Campus Lawn Alternatives

At Mount Holyoke College

Eliza Williams

Acknowledgements

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Contents

Abstract

The purpose of this thesis is to encourage Mount Holyoke College to adopt a more sustainable landscaping plan. The historically significant way that lawns came about is important to consider as these spaces do provide certain cultural and aesthetic benefits. However, the environmental costs are too high to continue this form of ultimately unproductive landscaping. Using case studies as attainable alternative examples I have compiled a variety of techniques for Mount Holyoke to employ. This, along with many other considerations like student and staff opinions, how we and other species use our landscape, and site evaluations, led to the creation of a final proposal which includes the possibility of potential pilot projects.

Introduction

When I walk around the MHC campus I am constantly reminded of its beauty. We are fortunate with green vegetation, many varieties of trees and shrubs, rolling grass hills, etc. But beauty isn't the only function this nature provides. Our earth grows to support the larger ecosystem. Unfortunately, though, humans have elevated beauty as a primary purpose of nature, to provide us with daily greenery that many of us often overlook. To attract prospective students we go along with the 'ideal' campus, perfectly manicured with controlled vegetation. The real purpose of nature is lost.

I grew up in the suburbs of Massachusetts where the houses are close together, and each one is adorned with a luscious green lawn. I never thought about what else could have taken over that space - to me the lawn was an extension of every house. With each home, you get a lawn - and I think most people have the same belief. It got me thinking, why are our brains engrained to expect and accept lawns?

Source: Google Maps

This year I have been focusing on ways to decrease lawns at Mount Holyoke College through creating a more ecologically friendly landscape, and exploring methods of rewilding. Efforts to understand, through past archives and historic designs, why our campus was designed the way it was and what cultural significance lawns hold was my first step. I then considered how students use our current green spaces and how this can be improved through a new eco-conscious design. Interviews with students allowed me to understand what they envision and desire. Further research on converting lawns was undertaken, as well as understanding which native plant species would work best for our New England climate. This, as well as other considerations all informed an overarching categorized proposal for Mount Holyoke on how we can design our campus not just for students but also for wildlife. I created possible designs of the new landscape forms that I envision with the help of my research, peers, and precedents. Additionally, a general strategic plan is outlined for departmental changes/funding that would need to occur in order for this landscape to be established and sustained. This includes such changes as facilities management staff retraining and a call for a budget. A project like this is important in many aspects, not just environmentally but also socially, educationally, and institutionally. I hope to pitch my final design and potential pilot projects to the school administration, with a goal of ensuring one lawn renovation during the summer of 2025, after geothermal digging.

History of Lawns

Lawns are culturally very significant in the history of our landscapes. The traditional American lawns we think of today first appeared in Europe in the 17th century, with the emergence of the aesthetic becoming prominent in landscapes like the Palace of Versailles. Before this, grass expanses in front of castles were used to see enemies that were approaching or for grazing animals (Castilho, Freitas, and Santos, 2020). It was believed that Thomas Jefferson was one of the first to then bring this landscape to the US after his travels abroad. Jefferson was attracted to the large grass expanse that he believed to be a 'fine art'. Other wealthy Americans who could afford travel and who had experienced the European landscapes followed the lead of Jefferson by also implementing grass lawns on their estates, viewing it as an aesthetic for the wealthy. It wasn't until the 1840s that lawns were incorporated into public space. Wealthy town residents encouraged village commons to be replaced with lawns to support their belief that "beautiful surroundings were an important part of civilized society" (Jenkins, 1994, 19). With the industrial revolution, more people moved away from cities to escape the unhealthy and dirty living conditions. Suburbs were a place for the wealthy to reconnect to nature, although this quickly turned into the need to control nature. Residents wanted to represent "America as a garden" (Jenkins, 1994, 22). This was reflected in the 19th century public park movement, spearheaded by Frederick Law Olmsted. Soon the lawn became a phenomenon and was advertised and romanticized as a space for families to relax, enjoy, and simply have 'the good life'. It became a status symbol for the upper and middle classes who could afford the time and equipment/help to maintain it. It is extremely important to remember that lawn grass has never been native to the US. The reason why Europe has these luscious expanses of grass is because they are native to the land and therefore thrive in the area with no extra inputs. The grass seed that is imported to the US has to be nurtured in order to survive. This means chemicals, irrigation, mowers, etc. are needed to support this non-

Palace of Versailles

1840 central common - use of lawns stressed by the wealthy community

golf courses = lawn research

17th Century

19th Century

20th Century

Thomas Jefferson estate, one of the first lawns in america

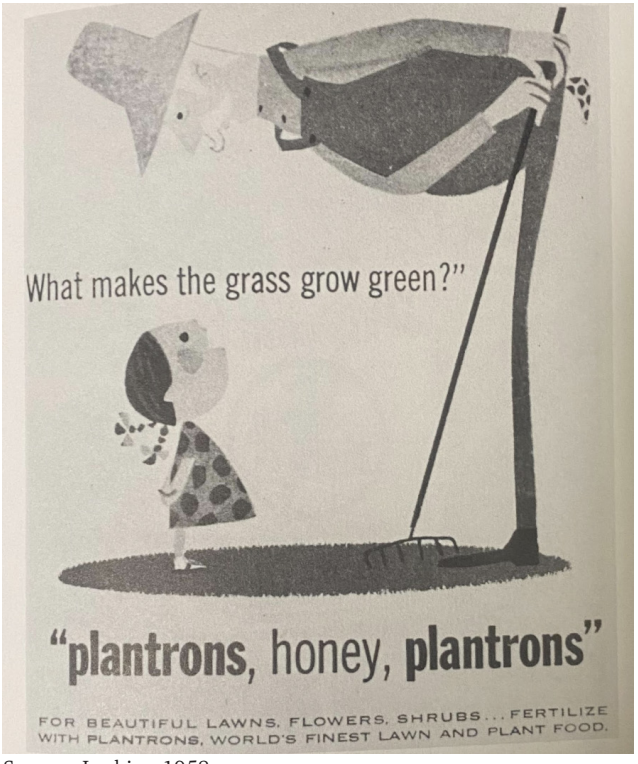
Park movement, NYC central park, Olmstead design

suburbs = lawn requirements

Source: left to right, top to bottom: (Jouan, 2020) (Barber, 2021) (Neiman and Crystal, 2020) (Olmsted Central Park) (Heilman, 2022)

native species. In some areas of the United States the seed does better than others, but in general a lot of homeowners battle with their lawns, especially homeowners before the 20th century. Advertisements made the so-called "green carpet" look like an easy job, when in reality it was the opposite (Jenkins, 1994). It wasn't until golf courses became a value to Americans in the 20th century that grass research was taken seriously. The US golf association (USGA) teamed up with the USDA to undertake turf research. If it wasn't for the USGA the landscape we have today would probably look a lot different. Soon homeowners were urged to "use golf course turf as a measure of perfection" (Jenkins, 1994, 61). With more research in turf grass came cheaper lawn care equipment and chemicals. This also meant that even lower class individuals were expected to have a lawn. "Horticulture writers continued to emphasize that a house was not a home without a front lawn" (Jenkins, 1994, 78).

Before the 20th century, a lot of homeowners didn't know how to make their lawns perfect, which was what was expected of them. Often they would dig weeds out and pour gasoline in the holes with no success (Jenkins, 1994, 85). This was alarming to me at first but then I realized that this is exactly what fertilizers, herbicides, and pesticides are. It is truly unknown what we are putting on our lawns, it is just a chemical that does its job. What was once gasoline became chemicals that were 'ok' to use because they were being sold to us. This battle with nature to dominate it and keep it at our standards is a common theme for mankind in general, and lawns are a symbol of this underlying theme. "Nature no longer was credited with having anything to do with the lawn" instead it was chemicals and equipment (Jenkins, 1994). This is perfectly represented in the ad for a now outlawed fertilizer called plantrons. It isn't nature that is credited with making the grass grow but instead plantrons. The lawn industry emphasized this as well, portraying the lawn as a



Source: Jenkins, 1958

commodity. While the lawn became part of the American culture it was also a brainwashing act. This illusion of a perfect natural paradise was sold to people, they were told that this was what they needed. The lawn industry made billions while the US landscape is left with unproductive and expensive greenscapes. This is not to say that lawns are evil though. Lawns are an overused landscape but they do have some benefits.

Lawns as a Community

Lawns are important for the function they provide. They build community. Growing up, my neighborhood valued the suburban lawns for playing. These are all photos of me and my neighbors utilizing the lawn scapes. However, incorporating native species and reducing lawns can provide a great learning environment for kids and adults as well. Near the beginning of the semester I was walking through the botanical garden and I noticed a family by the small pond. The kids were having fun looking for frogs and pointing out plants that they thought looked cool. This isn't something that can be seen in lawns. However, it is clear that front lawns play a role of establishing class and community in the landscapes of our built environments, but how does this role play out in the context of a school campus?

Photos: Jonathan Williams

Several campuses, including Mount Holyoke, were designed by the Olmsted brothers, with their form of landscaping that is highly praised and still honored to this day. "The traditional American campus landscape with its open lawn and mature canopy trees", is how one would describe the Olmstead Style, and this style is beautiful to the eyes of many (Hough, 2010). The rolling hills, open expanse, and large trees help make Mount Holyoke the gorgeous campus that it is, and is a key reason why I, and many others, chose this college. Furthermore, as previously noted, Thomas Jefferson was a key figure in the creation of the American obsession with lawns. He also established one of the first institutions of higher learning, the University of Virginia. With this college came the opportunity to design it as a space to encourage education and learning. Jefferson used lawns as a way to nurture this. It was said that the "open vistas [were] to represent the world, the final object of all education" (Edmundson, 1999). Here students and professors could gather to exchange ideas and learn from one another. At least that was the intention that Jefferson conceived (Edmundson, 1999). Whether that happens or not, I do believe that the lawn has always served the purpose of offering a space for congregation. Being able to see your peers spread over the lawn encourages oneself to join in. I dug through the college archives and you can see that throughout the years the same traditions and activities take place on the lawns at Mount Holyoke. Studying, parties, meals with friends, and relaxing on the lawn are common sights to see at our campus. However, I strongly believe that these activities can still be nurtured with a combination of lawns and native scaping.

Source: Mount Holyoke College Archives

Lawns as a Problem

Lawns have many, many environmental costs. One that is especially concerning in our area is the risk of flooding. This photo was taken just 15 minutes after a typical rainstorm, and the Creighton field looks like part of the lake. Lawns don't have an extensive root system and the land is also compacted by mowing equipment. These facts combined mean that lawns do a terrible job of absorbing water. This is especially concerning for our campus as this can affect our buildings. An alternative meadow or groundcover has looser soil and deeper roots and does a wonderful job at rainwater infiltration and absorbing pollutants ("From Lawn to Meadow."). Turf grass also contributes to fertilizer runoff. While most of our lawns are treated with organic fertilizer some still use chemicals, meaning that after a rainfall these harmful substances are transported to our natural water systems (Domina, 2023). Grass lawns are also a monoculture, lacking in biodiversity and therefore providing little support for the other species in the area. Additionally, habitat fragmentation is a big problem in the US. That's why it is important to create ecological corridors, or spaces where animals can live and travel from one area to another (Tallamy, 2020). Lawns also cannot sustain themselves, and require massive amounts of water. "The EPA estimates that landscape irrigation accounts for a third of all residential water use nationwide, totaling nearly 9 billion gallons per day" 50% of which is lost in runoff or evaporation (How to Build and Maintain a Meadow). At Mount Holyoke we have had a wet year so irrigation wasn't really needed except for establishing new seed and for athletic fields, but even this can be reduced. Finally, our lawns require mowing and leaf blowing, something that alternative scaping wouldn't require nearly as much of, if any at all. This is important because the equipment has a high carbon footprint. "In 2020, fossil fuel-powered lawn equipment emitted more than 30 million tons of carbon dioxide" in the US, which is as much carbon emitted by 6.6 million typical cars in a year (Metzger and Schatz).

Photo: Eliza Williams

There are also a lot of economic costs associated with lawn care. It was calculated that "including labor, machinery and fuel, Facilities Management spends a rough total of $2,085 mowing campus lawns weekly" (Perry, 2023). This doesn't even include the cost of irrigation and leaf blower gas. So clearly our lawns have a cost that could be avoided with alternative scaping which primarily has an upfront cost, making it more cost effective.

Finally, consider not just the health of our environment (even though the well-being of our environment correlates to the well-being of ourselves) but the health of the public. Lawn care can have a negative affect on our health. Lawn chemicals are unhealthy for humans and pets and may cause cancer (IARC Monograph on Glyphosate). Additionally, noise pollution from leaf blowers and lawn mowers are bad for humans and all animals and are a common complaint for students at Mount Holyoke in terms of sleep and study disturbance. Furthermore, we spend a lot of our time and energy on lawns. "We Americans spend more than three billion collective hours per year maintaining our lawns" (Tallamy, 2020). Time, of course, that could be spent doing more productive tasks.

In conclusion, lawns provide very little to support the environment around it, they are expensive to keep up, and have adverse health effects for not just the environment but for people too. A switch to native scaping would tremendously benefit surrounding species, would be little to no money in upkeep and would have no negative health effects for our students.

