*Please submit this completed application and any relevant supporting documentation by the deadline listed on the SSC website to* [*Sustainability-Committee@Illinois.edu*](mailto:Sustainability-Committee@Illinois.edu)*.The Working Group Chairs will be in contact with you regarding any questions about the application. If you have any questions about the application process, please contact the SSC at* [*Sustainability-Committee@Illinois.edu*](mailto:Sustainability-Committee@Illinois.edu)*.*

# General Information

**Project Name:** Enhancing Learning and Volunteer Opportunities in the Southern Arboretum Woodlands

**Total Amount Requested from SSC:** $40,000 (phase 1)

**Project Topic Area(s):** Energy Education Food & Waste

Land Water Transportation

# Contact Information

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**Project Team**

|  |  |  |
| --- | --- | --- |
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# Project Information

Please provide a brief background of the project, the goals, and the desired outcomes:

The SSC has provided key financial support that is helping transform the 22 acre Southern Arboretum Woodlands (SAW) from a neglected research plantation into area that is becoming more ecologically diverse, accessible and aesthetically attractive. During 2016 and 2017 the SSC funded a project for broad scale removal of the previously impenetrable honeysuckle and other invasive species that dominated the understory of the SAW. Special effort was made to remove invasive plants along the edges of the woods and roadsides. Native woodland wildflowers were added to the east edge of the woods and an area along Lincoln Avenue will be seeded before spring 2018. Smaller plants like garlic mustard will be targeted for eradication this spring in the more central parts of the woods. Although initial eradication of honey suckle has been accomplished, the need for ongoing suppression (via cutting and highly selective spraying) of resprouting honeysuckle and other invasive plants, will persist indefinetly.

The goals and desired outcomes of the next phase of the project are:

1. To continue the efforts towards suppression of invasive plants and establishment of native plants in the understory of the SAW. This will build a more diverse ecological community and improve its ecosystem sevices.

2. Enhance opportunities for students and community volunteers to transform the SAW into a campus and community resource. This will build a collective and sustainable ethic of engagement in natural resource management.

3. Establish a landscape that serves as an outdoor laboratory for learning and outreach across a broad range of disciplines and interests. The proximity of the SAW-laboratory to campus will provide a convenient and distinctive location for enriching ‘hands-on’ learning and exploration for students.

Please provide a brief summary of how students will be involved in the project:

This project is part of a multi-year effort to bring more native plantings to campus. Student volunteers in the Red Bison student organization have regular work days at this site and others around campus. Other organizations such as Alternate Seasonal Break participate once or twice a year. During 2017 about 10 students showed up for scheduled work days. We plan to continue these workdays indefinetly. Additionally several students are hired on the project as interns to keep up with the regular needs of the plantings and gain experience in natural resource management. Arboretum summer interns also contribute to these activities in the SAW. A number of classes visit the sites to learn about ecological diversity. Several research projects are using the SAW and new projects involving insects and birds are underway and other projects are planned.

See additional comments – below.

Please provide a brief summary of the project timeline:

Major work in the SAW involving the removal of large invasive honeysuckle and other invasive plants has been accomplished. Smaller plants like garlic mustard and resprouting invasive shrubs will be removed by hand or selective herbicide application. This will continue through 2018 and beyond. This site was previously a tree research area where seedlings were planted close together and are now too dense. During 2018 trees in the woods will be thinned to allow for growth and to open the canopy. Native flowering plants, shrubs and some trees will be added this year with an emphasis on those that are beneficial to birds and pollinators. Species lists have been developed in consultation with campus experts that are targeted for enhancing bird and insect habitat and food resources. Discussions are also underway to establish habitat modifications that improve the area for small mammals. These efforts towards habitat/species diversification will continue as an iterative research/learning process. We anticipate a further request for 2019 funding based on a critical evalution of outomes achieved under the 3 goals outlined above.

Additional comments

Progress towards the broad vision of transforming the SAW into a ecologically diverse asset for campus and beyond are being systematically accomplished. Classes in avian biology and plant ecology used the SAW for field investigations last Fall semester. In addition, four soil pits were contructed in the SAW and nearby, and used by three different classes last Fall semester. The soil pit project is a good example of leveraging of SSC funding. This project ($17.5k) is funded by the College of ACES, the Illinois Natural History Survey and the US Dept. Agricultural-Natural Resources and Conservation Agency. Funding covered the costs of pit excavation and will further provide for secure fencing around the pits and signage that will include acknowledgement of SSC funding in the collective effort towards establishement of the outdoor laboratory.

A large number of community volunteers have helped with the project including a Boy Scout Eagle Project and members of the Master Naturalist program. Master Naturalists even provided rides for Red Bison students to get their herbicide trainging at the Forest Preserve District so they can help in the SAW.

Aroretum resources are specifically devoted to on-going management of the SAW. A mechanised chipper was purchased for processing woody debris and an articulating machine (Avant loader) that uses multiple attachments (e.g., backhoe, buckets, forks) has just been purchased. This equipment and the expertise of Arboretum staff is invaluable for on-going management which is used to augment volunteer efforts.

To the extent feasible, efforts will be made to obtain native seeds, shrubs and saplings either at no- or reduced-cost.