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Respondent

14

Ajna Siegel

11:08

Time to complete

Applicant Info

The person submitting this form will be considered the primary contact for this proposal and should check their email for updates.

Group members and affiliation *

Please list all individuals who are submitting this proposal. For each person include their role in the proposal and affiliation. For students include their year, major and college. For faculty and staff include their title and department/college. You may also include stakeholders you have consulted with.

Ajna Siegel, 5th year undergraduate, Agroecology; CALS, Music; CAS.

Faculty/Staff Sponsor (name, email and position)

Required for student projects.

Dr. Mark Starrett, mark.starrett@uvm.edu, Associate Professor of Horticulture, Agriculture, Landscape & Environment

Proposal

Consider the following when developing your proposal:

- Explain what your project will be and how it meets the criteria of the Sustainable Campus Fund.
- If your project explicitly addresses the intersection of social justice and the environment, please highlight this.
- Describe what you plan to do during this project and your qualifications for completing this work.
- Explain how the work will benefit or involve members of the university community, especially students. If you can, demonstrate campus support for your idea.

Title *

Underplanting the ash trees in the University Heights circle with pollinator-friendly, pest-resistant trees

Summary *

This field cannot accept a response over 4000 characters (including spaces) which is about 700 words and sufficient to summarize most proposal ideas. If more explanation is needed you can upload your proposal summary as an attachment in the final question of this form and write "see upload" in the field below.

The Emerald Ash Borer (EAB) is an invasive beetle that presents great danger to ash trees in the United States. Currently the circle in front of the University Heights residential halls has numerous ash trees planted throughout the entire area. In a few years, those trees will begin to die due to the EAB. The goal is to underplant the existing ash trees with pollinator-friendly, pest-resistant trees, meaning we will plant a different tree species in the space underneath the existing ash trees. This way there will be established trees once the EAB reaches this area so that when the ash trees are removed, these non-susceptible trees will be already growing. As an Agroecology and Landscape Design student I have been exposed to the impact of invasive species on ecosystems. That coupled with my design course work has made me passionate about how design can have a positive impact on the environment. Through several landscape design courses, a course in woody landscape plants, and with advice from Dr. Starrett, I am qualified to make these tree selections that will provide a beautiful and ecologically sound landscape for students to enjoy.

The primary replacement trees we will plant are two different cultivars of Freeman maples: 'Firefall' and 'Sienna Glenn'. 'Firefall' has bright red fall foliage and 'Sienna Glenn' has an orange-yellow foliage in fall. These maple trees were chosen because the existing green ash and white ash trees have yellow and red fall foliage, respectively. Additionally, the habit of growth is similar between both maple trees and that of the existing ash trees. This will keep a similar feeling to the space and align with the original landscape architect's design. Freeman maples are a naturally occurring hybrid, which are a cross of both the native red maples and native silver maples, here in Vermont.

Outside of the University Heights circle there are several other ash trees that we believe should be replaced with more unique trees that will help enhance the diversity of the plants in this area. The additional trees include: red buckeye, magnolia 'Butterflies', and native white oaks.

Once the trees arrive in April 2025, Dr. Starrett and I will host a tree planting workshop where we will provide pizza and students will learn how to properly plant trees. We will also have UVM alumnus, VJ Comai, who is the Burlington city arborist, provide us with a demonstration on tree planting and staking. In preparation for the tree planting event, we will have "BAB Excavators" dig all of the holes with an excavator prior to the workshop. This will significantly decrease the required amount of work by volunteers and allow us to plant as many trees as possible during the workshop. If there are any extra trees that do not get planted at the initial planting event, those trees will be planted by Dr. Starrett, his 8 work-study students, Vermont Master Gardener volunteers, UVM Horticulture Club members and me. The trees will all be staked for support and protection, and each will have a "Treegator" plastic irrigation bag attached at the base so that UVM Grounds can provide regular watering over the course of the summer (2025). Grounds believes this tree planting is an important initiative and is why they are willing to provide their support. Once the EAB is detected, Grounds will be responsible for removing the existing ash trees.

The greatest benefit to preemptively getting new trees established is so students will never have to go through a period without trees in this area of campus. There are very few trees in the University Heights oval that are not ash trees. Trees provide shade, places to hammock, protection from the elements, and an aesthetic landscape to enjoy. It is not only students that would have to go without trees but wildlife, such as birds, bees, and numerous pollinator species. Over time, these new trees will become features of the UVM landscape.

Timeline *

This should include several major milestones.

Fall: Order trees through Branch Out Burlington from Bailey Nurseries (wholesale)
Pre-April: Dig Safe will survey the area for underground utilities.
Early April: Trees will be delivered to the UVM Horticulture Research and Extension Center
Early April: Dr. Mark Starrett and I will mark where the holes will be dug.
Middle April: Holes are dug by BAB Excavators (UVM's preferred vendor)
Middle April: Tree planting/staking workshop conducted by VJ Comai and Dr. Mark Starrett
Middle April: Any trees not planted at the initial event will be planted by others as noted above
Post-Planting: Grounds will water the trees during the summer 2025

Budget

Justify your budget and make sure equipment isn't available to loan or borrow before requesting it.

For wages use the current Student Employment Office compensation guidelines when proposing a wage rate for student employees.

- Find rates effective May 2023 here: [https://www.uvm.edu/sites/default/files/UVM-Student-Employment-Office/Supervisor%20Tool%20Kit/Paylevels Effective May 13 2023 with Provosts Memo.pdf](https://www.uvm.edu/sites/default/files/UVM-Student-Employment-Office/Supervisor%20Tool%20Kit/Paylevels%20Effective%20May%2013%202023%20with%20Provosts%20Memo.pdf)
- Also calculate and add the appropriate benefit rate based on employee type. Find current rates here: https://www.uvm.edu/sites/default/files/Division-of-Finance/cost_accounting/benefit_rates.pdf

Itemized Budget *

Example:

\$12,500 - Equipment: Water flow meter, water pump, canister filter housing, particulate filter housing, UV filter

\$2,000 - Consumables: Water sampling supplies (bottles, sample tubes, filters), PPE, PVC, sealant, filter medium

\$1,211 - Student wages: Student lab coordination/project support (\$15/hr) for 15 weeks at 5 hrs/wk x 1 undergraduate student = 75 hours with 7.6% benefit rate

~\$4,000 for 60 trees (50 Freeman maples, 3 red buckeye, 4 white oaks, 3 'Butterflies' magnolias), includes shipping
~\$5000 for BAB to excavate 60 holes in preparation for tree planting
~\$1,320 for Treegator irrigation bags, includes shipping
~\$600 for 2" x 2" x 72" wooden tree stakes (3 stakes per tree), includes shipping
~\$120 for nylon tree straps for staking (3 straps per tree), includes shipping
~\$120 for 10 Costco pizzas
~\$404 for wages for myself. \$15 an hour rate based on UVM student employment categories for 25 hours of work plus \$29 for benefit rate.

Items to be borrowed/provided from/by Dr. Starrett and UVM Grounds includes: sledge hammers, shovels, twine for staking, and mulch

Total funding request *

11564

The value must be a number

Budget Explanation

If necessary, use this section to further explain your budget.

Supplemental Information

Upload any additional information you'd like to include

How did you hear about the SCF?

Through a friend.