Photo: Eliza Williams

Lawns as a Piece of the Larger Landscape

Many colleges have spearheaded similar projects to make their campuses more sustainable. Other public and private properties have done the same. Doug Tallamy, the main inspiration of this project, is an influential figure in this movement, particularly for private homeowners. Him and Michelle Alfandari created the organization Homegrown National Park which calls for replacing our lawns with native plantings and allows you to place your converted property on the map (Tallamy and Michelle). It would be great to get Mount Holyoke on this map as well. For the purpose of my thesis research I looked at three case studies with similar initiatives: Hampshire College, Storm King Art Center in Orange County New York, and Duke University.

Hampshire College

Source: New England land history sign, 2013

Hampshire College's Meadow Initiative began in 2013, and has been gradually expanding since. Nine acres of campus were converted into managed meadowlands by student initiative, saving the campus money and mowing time, and reducing CO2 releases by 12,000 lbs annually (Communications Office, 2013) . Walking through the campus now you will notice that a lot more of the campus is meadow and low mow grass fields, which I think is really wonderful. Hampshire College also somewhat recently built the Kern Center which falls under the Living Building Challenge, which incorporates and considers the environment in architecture projects. How the building is sustainable ties into how it works with the landscape around it. This is done through using a mix of bioswales, meadows and rain gardens to manage water. These vegetation types all utilize deep rooted plants that can handle wet conditions. No infrastructure is used for water management, instead, nature filters the water, allowing it to clean itself and return to the environment. Water follows the slope of the terrain, seen in the diagram on the next page. First the water flows through the bioswale/meadows which is designed to slow water down (Stormwater Tip: How Are Bioswales and Rain Gardens Different?, 2021). Gradually it gets transported to the rain garden which is a depression in the landscape to collect and filter the water (Hydro, 2021).

Source: Kern Center, 2022

Source: New England land history sign, 2013

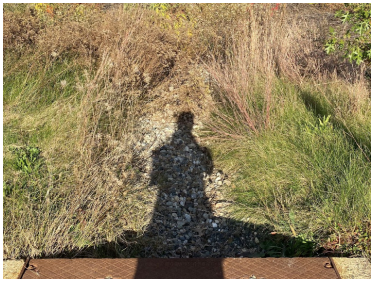



Photo: Kern Center, 2022

These same techniques could be implemented at Mount Holyoke. Our landscape also has a general slope, leading down to the lakes. Bioswales and meadows can easily be placed along this slope with a rain garden in areas of lower depressions.

Storm King Art Center

Source: Storm King grounds, 2023

There are other alternatives to lawn-reducing landscapes besides just meadows and rewilding, which may not look designed at all. A low-lawn landscape can also be aesthetic. Here for example at Storm King Art Center in Orange County, NY, the meadows have become part of the art. A quote from their website reads, the meadows "provide a rich mosaic of colors and

textures in a broadly sculptural landscape" (Storm King Art Center). I envision something like this being popular at Mount Holyoke as students may be concerned about the aesthetic of our campus disappearing with the addition of new landscaping. Not only were they concerned about aesthetics but also sustainability, choosing only native species of grasses and other plants that grow well in the changing climate (Storm King Art Center).

Duke University

Source: Hough, 2010

I pulled this example because it talks about possible flaws of replacing grasses with

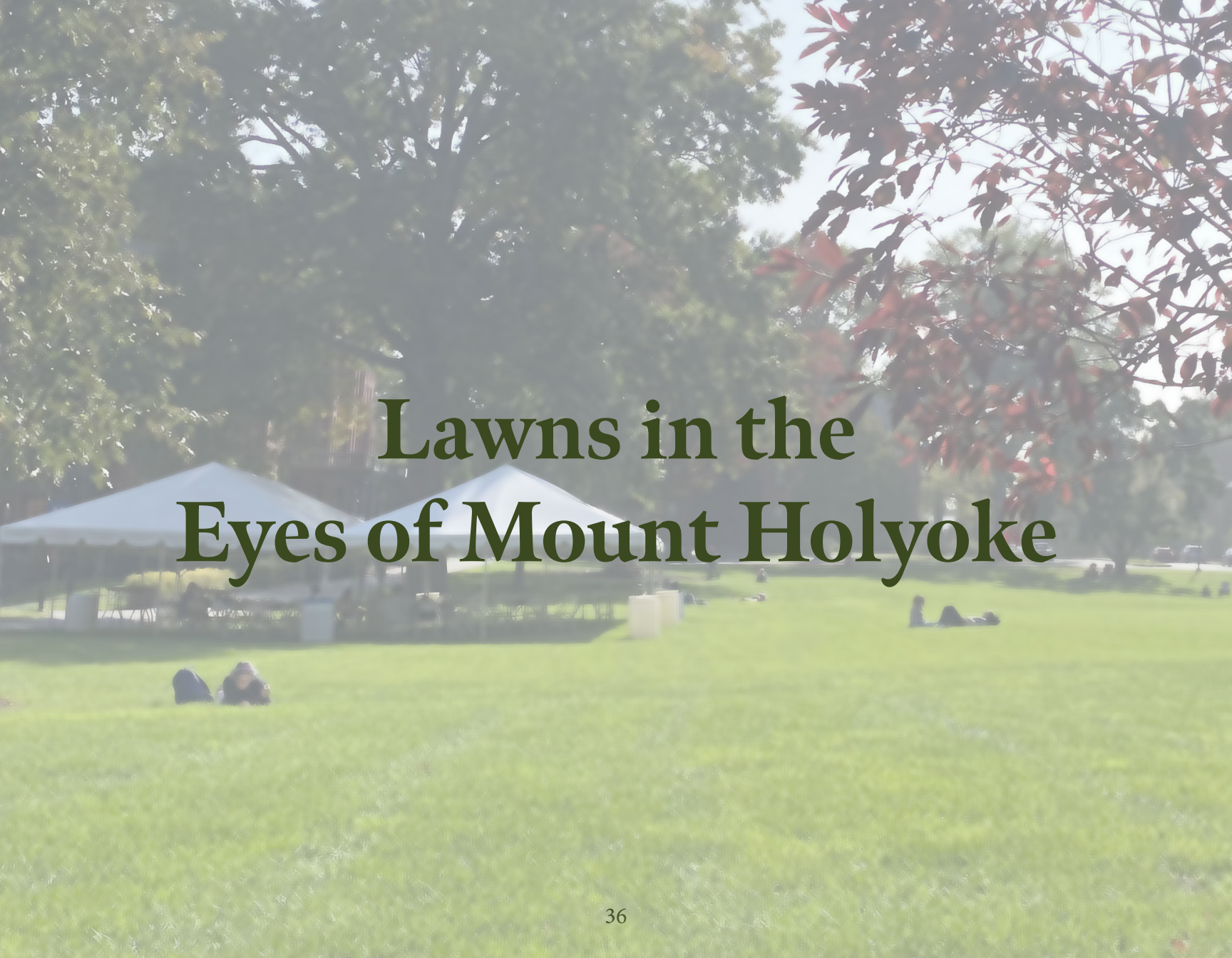
meadows. In 2003 Duke University proposed to change almost all lawns into native meadows. Shortly after the meadows were planted, invasive weeds took over and it couldn't be maintained (photo upper right). This along with people saying it looked ugly during the off months led to it again being replaced with lawn and trees, which is seen in the photo on the lower right. A school admin stated that meadows "are not appealing to everyone", especially when not in bloom (Mary Hughes). This is true, but it's about changing our view of what beauty in nature really is. This story also mentioned how "perhaps this fractured landscape is a new reality and the goal of a seamless campus really is no longer the point" (Pocket Prairie). Seamless campus is exactly the way to describe what we have now, it is an aesthetic that worked for a while but now we need a more sustainable approach. This article shows the flaws of meadows that still occur to this day, but since 2003 there has been a lot of improvements in how to establish meadows and allow it to be a low maintenance project once fully established. For example, in 2020 Duke University started a new project called pocket prairies. Medians between the parking lots on campus lended themselves perfectly as an underutilized space that could easily be made into a more productive landscape.



Source: Pocket Prairie Project

The project started with two 90- foot long sections of median in one of the main lots and more has been gradually added. Sod was removed, small holes were drilled and then filled with seedlings, watered once and mulched with compost. And they say "That's it!" (Pocket Prairie). A project like this would likely still require some weeding and nurturing as it gets established, but overall the maintenance doesn't take more time than grass care.

The movement away from traditional lawns into something more sustainable is getting larger everyday. My father sent me a memo while working on my thesis saying his workplace, an engineering facility, is reducing their lawnscape in the pursuit to be more environmentally friendly. Other large companies like Ford are starting to initiate landscape plans to make their headquarters more sustainable. 100 acres of lawn were converted into sunflower and corn fields which lowered labor, gas and fertilizer costs by 30% ("Ford Focuses…", 2008). So even corporate offices are taking this step. Many colleges have already significantly decreased their lawnscapes and are great leading examples for other universities. Cornell for example has been testing out low maintenance and low cost lawn alternatives for the past 15 years (Copeman, 2023). Mount Holyoke is capable of this change, it is just about getting the MHC community on board.



Lawns in the Eyes of Mount Holyoke

Considering student and staff opinions in my thesis is an important goal. My first step towards this was hearing directly from the students who utilize the lawns most. I interviewed 10 student groups or individual students who were utilizing the lawn on a beautiful day to hear their opinions on my thesis. The questions I asked were:

- Are you happy the green is now open after the shut down during the geothermal dig and what kind of activities do you like to do on the green?
- Are there any lawns on campus that you notice tend to go unused and Why?
- How would you feel if certain campus lawns were completely eliminated or were instead made into a native scape?
- Do you know anything about the benefits and drawbacks of grass lawns?

The answers I received were varied. Everyone was happy that the lawn was reopened and they could do activities like play sports, run around with their dog, lounge around, etc. Overall, people agreed that the main lawn is used most because it is centrally located and hosts a lot of traditions. Because of this a lot of the students thought that it was important that the main green remains a lawn but overall people were not opposed to other under-utilized lawns to be redesigned as long as there was still space for students.

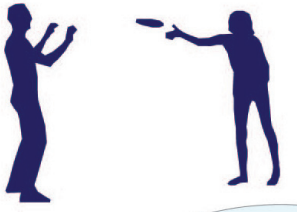
I also wanted to address the issue of students' worries on aesthetics and safety of a project like this. Multiple advisors have warned me that a project like this would likely worry students who are afraid of rewilding what once was a clean grass lawn where you can see any threats in front of you. I also have friends who avoid certain walking paths in case of ticks or who don't enjoy walking around upper lake because wild animals like beavers and deer are more likely to

"I really like the lawn, I enjoy the sunshine and listening to the wind while I study. The lawns not being used as much as the main green might be because they are being blocked off to "let them grow". It would be fine to have some specific spots for plantings **but honeslty I do want to main green to stay lawn**." (student didn't know about the drawbacks of lawns)

"My pet likes to be outside and hang around on the lawn. The smaller lawns that are at weird angles and on the side of hills tend to go unused. **I would love if the lawns were redesigned. There are so many better alternatives**" (student did know about the drawbacks of lawns)

"I think the main lawn is used so much because it is on the way to other buildings which makes it a very convenient place to stop and hang out, you don't have to think about going there you just go there. **The main lawn has so much meaning, associations, and traditions** but if the other lawns were changed no one would complain. Especially in 4 years when students don't know it was a lawn before." (student did know about the drawbacks of lawns)

"I like to do homework, have picnics, craft, and read on the green. Some lawns, like the academic green, go unused. The main green is central to dorm buildings. which people like to be near. Alternative scaping is fine, and healthier, but it helps to have a space where students can relax. **Incorporating a space for students is important**" (student did know about the drawbacks of lawns)



"**I use the lawn as a short cut or to hang out in the sun**. When the green was closed people seemed to be using Mary Woolley lawn more but now that it is open MW isn't being used as much. I also think Creighton isn't used, I would like to see more trees there. I would be slightly annoyed about the re-design of the main green because of the traditions, but for other lawns I wouldn't care too much." (student didn't know about the drawbacks of lawns)

be close by. While this is a valid concern, it is important that we learn to live with other species in our environment, as the world is not only a home for us. Coexistence is a necessity for humans to learn as wildlife is essential for human existence. Living in harmony with nature is especially important with the climate of today.

A student I interviewed on the lawn was actually doing a group project on sustainable campus beautification at Mount Holyoke and Smith College. They did a lot of research and data collection on a variety of issues including students' opinions on lawns, and this was critical information for my thesis as well. This group was kind enough to let me use some of their final data, as displayed in the following pages.

To begin, the first question responses we graphed (***Figure 2***) were in response to the question, "Were the campus grounds (gardens, lawns, trees etc) and overall aesthetic a factor in your college decision?"

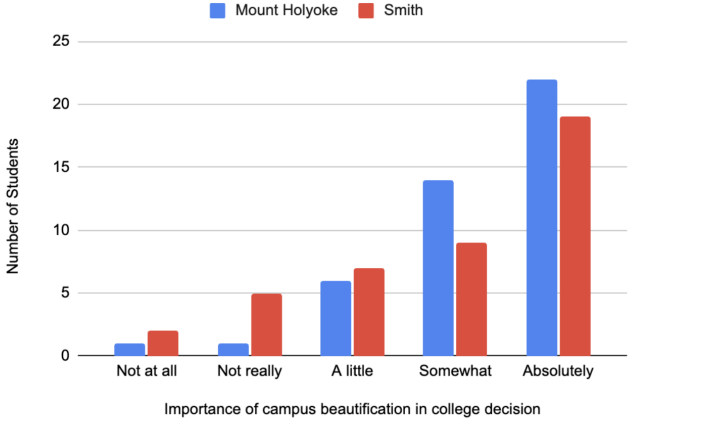


Figure 2. A double bar graph that shows the number of students from Mount Holyoke (blue) and Smith (red) who identified with each statement about the importance of campus beautification in their college decision.

