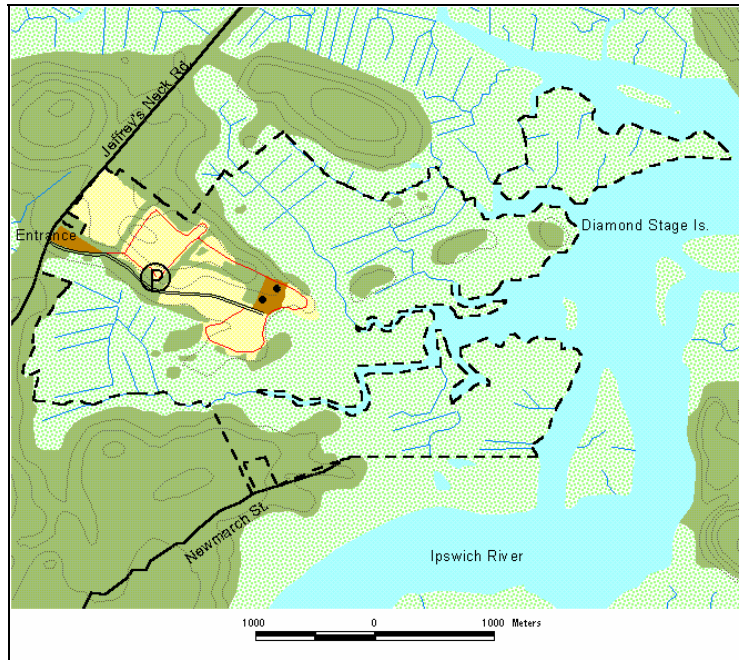


Greenwood Farm Reservation

Management Plan

1998



The Trustees of Reservations
572 Essex Street
Beverly, MA 01915-1530
(978) 921-1944

Northeast Regional Office:
Castle Hill
PO Box 563
Ipswich, MA 01938-2647
(978) 356-4351

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About the Maps Included in the Plan:

All maps are a product of the Geographic Information System of The Trustees of Reservations. Production of these maps is made possible, in part, by generous donations from the Stratford Foundation, Environmental Systems Research Institute, Inc., Data General Corporation, and Hewlett Packard.

Source data obtained from 1:24,000 scale USGS topographic maps, a Global Positioning System, and the Massachusetts Executive Office of Environmental Affairs, MASS GIS. Feature boundaries and locations are approximate.

i. Acknowledgments

The Greenwood Farm Management Plan was written by a planning team composed of staff members from the property, the region office and headquarters. Input was received from a number of outside sources, including the Boston University Preservation Studies Program, James Kypriano (Curator of the Ipswich Historical Society), and consultants Margo Muhl Davis, Robert Mussey, Preservation Technology Associates, Heather Salvatore, and Kathleen Wheeler. All contributed their invaluable expertise and advice to this effort.

Planning Team Members:

Hilary Hamilton, Superintendent (former)

Mark Bailey, Superintendent

Susan Hill Dolan, Northeast Regional Historic Resource Manager

Russ Hopping, Natural Resources Planning Assistant

David Rimmer, Northeast Regional Ecologist

Wayne Mitton, Northeast Regional Director

Elizabeth Redmond, Associate Director for Historic Resources (former)

Lisa Vernegaard, Associate Director for Planning and Ecology

Wes Ward, Director for Land Conservation

The Trustees of Reservations wish to thank everyone who was involved in the creation of the Greenwood Farm Management Plan for their time, effort and input.

Section 1: Executive Summary

Located along the Ipswich River, in Ipswich, Massachusetts, Greenwood Farm Reservation contains an extraordinary number of natural and cultural features. Totalling some 213 acres the property is composed of hay fields, woodlands, salt marsh and formal landscape. Two historically significant houses are located on the property: the Paine House which is one of the few remaining First Period houses in Massachusetts, and the Greenwood-Dodge House built in 1828. In addition, because Native Americans used the Ipswich coastal area as early as 10,000 years ago Greenwood Farm Reservation has a high archaeological potential.

Greenwood Farm was given to The Trustees of Reservations by Sally Dodge and her sister Alice Dodge Wolfson in 1979 (subject to a life interest held by Sally Dodge) with the wish that The Trustees "maintain the Paine House and as much of the surrounding land and land adjacent to the marshes already owned by The Trustees of Reservations as is possible."

