

Prairie Fire

Martha Hill and Sherry Haar (mentor), Kansas State University

Environmental change, organic burn, zero waste design

Design Mentor Statement

The mentor relationship was instructor and student in a pattern-making course with a culminating project to design garments reflecting upon the 150-year history of the department through a lens of empowerment. To meet this purpose, an overview of the department's history was provided through presentations and guest speakers. Student's selected a concept and developed a project proposal. Following critique, students built more depth to their proposed project, and designs were edited and selected for construction. The Elements project was selected due to the student's strong research of environmental change of the region due to human settlement and land management practices. The Elements project included four garments, Earth, Wind, Water, and Prairie Fire. Prairie Fire was selected due to its particularly strong connection to the region, use of minimal waste, and creative solution incorporating fire.

Purpose and Background

The purpose was to design a group inspired by the theme of empowerment and a context from our 150-year history at a land-grant college. When comparing current and historic photos of the land I saw changes to the landscape from open grasslands to populations of invasive tree species. This change inspired me to research the regional environment and its changes over the past 150 years. Prairie burning replicates the effects of natural lightning fires to maintain prairie ecosystems (Courtwright, 2011). The fire removes dead plant material enabling new growth (Engledow, 2013). Of particular interest were the organic burn trials and their curvilinear charred paths (Figure 1) which lead to experimenting with Liu's (2016) use of seam allowance as decorative edges that also reduced material waste.



Figure 1. Organic prairie burn
by James Nedresky.



Figure 2. Zero-waste fashion by Mark Liu.

Process

The design process included researching prairie fires, sketching, draping the design with minimal fabric waste, and fabric burn tests. The exposed and decorative seam allowances burned best by holding the rayon/acetate over a candle and smothering any hot spots with a damp towel. The burlap weave fabric of the skirt portion was draped with no fabric fall-out.

Summary

Prairie burning from a natural occurrence to today's managed burns was viewed as empowerment as humans and nature work in tandem to preserve the region's environmental history. The dress, Prairie Fire, represents this history.

References

Courtwright, J. (2011). *Prairie Fire: A Great Plains History*. University Press of Kansas.

Engledow, J. (2013). The benefits of burning Prairie Grass. *Engledow Group*.
<https://www.engledow.com/green-scene/2013/05/the-benefits-of-burning-prairie-grass/>

Liu, M. (2016). Zero-waste fashion. <http://www.drmarkliu.com/zerowaste-fashion-1>