Source: Brade, Lindskold, Pillai, and Richards, 2023

As you can see in the first figure, campus beautification had a large impact on Mount Holyoke students' college decision, which I would agree with myself. The second figure shows that Mount Holyoke students also find lawns to be overwhelmingly somewhat or very important to their campus life quality. The final figure shows a bit less students say the gardens and greenhouses are important to them. So in conclusion to both this data and my student interviews, it is important to keep lawns and the overall aesthetic of our campus, but the key is being able to cater to that while also making our landscape more sustainable.

The next question responses we graphed (***Figure 5***) were in response to the question, "How important are the campus lawns for your quality of life on campus?"

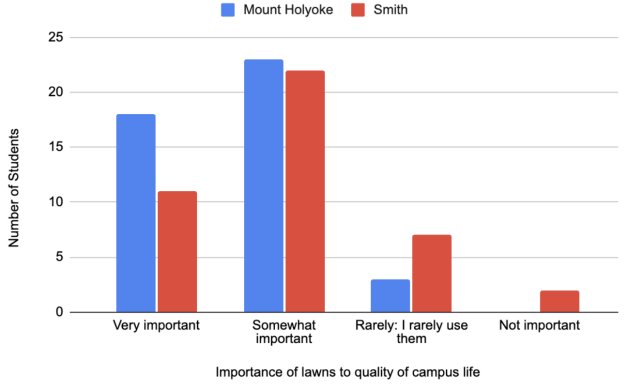


Figure 5. A double bar graph that shows the number of students from Mount Holyoke (blue) and Smith (red) who identified with each statement about how important campus lawns are to their quality of life on campus.

The next question responses we graphed (***Figure 6***) were in response to the question, "How important are the campus gardens and greenhouses for your quality of life on campus?"

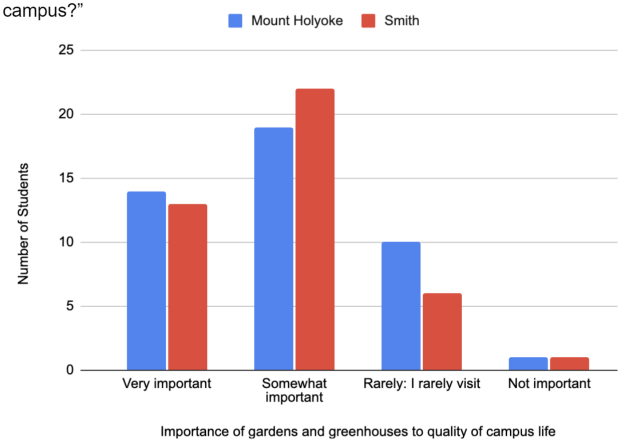


Figure 6. A double bar graph that shows the number of students from Mount Holyoke (blue) and Smith (red) who identified with each statement about how important campus gardens and greenhouses are to their quality of life on campus.

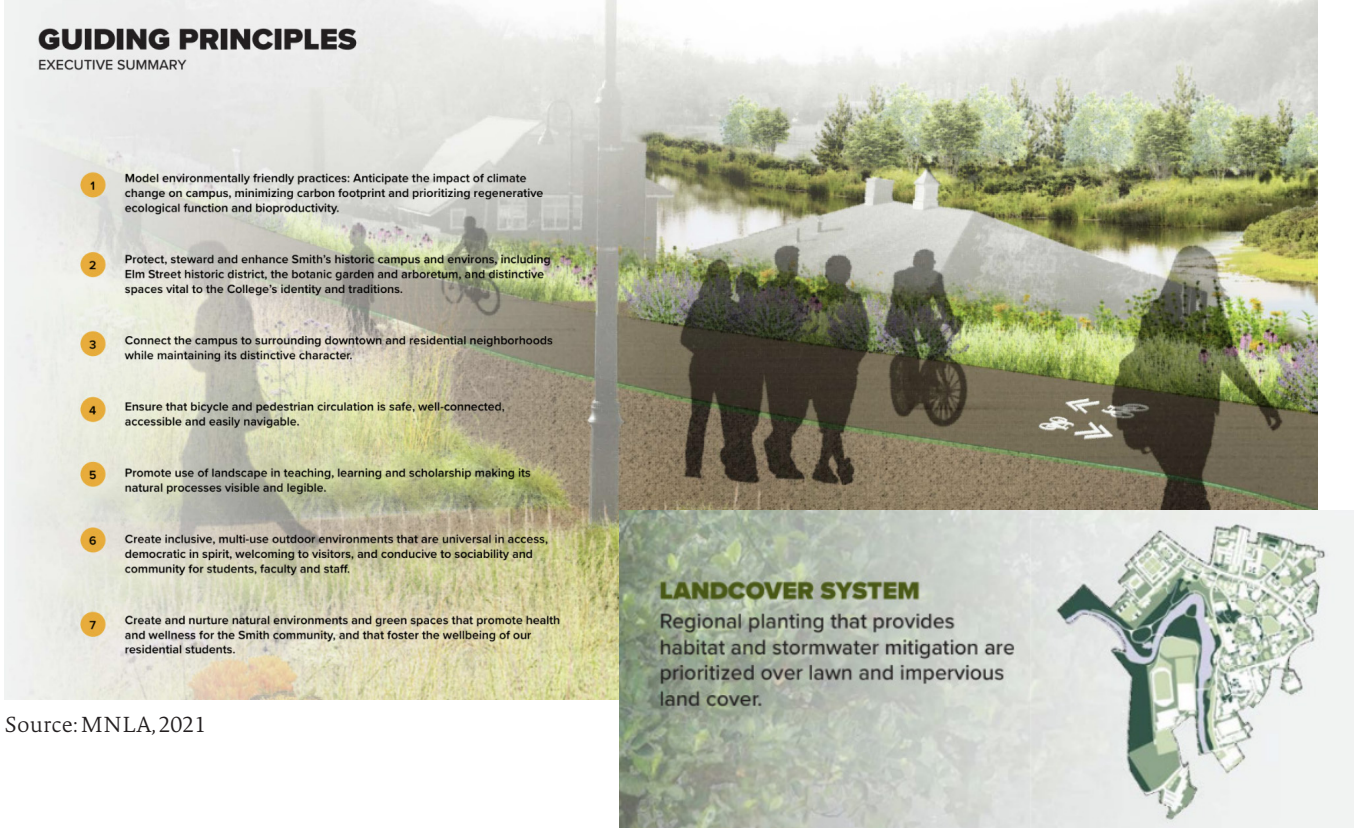
I then interviewed botanical and facilities crew at Mount Holyoke. My main takeaways were that there is currently a big disconnect between the horticulture and facilities crew. For example, part of Delles Hill was planned to be a no-mow zone, but not long afterwards the facilities crew mowed over it. Tom Clark from the botanical gardens was saying that it was because aesthetically grounds crew has a job to fulfill and this didn't fit that criteria. This is true but interestingly enough, Dave Barthelette from facilities said the Delles was mowed because students complained about not being able to use the space and that there were ticks and critters. Whether this is true or not, it is important to note that if lawns are to be transformed into anything else then there needs to be a larger and more consistent conversation between the two departments, as well as students. More communication could mean an in person meeting once a week/month, or some type of weekly newsletter with brief updates from each department, or both.

My other takeaway was the perceived hurdles that a project like this would need to overcome. Clark, Chris Domina (facilities member), and Barthelette all mentioned how they are low on staffing. The grounds crew was a team of 22, but budget cuts forced them down to 11 people. This was especially shocking considering all of the land that they have to maintain. They stressed that if these new landscapes were established then it is important to make them low maintenance or at least comparable to lawn maintenance, which I believe is possible. Additionally, they all agreed that the cost of this project would be high and would need to come out of the school's pocket, something that they are wary about since they often get budget cuts themselves. As an example, Barthelette noted that the school urged them to convert to organic fertilizer which they were happy to do, but the extra cost of it came directly out of facilities budget.

Furthermore, the organic fertilizer doesn't do a great job of keeping the grass healthy, so more effort goes into maintaining it. He says that if this project were to happen it can't be at the cost of their own staff and budget. And finally, regarding the question of aesthetics, both agreed that you can't just get rid of grass and plant something that will look unkempt to many people. Clark said that incorporating signage or information on why the landscape has been transformed in the way that it has is important.

I also wanted to get some opinions from our sister college. I talked with Gaby Immerman and John Berryhill from the Smith Botanical Garden and then also Reid Bertone-Johnson from the Landscape Studies Program at Smith. The main takeaway I gathered from these conversations was that Smith is currently doing a really good job at making their landscaping more sustainable. While there are still flaws in the system, I appreciated how the Botanical crew has control over all of the gardens and trees on the campus, not just the main Botanical Garden like Mount Holyoke. Immerman said that there is still not a lot of communication between grounds crew and the Botanical Department staff, but it seems to be more than at Mount Holyoke. Additionally, throughout the year, the Department offers work study and internships for students to help maintain the gardens which is especially helpful in the summer months and something I think Mount Holyoke could, and should, implement. Finally, Smith has developed a really impressive Landscape Master Plan which is a 20 year action plan to create a more sustainable landscape. It's guiding principles are seen on the next page. One of the main goals is to reduce lawns on campus, which will hopefully be seen soon with the new redesign of Davis Lawn happening likely late summer 2024 after geothermal digging. Smith college has been able to implement these changes so effectively partly because they have a campus planning committee. This committee, made

up of faculty, administration and students, coordinates "facilities, landscape and traffic flow" ("Smith College Governance"). A committee like this would be beneficial for Mount Holyoke to implement. Otherwise, more coordination between facilities and botanical crew would be necessary and continuing to listen to student calls for change is valuable.



Source: MNLA, 2021

Lawns as a Secondary Landscape at Mount Holyoke

Formulating an Overarching Design

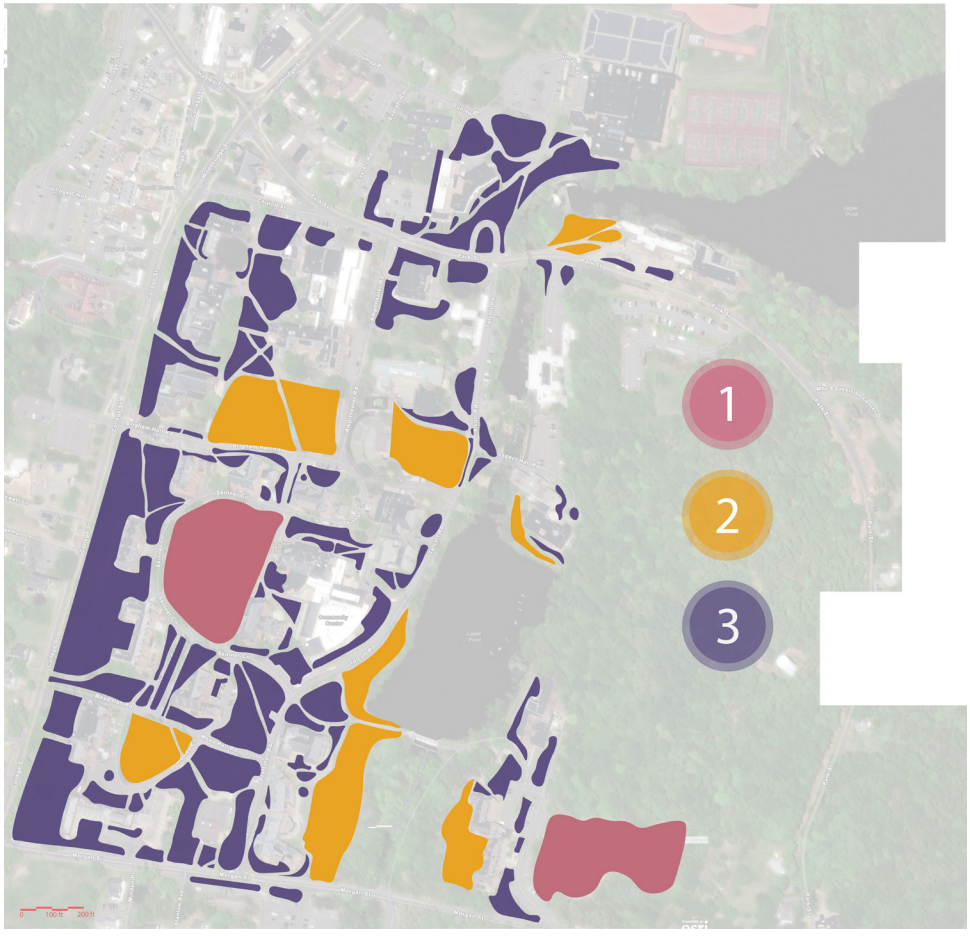
Moving forward to my landscape design for Mount Holyoke, I first created a whole campus landscape design layout considering which lawns are used at Mount Holyoke and which lawns go unused. This information was obtained by biking the campus on three different days and times during sunny warm weather and then recording where students were. This data can be seen in the map below.