This brief directive, which over the years was reinforced and expanded upon during conversations with the donors, is the foundation of this management plan. Of critical importance to this planning effort was the extensive written and photographic documentation that is associated with Greenwood Farm and which was left to The Trustees by the Dodge family. The Trustees staff began the planning effort by compiling reports on the most significant features.

The combination of reports, surveys and experience enabled The Trustees of Reservations, through its planning team, to develop and write the Greenwood Farm Management Plan. The ultimate intent of the plan is to protect and preserve the natural and cultural resources of this extraordinary property, while permitting the public to use, enjoy and appreciate it.

The needs of the property, which are identified in the priorities, are extensive. A strong commitment by The Trustees, its staff and volunteers will be required in order to meet these needs. However, this plan will, when implemented, insure that Greenwood Farm Reservation will remain one of The Trustees of Reservations truly *Special Places*.

The recommendations found in this plan have been arranged in "High", "Medium" and "Low Priority" categories. The purpose of these categories is to insure that the most pressing needs are met first but do not imply that the lower priorities need not be addressed.

Please note that certain management recommendations are highlighted throughout the text; all recommendations are summarized at the end of each section.

High Priority Recommendations

Historic Resource Management:

- Plan and initiate Paine House structural stabilization; plan and carry out necessary archaeological reconnaissance; create opportunities to publicize and interpret project in progress.
- Develop a plan for the restoration of interior finishes and reinstallation of the collections (or some part of them) in the Paine House.
- Conduct research on the archaeology, architecture, and family histories of the Paine House; based on this information, devise an interpretive plan.
- Implement maintenance measures for the Paine House such as chimney capping, drainage and gutters.
- Rehabilitate the Greenwood-Dodge House as the Superintendent's residence and for intern housing.
- Stabilize outbuildings and secure all structures from unwanted access.
- Move the Jones Mansion inside the barn or tool shed for temporary storage.
- Document and demolish chicken coop and pig pen.
- Gather and inventory all collections into storage in farmhouse or elsewhere.
- Survey condition of all stored collections and take measures to best preserve fragile items.
- Complete a chain of title and chronology of ownership.
- Undertake necessary work on Greenwood-Dodge House critical to preservation.

Natural Resource Management:

- Design a trail that replaces the original salt marsh trail that prevents ongoing impact to the salt marsh.
- Reduce nutrient flow from uplands by controlling fertilizer applications.
- Develop a grassland management plan for the fields.
- Cut back field edges to discourage encroachment of woody vegetation.
- Remove understory vegetation selectively to enhance views.
- Prohibit salt marsh haying.
- Protect wet meadows and swales, which abut fields.
- Establish monitoring program for grassland birds

Visitor Services:

- Install new parking area with bulletin board, membership and basic interpretive information
- Provide parking closer to the Paine House
- Begin construction of boardwalk (if it can be designed so that it is simple and non-intrusive to the salt marsh environment)

- Provide interpretation during rehabilitation phase at Paine House
- Contact Diana Hazelton re: inclusion in Essex National Heritage Area
- Increase public awareness of The Trustees

Land Acquisition and Conservation:

- Complete research at the Assessors' Office and compile a Critical Lands Database for Greenwood Farm. Research deed for Wendel property in Salem. [Land Conservation Center with volunteer]
- Communicate protection priorities to the Town's Open Space Committee, Town Planner, and the Essex County Greenbelt Association.

Medium Priority Recommendations:

Historic Resource Management:

- Complete a cultural landscape report and develop a landscape treatment plan.
- Develop and implement basic property interpretation.
- Begin to develop volunteer corps, tapping local expertise in historic structures and local history.
- Complete collections cataloguing using database.
- Develop and implement tours of the Paine House.
- Conduct further research on Thomas Greenwood's life.
- Develop archives management plan.
- Develop visitor services and interpretation in barn.

