

Guyette Farm Comprehensive Management Plan: Internship with the Franklin Land Trust

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Introduction

As continued suburban development threatens natural resources, land conservation organizations play an increasingly important role in their protection. The Franklin Land Trust provides landowners with the education and tools necessary to legally restrict their properties from future development, thus ensuring the protection of natural resources. The Franklin Land Trust was recently gifted Guyette Farm, a 107-acre property in Plainfield, Massachusetts with strong historic and agricultural ties in the community (Photo 1). The Land Trust has begun to apply conservation practices to the Guyette Farm and has opened this property to the public as a model for local landowners to recognize the value of land conservation.

Goal

The goal of this internship was to write a comprehensive and functional management plan, with involvement from the local community, for the conservation of the natural resources of Guyette Farm. This management plan delineates a series of long-term activities that facilitate the continued preservation of natural resources and wildlife. To achieve this goal, my action plan included the following steps:



Photo 1. View of Guyette Farm

- Conducting a comprehensive inventory and analysis of ecological data and current use of the property.
- Collaborating with the Massachusetts Department of Fisheries and Wildlife (DFW) to examine the potential for habitat conservation of declining native brook trout, whose population may be vulnerable to increasing temperatures of climate change (Massachusetts Division of Fisheries and Wildlife, 2008).
- Meeting with various stakeholders to discern others' visions for Guyette Farm.

To achieve my goal, I applied knowledge and skills gained during my professional development at SUNY College of Environmental Science and Forestry (SUNY ESF). Additionally, the internship served as my integrative capstone experience of which I recently presented the management plan to the faculty and student body of SUNY ESF. My final management plan will serve as a guiding resource to both the Franklin Land Trust and future students and faculty at SUNY ESF that are interested in developing management plans for protected properties.

Internship Responsibilities

Initially, I conducted a comprehensive inventory of the current contracts and documents that pertain to the ecology, history, and management of Guyette Farm. Composed primarily of woodlands, the property currently has a forest stewardship plan outlining sustainable forestry practices that the Franklin Land Trust will complete over the next few years. In other non-forested areas, contracts such as the Wildlife Habitat Incentive Program (WHIP) identify management activities and a payment schedule for a grant provided by the Natural Resources Conservation Service. In addition to reviewing these contracts, I also noted documents that describe the history of land use on the property, the property deed, and the intent of the land donor, Evelyn Guyette. During this inventory phase, I also discussed the future of Guyette Farm with individuals from external organizations. With distinct interests in the property, stakeholders such as the community garden coordinator provided me with information on how they envisioned their roles on Guyette Farm in the future.

Throughout the internship, I examined vegetation composition, soils, hydrology, and current management practices. The Franklin Land Trust provided me with a statewide database of geospatial information known as MassGIS (Commonwealth of Massachusetts, 2010). This database allowed me to review site data, such as soils, topography, and aerial photographs.

Guided by maps that I created using geographic information system (GIS) software (Figure 1), I regularly visited the property to examine the potential for different management practices based on site conditions. During site visits, I also collected waypoints of important land features, such as trails and invasive species, which I later used to create inventory and management maps.

