2013 Campus Sustainability Fund Proposal

Paul Smith's VIC Sugar House/woodland education and interpretive building

Project leader- Brian McDonnell

Co-participant- Sean Frantz

Total amount of money requesting-\$6,000

Project Narrative

Project Goals and Supporting Objectives

The goal of the sugar house/woodland education and interpretive building is to provide a facility to continue operating our community maple sugaring project with the Northern New York Maple Project (NNMP) and the Wild Center. The VIC's role as a participant in the grant is to serve as a demonstration site for community outreach and to increase community involvement with backyard maple sugaring and education in the Adirondacks. This project is being developed in collaboration with the existing Paul Smith's College Sugar Bush, Cornell Uihlein Sugar Maple Research and Extension Field Station and The Wild Center.

Project Justification and Relevance

We will build a facility where maple syrup can be made, with space available for instructional sessions on the aspects of maple sugaring. The building will also provide us with storage for our maple sugaring equipment. In the off season, it will serve as a classroom for educational programs involving an array of woodland education on subjects such as dendrology and woodland management for the homeowner. The small-scale sugar bush at the VIC is intended to provide a model for what a small woodlot owner/manager could economically produce from their own backyard. Our demonstration site incorporates a tubing system and traditional bucket collection set-up.

The relevance of this project toward campus sustainability is to capture the sugar maple asset that exists on the VIC property. The designated site was managed by Professor Robert Brhel as a student, and is primarily made up of sugar maple, yellow birch and beech. The location provides an optimal site to continue current research on prolonging the sugaring season and expanding the resource by tapping birch trees as well as the traditional sugar maple.

The project will provide another opportunity for year-round revenue generation for the VIC. It will also continue its current maple sugaring project, provide a work study position for one or more students who have successfully completed Maple Sap and Syrup class, and provide a demonstration site for the public on a unique sustainable crop. Public engagement will be encouraged in both demonstration and educational projects.

Approach and Methodology

Our plan to meet this objective is to utilize the NNYM Project grant to obtain all the equipment for a functional maple sugaring operation. To meet the college's match under this grant, we need a permanent facility dedicated to maple sugaring and woodland education. Our hope is that the Campus Sustainability Fund will partially support this goal by providing funding for site preparation and construction. Lumber for the facility will be provided from the campus sawmill, so funds will be needed to pay for construction and materials as well as some basic furnishings.

To raise the additional funds necessary this season to help with establishment costs, we plan to offer interpretive programs, our Adopt-A-Maple Program and the sale of maple syrup. The whole operation will be overseen by Brian McDonnell with assistance from Maple Intern, Sean Frantz, and work study students, Tom Manitta and Charlie Killian.

Expected Products and Outcomes

The expected outcome from this project is a genuine maple sugaring facility designed to provide an educational experience for students and the public on backyard sugaring as well as woodland knowledge and management. Another product would obviously be the sale of maple syrup and maple products created by VIC interns and work study students utilizing skills learned in the Maple Sap and Syrup class.

In the NNYM Project grant, the VIC will serve as a hub for syrup production, accepting sap from local collectors, processing it and returning shares of the syrup produced. This is intended to stimulate greater interest in shoulder-season agro-forestry.

Success will be measured by the amount of syrup made and the number of community members involved in the project and educational programs.

Budget

Item	Approximate Cost
7 cubic yards of concrete	\$ 700.00 (estimate)
Labor for concrete installation	\$ 300.00 (approximate)
Hardware (hinges, door knobs, etc)	\$ 300.00
Roofing screws, 1.5 inches	\$ 27.50 (Curtis Lumber) \$13.75/bag 2 bags of 500
Roofing screws 2inch screws	\$ 16.45/bag (Curtis Lumber) 1 bag
Rebar	\$ 338.40 (Curtis Lumber) \$8.46/rod 40 20ft
	rebar rods
Ridge cap for roof and cupola	\$ 126.15 (Curtis Lumber) \$25.23/ section 5
	10ft sections
Galvanized screws	\$ 108.75 50lbs box of 2.5inch deck screws
Tin for roof	\$ 1,375.50 (Curtis lumber) \$45.85/sheet, 30
	pieces of 3ftx13.5ft
Tin for cupola	\$ 37.80 (Curtis Lumber) \$6.30 /sheet, 6 pieces
	3ftx4ft
5 windows	\$ 850.00 (Lowe's) ~ \$170.00 a piece (48x48)
2 Folding tables	\$ 220.00 (Lowe's) ~ \$110.00 a piece
16 folding chairs	\$ 400.00 (Lowe's) ~ \$25.00 a piece
Lumber	\$ 0.00
Labor for building construction, building	\$ 1,200.00 (approximate)
permit, miscellaneous	
Total	\$6,000.00

Timeline

March-April 2013

• Lumber is cut by Forest Production Processes class

May 2013

- Summer interns establish concrete forms for building foundation.
- Concrete is poured and foundation allowed to harden

June-August 2013

• Sugar house construction

September 2013

• Sugar house and class room set up

October 2013

• Management cuts in Sugar Bush

November-December 2013

• Maple interpretations/outreach starts

January 2014

- Sugar bush expansion from previous year
- Sugar bush set up
- Interpretation and outreach continues

February

- Tapping of trees begins and sugar season starts
- Maple workshops and programs begin until end of sugaring season in April

Supporting Documents

- Northern New York Maple Project (NNYMP) Grant Announcement Northern New York Maple Project
- Email from Joe Orefice about lumber
- Information on Maple Weekends http://www.facebook.com/MapleWeekendNENY
- Adopt a Maple Tree Program certificate

Detail revisions

The Paul Smith's College VIC is partnered with the Wild Center and Cornell Maple on the Northern New York Maple Project. The maple project has received funding from the Northern Border Commission. The VIC is scheduled to receive \$38,520.00 to pay for essential apparatus for a demonstration sugar bush of 80 taps on tubing and 50 taps on buckets to represent what a hobby maple producer could do in their own backyard. The grant has paid for the majority of the equipment including tanks, an evaporator, a reverse osmosis machine, all tubing and buckets a refractometer and the rental of a sugar shack for this season.

The majority of the college's match comes from the construction of a permanent 24' X 20' interpretive sugar house with an adjoining 16' X 20' open pole shed for wood and sap storage on VIC property. We plan to locate the sugar house behind the VIC at the East end of the lawn adjacent to the parking area. The location will facilitate community members being able to drop off their sap as we develop a cooperative community based maple project.

The Community Maple Project involves the VIC offering workshops to aspiring maple producers, the college hosting a maple camp in June, and the engagement of people in the area who are interested in learning more about and participating in maple syrup production. Ultimately our program will include collecting and processing maple sap from our demonstration sugar bush and from local community members who have maple trees on their property. We are also looking to engage the college's culinary program in aftermarket products. We are offering supporters the opportunity to "adopt" a sugar maple tree to invest in the development of the Community Maple Project.

The funding we are requesting will cover such items as the concrete slab, the windows, doors, metal roof (which we had overlooked and have now added to the budget) and some of the labor. The wood is essentially free coming from the Paul Smith's College saw mill. Labor will come from VIC staff and volunteers. Oversight of the project will come from Master carpenter Tom Seymour and VIC Director Brian McDonnell. The detailed summary cost is now \$6000 that we are requesting from the Sustainability Fund.