Natural Resource Management:

- Monitor local water quality issues associated with the Ipswich River.
- Continue to encourage Open Marsh Water management.
- Reduce or eliminate woody vegetation from fields.
- Keep trails along field edges.
- Maintain the apple orchard.
- Maintain forest integrity by preventing additional fragmentation.
- Snags and deadwood should be left standing unless they pose a safety hazard.
- Maintain formal plantings around houses by adding and replacing existing plants with native or non-invasive species.
- Develop deer management plan.
- Work with adjacent field owners on their protection and management

Visitor Services:

- Develop and provide self-guiding interpretive materials
- Provide expanded interpretive materials/programs
- Open Paine House for tours and train guides
- Provide a clear and varied trail system that addresses ecological impact on birds and salt marsh
- Provide educational programs - school visits, lectures, walks
- Establish local and regional linkages for Greenwood Farm

Land Acquisition and Conservation:

- Conduct a habitat analysis of the open hayland on Jeffrey's Neck Road in relation to the diversity of bird life at Greenwood Farm. [Associate Director for Planning and Ecology, Regional Ecologist, Greenwood Farm Superintendent, and Land Conservation Center]
- Conduct an ecological assessment of the upland area on Newmarch Street.
- Initiate and develop contacts with owners of high and medium priority Critical Lands. [Greenwood Farm Superintendent with Land Conservation staff]
- Work with Essex County Greenbelt on protection strategies for the Notre Dame property.

Low Priority Recommendations:

Historic Resource Management:

- Initiate annual historical internship working with family manuscript collection.
- Develop and begin implementation of collections conservation plan.
- Develop and implement furnishing and interior finishes plan for Paine House.
- Begin landscape treatment.
- Explore programming alliances with Crane properties and Ipswich Historical Society sites.
- Rent out cottage for income or offer to qualified individual in exchange for labor.
- Develop interpretive trail including old road, and sites of Dodge farm structures.
- Conduct further archaeological research on the ceramic artifacts found at the Paine House.

Natural Resource Management:

- Place bird nesting boxes throughout the upper margins of the marsh and along the fields.
- Clear woody vegetation from around fruit trees on the islands.

- Control and remove invasive vegetative species from islands.
- Maintain current lawn around the Paine and Farm House.
- Monitor development of Phragmites.
- Survey salt marsh breeding birds and use by shorebirds at high tide for loafing/resting
- Survey small mammals in fields
- Explore/research salt marsh haying effects on biological diversity
- Investigate/establish studies and/or monitoring for OMWM.
- Monitor salt marsh use by birds.

Visitor Services:

- Renovate barn and set up exhibits for a visitors center
- Host annual revenue-producing event

Land Acquisition and Conservation:

None

Section 2. Introduction and Property Profile

2.1 The Mission of The Trustees of Reservations

The Trustees of Reservations preserves for public use and enjoyment properties of exceptional scenic, historic and ecological value in Massachusetts and works to protect special places across the state.

2.2 Property Significance and The Trustees' Vision for Management

The significance of Greenwood Farm lies in the fact that few properties have survived from the past centuries, in a nearly unaltered condition, which possess such a high concentration of historical and ecological resources and which can be made accessible to the public through an ongoing interpretative program.

The Trustees vision for Greenwood Farm parallels the *Trustees 2000 - A Strategic Plan to Guide Us into the Next Century* which was adopted by The Trustees in November, 1996. That plan calls for the highest standards of protection and management of natural and cultural resources; positive visitor experiences including enhanced interpretation and visitor services; and increased outreach to communities, volunteers and present and new members.

2.3 Management Goals

Historic Resource Management

The Trustees seeks to preserve and interpret the cultural landscape, historic structures, archaeological resources, and historical collections resulting from and reflecting the property's evolving uses over time. The heyday of the Dodge family ownership of the property, in the 1920s and '30s, shall be the primary reference point for interpretation, and for preservation treatment decisions for the landscape and for individual structures. Secondary reference points will be used in order to reflect the spanning of time, particularly with regard to 18th Century farm life at the Paine-Dodge house and archaeological evidence dating from prehistory to present.

Natural Resource Management

The Trustees seeks to protect, and where possible, enhance the ecological values found at Greenwood Farm. These values include: 1) expansive salt marsh which performs a wide array of ecological functions; 2) former agricultural fields which support increasingly rare

grassland-dependent birds; 3) diverse woodlands and; 4) an important link in the regional natural landscape that includes barrier beaches and open agricultural lands.

Scenic Landscape Preservation

The Trustees will embrace opportunities to maintain and enhance scenic values in a manner that doesn't conflict with historical and ecological goals.

