

Native Buzz: Nesting Sites in NATL

Proposer

Name: Haleigh Ray

Academic classification: Ph.D. Graduate student

Department: Entomology and Nematology

E-mail address: hray12@ufl.edu

Postal address: 3800 SW 34th Street, Apt CC-291, Gainesville FL, 32608

Phone number(s): (309) 657-1704

Experience or training related to proposed project: I am currently a Ph.D. student in the Entomology and Nematology Department, I completed a M.S. degree here in May 2014. I have been working with the *Native Buzz* project since September 2014, and am currently writing a National Science Foundation grant to expand the project to every Florida county.

Co-Proposer

Name: Ashley Egelie

Academic classification: M.S. Graduate student

Department: Entomology and Nematology

Email address: ash.egelie@ufl.edu

Sponsor

Name: Jennifer Gillett-Kaufman

Department: Entomology and Nematology

E-mail address: gillett@ufl.edu

Campus-mail address: PO Box 110620, Gainesville Florida 32611-0620

Phone number(s): (352)273-3950

Starting date- January 12, 2015

Completion date- May 8, 2015

Project Summary:

The main objectives of this project are to 1) promote nontraditional STEM (science, technology, engineering and mathematics) learning activities and 2) gather scientifically viable information on pollinators and any evidence of population fluctuation. The *Native Buzz* project team hopes to advance scientific understanding of pollinators by providing easy-to-access information and resources that will encourage the public to gather data. Building and placing commercially available nesting sites in the Natural Area Teaching Lab (NATL) will provide habitat for native pollinators while allowing the public to help gather data on pollinator populations. The opportunity to participate in citizen science will hopefully draw a new audience to NATL.

Description of Project:

The primary goal of the *Native Buzz* project is to expand knowledge of native pollinators in both the scientific and non-scientific community. This minigrant will focus on installing native and non-native Hymenoptera (bees and wasps) nesting habitats in NATL and will allow us to demonstrate examples of how to enhance habitats to people interested in participating in *Native Buzz* and for NATL visitors interested in citizen science. Having these displays in NATL would

allow us to coordinate with the UF Entomology and Nematology Department and the Florida Museum of Natural History outreach programs that can use the sites during tours. Nesting habitats in NATL (**Figures 1-4**) would be a component of a larger project, the goal is to have *Native Buzz* nesting sites at public locations throughout the state of Florida.

The *Native Buzz* project has multiple benefits for the community and NATL. The citizen science project will involve Florida residents who want to assist in monitoring pollinator levels in urban and rural settings. The project will have positive impacts on the public by involving them in the scientific process and enhancing their understanding of pollinator ecology and by encouraging them to get outdoors and observe nature. We hope to facilitate education of the public on the subject of pollinators and their importance, with the unstated benefit of stimulating learning in related areas of STEM science. Participants will be encouraged to build their own nesting habitat, and commercially available sites will be available to purchase for those who are uncomfortable building a site. The presence of *Native Buzz* project material on online social media sites (Facebook, Twitter) will help engage the public, spread important pollinator information, and promote NATL as a site to visit to see a project site in action.



Figure 1

Figure 2

Figure 3

Figure 4

Figure 1. Official *Native Buzz* nesting site.

Figure 2. [Commercially available bamboo mason bee house.](#)

Figure 3. [Commercially available solitary bee house.](#)

Figure 4. [Commercially available combination bee house.](#)

Procedures

Three commercially available nesting sites will be purchased and an official *Native Buzz* nesting site will be built and placed in a place approved by the NAAC on the Old Field Trail. We are installing four types of habitat so that visitors can collect data to compare activity at each site. For the public, the *Native Buzz* website, social media platforms, and publicly displayed interpretive signs will be the primary method of information dissemination. There will be a sign near each habitat (**Figures 1-4**) explaining the project and where to find previously gathered information, as well as a sign with a QR code that will lead people to where they submit data. Dissemination of synthesized data, including charts, graphs, and statistical findings will be available on the *Native Buzz* website. We will produce charts and graphs with NATL specific data to post on the NATL website.

Impacts on NATL

The addition of a *Native Buzz* nesting site to the Natural Area Teaching Lab will improve the habitat for native pollinators by giving them easy access to a nesting environment. Advertising the project and NATL's involvement should bolster the Natural Area's public appeal, generating an increased number of visitors. Visitors can turn in data sheets, making them more engaged with NATL and more likely to return. Data that is collected will be analyzed, and the information will be provided to NATL to be included on the NATL website.

Budget

- 1 solitary bee house from ATGStores.com + shipping = \$30
- 1 mason bee house from Gardener's Supply Company + shipping = \$34
- 1 combination bee house from Backyard Chirper + shipping = \$63.50
- 1 steel eye and screw hook set = \$3
- 1 gallon wood stain = \$20
- 1 box of screws = \$10
- 1 box of drill bits = \$15
- 2 wide paint brushes = \$7.50
- 3 treated lumber size 2 x 12 x 12 at \$24.60 each = \$73.80
- 3 untreated lumber Size: 2 x 6 x 12 at \$8.60 = \$25.80
- 1 weather proof brochure holder at \$5.25 + 15.90 shipping and handling = \$21.15

-If this project is funded, information signs that match current NATL sign specifications will be donated by Operation Pollinator (see attached letter of support)

Total: \$303.75

By the completion date of this project, we will give the Natural Area Advisory Committee (NAAC) a write up of the data collected by the project. We will provide follow-up data in May of 2016. Future NATL visitors will learn more about native bees and wasps as beneficial insects, what they can do to promote these beneficial insects at their own home, and how to collect data about them.

For the duration of this minigrant, we would be able to meet with the NAAC committee once a month to discuss the progress of the project and give a monthly update of the project participation by NATL visitors. We will be posting photographs of *Native Buzz* on our official Facebook (<https://www.facebook.com/NBNSproject>) and Twitter (<https://twitter.com/ufnativebuzz>) pages, and would share those so they can be posted on the NATL Facebook and Twitter sites.

Signatures

Proposer/Student Haleigh Ray Date 10-30-14

Co-Proposer/Student [Signature] Date 10-30-14

Sponsor [Signature] Date 10-30-14