

Name: Entomology and Nematology Student Organization
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Academic classification: Student Organization
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Phone number(s): Matt Moore (402-350-4526)
Experience or training related to proposed project: We represent a collection of all entomology and nematology graduate students. Specifically, we have members with previous experience in construction, producing educational materials, and citizen science projects.

Sponsor

Name: Dr. Marc Branham
Department: Entomology and Nematology
E-mail address: marcbran@ufl.edu
Campus-mail address: Bld. 970, Natural Area Dr. Gainesville, FL 32611
Phone number(s): 352-273-3915

Title of project: NATL infrastructure improvement through construction of a permanent light trap

Project summary

Our proposal is to construct a permanent light trap structure in the Natural Area Teaching Laboratory. This light trap will be designed to match the style of existing structures. Accompanying the structure will be educational signage describing the trap and phototactic behavior of nocturnal and crepuscular insects. The proposed project has educational value to visitors of the NATL in addition to a functional role for students collecting arthropods. Maintenance of the structure will be minimal; that which is required will become an official responsibility of the Entomology and Nematology Student Organization (ENSO), a student club within the entomology and nematology department. Construction of this trap and its associated signage are the main goals of this project. Future citizen science projects, entomology courses requiring student collections, and future biodiversity inventories of the NATL will benefit from this project.

Starting date: January 12, 2015

Completion date: April 22, 2015

Description of project

Objectives

Construct a permanent light trap structure in the NATL
Generate and install educational signage relating to the structure

Procedures

We wish to install a structure that is aesthetically similar to the existing signage and is low maintenance. Our proposed structure is identical to the existing kiosks, with a white background and two spotlights that direct light onto the trap area (Figure 1). A committee of volunteers from ENSO has been established to construct the permanent light trap and educational signage. The location of the light trap and sign will be confirmed with the NAAC before construction commences. Our preferred location is one that is adjacent to existing power sources. Our proposed budget for the structure is below (Table 1).

A subcommittee of ENSO members will be formed to develop the educational signage covering the basic concepts of phototactic behavior in insects. Educational signage designs will be sent to the NAAC Chair for approval before production and installation.

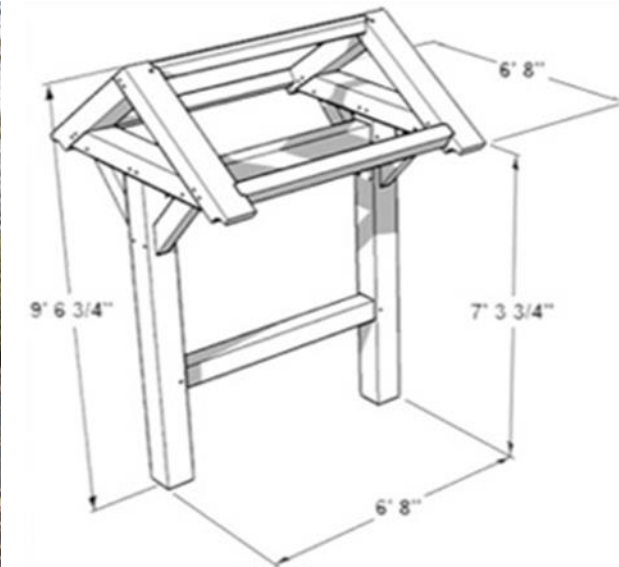


Figure 1. General schematic for the NATL kiosks. Budget was calculated from the above dimensions.

Table 1. Proposed budget for the light trap structure.

No.	Item	Unit Cost	Total Cost	Notes
2	6" x 6" x 12' Pressure Treated Lumber	\$36.57	\$73.14	Vertical beams
1	6" x 6" x 12' Pressure Treated Lumber	\$36.57	\$36.57	Cut in 1/2 for cross beams
3	2" x 6" x 12' Pressure Treated Lumber	\$9.57	\$28.71	For use in roof construction
3	2" x 2" x 8' Pressure Treated Lumber	\$3.57	\$10.71	Cross support in roof (2x2x6)
1	2" x 4" x 8' Pressure Treated Lumber	\$4.57	\$4.57	Vertical support for roof
4	1/2" x 4' x 8' "Severe Weather" Plywood	\$30.97	\$123.88	Roof and Face
2	Bundle of Roofing Shingles	~\$30.00	\$60.00	Estimated at one bundle per side
1	Roll of Roof Underlayment	\$19.75	\$19.75	
1	Gallon of White Exterior Paint	\$30.97	\$30.97	Glossy (or Semi-Gloss) with Mildew-Resistance
2	Storage/Utility Hook	\$4.98	\$9.96	For hanging lights
2	50 lb. bag of Ready-to-Use Concrete Mix	\$2.48	\$4.96	For setting posts in ground
1	Box of 3" Deck Screws	~\$10.00	\$10.00	Need to research appropriate fastener
1	Box of Roofing Nails	\$2.98	\$2.98	
	Other Miscellaneous Fasteners	~\$20.00	\$20.00	Framing angles, etc...
	Spotlights and housing	~\$60.00	\$60.00	
	Running Estimated Total		\$496.20	

Potential Lasting Impacts on NATL

Currently each fall and spring semester the ENY 3005/5006 courses utilize the NATL for night collecting. If selected our project would allow individuals to have this opportunity at their disposal at any preapproved time. Many courses for graduate students require collections and

would likely be used by many students not in courses. Additionally, the light trap structure could be utilized for research purposes. Pictures and other information on the project formatted for social media and NATL website use will be generated. If we receive funding from NAAC we will seek a matching contribution from the office of College of Agriculture and Life Sciences Dean Dr. Elaine Turner.

Provision for periodic communication with NAAC administration

The NAAC Chair will be kept informed of progress on the minigrant project. Social media content that covers the progress of the project will be provided by ENSO.

Signatures

Only the paper copy needs to be signed.

Student _____ Date _____

Sponsor _____ Date _____