Public Use and Enjoyment

The Trustees will offer and promote appropriate active and passive opportunities for visitors to enjoy, understand and appreciate the natural and historic features of the property. Through various interpretive activities, The Trustees will work to tell the story of how people have interacted with the Greenwood Farm landscape over the years.

Outreach

The Trustees wishes to engender public interest in and support of the property and the organization as a whole.

Land Conservation

The Trustees will work to protect properties that may affect the integrity of the reservation through the acquisition of title or restrictions or through other means such as the participation in planning and zoning processes.

Finance and Administration

In order to achieve the goals and objectives of this management plan, The Trustees will develop a financially responsible management program and will provide clearly defined roles and responsibilities for staff and committees in making and implementing decisions.

Donor's Wishes

The Trustees wish to comply with the donor's intentions that the property's historic and natural resources be preserved and made available to the public. In the 1979 deed which transferred the property from the Dodge family to The Trustees it was stated that it was the donors' wish that The Trustees "maintain the Paine House and as much of the surrounding land and land adjacent to the marshes already owned by The Trustees of reservations as is possible".

2.4 PROPERTY PROFILE

In 1975 Sally Dodge and Alice D. Wolfson donated approximately 138 acres of marshland, including the upland islands and hummocks, to The Trustees of Reservations. Situated in Ipswich along the Ipswich River the property was part of Greenwood Farm (see Figure 2.1). Called Greenwood Farm Salt Marsh the property was opened to the public, although access was only by boat from the Ipswich River.

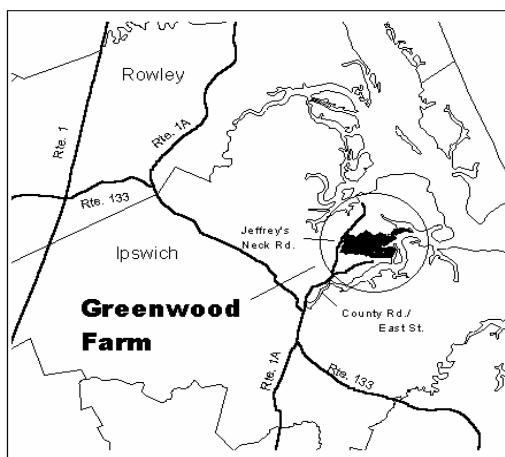


Figure 2.1: Greenwood Farm Locus Map

In 1979 Sally Dodge and Alice D. Wolfson donated the remaining portion of Greenwood Farm (some 71.9 acres), together with the buildings thereon, to The Trustees of Reservations to be held as Greenwood Farm Reservation (see attached map). In addition, Sally, Alice and Khaki (a third sister) each agreed to contribute funds to create an endowment for the property. Sally, who always loved Greenwood Farm and lived at the farm in the spring, summer and fall (she lived in Cambridge for the remainder of the year) retained a life interest in the property.

In 1980 George and Jane Desrochers, of Ipswich, donated 19.3 acres of salt marsh to The Trustees of Reservations. Located along Jeffrey's Neck Road and adjacent to Greenwood Farm the property was added to Greenwood Farm Reservation.

Sally Dodge lived on Greenwood Farm through much of each year until her death on July 30, 1993. The intent of the life estate was to ensure that Sally retained control of Greenwood Farm throughout her lifetime and that occurred. Sally was an independent woman who only sought help on her terms. The Trustees of Reservations was always ready to assist when needed and often helped her find contractors and manage projects - such as farmers to mow the fields, house painters, the installation a new underground power line to the farm house, the installation of a new septic system, etc. In the later years the cost of many of the capital improvement projects were shared between Sally and The Trustees.

Upon the death of Sally Dodge, in the summer of 1993, The Trustees of Reservations took over full management responsibility for the property. Greenwood Farm Reservations was established in the fall of 1993 and the property was immediately opened to the public for walking and nature study. Various studies and reports were done in 1994 and 1995 and the management plan was begun in 1995.

The first property superintendent, Hilary Hamilton, was hired in 1994 and moved into the cottage that year. Hilary left the employment of The Trustees in 1996. In January of 1997 Mark Bailey, the Superintendent of the Charles River Valley Management Unit, became the Superintendent of the Ipswich/Newbury Management Unit. Besides Greenwood Farm the superintendent is also responsible for Appleton Farms Grass Rides in Ipswich and Hamilton, and Old Town Hill Reservation in Newbury.