As you can see our landscape is largely made up of lawns in between the hardscape and buildings. Mount Holyoke has approximately 100 acres of lawns (Chris Domina, email message, May 6, 2024). This is a lot of space, especially when it is clear that many of our landscapes go unused. To think about how to reduce lawns I created a model called a necklace of lawns. The beads on the necklace are the high use lawns and would remain mostly lawn if not all lawn as it is now. This necklace allows students from all throughout the campus to have easy access to a lawnscape. The lawns in between could then be transformed into alternative landscaping like groundcovers, low mow grass, meadows, and more trees.

Accounting for which lawns I knew I wanted to keep due to high usage and which lawns I wanted to convert, I designated each lawn into a category. The 3 categories I created were...

1. Retaining most of the lawn with only slight changes
2. Converting about 50% of the lawn into a more sustainable alternative
3. Converting about 100% of the lawn into an alternative

To the right is a diagram which shows these designations. As you can see a lot of our lawns are designated as category 3, but this is because they go completely unused. Of course pathways would be created where needed on these new landscapes.



Overall our campus would look quite different, but it would be a much more efficient design that I think would still be beautiful if not more beautiful.

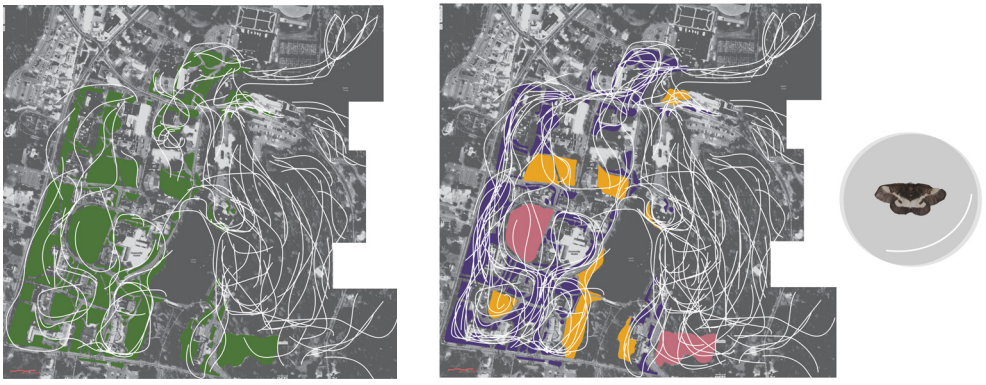
To show what these three categories would look like in a more detailed plan view and rendering I decided to create some pilot projects in each category. I zoomed in on the Main Green (Skinner Green) as category 1, Academic, Abbey, Creighton, and Lower Lake Green as category 2, and Torrey Green as category 3. To the left is a map of where these locations are, and later I will go into detail about each design.

Considerations Before Designing

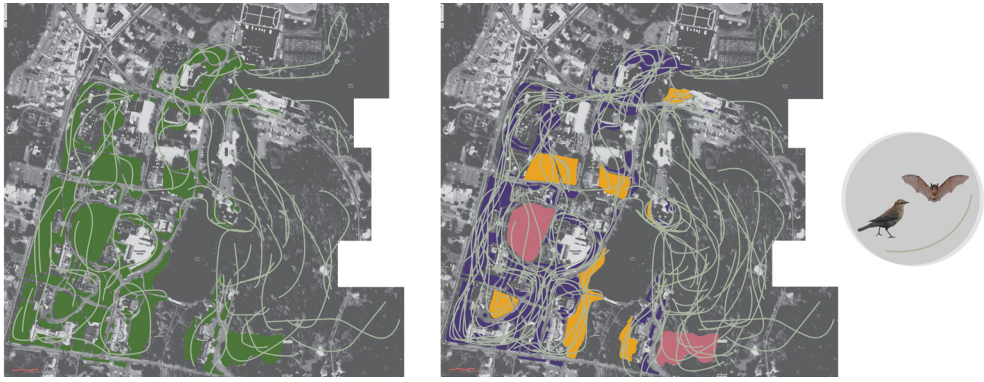
Before jumping into my final designs I wanted to explain the considerations I made throughout the design process. Below are all of the subjects I took into consideration.

Wildlife

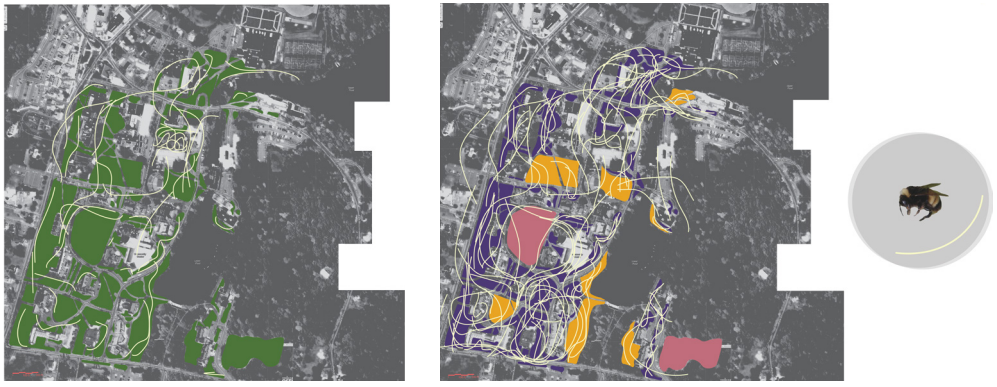
If this type of landscape were to be realized, there would be a gradual, but likely quick, re-abundance of biodiversity on campus, specifically with insects, birds, and small mammals. The Guardian stated that "more than 40% of insect species are declining and a third are endangered" (Carrington, 2019). Insects are the base of our ecosystem. Below are predictions for what current (left) and new (right) insect and mammal movements would look like on campus.



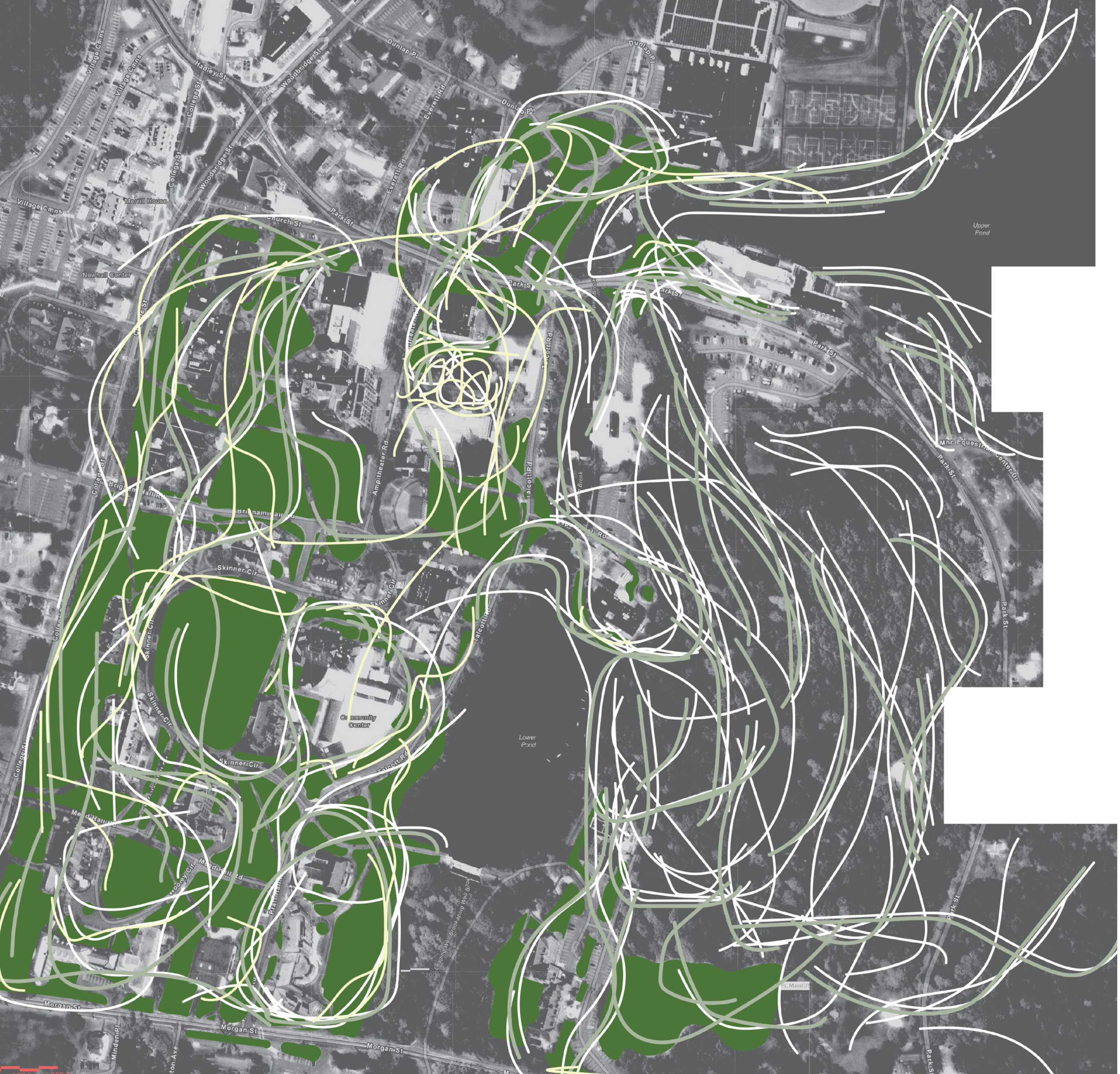
Moths/insects: Right now if we see any moths they would be in the outskirts of our campus which is where the habitat is. Lawns do not support them and even the trees that do support them don't do a great job because when a caterpillar falls to the ground to become pupa or for habitat it gets mowed or has no habitat (Tallamy, 2020). Creating habitat for them allows for more connectivity on the campus environment and an increase in these species means an increase in birds and bats.

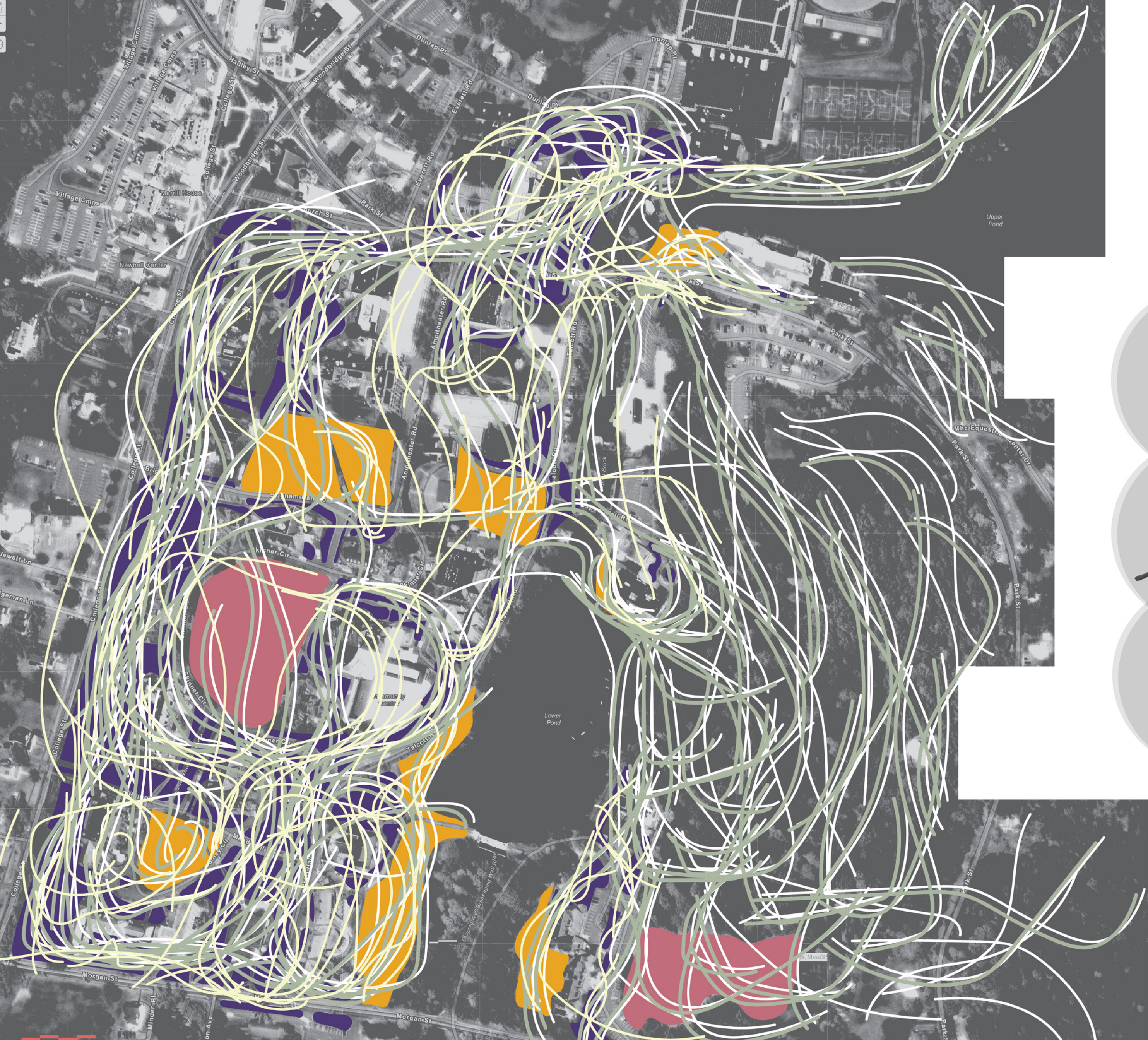


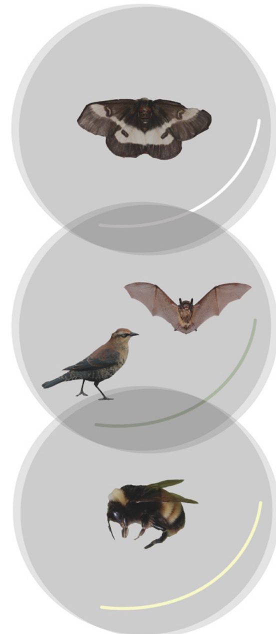
Birds/bats: Two very important species for seed distribution and insect control. With increase in habitat and increase in food means an increase in bird species and more connectivity and also a space for these migrating species to stop on their travels which is extremely important to provide in our fragmented world.