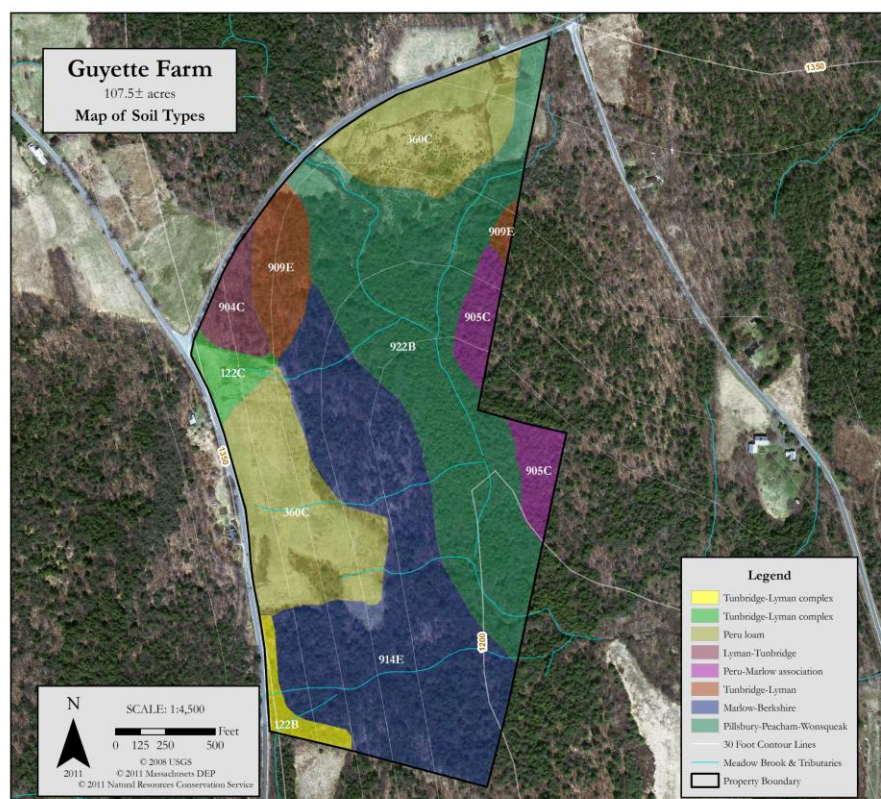


Figure 1. Inventory map of soil types (not to scale)

Through data inventory and site visits, I created a series of inventory maps that facilitated the analysis of management opportunities on Guyette Farm. Review of maps allowed Franklin Land Trust staff and me to create a vision, goals and objectives for management of the property. Within the framework of these goals and objectives, I subsequently created customized geospatial shapes that depict management in different areas of the property. Collectively, I incorporated these shapes to create management maps that are unique to the various resources on the property. I also created maps to show locations of future trails and areas of stakeholder interest.

To determine how others envision their use on the property, I discussed the vision of Guyette Farm with various stakeholders through informal interviews. This began with a conversation with Massachusetts Division of Fisheries and Wildlife (DFW) in which I identified the general wildlife value of the habitat surrounding Meadow Brook, the interest of DFW in conservation efforts of Guyette Farm, and whether or not DFW had conducted any landowner outreach efforts in the region surrounding this property. During this conversation, land agent Peter Milanesi indicated that DFW had not initiated outreach efforts in this area, but would appreciate the increased public awareness of conservation values as supported by the vision of Guyette Farm. I also held a conversation with the community garden coordinator, in which we discussed past accomplishments, goals for future years, and different garden management options. Conversations such as these led me to incorporate the goals of other organizations into the management plan of Guyette Farm.

Prior to writing the comprehensive management plan, I reviewed recommendations provided by the Land Trust Alliance (www.landtrustalliance.org), the leading land conservation organization that provides accreditation to land trusts nationally. I also reviewed two management plan case studies of similarly composed property held by the Hunterdon Land Trust Alliance (www.hlta.org) and 1000 Islands Land Trust (www.tiltrust.org).

Results

The final management plan is an extensive document that includes background information, goals and objectives, management strategies, and financial guidance. The background information includes an introduction to the setting of Guyette Farm, site soil characteristics, vegetation composition, and present public use. This introduction also describes the intent of Evelyn Guyette, who donated the property in honor of her late husband, Harry Guyette.

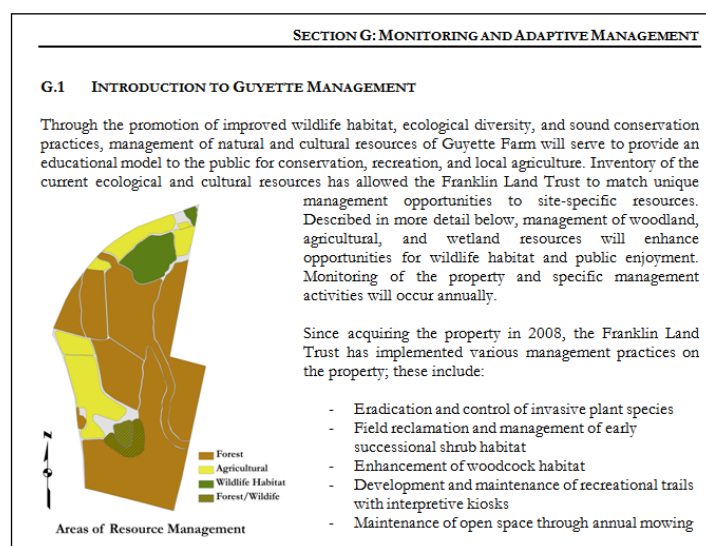


Figure 2. Excerpt from the management plan

Identified through discussion with the Land Trust and written into the management plan, the vision of Guyette Farm is to provide an educational model to the public for conservation, recreation, and local agriculture, while providing improved wildlife habitat, ecological diversity, and sound conservation practices. I also identified the goals and objectives for management of the property, which will serve to guide decision-making by the Franklin Land Trust.