People have likely used Greenwood Farm since the end of the last glacier more than 10,000 years ago. It is composed of upland fields and forest but the views of the salt marsh clearly dominate the landscape. Thanks to an abundance of natural resources, Native Americans used the Ipswich/Essex coastal region, including the land that is now called Greenwood Farm, long before the arrival of the first Europeans.

Originally called the Paine Farm, Greenwood Farm was part of a land grant given to Robert Paine by the Town of Ipswich shortly after the founding of the Massachusetts Bay Colony. Robert Paine was the first occupant of the Paine House (circa 1702) and the Paine family owned and managed the farm for nearly 250 years. By the early 1800s the property passed to the Greenwood branch of the family. Thomas Greenwood built the farmhouse in 1828. In 1911 the property was sold to Major Guy Murchie who, in turn, sold the farm to Robert Dodge in 1916. Robert Dodge, and his wife Alice, converted the property to a gentleman's farm on which they raised their four daughters.

Section 3: Historic Resources

3.1 Introduction

3.1.1 Interpretive Emphasis

The rich natural resources of Greenwood Farm, which provide today's visitor with a scenic and tranquil respite, have attracted and sustained people for over 10,000 years. The varied historic resources of Greenwood Farm, now in The Trustees' care, tell the layered stories of the relationships of successive occupants of Greenwood Farm to the natural environment, and the environment's affect on them. The Trustees seeks to preserve and interpret the cultural landscape, major historic structures, archaeological resources and historical collections resulting from and reflecting the property's evolving uses over time.

Rather than restore the site to one period, The Trustees will use the many important features on the property, both natural and historical, as windows through which visitors can view different periods from the property's past. The planning team believes that the interpretive potential of the site's ecological resources equals that of its historic resources, thus the two should receive equal attention as an interpretative program is developed.

3.1.2 Research Resources

In writing the management plan, we were able to draw on the results of several property studies that were commissioned by The Trustees soon after it received the property. In 1993, Robert Mussey conducted a collections condition survey of the Paine House. In 1994, Boston University Preservation Studies Program graduate students participated in a three-fold study, a project initiated with the assistance of Valerie Talmage. First, students in an adaptive reuse class studied reuse alternatives for the large farmhouse. Summer intern Albert Rex did an excellent job of gathering and organizing the family manuscript collection, then scattered in both houses at Greenwood Farm, and now stored at Castle Hill. Mr. Rex's work with the manuscripts and pursuit of other research leads forms the basis of what we know of the history of the property and is summarized in a three-volume documentation binder kept with the manuscript collection. Drawing on Mr. Rex's research, students in the Preservation Planning Colloquium under the direction of Pat Weslowski developed a very useful interpretive plan for the property, which first charted the interpretive themes outlined here.

Concurrent with the Boston University project, The Trustees launched several other research efforts. Consultant Heather Salvatore completed the historical analysis portion of an Historic Structures Report for the two houses. William Finch of Preservation Technology Associates completed Developmental Histories and Existing Condition Reports for the two structures. Ipswich resident and authority on first period houses, Jim

Kyprianos, advised on the Paine House studies. Ms. Salvatore continued on to inventory the Paine House collections. Boston University graduate student in archaeology Margo Muhl Davis prepared reports on archaeological potential for Greenwood Farm and on an investigation conducted prior to installation of the first parking lot, on Jeffery's Neck Road. Finally, Dr. Kathleen Wheeler, independent archaeological consultant, conducted archaeological surveys of the Paine-Dodge House, resulting in the comprehensive report, Findings from the Paine-Dodge House, Ipswich, Massachusetts: Results from Two Phases of Archeological Investigation, submitted to The Trustees in April 1997. This research provides new insights to 18th Century farm life on Greenwood Farm, including evidence of a milkroom, or dairy, at the west end of the north lean-to.

Our knowledge of the family history was greatly enhanced by a manuscript prepared by Alice Dodge Herling in 1995, less than a year before her death. Entitled, "The Dodges at Greenwood Farm," it provides a delightfully readable account of the Dodge period. During planning team discussions of our vision for interpretation of the landscape, we were assisted by conversations with Elliot Foulds of the National Park Service's Olmsted Center for Landscape History. Environmental Engineer Ernest Conrad consulted on the high moisture levels in the Paine House, and entomologist Gary Alpert of Harvard University advised regarding insect infestation.

