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### Panther Ovation Project

**Note:** While researching my project, I learned that the scope of what I wanted to achieve was far greater than I would have the time for during the two months we've worked on it. My interests in this project have also shifted. I should've notified my instructor earlier on these matters. This paper will be structured with a description of my project scope and purpose, then how that has shifted, future plans, and finally, the exigency/thesis of the project.

**Initial Purpose:** My initial purpose and desire in this project was to encourage a greater use on campus of native plants. We seem, at least in planting beds, to have a pronounced use of annuals (most likely for vibrancy), which are high maintenance items and are usually not native, as I understand. We also have an extensive use of monoculture grass lawns, which could be replaced with either prairie, or a polyculture blend. These would be far better for the soil, and the wildlife. In my opinion, it would also be much more visually appealing. As a flagship of campus culture, we should have grounds that represent our agricultural heritage (prairieland). We do have the Tallgrass Prairie Center complex on the west side of campus, but campus proper is almost completely devoid of these features.

**Initial Project Plan:** My initial plan for this project was to do a survey of the grounds on campus and evaluate the proportion of native plants to non-native plants. I would then create an educational/advocacy material for distribution among the student body (I suggested a video essay). This material would broadly show our progress with native plants, and suggest

improvements. I think these would still be good options down the road, but my focus has shifted slightly.

**What's Changed:** After doing research on this project, I've grown a lot more eager about the cause. Rather than just evaluate our campus and broadly suggest improvements, I see the project of increasing native populations of plants, and more generally, re-wilding our campus, as something that seems quite reasonable and necessary. Looking around at what other campuses in the country have done, it seems that re-wilding is a goal that is very obtainable, and it can start small as well. Grinnell College in Iowa has demonstrated a notable effort itself on a minor use of prairie in unused lawn areas. UNI has a lot of unused grass areas, some of which aren't used frequently for events or by students in general, which could be good grounds for a project like this.

Doing all of this would require a large amount of support from the student body, grounds, and general school administration, so in this, the direction of my project will shift dramatically.

**What's The Plan Now:** If we really want to succeed in re-wilding our campus, we must work together and make sure everyone is on the same page and invigorated for this project (like the communication and collaboration necessary for wicked problems).

Grounds has already shown interest. UNI is recognized as a bronze-level campus with its Green Grounds certification from Re:Wild Your Campus. This means 60% of our grounds are maintained without pesticides. Through this, Grounds shows they are interested in ecologically positive uses of the land on campus. One of the best ways to reduce pesticide usage is to switch planting beds to native perennials, and to convert unused/low-traffic lawn space into dedicated native plant zones (like prairie zones).

There seems to be at least partial interest anecdotally among the student/faculty body. The peers and faculty I have spoken with on the topic have generally expressed interest in the idea of campus re-wilding. This is an area where we would need to provide information materials and conduct surveys to determine interest. If we can prove that re-wilding is something widely desired by the campus community, then this project will be proven as much more legitimate and essential to the school administration, which would ultimately approve such a project.

To start this process of re-wilding, there will be a lot of steps which are very necessary. Below is a tentative list of the most obvious and immediate.

### **Steps To Take:**

- Establish a possible committee - Bring this project to the attention of organizations and people in this field. Possible examples below.
  - Student Organization which would be, or have students which are empathetic or relevant, like the UNI Sustainability Student Advisory Board, UNI Student Government, Climbing Club, Geography Club,
  - Faculty in this area, like the Sustainability Director, or Sustainability Curriculum Director, anyone in Environmental Sciences.
  - Representatives from other concerned areas, like Botanical Center, RTNL UNI Outdoor Adventures.
  - UNI Grounds.
- Compile resources explaining different aspect of re-wilding
  - Benefits/need (cost savings, environmental, beauty/culture)
  - Necessary education/training

- Cost/labor/timeframe
- Parties which would need to be involved
- Available resources for labor, supplies, education/training (like Re:Wild), planning
- Inform the students/faculty body
  - Survey the campus community and record established interest
  - Use this interest to demonstrate project need/importance
- Meet together and discuss
  - Put plans into motion
  - Roadblocks and new areas that need to be researched/considered
- Reconsider all parts of this list as necessary

### **What I Will Be Doing:**

- Meet with the Sustainability team and the Sustainability Director and put this project on the table. We can discuss different aspects of this project, establish a firm foundation for the project, and decide what the immediate next steps should be.
- Meet with a representative from Grounds. Jonathan Butler is the representative of UNI for our Green Grounds Certification, so he would be a good start. He is also the Assistant Director of Campus Services, so this is well within his domain. I need to establish and understand the interest Grounds may have in this project. We would discuss some concerns they may have with extending re-wilding measures on campus (like labor, time frame, initial costs vs cost savings). If they don't see it as very important, we can discuss

what would change that view (which would likely be establishing a strong desire for this in the student and faculty body).

- Educating myself with Re:Wild Your Campus's Ground Up Advocacy Bootcamp. This is a 2-day virtual bootcamp which discusses “toxic chemicals, what it means to rewild spaces, the intersection of human and environmental health, and how these issues tie back to social justice and climate change”. Re:Wild focuses primarily from the side of preventing pesticide usage, but since use of native plants and prairie are prime methods of this, I am sure I will gain a lot of important information from the training. This bootcamp occurs virtually sometime (date unknown) during the winter and I have filled out their interest form. If it works out schedule-wise, I will participate.
- Continue educating myself with resources about re-wilding. I plan to continue researching and compile a list of resources (like website links and pdf). These will be good resources for the rest of the team to also learn from. Having everything compiled in one place would also make creating education materials like brochures or pdfs, which could be distributed to the student body much easier.

