

PRAIRIE

UNIVERSITY OF IOWA
RESTORATION PROJECT





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Establish a community-led, half-acre demonstration prairie at The University of Iowa's Ashton Cross Country Course.

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Prairie restorations provide ecological, environmental, economical and social benefits to the community.

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A collaboration between The University of Iowa Office of Sustainability and the Environment, student organizations, university staff and faculty, and the local business community.

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A half-acre of non-operational land at The University of Iowa Ashton Cross Country Course.

05 THE PLAN + THE BUDGET

Establish a small demonstration prairie in Spring of 2019 and continue to grow and maintain the prairie into the future.



INTRODUCTION

The idea

About 200 years ago, the entire state of Iowa was blanketed in the crown jewel of American landscapes, the tall grass prairie. With grasses as high as twelve feet, enormous yellow aster flowers, and deep blue corn lowers, the aesthetic of this landscape was undeniable. Seeing the landscape for the first time, explorers and settlers marveled at the grasses and wildflowers waving in the wind and stretching to the horizon, like a sea of grass. But, since the arrival of settlers in Iowa, the rich and nutrient dense soil created by the prairie plants has been exploited for industrial agricultural use.

The booming, modern agricultural industry slowly drove the out the native prairie plants, and today less than 0.01% of native Iowa tallgrass prairie remains. As a crucial public institution, it is vital that the University of Iowa confront this profound loss. A tallgrass prairie restoration would foster the growth of native plants and serve the student body through hands on educational experiences.



WHY

The benefits

ENVIRONMENTAL

- Provide habitat for endangered species such as native birds
- Improve water, air, and soil quality
- Crucial habitat for at risk pollinator species

SOCIAL

- Aesthetic value
- Improvement of shared community space
- Equitable education opportunities through signage

ECONOMIC

- Low long term maintenance
- Contributes to the Green Sports Alliance
- Native landscaping is more cost effective than conventional landscaping

EDUCATIONAL

- Hands-on land stewardship experience for students
- Field work experience for biology students
- Volunteer opportunities for environmental science students

WHO



GRINNELL COLLEGE

Grinnell first acquired land to start restoration work in 1968. Since then, students, faculty, and staff have worked to restore and preserve over 360 acres of prairie, savanna, wetlands, and oak forest.

DORDT COLLEGE

The 20 acre tall grass prairie at Dordt is curated by Environmental Studies professor Robert De Haan. Environmental studies, biology, and agriculture students are encouraged to use the prairie as a living laboratory. First planted in 2008, about 80 species of wildflowers and grasses now thrive in the prairie.



LUTHER COLLEGE

First planted in 1988, Anderson Prairie is about 25 acres today. Anderson Prairie is located on campus near resident halls and was planted to reduce soil erosion and increase biodiversity. Gateway Prairie is a nearly 40 acres prairie established in 2005 across from campus and planted to provide aesthetic and recreational benefits to the Decorah community.