3.1.3 Challenge in Historic Resource Management

For the historic resources of Greenwood Farm, the major challenges lie in preservation and interpretation of the two principal houses. By choosing to interpret the *evolving* use of the Paine House, The Trustees confront several restoration challenges. The Trustees must take into account archaeological evidence, including prehistoric artifacts, the discovery of a rare colonial dairy dating to the late 18th Century, and the Dodge's 20th Century Colonial Revival renovations.

Appropriate and viable reuse for the Greenwood-Dodge House is the key to its long-term preservation. The structures on the property are going to require attentive, scheduled maintenance and the annually funding to support that.

Further research into pre-Dodge owners of the property is needed to fully develop the interpretation program. The Paine House collections and the archives must be more carefully evaluated for the role they can play in interpretation, and their long-term preservation must be assured. The historic landscape also needs further study to detail its treatment and maximize its interpretive potential.

3.1.4 Interpretive Potential

This plan addresses essential preservation of resources and basic interpretive themes and issues. Accomplishment of these recommendations is essential to the property's operation. In the future, Greenwood Farm's historic resources will continue to provide a wealth of opportunities for developing a variety of interpretive programs. The combination of resources and location offer tremendous potential. The structures --a first period house and

a nineteenth-century farmhouse--are increasingly rare because they possess a great deal of integrity and are located in an intact landscape. Ipswich's rich history, central to the story of first settlement in the New World, has been extensively studied by scholars but as yet has been under-interpreted for the public. The property's manuscript collection, supplemented by the other area resources, offers many avenues for interpretation.

Trustees 2000 - A Strategic Plan to Guide Us into the Next Century was adopted by The Trustees in November, 1996. The central interpretative theme found in *Trustees 2000* is the evolving relationship of people and landscape. This theme is well suited to Greenwood Farm thanks, in part, to man's long and active association with this coastal property. This theme will be the primary interpretative theme at Greenwood Farm. Finally the property is centrally located and accessible to a large regional population

(For reports resulting from the studies mentioned, see Appendix 3.1. Copies of each report will be available at Greenwood Farm, the Northeast Regional Office and in the Historic Resources Office at headquarters.)

3.2 Resource Description and Existing Conditions

3.2.1 Owners and Occupants

The land now comprising Greenwood Farm was first owned by Robert Paine, the Elder (1601-1684). His son, Robert Paine, Jr. (ca. 1634-?), graduated from Harvard in 1656 and later gained the distinction of being the foreman of the Salem witch trial jury in 1692. In 1702, Paine conveyed his land to his daughters, and Elizabeth, who had married Daniel Smith, received the property that now comprises Greenwood Farm. The property passed to their son Moses Smith (d. 1784); his son Moses Smith (d. 1829); his children Daniel Smith (d. 1870) and Elizabeth Smith (d. 1863); and to their nephew Thomas S. Greenwood (d.1883). Greenwood's heirs sold the property to Major Guy Murchie in 1907. Murchie sold to Robert G. Dodge, Boston lawyer and founder of Palmer & Dodge, in 1916.

Dodge, his wife Alice Childs Dodge and their four daughters--Katherine (Khaki), Eleanor (Nenny), Sarah (Sally) and Alice--used the farm on weekends and summers. At Greenwood Farm, the Dodges engaged in a lively country life of entertaining, tennis and swimming, and raised vegetables, pigs and chickens. Diaries and letters in the family archives, record their life at the farm in detail, as does a delightful historical manuscript written for The Trustees in 1995 by Alice Dodge Herling. Sally Dodge always loved the farm and did not marry and move away. She continued to use the property in the spring, summer and fall until her death in 1993. A local character, she loved to show Greenwood Farm to appreciative visitors, and was particularly attached to the Paine House.

Recommendation:

- *Complete a chain of title and chronology of ownership for the property, drawing on research accomplished to date, records at the Essex County Registry of Deeds, and Ipswich Vital Records for birth and death dates.*

(See Heather A. Salvatore, "Greenwood Farm...Historical Structure Report, Phase One, Historical Analysis", May, 1994; T. Frank Waters, *Jeffrey's Neck and the Way Thereto* [Salem, 1912]; Alice Dodge Herling, "The Dodges at Greenwood Farm," March 1995; and Dodge Family Manuscript Collection.)