Pollinators: As we know, pollinators are vital for our ecosystem health and therefore we need to provide the habitat to host more of them.


Village Cmns
Hadley St
College St
Woodbridge St
Dunlap Pl
Everett Rd
Park St
Church St
Merrill House
Newhall Center
Upper Pond
Talcott Rd
Amphitheater Rd
Brigham Hall Rd
Skinner Cir
Community Center
Lower Pond
Mead Hall Rd
Morgan St
Minden Pl
Mhc Equestrian Center Dr


Upper Pond
Lower Pond
Park St
Morgan St
College St
Dunlap Pl
Hadley St
Woodbridge St
Everett Rd
Amphitheater Rd
Talcott Rd
Village Cmns
Merrill House
Newhall Center
Church St
Jewett Ln
Skinner Cir
Minden Pl



All of the species I have mentioned are declining due to habitat loss ("Map of Life", 2024). The maps on the pages before shows our species current restricted distribution and what distribution could look like if we provided the habitat these species need. Note that these paths are predicted by me, but overall, these maps are showing that our campus is largely made up of lawns and none of them provide habitat.

Notice how a lot of the species are currently restricted to the outskirts of campus or landscaped spaces where shrubs and trees are located. With the addition of more vegetation and therefore habitat and food availability, these species are able to move around campus more easily and therefore thrive in this space. Connectivity of habitat is so important to provide in our extremely fragmented world. It not only creates habitat but also a space for migrating species to stop on their travels. In these diagrams I also specifically chose to represent threatened or endangered moth, bird, bat, and insect species, all of which are threatened due to habitat loss and are extremely important in our natural ecologies for bird food, seed dispersal, insect control, pollination, etc.

People

When designing a landscape it is important to consider the people that will be using your landscapes. Currently our lawns are valued for the ability to easily walk across them, for recreational use, and also for simple relaxation. Another user of the lawn is of course the lawn mower, a frequent visitor and often disrupter of the user experience. Lawns are beneficial because they allow humans to do activities they wouldn't normally feel comfortable doing in 'wild' nature. So, how do I continue fostering these activities while reducing lawnscaping? The answer is, a design that still caters to these activities. Mowed pathways and stepping stones continue the use of shortcutting through landscapes. Mowing designated shapes in the landscape to conform to frisbee, relaxation, or other recreational activities continues these

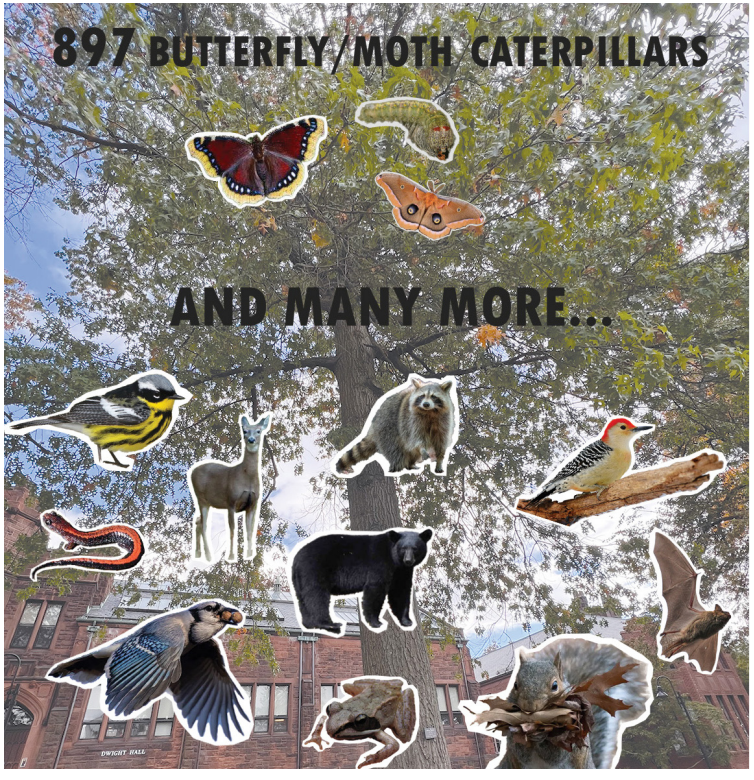
functions. But the key difference with this alternative landscape is that now other species can also live in and enjoy our landscapes. Current use of the landscapes on campus and how these same uses can be nurtured while also creating spaces for both human and ecological use is shown in the diagrams on the right.

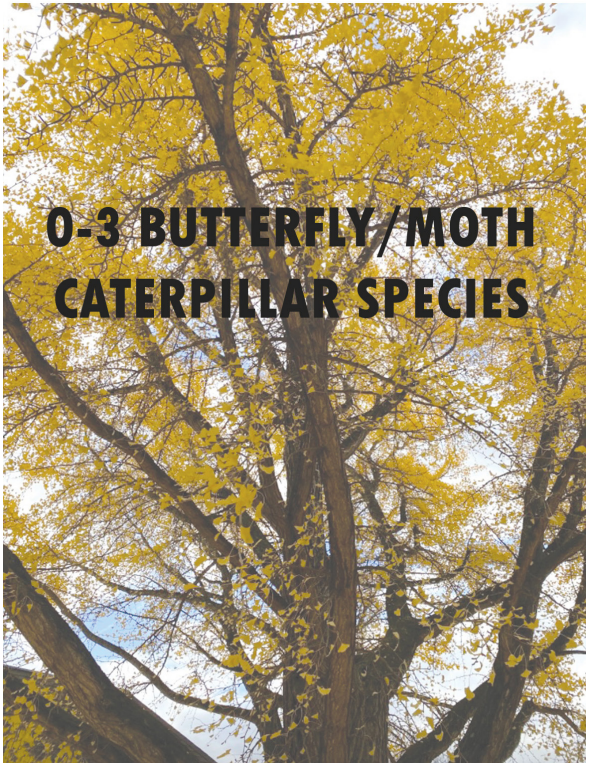
Another consideration is how a landscape like this will improve student education on campus. Students can learn from these new ecosystems from their own observation, classes or educational signage. Environmental science courses and students can

greatly benefit from this landscape. A student research position would go alongside this project really well, providing an opportunity for students to conduct ecological restoration monitoring. For example, students could monitor wildlife and see if it actually does become more abundant with a landscape change like this. My predicted visualizations of wildlife circulation on campus is informed by observation and information I know about species habitat, but true data of these species numbers and movement would be ideal and would make a compelling project. Data that shows the hopefully biological success of this project could encourage other colleges to make this change as well.

Plants

With this pilot I would choose specific plantings that would do well in the area but also support our environment and nurture biodiversity. My plant research includes native species but I would encourage the use of non-native plants that don't have invasive tendencies and would continue to thrive in our environment with the changing climate. As you can see in the diagram, choosing the right plant species is important. The native pin oak tree on the left supports 897 butterfly and moth caterpillars and many more species while the non-native Ginkgo tree supports only 0-3 (depending on the source (Battersby, "Doug Tallamy: A World..., Recklies)) caterpillar species, meaning it provides little to nurture biodiversity especially compared to the mighty oak (Tallamy, 2020). After making this collage I left my dorm and 2 minutes into my walk I saw two striking blue jays that were under an oak tree clearly looking for acorns! The next day as I was biking through campus I heard a scratchy sound and I looked over and it was a squirrel climbing up a tree with a mouthful of leaves which were scratching against the bark of the tree. The power of natives is clear.


897 BUTTERFLY/MOTH CATERPILLARS
AND MANY MORE...


0-3 BUTTERFLY/MOTH
CATERPILLAR SPECIES

In the following pages are tables of plant species that I think would do well in our soils, climate, and general environment. These species are said to be easy to work with and are all native, meaning they would also support the most species.

Note: All tables below created with information from (Lady Bird Johnson Wildflower Center)

Perrennial Planting Key:	Groundcovers low growing plants that spread well, creating a carpeted landscape				
	plant name	traits	location	photos	notes
sun loving	Gray Goldenrod	12-24in tall, blooms in late summer/fall, pollinators, birds, moths	Torrey/Creighton		Create a patchwork of groundcovers for biodiversity. Choose plants that grow well together 
	Lynnehaven Carpet	12in tall flowers, blooms in summer, pollinators, insects	Torrey/Creighton		
part shade/ both sun/shade	Wild Strawberry	1-4in tall, blooms summer/fall, birds, caterpillars, pollinators, mammals	Academic/Abbey		
	Golden Ragwort	1-3ft tall flowers, blooms in summer, pollinators	Torrey/Creighton		
	Bunchberry Dogwood	3-6in tall, blooms summer, birds, pollinators, mammals	Academic/Abbey		"Embrace a little bit of a mess" -Amy Ellsworth 
shade loving	Wild Ginger	4-8in tall, blooms in spring, butterflies	Main Green/Torrey		
	Quaker Ladies	4in tall, blooms in spring/summer, pollinators	Main Green/Torrey		
	Dwarf Crested Iris	4-16in tall, blooms in spring/summer, pollinators	Main Green/Torrey		"It's the plants in your garden now that will determine which animals will live" - Doug Tallamy 
	Native Mosses	home to many organisms /insects, bird nest material	Torrey/let take over in any shady spot		
	Native Ferns ie.Sweet Fern	2-5ft tall, shelter for various creatures, insects	Torrey		
	Trillium Grandiflorum	12-15, blooms in spring/summer, insects	Torrey		

Note: Created with information from (Ellsworth, 2023) and (Jentz, 2023)

Perrennial Planting Key:

Perennials

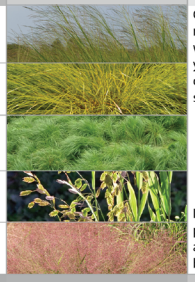
any type of plant that continues to grow year after year

	plant name	traits	location	photos	notes
sun loving	Goldenrod ie.Wrinkleleaf	4ft tall, blooms mid summer, pollinators, good in meadow/rain garden too	Torrey/Lower Lake		Matrix design - easier to care for and prettier - requires research to figure out which plants grow well together but worth it! -Erica Browne  
	Common Milkweed	1-3ft tall, monarchs, good in meadow/rain garden too	Torrey/Lower Lake		
	Butterfly Weed	1-3ft tall, blooms summer/early fall, good in meadow too, butterflies	Torrey/Creighton		
part shade/ both sun/shade	Eastern Bluestar	1-3ft tall, blooms spring, good in meadow too, butterflies	Torrey/Creighton		
	Hoary Skullcap	2-3ft tall, blooms late summer/fall, pollinators	Torrey		
	Coastal-Plain Trumpetweed	3-5ft tall, blooms late summer/fall, butterflies	Torrey		

Note: Created with information from (Werlebird, 2023)

Grasses

consists of low mow to no mow grasses, great to plant with perennials and in meadows and raingardens

	plant name	traits	location	photos	notes
sun loving	Switchgrass (Panicum virgatum)	3-10ft tall, blooms late summer/fall, butterflies, birds	Torrey/Creighton/Lower Lake		Grow with plugs, mow every month in growing season while establishing (takes 1-2 years), cut back in late winter or early spring before new shoots emerge.  Intermix with water loving perrennials for a rain garden and other perrennials for a beautiful and biodiverse bed.
part shade/ both sun/shade	Prairie Dropseed	2-3ft tall, blooms summer, smells nice, birds, mammals	Abbey		
	Pennsylvania Sedge	6-12in tall, blooms summer, insects	Academic		
	Northern Sea Oats	3-4ft tall, blooms late summer/early fall, birds, mammals insects, butterflies	Torrey/Creighton/Lower Lake		
	Purple Love Grass	1-2ft tall, blooms summer, birds, mammals, moths, butterflies	Torrey/Creighton/Lower Lake/Abbey		

Note: Created with information from (Greenlee, 2001), (Grivas, 2022) and (Ludden, 2023)

