

Application for a Research Permit for The BNP

Permit 2007-001

Name (Last, First, MI): Moore, Francisco, B.-G., Date: 10/05/06

Affiliation: Department of Biology, University of Akron

Email address: moore@uakron.edu

Mailing Address: Department of Biology, University of Akron, and Akron OH, 44325-3908

Title of Research: Aquatic Field Research Facility.

Briefly describe the research to be conducted at the BNP in non-technical language (this paragraph will be used in describing your research to the public).

This project would install 36, 380 liter tanks into the ground on a leveled section of grassy area in close proximity to the Martin Field Center. These tanks will provide researchers the ability to experimentally control environmental factors that may influence the physiology or ecology of local species. This will allow those researchers to test for the influence of anthropogenic or natural changes in the environment on the success of many local aquatic species.

Briefly describe the goals of the proposed research.

A number of researchers in the Department of Biology at The University of Akron are currently engaged in field or laboratory research in aquatic systems. These researchers would benefit by the existence of a designated area in which replicated aquatic experiments could be conducted in a set of identical plastic tanks that can be experimentally manipulated. The goal of this project is to replace the ad-hoc tank farm that is currently located next to the Field Center with a nicer looking and more functional set of tanks that is fenced to increase safety for the public and reduce the likelihood of accidental disruption of experiments.

On which research areas of the preserve will your research occur? MARTIN FIELD CENTER GROUNDS

What are the GPS coordinates or locations of your proposed research? Grassy area east of Martin Field Center Grounds

Does your proposal involve areas that are not part of the designated research areas? ___No_

(if yes, this permit will require approval from the Bath Trustees – this can only be sought four times a year, and so approval of your permit may take up to several months). Talk with the BNP Committee for more details.

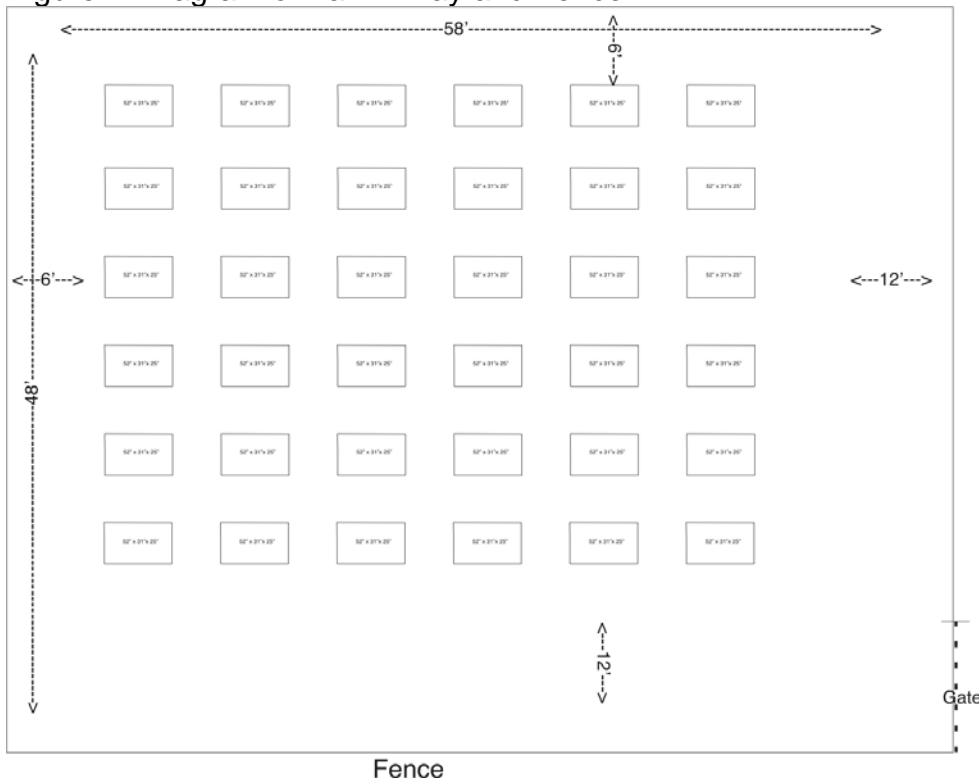
What is the expected duration of your proposed research? ___ October 2006 through June 2007 _____

What is the Web address of your research outline?
http:// _____

Briefly outline of methods to be used. Be sure to include outlines of the equipment to be used (if any) in the research.

Thirty-six 380-liter (300 l to fill height) cattle tanks placed into holes in the ground will represent pond mesocosms. The upper lip of the cattle tanks will be level with the ground. Cattle tanks will be equally spaced across a 48' by 58' area. A chain-link fence will surround the 36 cattle tanks with a 6" buffer between the tanks and the fence on two sides and a 12' buffer on the other two sides. (See Figure 1). The 12' buffer zones on two sides will allow for a limited amount of expansion of the facility and a small area for researchers to set up their equipments.

Figure 1: Diagram of Tank Array and Fence



Outline the use of markers/cages/fences/etc. for your research. Note: in receiving a research permit, you must agree to remove all such research tools at the completion of your study.

The Tank array will build on a current array that was built for use by Dr.s Moore and Bagatto in conjunction with Misty Ayres. The array will be modified in the following ways.

- 1) The area in which the array currently exists will be leveled so that all tanks are at same height and angle to the sun.
- 2) The area will be fenced in with a chain link fence to restrict access by the public (See Figure 1). Signs will be posted to explain the nature of the research. They will also reduce any risk to infants posed by the presence of these tanks.
- 3) 20 new tanks will be added to the current array of tanks.

What is the potential impact of your research on nature preserve?

Development of the tank array will provide a location for ongoing studies of replicated aquatic environments. This research will provide a platform for a great deal of ecological research addressing questions that are relevant to the BNP and the surrounding community.

Leveling of ground should be superficial since the area was chosen due to its relatively level ground. It may temporarily alter water flow on Martin Center grounds until grass re-grows around tanks.

Have you looked at the listings and web sites of the research being conducted at BNP? <http://www3.uakron.edu/biology/bath/active.html> Yes No

Are there any potential conflicts of your research with others at BNP? Yes No

Explain: _____

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To be granted a research permit for work at the BNP, you must agree to the following terms:

- Researchers are responsible for obtaining the appropriate state or federal permits for the conduct of their research on the BNP (e.g., when working with regulated species).
- Researchers are responsible for removing all markers, etc. from their research plots when the research is completed.
- Researchers must build a web site (immediately after being granted a permit) outlining their research at the BNP so that other researchers can avoid the proposed research site(s). Therefore, the web site must clearly outline, using one or more maps, the exact location(s) of the proposed research.
- Researchers will file an annual (due in yearly increments based on the date of the permit) and final report. Such reports will include: user days on the BNP, a summary of results of the project(s), a list of data generated and contact information for those interested in the data, and a list of publications resulting from the project(s).
- Any publications resulting from research conducted at the BNP must acknowledge the use of the preserve by referencing the BNP permit number. A copy of any such publication should be filed with the BNP committee.
- To abide by the rules and regulations of the BNP in any and all conduct of research at the BNP.

By signing the request for a BNP research permit below, I agree to the above terms and state that all of the above information is correct to the best of my knowledge. I also agree to amend my above permit request if my research plans change such that they are no longer well represented in the information supplied in this permit request. If I fail to notify the BNP oversight committee of significant changes in my research, or if I do not follow the rules of the BNP, I realize that the BNP oversight committee can revoke my research permit, and disallow any further work by me, research or otherwise, at the BNP.

Signature: _____

Date: _____

Print Name: _____