3.2.2 Landscape and Land Use

Prehistoric Land Use

Ipswich is an extremely important site for the study of prehistory, both because of the large number of known prehistoric sites, and also because it was one of the earliest areas to be excavated and studied by archaeologists. Native American use of the area began as early as 10,000 years ago, when nomadic hunters followed reindeer through the then tundra-like environment. Later groups were attracted by the rich marine and riverine resources, and by the agricultural land along the estuaries. Archaeological evidence for this early occupation was found beginning in 1867, in an excavation conducted by Jeffreys Wyman of the Peabody Museum at Harvard.

While no prehistoric sites within Greenwood Farm Reservation have been identified and listed with the Massachusetts Historical Commission (other than our own survey of the first parking lot site, discussed below) sites abound on surrounding islands and other uplands. The property thus has very high archaeological potential.

Reconnaissance conducted in 1994 by Valerie Talmage and Margo Muhl Davis prior to creating a parking lot at the northeast corner of the property fronting on Jeffrey's Neck Road resulted in finds of a felsite flake and a crushed shell--evidence of a single prehistoric shellfish meal consumed on the site--as well as a few historic period artifacts. Additional archaeological investigation is planned prior to work to relocate the parking lot, improve the driveway, and improve drainage and foundation ventilation at the Paine House.

Recommendation:

- *Incorporate general discussion of the prehistory of the area into basic interpretation, drawing on the Davis reports. Do not identify specific potential sites within the property, if known, because of potential for unauthorized exploration.*

(See Margo Muhl Davis, "Archaeological Potential of Greenwood Farm, Ipswich, Massachusetts", January, 1995 and Davis, "Intensive Archaeological Survey of a Proposed Parking Lot, Greenwood Farm, Ipswich, MA," September, 1995.)

Historic Land Use

The area comprising Greenwood Farm Reservation represents early land grants from the Town of Ipswich to several prominent citizens who lived in town and maintained farm land outside of the town. The geography of Jeffrey's Neck, essentially a chain of islands surrounded by river, creek and sea, make the early history of its use by English settlers--as a natural and economic resource--relatively easy to understand. Ipswich residents pastured cattle communally on the Neck, set up fishing stages on the Ipswich River, and harvested salt marsh hay.

By 1689 Robert Paine of Ipswich owned much of the land which is now Greenwood Farm, having purchased portions of it from Thomas Brecy and John Perkins; and acquired the rest as direct grants from the Town. In that year the elder Paine gave it to his son Robert Paine, Jr. By 1702, when Robert granted the property to Daniel Smith, husband of his daughter Elizabeth, the property produced grain, flax, cattle, sheep, fruit from an orchard, and firewood. Daniel passed the farm to his son Moses. At Moses's death in 1784, an inventory of the premises included a pair of oxen, 11 head of cattle, a mare, five sheep, and six pigs, as well as 13 tons of hay.

In addition to farming, the late 17th and early 18th centuries saw commercial use of the property. Diamond Stage (see Map 1) is likely named for Capt. Andrew Diamond, an Ipswich resident who ran extensive fishing enterprises at the Isles of Shoals, and probably operated drying stages on the island. At times the Diamond Stage parcel was owned separately from the rest of the farm; when it changed hands in the 1780s, it included a wharf, warehouse, and "fish fence." T. Frank Waters provides a period illustration of the fishing stages in his 1912 book on the history of Jeffrey's Neck.

Access to Diamond Stage was by a road extending from Manning's Neck along the eastern edge of the upland. Built originally to provide access to abutting landowners shortly after the winter of 1714-5, the road was in general public use by the 1770s. Town records indicate such heavy usage to transport goods from the wharf at Diamond Stage to town that in the 1850s citizens petitioned that the road be improved, but the proposition was turned down as too costly. Thomas Greenwood operated it as a toll road for a time; and when Robert Dodge purchased the property, it appears he went to some length to document that the road was not a public way. Today, the path of the road can be seen in the woods southeast of the farmhouse, extending to a line of stone rubble across the marsh marking a former dike.

For most of the nineteenth century, Thomas S. Greenwood farmed the property. Greenwood was the nephew of Daniel Smith (d. 1870) and Elizabeth Smith (d. 1863), brother and sister, the last members of the Smith family to occupy the old house. Greenwood presided over the property from 1828 to 1883--much of the 19th century and presumably its last period as a working farm. Some aspects of the Greenwood years are

documented in letters from his daughter, Pauline Farley, to Robert Dodge (Family Manuscript Collection).