**Considering All Of This:** With all of this in mind, I've realized that re-wilding our campus, or at least making improvements in this area, is something that is very possible, and quite necessary. I've been talking to my peers and friends for many years about how unfortunate it is that most of the prairie which once dominated this land is gone. We have a severe lack of biodiversity, and our land does not represent its fullest potential and native beauty. The plants and wildlife that once so freely and commonly roamed have little to no place on this campus. I maintain that re-wilding our campus would allow UNI to serve as a prominent representation of

historical Iowan culture. UNI has unique buildings which provide a good sense of culture. I wonder though how much better the campus community could be, how much more involved and sensitive to the history, landscape, and nature of Iowa we could be, if we gave this a shot and brought native back to campus. Our sense of campus culture is determined so strongly by the environment we surround ourselves with every day. Let that environment be a testament to our heritage as Iowans, and a refuge for native plants and wildlife.

Considering the interest I have in a much broader plan for this project, I have little available in terms of a summative demonstration for this PantherOvation project. I submit this plan above as a demonstration of the effort I put in, and my desire for this project. I ask that you accept this, and the work I plan to do in the future with the sustainability team as evidence of my desire. You are the sustainability director, so my continued interest will be very obvious to you. There is too much meeting and deliberation that needs to be done to have a satisfying summation for this project.

That being said, for the presentation portion of this assignment for my peers, I plan to compile a few resources that will be relevant to them, and provide qr code to the resources. I will discuss the importance of re-wilding, and its benefits to campus life and the environment, as well as different ways students may get involved and help this mission. In short: why this all matters, and what they can do about it.

Below I am also including connections to course material to fulfill that part of the PantherOvation Project.

**Connection To Course Content:** We talked rather extensively in class about different agricultural practices, and how they affect society. We talked prominently about use of fertilizers, and how runoff can lead to eutrophication of sealife, caused by algae blooms. This

fertilizer runoff destroys marine ecosystems. Converting unused lawn space to prairie and flowerbeds from annuals to native perennials would reduce the need for fertilizer, since these plants flourish here naturally. Prairie grass also has remarkably deep root systems, which helps water infiltrate the soil and stops water runoff before it can reach the streams. This is why farmland often has prairie strips bordering the fields in Iowa. This conversion would also reduce the need for pesticides and herbicides, which pose significant health risks to human and animal populations. Prairie space also provides the habitat essential for native animals, like birds that will also combat insect and pest populations.

We also discuss how Rome, during its empire used rather poor agriculture practice, which eventually led to the degradation of their soil. Also, in the unit about soils, the text “Graveyards of Empires” discussed Greek farming methods that caused the soil on hillside slopes to slowly run down the slope until the slope was barren. We also talked about topsoil in Iowa and how it has a tendency in monoculture, plowed fields to blow away. Prairie grasses have deep root systems that protect the topsoil and prevent it from blowing away or eroding in general. While you wouldn’t put prairie in the same place you want to sow crops, and the land at UNI we’d convert to prairie isn’t being used for agriculture, prairie is still a good solution to the problems of erosion we discussed. Polyculture prairies also have significantly more diverse soil microbiomes and enrich the quality of the soil. Polyculture land usage, like in prairie, serves to protect and improve the soil. It is also more resistant to sudden, and long-standing changes in the weather and environment. They discussed this in the Brad Smith Podcast of week 13, relating it to having a diverse team of collaborators to solve problems. We also know that diverse plantings for crops improves soil and crop quality, like with the three sisters method indigenous peoples used in the Americas. The diversity found in prairies exemplifies this benefit even further.

Incorporating prairie grasses in our community would greatly protect our soil and provide essential habitat for native wildlife.

**References:**

“Good Neighbor Iowa.” *Goodneighboriowa.org*, 2025, [goodneighboriowa.org/](http://goodneighboriowa.org/). Accessed 5 Dec. 2025.

“Grounds | Facilities Management.” *Uni.edu*, 2024, [fm.uni.edu/service-units/grounds](http://fm.uni.edu/service-units/grounds). Accessed 5 Dec. 2025.

“Home.” *Re:wild Your Campus*, 2025, [rewildyourcampus.org](http://rewildyourcampus.org). Accessed 5 Dec. 2025.

“Tallgrass Prairie Center | Tallgrass Prairie Center.” *Tallgrassprairiecenter.org*, [tallgrassprairiecenter.org/](http://tallgrassprairiecenter.org/).

“Turf Management | Facilities Management.” *Uni.edu*, 2025, [fm.uni.edu/turf-management](http://fm.uni.edu/turf-management). Accessed 5 Dec. 2025.

University of Northern Iowa. *Landscape Management Plan*. University of Northern Iowa, 7 Dec. 2023.

[https://fm.uni.edu/sites/default/files/inline-uploads/Landscape\\_Management\\_Plan.pdf](https://fm.uni.edu/sites/default/files/inline-uploads/Landscape_Management_Plan.pdf).