Restoration of Rider Woods Trails

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Introduction

- This project was originally started by former Rider students and faculty, and will be continued and completed by Bailey Adams, Ashley Murphy and Dr. Daniel Druckenbrod. The original Rider woods nature trail was created in 1974, when our school was 'Rider College'. Since then, a plan to restore these trails has been developed by Dr. Druckenbrod's ENV-340 and then Dr. Hunter's SUS-400 classes. Our contribution to this restoration began during this spring semester with a goal to finish a third trail. With this trail addition, we will also be laying wood chips down on all three trails. The trails will be supplemented with QR codes that will take students, faculty and staff on three possible experiences for walking the trails. The codes will be linked to BroncNation, there they can see land history, native species, and exercises that can be done on the trail. A large entrance sign will be added along with benches, native species tags for trees and spotted lantern fly traps. Our third trail to be restored is currently mapped and does not require removal of large vegetation in the woods.
- The goal of this project is to bring students, faculty and staff back into nature during busy semesters. The completed trail is made to promote well-being and mindfulness of the nature this campus is lucky to have.

Methods

- Many design and logistic plans have went into the making of the Rider Woods trail system. Designs for plaques for native species have been created and the mechanism to attach them to trees without harm has been decided. It was also decided that the trail system would put an emphasis on taking any belongings and trash out when an individual leaves the woods, which is what most national parks are doing now, we will have a note on our main trail sign stating such. We have the design for displaying QR codes and also for the benches that will be at each trail, and we have a source of supplies from Facilities to ensure maximum sustainability and low cost.
- One area that deserved a lot of attention was the safety of the Rider community. We wanted to make the information about the woods accessible to all Rider students and staff because the woods serve as a great resource. However, we did not want to jeopardize the safety of the campus by indirectly encouraging the outside community to come to the Rider Woods. So we decided that all of the information and maps of the woods should be advertised through a University platform, BroncNation, that requires a sign-in to access.

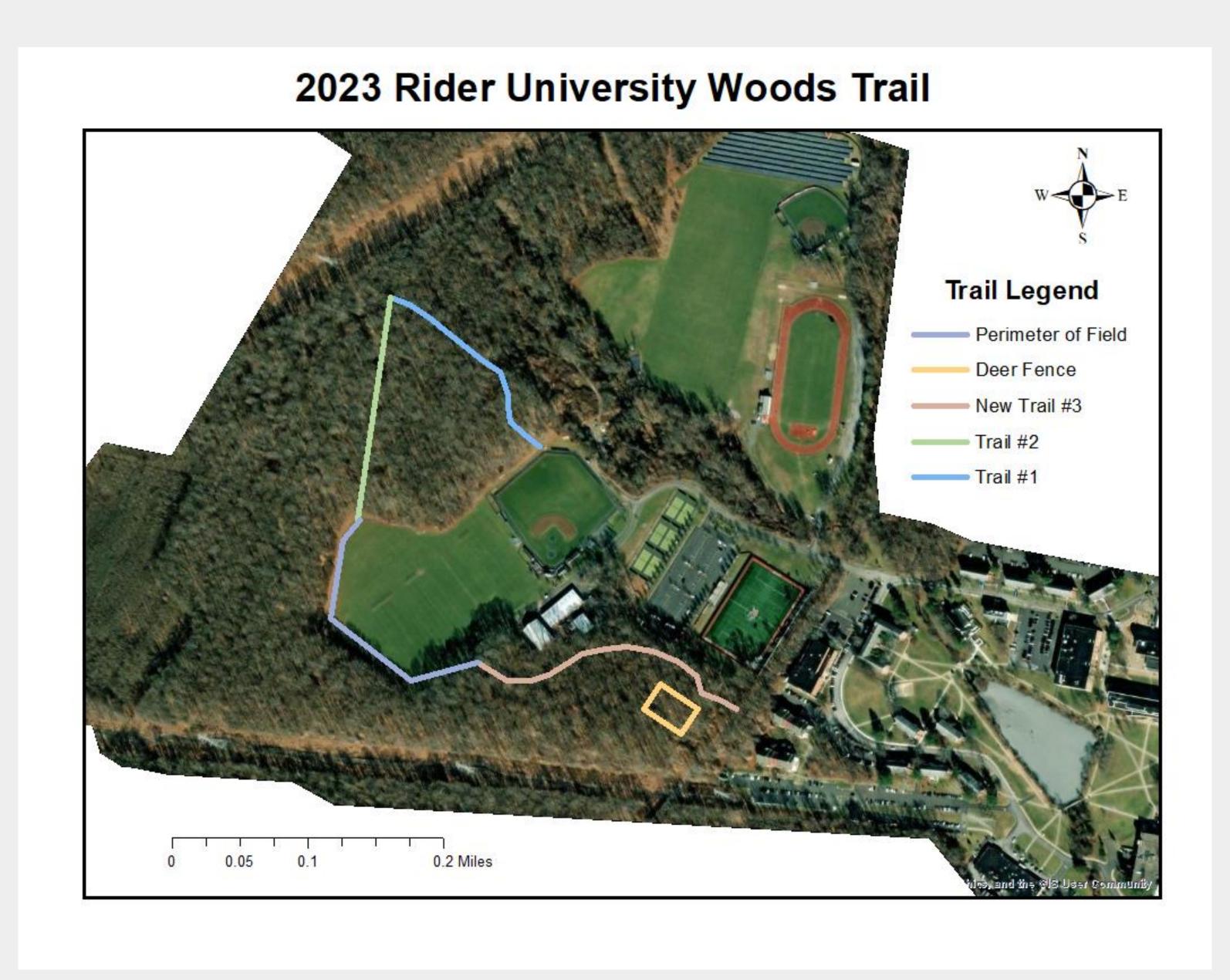


Figure 1. GIS map of Rider's trails, including existing trails (Trail #1 and Trail #2). The third trail will be completed this summer. Rider's deer fence research project is also included on the map.

Results

- So far, we have worked with multiple groups on campus to assist with many of the details of the Rider Woods trail system and started finishing the third trail. We marked the third trail in the woods and Facilities has started clearing the leaves and debris off of the designated path. We have had volunteers sign up to help during summer 2023 also assist with clearing the trail and placing wood chips. We are also reaching out to Public Safety about any extra precautions that may need to be taken when advertising this extension of our campus features to our students. We will also meet with University Advancement about the process of naming the three trails and whether or not we will have the opportunity. Ashley has presented our project's progress to Dr. Druckenbrod's sustainability class with a tour of our trail system.
- We hope to have a Grand Opening event in the Fall 2023 semester to hopefully show students the three trails and encourage them to use the system. We have some ideas about a clean up or a sustainable scavenger hunt around campus and partially on the woods trails.





Figure 2. GIS map of Rider's original trail plans from 1974. Our first and second trail follows the original 1970s plans.

Discussion

• This summer, we will be clearing the third trail and adding wood chips, building the benches, and putting out the signs and QR codes that will bring students, faculty and staff to our website. We will also be adding the native species plaques. There are plans to add lanternfly traps to a few trees along the trails as well. We will have help from facilities and volunteers from the Green Team.

Works Cited

- Allessio, M. L., Simpson, R. L. (1974). Rider College Nature Trail Guide.
- Druckenbrod, D. L. (2017). Rediscovering Aldo Leopold's big woods. New Jersey Studies: An Interdisciplinary Journal
- Waller, D., & D., & D., & D., & D., & C. (2010). Leopold's Legacy. In The ecology of place: Contributions of place-based research to ecological understanding (pp. 40–62). essay, University of Chicago Press.

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