



Lenape Garden Project; Southside Permaculture Park



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Abstract

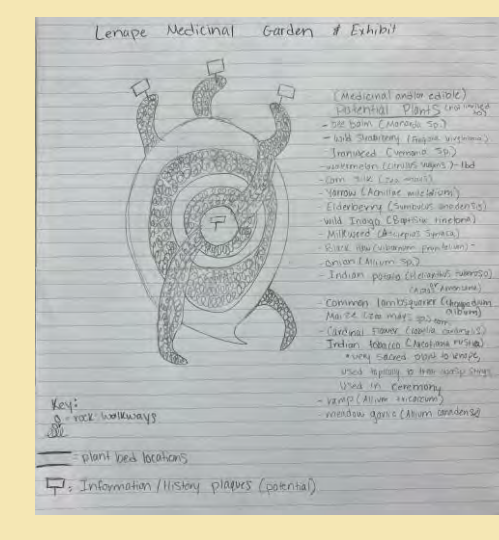
Permaculture is an avenue for urban sustainability that involves growing plants for food, medicine, and fiber within an existing ecological context. Indigenous people in this area utilized permaculture principles before European arrival in Eastern PA. There is a lack of appreciation for indigenous peoples' knowledge and history regarding plants in the local area. In this fellowship, I worked with the permaculture team to continue developing Southside Permaculture Park infrastructure, and also facilitated creation of a Native American plant garden and exhibit. The fundamental research question was, what plants and knowledge should be included and how should they be represented? My methods included a literature search on Native American plant use in Eastern Pennsylvania, and interviews of key informants about plant use and appropriate representation of indigenous knowledge. The data collected included a list of plants and their uses and documented informant knowledge. I used the information to buy plants and begin to install a Native American Ethnobotanical plant garden including interpretive signs in the Southside of Bethlehem.

Introduction

The Southside Permaculture Park was once a plot of grass unused and continuously being mowed by the university. With permission, the eco house living next door began the permaculture park on this land, creating an experimental laboratory and a center to teach about the principles of permaculture, practice, and theory. The goal of the park is to rebuild a more sustainable and regenerative society that produces food, medicine, and material, while also increasing biodiversity and reducing atmospheric carbon ("Southside Permaculture Park"). A critical aspect of practicing permaculture is recognizing its roots that are built on indigenous knowledge. The Lenape peoples are the Native Americans that used to reside in Bethlehem, PA hundreds of years ago, but were forced out throughout European colonization. The goal of this project is to introduced a new garden on the Greenway of Southside Bethlehem recognizing the Lenape peoples and exhibiting the reciprocal relationship that the Lenape peoples shared with the land. The garden is meant to house native plants used by the Lenape peoples as food and medicine and incorporate accurate informational displays about who the Lenape were and where they are now. According to the Proceedings of the National Academy of Sciences in the US (PNAS), as plants go extinct, traditional ecological knowledge dissipates as well, and vice versa (Cámara-Leret, Rodrigo, et al.). Reintroducing some of this knowledge may help inspire the preservation of this precious information and the peoples from which it comes from, as well as connect people to history and the environment.



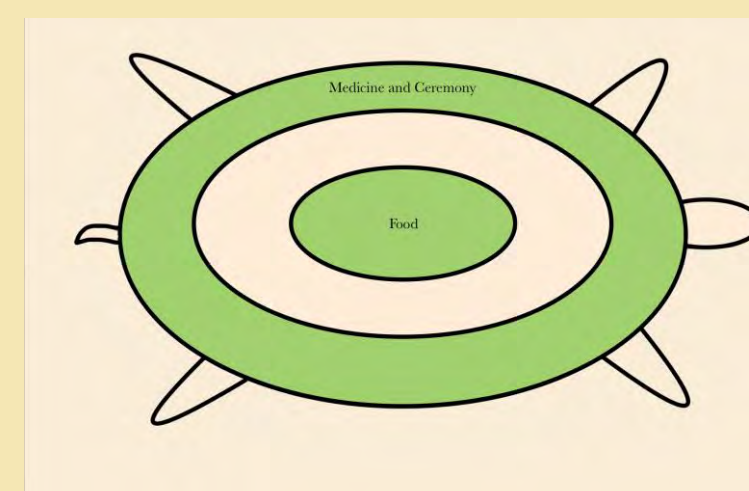
Methods



- Work as a part of the Southside Permaculture Team to expand the garden and knowledge of permaculture to the surrounding community
- Be granted permission by the Bethlehem City Council to implement a garden on the Greenway and determine best fit location
- Work with the Delaware Nation Historic Preservation office to gain insight on exhibits and ensure accurate information about the Lenape peoples
- Literature research history on the Lenape peoples
- Utilize key informants to determine native medicinal and food herbs and information on their use to be incorporated in the garden
- Build an ethnobotanical garden and determine a plan for long-term sustainability

Results

- Southside Permaculture Team fulfilled major goals including building a shed, partnering with Sierra Club to host a presentation on Permaculture, building a native hedgerow fence around the park, and partnering with other community garden groups.
- Permission was granted by the Bethlehem City Council to implement the garden and support was offered for gathering materials and signage
- LettuceGrow donated a hydroponic system for growth of herbs and foods during the off season
- Five exhibit panels in the process of creation with information on: "Lenape Garden Project Design," "How to Treat Plants," "Lenape Creation Story," "Lenape in Bethlehem," and "Where are the Lenape Now."
- Plants determined, seeds obtained, and accurate medicinal and edible uses documented
- Ethnobotanical garden was designed, and foundation was built



Conclusion

The goal of the project was ultimately to work with the Southside Permaculture Team and to recognize the Lenape peoples who used to reside in this area and inspire the philosophies of permaculture. A medicinal plant and food garden allows knowledge and history to be shared within the community and introduces the notion of living in reciprocity with the land. One of the overarching challenges of this project was navigating the sensitivity of working with indigenous knowledge. The Lenape peoples have faced generations of exploitation of knowledge taken and used without credit, which made it difficult to find tribal members willing to act as informants on this project. However, due to trusting relationships in the Institute for Indigenous Studies, the Delaware Nation Historic Preservation Office was a key contributor to ensuring accuracy in information. This garden is a milestone in the Southside Permaculture integration into the community, but also serves to educate the community on the profound indigenous knowledge that served this land hundreds of years ago.

Future Work

The exhibit panels of the Lenape garden are currently in the finalization stages before the Delaware Nation's executive council review. The plants for the garden are perennial and will be planted at the end of September for the best outcomes. Avenues for expansion and long-term maintenance are currently being explored, since one of the important aspects of garden creation is ensuring that the garden continues to positively impact the community and accurately represents the Lenape peoples in future years to come.

The Southside Permaculture Park team's efforts continue into the Fall 2022 semester under the Office of Creative Inquiry. The team is presenting work in the 2022 Engagement Scholarship Consortium's Annual Conference on Sept 19-22, 2022.



Citation/Acknowledgement

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Cámara-Leret, Rodrigo, et al. "Indigenous Knowledge Networks in the Face of Global Change." *PNAS*, National Academy of Sciences, 14 May 2019, <https://www.pnas.org/content/116/20/9913>.