Meadow

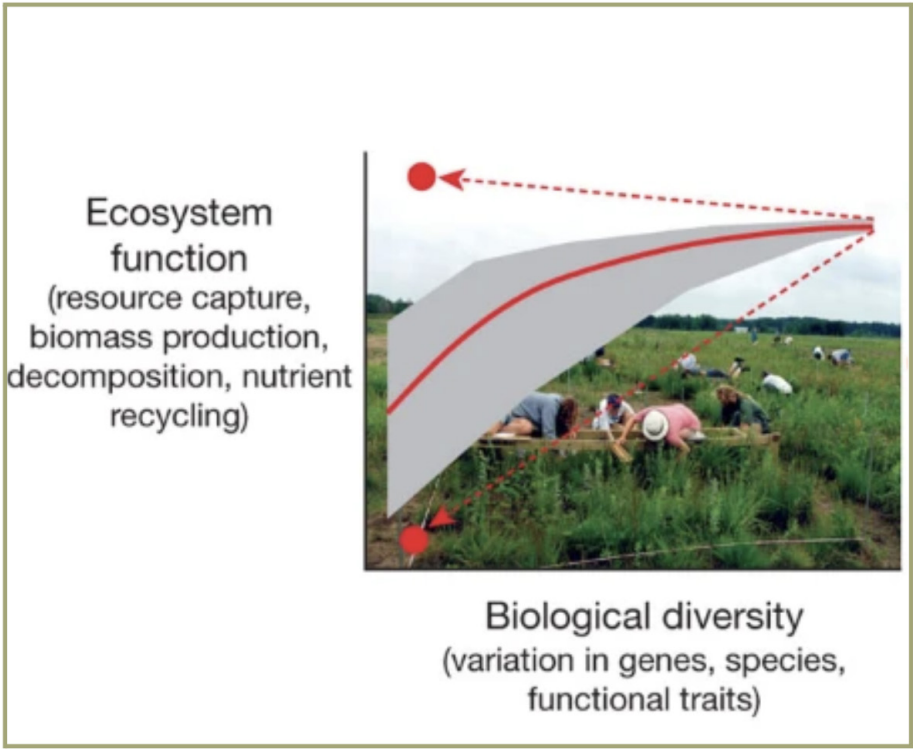
consists of sun loving perennials and grasses

	notes	photos	notes
sun loving	Mix together seeds/plugs of the sun loving perennials and grasses that grow well together in addition to these plants that do well in meadows: Bee balm, Blazing star, Lupine, Larkspur, Purple love grass, Queen of the prairie, Tufted hair grass, Yarrow, Coneflower, Bluestem...		"Create color succession" by choosing plants that bloom at different times. Keep it simple. Add natural resources like boulders for added beauty.
	Another viable option, as well as cheaper and easier (but takes more time to establish), is to buy a seed mix. New England Wetland Plants, Inc. is just one place that sells packs of meadow seed mixes composed of all native species.		

Note: Created with information from ("Massachusetts Meadow...", 2024) and (Loughrey, 2024)

Biodiversity

It is also important to select a diversity of species. Overall, biodiversity creates more productive ecosystems. The graph below represents 2 decades of research on how biodiversity loss influences how an ecosystem functions. An increase in diversity along the horizontal axis

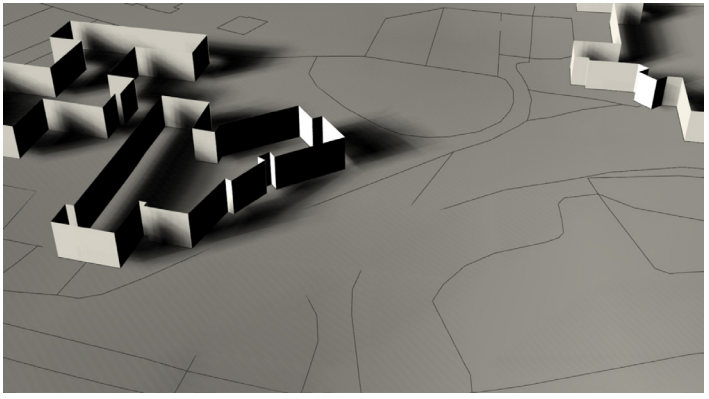


Source: Cardinale et. all, 2012

corresponds to an increase in ecosystem functions as seen in the vertical axis. Increased diversity also allows an ecosystem to be more resilient, especially to the changing climate (Cardinale et. all, 2012). Tom Clark from the botanical garden said that any diversity on campus is remnant of a past greenhouse worker when they had more of a say on species selection on the whole campus. Recently Facilities have not been striving for diversity on campus, instead generally just planting what is pretty. For example, in terms of trees they mostly plant red oaks, pin oaks, crab apples and maples. While they do get bonus points for the generous use of oaks and other natives, the lack of diversity in trees (and any other species) means that they are more easily wiped out by diseases, something that is more prevalent with the changing climate. With any new vegetation I propose I would recommend that a diversity of plants are chosen in the design, not just simply a monoculture of one species. Even if it is just a patch of ground cover that consists of two species instead of just one.

Site

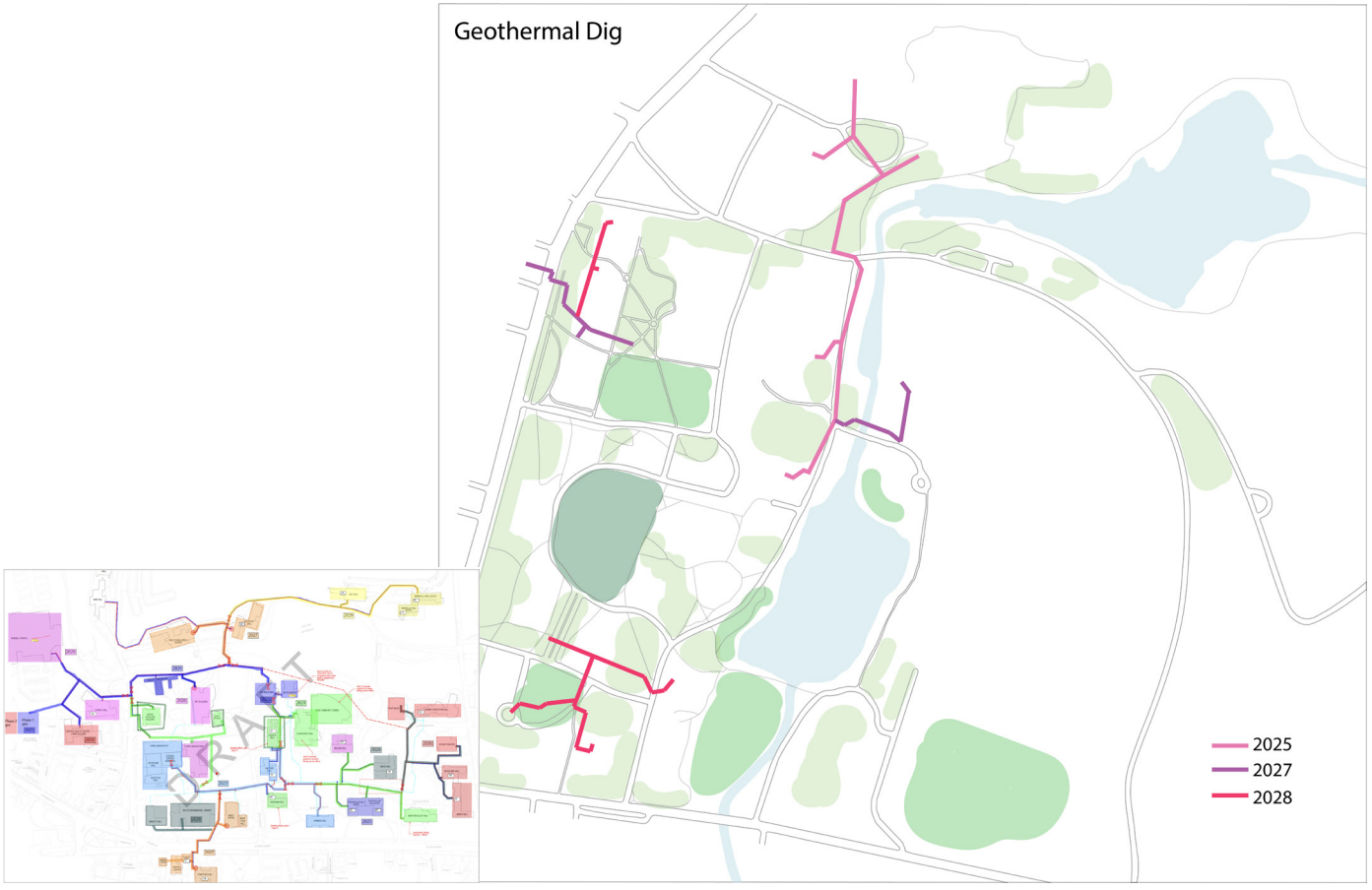
A final design would consider and include the current natural elements of the chosen site. To make the project more affordable for the school I kept all current landscape elements the same (aside from the lawns), and kept my redesign as simple as possible. I also studied where shade occurs on the site which informs my design through plant selection. Using Rhino and the topography map of Mount Holyoke I evaluated where the sunny and shady spots are, as shown to the right.



Geothermal Digging

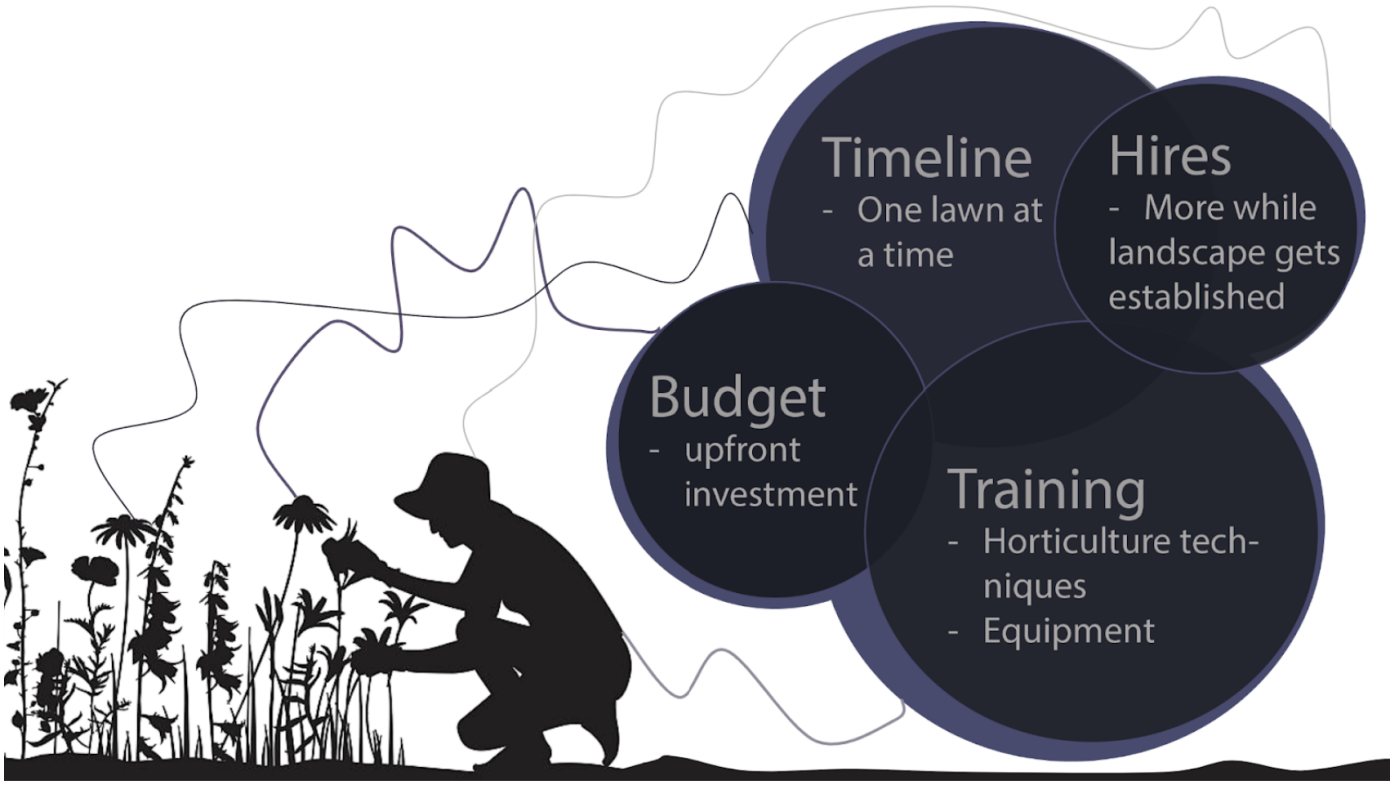
Geothermal digging, as seen below, lends itself perfectly to this project as a lot of our lawns will be dug up in the next 7 or so years. This means that alternative scaping can then easily be placed down after grass is removed.

After talking with Karla Youngblood and seeing the draft geothermal construction document, shown on the next page, I mapped out the potential dig spots on my landscape plan for the coming years. Both the 2025 and 2028 digs lend themselves to my Torrey and Abbey lawns pilot projects which will be described in the next chapter.


