE) advances wildlife conservation in the northeastern US and across the Americas through scientific research and community engagement. Our work involves researching and monitoring biodiversity in a variety of ecosystems and delivering results to inform management and policy decisions. We engage thousands of volunteers on a wide range of projects through data collection and monitoring.

Position Supervisor: Desiree L. Narango, Ph.D., Conservation Biologist

At Vermont Center for Ecostudies (VCE), I (Desiree) run an independent research program focused on biodiversity conservation and habitat restoration in the face of global change. I primarily study plants, insects, and birds with a particular focus on multi-trophic interactions, habitat relationships of wildlife with specialized life histories, and mechanistic approaches to applied ecology.

#### The Role:

The AmeriCorps member will assist PI Narango with the organization and implementation of the Pollinator Interactions on Plants (PIP) Project. Duties will primarily include: 1) Engaging >120 community scientists with documenting plant-pollinator interactions in yards, gardens, and other managed green spaces through our iNaturalist project by providing educational materials, outreach, and data management, and 2) Assisting with the implementation (Aug-Oct 2024) and monitoring (May-Aug 2025) of eight experimental garden plots in community agricultural spaces in the Upper Valley by coordinating with plot hosts, planting ~500 native plant plugs, collecting plant and insect data, pinning and organizing specimens, and writing reports and summaries for land owners.

This position will help us to scale up our PIP project which has grown exponentially since it's implementation in Feb 2023. Now at >34k observations, 120 members, and several subprojects across VT, CT and NY, this is an ideal time to bring on a full-time AmeriCorps member to assist with

organization, outreach, and data collection. All responsibilities of the AmeriCorps member will directly contribute to an ongoing collaboration between PI Narango and the Native Plant Trust to develop an interactive plant selection tool for biodiversity conservation in the Northeast. The assistance of a dedicated full-time AmeriCorps member will increase our capacity to bring this tool to fruition by 2025.

The AmeriCorps member will use the following tools to record their activity: 1) Using iNaturalist and our social media outlets (blogs, Instagram, etc.) to interact with community science participants, 2) using excel and a SQL database to enter, organize and query datasets, 3) using plant and insect monitoring techniques (e.g., nectar collection, Pollard walks, systematic surveys) to collect data on plant health and pollinator visitation in experimental gardens, 4) Using museum curation techniques for insect specimen archiving. At the end of the term, the AmeriCorps member will have developed advanced skills in data management, outreach, and pollinator research techniques.

In just one year, the PIP project has grown from a small idea to a vast project with >34k observations, 120 members and several subprojects. In order to support this rapid growth, we need a dedicated AmeriCorps member to assist PI Narango with data collection and management, outreach and organization. In addition, In winter 2023-2024, PI Narango has worked with the Native Plant Trust to design a new plant provenance experiment to be implemented in late summer 2024. The Americorps member will assist PI Narango with building eight experimental garden plots and planting ~500 native plant plugs with help from community volunteers.

#### **Essential Functions:**

- Assist with planting and maintenance of experimental garden plots (including watering, weeding, general maintenance)
- Monitor plant health and plant-pollinator interactions using standardized scientific techniques (including timed surveys, insect sampling with sweep nets, nectar and pollen collection)
- Communicate with land owners and community scientists about project progress and updates
- Use spreadsheets and databases to enter data and perform queries
- Develop outreach, educational materials and provide training and engagement to community scientists via the iNaturalist platform and VCE blog posts and social media

# <u>Secondary Functions:</u>

- Annotate iNaturalist observations for plant-pollinator interaction data
- Assist PI Narango with data analysis, writing scientific papers, and developing and interactive plant selection tool
- Assist other VCE scientists with data collection as needs arise and time allows (e.g., loon monitoring, bird banding, tick surveys, vernal pool surveys)

#### <u>Desired Qualifications:</u>

- B.S. in ecology, or similar field (completed or in progress)
- Experience or strong enthusiasm for monitoring biodiversity, conducting field work, and plant & insect ecology and identification
- Ability to adhere to specific data collection and specimen curation protocols
- Strong organizational skills, including ability to complete multiple tasks and keep track of equipment and samples
- Ability to work well independently and as part of a team