To guide management of specific vegetation areas and resources, I included a section that outlines monitoring and adaptive management strategies (Figure 2). Examples of these strategies include the restoration of historic grazing pasture, forestry activity to improve timber resources, vegetation management to improve wildlife habitat, and the creation of interpretive trails that will connect the community to different management areas. In addition to describing specific management actions, I included management icons and referenced management maps (Figure 3) that I created earlier in the process. In this section, I also described the resources required for various management practices as well as potential funding sources. At the end of the document, I included appendices of management maps, inventory documents, and historical information.

Relevance

Since acquiring the property in 2008, the Franklin Land Trust has envisioned this property as an educational model to the public for responsible land stewardship and conservation. Integrating the goals of the Land Trust and the vision of the community, the management plan serves to guide the Franklin Land Trust in making decisions that are consistent with the vision and goals of Guyette Farm management.

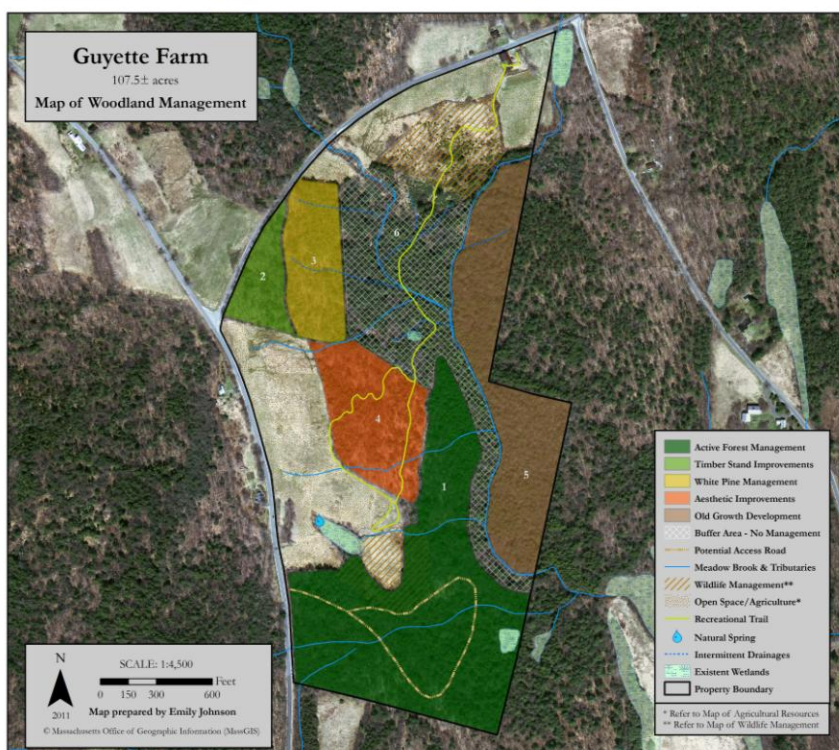


Figure 3. Management map located in appendix of management plan (not to scale)

By identifying key objectives, this document facilitates communication among staff and board members while also providing stakeholders and potential funders with a clear idea of how they can contribute to the success of the management vision. Most importantly, the management plan guides conscientious management so that the community is able to understand responsible land stewardship and consider similar management practices for their personal property.

Acknowledgements

I greatly appreciate the organizations and individuals that offered their time and guidance during my internship experience. I thank the staff of the Franklin Land Trust for providing me with the opportunity to learn and apply knowledge throughout this process. I would also like to thank my academic advisor, Dr. Robert Malmshemer, for his continual support and guidance during this project. Most importantly, I appreciate the support provided by the Edna Bailey Sussman Foundation that allowed me the unique opportunity to collaborate with the Franklin Land Trust in completing this distinct applied educational experience.

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