

Permit 2020-010

Response Summary:

Name:

John And Vijay Anand

Department or Organization:

Homeschool

Email Address:

Theanands@yahoo.com

Are you requesting renewal of a previously approved permit applicaton?

No

Type of activities at The University of Akron Field Station and Bath Nature Preserve
Research

Title of project or class name and course number:

Aerial observation using Moored balloon of the Lake and terrain

Date/Dates requested:

Sept 7, 2020 to April 2021

Number of people in group:

2

I am requesting permission to use a Research Area.

Yes

I am requesting permission to use a Sensitive Area.

No

I am requesting permission to use areas outside of the designated Research or Sensitive Areas.

No

I would like to use the Martin Center for Field Studies and Environmental Education for this prop...

Yes

Will the activity involve destructive sampling/collecting?

No

Which Research Areas?

Please indicate any preparation or set-up you will need in the Martin Center for Field Studies an...

Set up a base station for receiving signals from the Balloon to capture the data being recorded in the instruments.

Provide a brief description of (1) your proposed activities, (2) goals, and (3) impacts of your u...

1. Identify what can be monitored at the Nature preserve from an aerial perspective – the ponds, Hiking trails, the creeks, vegetation growth, water flows, snow drifts etc.
2. Find out if this can be done with 2 or 3 weather balloons, that are stationary and tethered at a certain height, with a camera connected to a Microprocessor (Arduino with wifi, possibly)
3. See if we can transmit other weather information from sensors you can attach to the balloons,
4. Figure out how to keep these devices powered (solar, battery) and transmit the pictures and data to a base station (possibly at the UA field station office), using a Low Power, Long range radio technology called LoRA that I have been experimenting with in the summer.
5. Set up this system, and monitor this on a weekly basis, for 3-4 months.
6. Gather and analyze the data and present it, possibly at the EEOC and the North East Ohio Regional Science and Engineering Fair in March 2021.

By checking this box, I agree to the above terms and state that all of the above information is c...

I agree