Geothermal Dig
2025
2027
2028
DRAFT

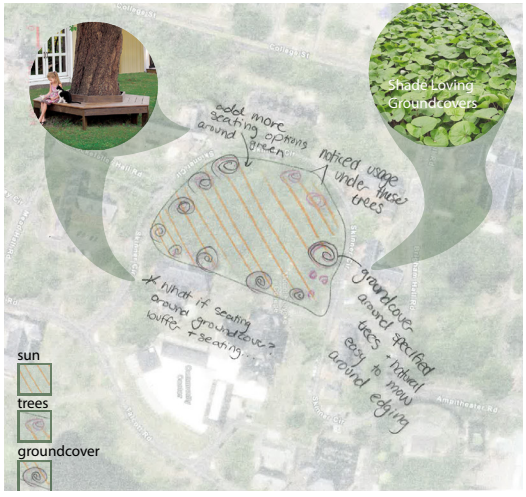
Department Changes

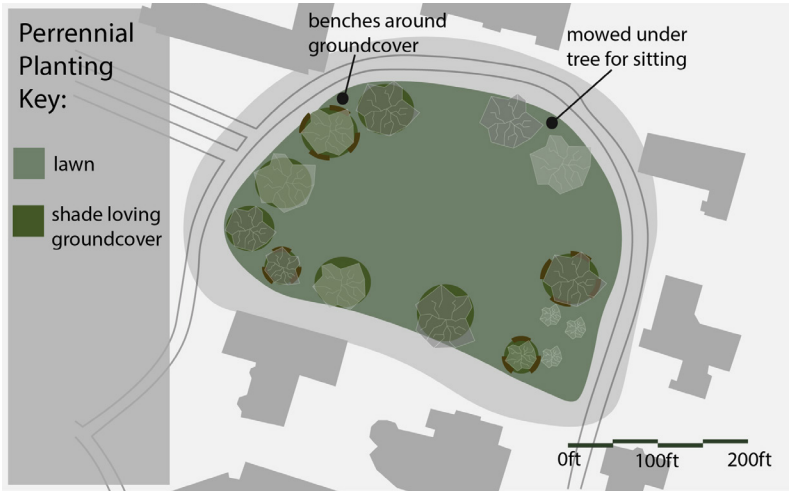
In order for alternative scaping to be possible there does need to be department changes and a strategic plan. This was brought to my attention when I interviewed Bertone-Johnson about the Smith Landscape Master Plan. For my management and investment proposal I didn't want to get too much in the weeds, as this is not my field of expertise, however I did some interviews and research and came up with a general outline for what changes need to be made with a landscape like this. New hires for the facilities crew would likely need to be made, especially during the establishment of the plants. Additionally, staff would need to be trained in order to take care of the landscape. This means knowing what invasives or weeds look like and how to control them, as well as monitoring the plants at each site during the first couple years of growing to see if replacements need to be made. A collaboration with or course taught by the horticulture crew would be beneficial for facilities to learn horticulture techniques like plant and invasive species identification. This also would encourage the two crews (botanical and facilities) to work together, especially with the addition of a weekly newsletter and/or meetings as previously suggested. New equipment like a rotary mower would also need to be acquired and learned. With that being said a budget would also need to be worked out. Seed, plants, both upfront and long term care equipment, and manpower costs would all add up, but again, this is an investment that will pay off in the long term both economically and environmentally. A plan of action to develop this landscape would be helpful to have. Chris Domina and I agreed that it is important to bite off small pieces, meaning make these changes one lawn at a time. My master design layout makes this easy, as it is divided by lawn and type. Additionally, the geothermal project lends itself perfectly to the initiation of this project. With this timeline in mind, I propose we develop the Torrey pilot project after the 2025 dig as our first chip away at the proposal.


Timeline
- One lawn at a time
Hires
- More while landscape gets established
Budget
- upfront investment
Training
- Horticulture techniques
- Equipment

Pilot Project Proposals

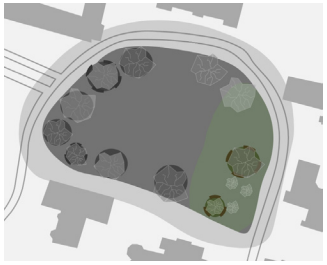
Proposal 1: Main Green





Main Green plans

The figure above and on the left shows my original thoughts on the transformation of the main green and on the right is the final digital plan. The college lawn feel would remain the same, the only difference is the addition of groundcover under the trees to support wildlife growth. Around the groundcover would be benches for sitting, something that is lacking in our current green spaces. Specific trees would remain without ground cover to allow for sitting up against the trunks. Following is a before and after of what that could look like.



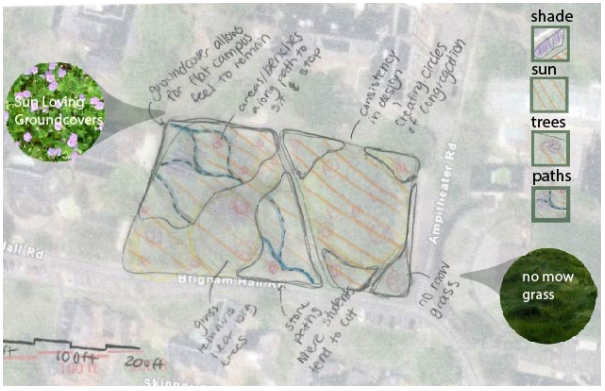
Main Green today

Main Green render

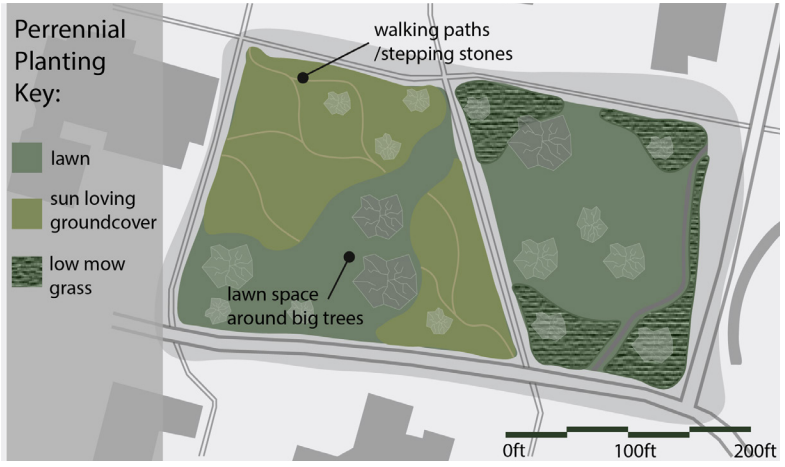
The purpose of adding groundcover under the trees is for the health of the tree and the ecosystem makeup around the tree. Mowing up against the base of a tree compacts the soil and irritates tree roots. Therefore, we see beds of mulch under many of our trees on campus. Mulch, done correctly (too much suffocates the tree), is not bad for the tree. It actually retains moisture and nutrients in the soil. However, it doesn't provide habitat for the ecosystem around the tree. This is why simply adding a perennial groundcover on our empty mulch beds around trees is the best alternative. Ground cover provides that same retention of moisture and nutrients while also providing habitat for insects and caterpillars that fall from the tree to become pupa or just to live. It also looks prettier than a circle of mulch and would be cheaper as it doesn't need yearly replacement. Additionally, the use of both would work well, especially as the groundcover is getting established to keep weeds out (Seyfried, 2023).

Groundcover under trees provides a soft landing for caterpillars when they fall from trees and a habitat that doesn't get mowed

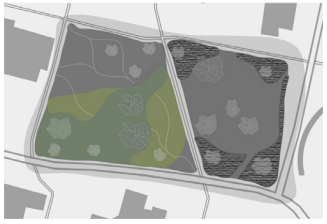
Proposal 2.0: Academic Green



Academic Green plans

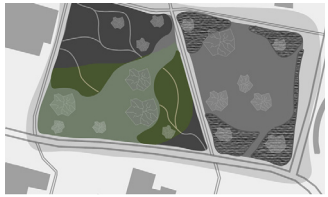


Above are my thoughts and final plan for the Academic Green which is an example of a lawn becoming roughly 50% alternative. On the Mary Lyon grave lawn I propose adding native low mow grass like Pennsylvania sedge on the corners of the lawn, still allowing people to gather in the central space. On the other lawn I propose a low groundcover on the outskirts where the lawn typically goes unused. Stone or mowed paths through the groundcover allow students to still take their typical short cuts through the space. The large central trees are still left with lawn underneath as students typically relax and hammock here. The purpose of choosing low vegetation is to keep that flat campus feel on such a central and important lawn on campus, which is shown and explained further in the renders and diagram that follow.



Academic Green today

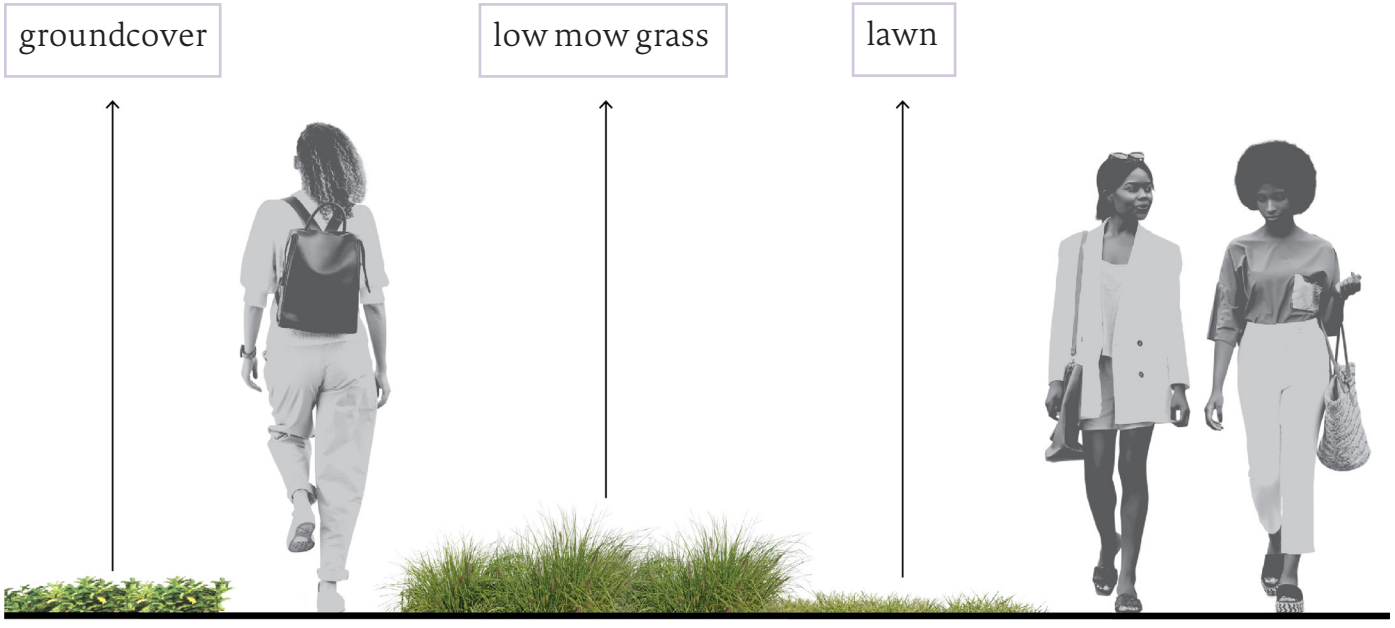
Academic Green render



Academic Green / Mary Lyon Grave today

Academic Green / Mary Lyon Grave render

varied heights but all keep the flat campus feel



Proposal 2.5: Abbey, Creighton, Lower Lake

Abbey, Creighton, Lower Lake plans

I wanted to show some more examples of what the 50% alternative landscape would look like since it is the most variable design based on location and student use. Choosing to keep some of the lawn is purposeful, therefore it is vital to understand how students use the current lawn in the specific space in order to design it well.

Taking a closer look at Abbey, I noticed that students typically use the lawn to walk straight across it for connection to and from the dorms. Students also enjoy utilizing the seating under the trees on the outskirts of the lawn. Therefore, the central space becomes a combination

Abbey Green today

Abbey Green render

of low mow grass and groundcover with a mowed pathway through the center. This also still allows students to sit under the large tree, another more common Abbey lawn activity. The purpose of having both groundcover and grass is to increase plant species diversity and also it has an aesthetic cascading effect.

Creighton Green today

Creighton Green render

Creighton lawn is one that many students and faculty agreed should not be a lawn as it tends to go unused. However, I did talk to some students that use the bowl shaped lawn as a convenient space for soccer or frisbee as it doesn't usually have other students dispersed on the

lawn. I think the space has a great potential to better provide for this type of activity. The issue with Creighton though, is the ease at which this lawn floods during a typical rainstorm. Adding a large meadow along the outskirts, extending the tree line, and placing groundcover by the dorm would allow for a more extensive root system and looser soils and therefore less flooding. Plants could also be selected to have the deepest roots and become more of a rain garden if desired, but I think increasing native vegetation in general would help a lot. The typical activities of soccer and frisbee could not only continue to happen but also hopefully happen more often. Additionally, extending the treeline reduces traffic sounds and makes the space more welcoming. To the left is a render of what this could look like in the fall.

