

Permit 2020- 002

Name:

Randi Depp

Department or Organization:

Biology

Email Address:

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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:

Textile Biodeterioration: Postmortem Interval Estimation and Stable Isotope Analysis of Soils for Locating Clandestine Graves

Date/Dates requested:

3/1/20-12/31/20

Number of people in group:

3

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?

Beefy's Woods

Garden Pond

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

Minimal - a table for materials and sample preparation and organization before and after sampling.

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

We will observe the biodeterioration patterns of several textiles on the soil surface and sample the underlying soil for isotope analysis. Preparations will include the use of bare ground or exposing the soil surface with a sod cutter. Our goals are twofold. First, we hope to quantify the rate of textile degradation through image processing software in order to provide estimates of physiological time. Second, we intend to test the application of isotopic analysis of the soil for textile-specific signatures. The textile degradation rates will be the first experimental results from a temperate forest biome. In addition, the data will contribute to the potential utilization of textiles as a means for estimating the postmortem interval (PMI), or time since death, for forensic scenes. The isotopic signatures will provide a new approach for soil analysis in forensic and archaeological contexts with potential applications to locating clandestine graves and reconstructing past events.

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

I agree