- Strong verbal and written communication skills
- Comfort with interacting with the public
- Experience with Microsoft products and Google apps (Docs, Sheets, Forms, etc.)
- Commitment to conservation science and community engagement as vehicles for positive environmental change
- A valid driver's license and access to a vehicle for transportation to field sites

#### <u>DEIJ</u>

VCE is wholly dedicated to supporting and growing DEIJ initiatives through the following activities. First, since 2023 we have supported the 'Future Ecologist" internship program, a position dedicated for supporting underrepresented communities in ecology. Second, we have an active DEI committee that meets regularly to implement our DEIJ action plans, and address issues and concerns as they arise. For example, we have made significant changes in our hiring procedures to ensure a diverse applicant pool, and inclusive onboarding procedures. Next, VCE has been actively involved in a regional DEI training program with other non-profits in the area. Lastly, we regularly bring in DEIJ experts for training workshops and exercises (e.g., addressing implicit bias in the workplace) of which the AmeriCorps member will be welcomed to join. As a organization we explicitly state our dedication to DEIJ in all our activities, and are continually working to learn and improve our actions, partnerships, and projects to ensure diverse, equitable, and inclusive participation by communities across the region.

## Networking

Yes, PI Narango regularly collaborates with colleagues at the Native Plant Trust, MA/VT/NH/CT Audubon, Aspetuck Land Trust, and numerous universities in the area (UVM, Dartmouth, UMass Amherst, and more). ECO members are also invited to meet with and shadow other members of the VCE science team on projects that interest them. Thus, the ECO member will have opportunities to network across diverse career opportunities in ecological science.

#### Misc.

PI Narango has experience mentoring >75 undergraduates, postgraduates, and graduate students in field ecology training. These activities include training in field techniques, serving on senior and graduate theses, supervising NSF REU student projects and more. PI Narango has also taken several workshops to learn how to inclusively mentor and better support diverse mentees. The activities the ECO member will assist with (the PIP project and experimental garden plots) are a core part of Narango's research program for 2024-2025 and thus ample time will be given to supervise the ECO member in their activities.

We will provide the following items to assist the member with their monitoring work: plant and insect sampling equipment (net, vials, etc.), digital camera, binoculars, compass, and GPS. For garden planting, we will provide all relevant tools and gear for safe work (knee pads, first aid kit, clippers, etc.). We will also provide relevant safety gear including reflective vests, car magnets, name tag, and VCE-branded clothing to indicate to the public they are working with VCE on active scientific work. We will provide the member with outdoor safety information and training during their onboarding. A reliable vehicle is preferred.

The position will be approximately 50% outside and 50% based in our office in White River Junction. Outside field work will occur in September 2024 and between May-August 2025. Other months of the year will be spent conducting office- and lab-based work entering and managing data, communicating with participants, developing educational materials and assisting with insect specimen sorting, pinning, and identification.

Because VCE regularly brings on summer seasonal interns, we have a series of informational packets to help folks new to VT and the Upper Valley find community, peer and support networks, service needs, and fun places to visit. We also regularly have VCE sponsored fun activities to build a sense of community among our employees. I am also new to VT so I am more than willing to help the ECO member find the connections they need, in part because I'm looking for them as well!

## Minimum Qualifications:

- Be a US citizen, a national, or legal permanent resident alien of the U.S.;
- Be at least 18 years of age upon entering the Pre-Service Orientation (there is no upper age limit);
- Be a high school graduate or have a GED certificate or be willing to work towards their GED as
  part of their service-year successful completion requirement. A member cannot have dropped
  out of high school to join AmeriCorps. If a member has a documented medical
  reason/professional opinion why they cannot finish high school, they might be eligible; call in this
  case;
- Has not been convicted of murder or sexual assault and is willing to undergo a National Service Criminal History Check;
- Must submit to Agency of Human Services checks, i.e. Adult Abuse and Child Abuse Prevention;
- Be committed to the ECO AmeriCorps program, and its ethic of service and personal and professional development of its participants;
- Have the ability and enthusiasm to drive to, attend, and participate in required trainings and events, and be prepared to drive up to 2-3 hours each way

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Position begins September 17th, 2024 and ends August 15th, 2025

The State of Vermont is an Equal Opportunity Employer. Positions are open to all applicants without regard to race, color, national origin, ethnicity, disability, age, gender, gender identity, sexual orientation, political affiliation, veteran's status, religion or creed.