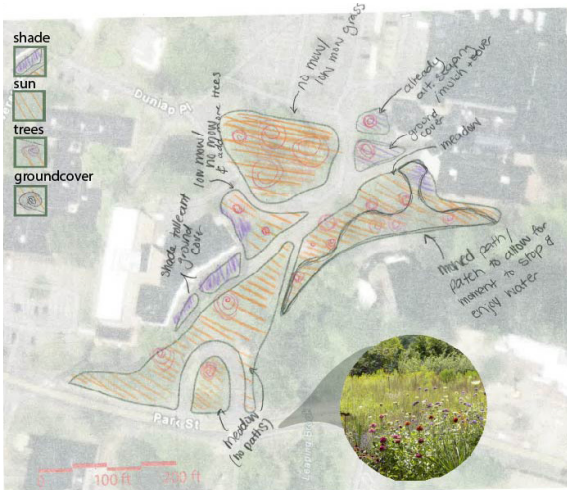
The lawn by Lower Lake also typically goes unused, besides the occasional picnic, walking along the water's edge, or sitting by the lake. Because of this I wanted to keep the lawn along the lake as well as the current dirt pathway. However, along the path and road would be a designed rain garden bed. The current path tends to get muddy and un-usable during any type of rainstorm. Adding a rain garden would greatly improve this walkability and increase usage. Furthermore, keeping our waterways healthy is extremely important, unfortunately humans do a great job of polluting them. Due to human activities such as driving, paving, lawn fertilizing, etc., "The stormwater runoff carries pollutants such as oil, dirt, chemicals, and lawn fertilizers directly to streams and rivers, where they seriously harm water quality" (Protecting Water Quality from Urban Runoff, 2003). With this strip of lawn being located between a paved road and the lake, it makes for a perfect opportunity to add a rain garden along the road where a lot of polluted runoff is coming from. Right now, the lawns with their shallow roots do a terrible job of absorbing pollutants and water. A rain garden would greatly improve the conditions and environmental health of this area/system. Below is a render and diagram to show what this might look like and how a rain garden works.

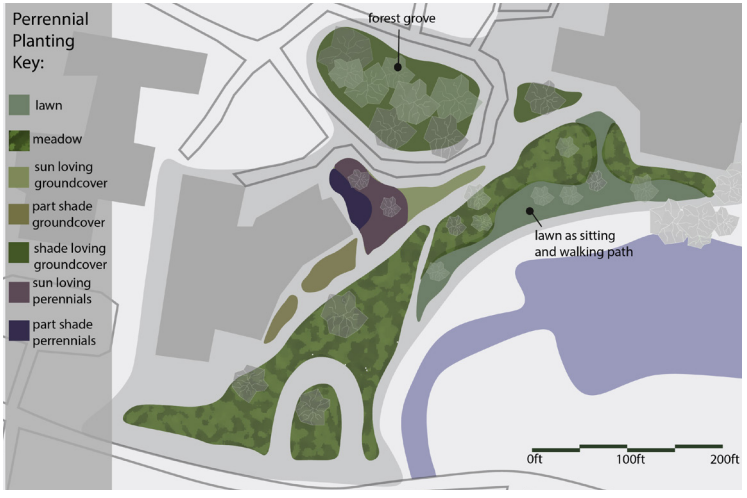
Lower Lake Green today

Lower Lake Green render


water gets filtered and
absorbed by rain garden
before entering lower lake

Proposal 3: Torrey Lawn





Torrey plans

Finally, what I designated as the Torrey Lawn, which is also the group of lawns in front of Torrey, the Athletic Complex, and Upper Lake, is an example of a 100% alternative lawn system. Here the one small plot of land that remains lawn is along the water as indicated in the figure on the right. Here students can still sit and enjoy the sounds of the flowing water. Currently this space is rarely used so I think this design would actually encourage more people to sit and stay, especially if a couple of additional benches were added. The rest of the lawns are rarely if ever used and therefore would become either meadow, groundcover, perennials, or a combination of the above depending on the site. A mix of groundcovers, perennials and grasses that grow well together due to similar resource and environmental needs are what comprise a successful self-sustaining and self-regulating garden (Grivas, 2022). Following are renders of what this roughly 100% alternative scaping would look like both in the winter and summer seasons and also a diagram of the importance of this range of plantings.

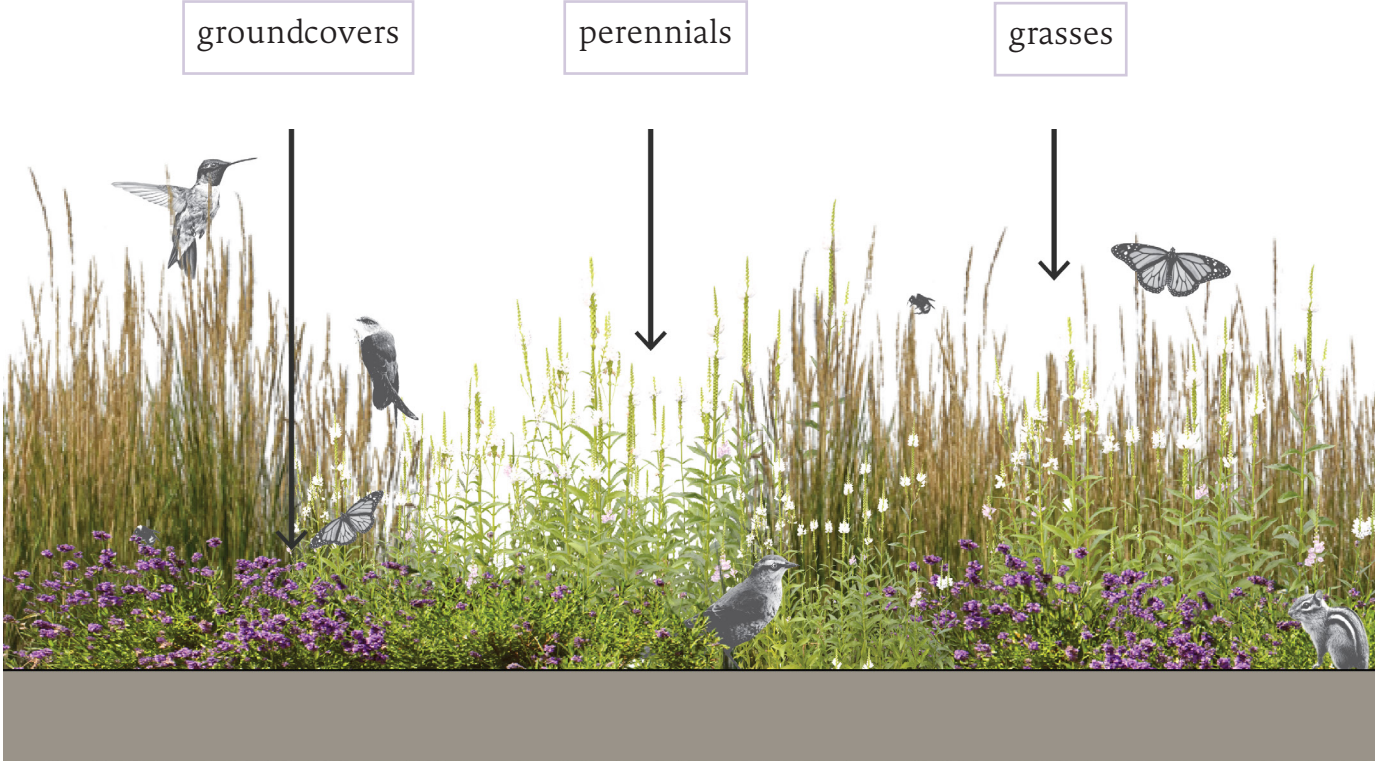
Torrey Green today

Torrey Green render

Torrey Green / Athetic Center today

Torrey Green / Athetic Center render

a good natural garden arrangement consists of a mix of native groundcovers, perennials, and grasses that have similar growing conditions and therefore live in harmony and allow wildlife to live in harmony



Other Options

These pilot projects are just examples of what these alternative landscapes could look like. However, I don't want to limit the vegetation options. Another viable alternative to a lawn is an edible garden or even incorporating edible species into a design. For my Sustainable Agriculture course at Hampshire College with Brian Schaumacer, I designed an upgraded edible garden for Mount Holyoke. One that would emphasize community maintenance, learning, and sharing. A garden can be both beautiful and productive (and in this way not just environmentally but also socially). Getting students to pick as they pass allows them to understand where food comes from and also encourages them to get involved. I created an edible garden design, which you can see in my collage render, but parts of this design can be applied to other areas of campus as well.

Greenhouse Gardens today

Greenhouse Gardens render

Design Conclusions

This change would be quite drastic, and the Mount Holyoke campus would have quite a different feel to it. Driving by campus with the new design would now look something like the image below, and I believe would make a statement. A statement that Mount Holyoke is shifting their landscape goals to align more with nature rather than the controlled and pristine lawns that have taken over so many privately owned landscapes in the US. This is a shift away from the normal, a scary task, but Mount Holyoke, along with other colleges like Smith and Hampshire, can become a beacon for this change.

Front of Campus render

Questions/Future Plans

Along my journey I have received a lot of similar concerns or questions about this type of landscaping. I just want to answer a few of the most common ones.

What about ticks?

After talking with Kelly D. Norris (an accomplished Horticulturalist well known for his meadow garden designs) he reassured me that he rarely finds a tick on him after walking through his meadows. He states:

> Some of these concerns stem from a general misunderstanding of tick biology; they generally follow the trails of large mammals like deer and congregate in areas where those animals bed. In most landscapes with human activities, deer are passing through and in motion while foraging. Ticks also prefer tall grasses and edge habitats between wooded and open areas because it provides them a higher likelihood of encountering a food source. In open meadow areas, their population density declines dramatically. Do the chances fall to 0? No. But relatively speaking, I think it's a minor concern for most landscape settings (residential, campus, etc.). (K. Norris, personal communication, February 13, 2024)

Hopefully this expert advice reassures other students as well. However, learning to live alongside nature and not controlling it is extremely important in our changing climate. A practice of checking for ticks could become part of the process, but hopefully my research is correct and this will not be a concern for long.

Would the geese still be able to use this habitat?

After doing some research geese prefer a habitat that is wide open so they can see approaching predators. My proposal includes a mix of alternatives, most of which are low growing plants, meaning they would likely easily adapt to this landscape. Geese also live in marshes where the vegetation is a little taller than turf grass, so I think our current geese would

be just fine if turf was reduced. They eat grass, grain, bulbs, and berries, which they would still have plenty of in this new landscape ("Canada Geese.").

Source: Photo of geese in wetlands, Audubon

Why Mount Holyoke?

Some people wondered about the relevance of Mount Holyoke adopting a landscape like this. Our campus is surrounded by lots of vegetation, hiking trails, bodies of water… ie.habitat. So why does our small campus out in the woods need to make this change? A Washington Post article states that "There are an estimated 40 million to 50 million acres of lawn in the continental United States — that's nearly as much as all of the country's national parks combined" (Root, 2021). If Mount Holyoke makes this change, we set a great example for other homeowners, colleges, and private landowners to follow. Species need more habitat; this movement starts with just one property owner to convert their lawn, and we should be part of that movement as a place of higher learning. With that being said, it would also be a great learning opportunity. As Robin Wall Kimmerer states it perfectly, "the plants are our

oldest teachers" (Kimmerer, 2020, 213). Finally, we have a flooding problem. Adding this type of vegetation will greatly reduce that issue.

As for the future of this project, I am hoping to see some of these plans realized. Inviting President Holley to my thesis presentation allowed for this project to be heard by people who could actually make this change. After the presentation she encouraged me to send her the final documents and set up a time to talk. I am looking forward to speaking with her at the end of the school year to gain her full support behind this project. I also met with Karla Youngblood, the Associate Vice President for Facilities Management who would play a major role in the encouragement and establishment of this project and future lawn renovations. She informed me that the Torrey Proposal would be a great pilot project, especially with it lining up with the geothermal dig. We are going to continue conversation but at this moment the construction documents for the 2025 dig are at the 50% design development stage, meaning this is the perfect time to propose this landscape plan and make it happen. Karla will be checking in with her staff about the possibility, then confirming plans with the landscape architecture firm (GZA), and then finally setting it in the final construction documents (Conversation with Karla Youngblood, May 10, 2024). This is exciting news, however this is just the start! I look forward to coming back to campus as an alumna and hopefully seeing a bit of a new campus.

Conclusion

In conclusion it is important to provide a healthy landscape for both our community and the ecosystem around us. Converting lawns is a popular and ever-growing movement that is a relatively easy change to make, but has the potential to be a major environmental steward. It is a no-brainer to many to make a change like this, but to many others it is seen as silly. This is why it is important for college campuses, a place of higher learning, to be at the forefront of this movement and to set a good example of alternatives for others with lawns. Garden designer Kelly D. Norris stated that "Why are gardens only held to the standards of being beautiful? Why can't they also be part of the natural landscape even if we've 'made' them? Why can't they also be habitats? Why can't they also be just interesting and complex?" (Norris, 2023). These are the kind of questions that I want students to contemplate when they are considering this new landscaping approach for our campus. When I walk through campus I enjoy the manicured aesthetic because of course it is beautiful, but what I enjoy more is the sweet smell of a Katsura tree, the whooshing tall grasses as they dance in the wind, the sight of a squirrel's mouth full of oak leaves, the count down to the fall of the Gingko leaves, the discovery of a new flower in the botanical garden, spotting a butterfly on the Black-eyed Susans, and so much more that comes with nature.

Front of Campus today

Front of Campus render

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