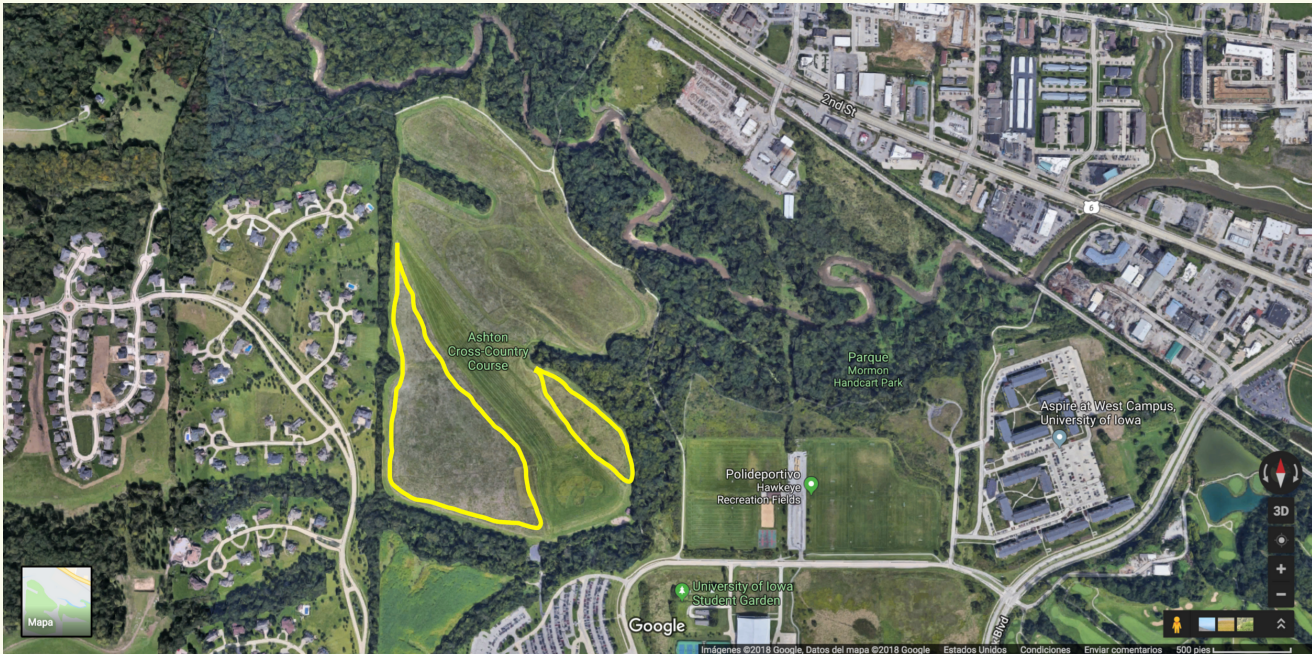


WHO



On campus at the University of Iowa, the prairie restoration would be a collaboration between student organizations, the Earth and Environmental Sciences Department, the Office of Sustainability and the Environment, University Athletics, and university faculty and staff. In the community, the prairie would provide a means of collaboration between the university and local businesses through funding processes and other volunteer projects. |

WHERE



LOCATION

Ashton Cross Country Course currently has locations already used as designated no-mow zones. By initiating the prairie restoration project at this location, land that is already being converted to natural lands would be used. Ashton is used frequently by community members, students, and campus guests alike, making it an ideal location for community engagement.



PHASE ONE

YEAR ONE

THE PLAN

- In spring of 2019, as the ground dethaws, measure and delineate a half-acre of non-operation or unused land at Ashton Cross Country Course.
- With the help from The University of Iowa's Environmental Science Club, Environmental Coalition, and environmental science students, remove dead thatch (living and dead plant matter) from the half-acre prairie project area and sow with native plant seed.
- Initial maintenance performed by volunteers from The University of Iowa's Environmental Science Club, Environmental Coalition, and environmental science students.
- Students will observe, measure, and monitor seedling germination and plant growth in both the summer and autumn following seeding.
- Students will design multilingual signs, including translations in Spanish, Arabic, and Braille, for display adjacent to the project area. Signs have the intended purpose of educational enrichment and community engagement.



PHASE ONE

YEAR ONE

THE BUDGET



PHASE TWO

YEARS 2-7

THE PLAN

- Begin in the fall of 2019 killing off current plants to prepare the site for native plant planting. Instead of using chemicals, use large black tarps to inhibit photosynthesis and growth of plants.
- In spring of 2020 plant 3 acres of tall grass seed on Ashton Cross Country course on prepared, bare land.
- Operate and execute general prairie maintenance for first five years or until prairie is mature including mowing, weeding, burning, etc.
- Begin educational programming with biology department, environmental science department, School of the Wild, etc.
- Continue volunteer labor with UIEC, Environmental Science Club, and environmental science students.
- Include landscaping services staff in prairie maintenance work.



PHASE TWO

YEARS 2-7

THE BUDGET



PHASE THREE

YEARS 5+

THE PLAN

- Continue programming and promotion of three acres of prairie at Ashton Cross Country. Expand prairie at this location to other no mow zones around course.
- Continue educational programming at Ashton Cross Country Course.
- Continue partnership with UIEC, Environmental Science Club, and environmental science students for volunteer maintenance labor.
- Continue maintenance partnership at Ashton Cross Country Course with landscaping services stop.
- Continue general prairie maintenance at Ashton Cross Country Course including mowing, weeding, burning, etc.
- Expand native landscaping and prairie restoration zones to identified areas along the Iowa River closer to campus.



PHASE THREE

YEARS 7+

THE BUDGET



CONCLUSION

The iconic fields of tallgrass prairie that used to blanket the entire state of Iowa in vibrant blooms and diverse wildlife has been lost at the hands of industrial agriculture. Due to the University of Iowa's crucial role in the state, it would be incredibly powerful for the university to embrace its natural history and set a state wide example of environmental conservation by planting and maintaining a tallgrass prairie on the Ashton Cross Country Course. Environmentally, the prairie would improve air quality, water quality, and soil quality. Economically, the prairie would be less expensive to maintain over extended periods of time as compared to other traditional landscaping methods. Academically, the prairie would

provide faculty and students alike with the opportunity to plant, grow, and monitor many different plant species as well as the various insects and wildlife that inhabit prairie land. Students would be further involved with the prairie through student organizations such as the Environmental Science Club, the University of Iowa Student Government, and the Environmental Coalition. By initiating the prairie with a half-acre plot in Spring 2019, a legacy will be born on campus. Long after current students have graduated, the prairie flowers and grasses will continue to bloom, create habitat, and providing learning experiences that benefit students, faculty, and the community at large.