Recommendations:

- *Conduct further research on Greenwood's life, drawing on standard historical research resources in the county.*
- *Develop a trail to the dike marking the site of the old road*

(See T. Frank Waters, *Jeffrey's Neck and the Way Leading Thereto* [Salem, 1912] and Heather A. Salvatore, "Greenwood Farm...Historical Structure Report, Phase One, Historical Analysis", May, 1994.)

Vernacular Landscape

Greenwood Farm is an excellent example of an historic vernacular landscape, "a landscape that evolved over time through use by the people whose activities or occupancy shaped that landscape" [Birnbaum, National Park Service *Preservation Brief* 36.]. Reading features of the landscape today we see an agricultural character, probably dating to the 18th century, in the layout of fields; overlaid with 19th- and 20th-century features such as the trees planted in the northern hedgerow as windbreaks, the gardens around the houses, and the ditching of the marshes to control mosquitoes.

Designed Landscape

There are plantings by the houses, including a perennial bed running between the two houses, and shrubs and a grape arbor by the front entrance to the Greenwood-Dodge House. An old orchard exists between the two houses, with more fruit trees planted on the islands. The Dodges had a tennis court north of the driveway as you pass the stone wall coming into the last field. References in letters indicate it was installed in 1917.

A single plan by Martha Brookes Hutcheson for the Dodges, dated 1920, includes features that were implemented, such as the circular drive and trellising in front of the farmhouse; and those that were not, such as an elaborate formal garden along the walkway to the old house. Hutcheson is a significant figure as one of the first women working professionally in garden design in the area. Mrs. Dodge's flower gardens are also documented in photographs, diaries and receipts in the manuscript collection.

Recommendation:

- *Complete a cultural landscape report to identify historic landscape features dating from various periods, assess their interpretive significance and make treatment recommendations. This study would draw on the manuscript collection as well as evidence at the site. Until this study is completed, existing plantings should be maintained, and if new plant material must be added, records of what, where, when and why it was planted should be kept.*

3.2.3 Structures: Principal Buildings

The Paine House

As one of only 100 First Period houses surviving in the Massachusetts Bay area, only a quarter of which are open to the public; as an example relatively well-preserved, retaining much of its original building fabric and in its original setting, the Paine House (Figure 3.1) is of highest priority for preservation and interpretation. Of particular merit for interpretation are its architectural style and construction details; the evolution of its ownership, use and modifications over time, particularly as seen in Daniel Smith's 1755 probate inventory itemizing the furnishings and contents of the house at his death; and the Dodges' Colonial Revival restoration of the house for use as a guest house.



Figure 3.1: Paine House (ca. 1907)

The Paine House is an integral lean-to First Period house of typical plan: parlor to the left and hall to the right of a central chimney, with a chamber over each; and a kitchen in the lean-to. The ell was added in the 19th century and remodeled by the Dodges to accommodate a modern kitchen and bath while leaving the older portion of the house unaltered by modern systems other than simple wiring. The house was traditionally thought to have been built by Robert Paine, Jr. in the 1660s. However, stylistic and construction evidence, according to Abbott Lowell Cummings, author of *The Framed Houses of Massachusetts Bay*, suggest a date of as late as the first quarter of the 18th century. Paine's daughter Elizabeth was married to Daniel Smith in 1702, at which time they were given the farm, and this is perhaps a more likely occasion for the building of the house. Archaeological investigation in conjunction with drainage improvements is likely to shed more light on the date for the house.

The exterior of the Paine House is in good condition, with a relatively recent roof and paint job, although the chimney needs capping and the paint is beginning to fail on the east side.

Serious structural problems exist in the first floor framing, especially the sills, due to prolonged high moisture levels. The east wall, which has been previously repaired, appears to have structural problems again. The central chimney support in the cellar, as well as parts of the cellar wall, need rebuilding. Interior finishes--plaster and paint--are in poor condition.

Recommendations:

- *Structural stabilization of the Paine House is of highest priority, with a preservation approach employed toward preserving original building fabric. Foundation drainage and lowering of the grade in the lean-to crawl space are key to this stabilization.*
- *Maintenance measures aimed at reducing moisture levels are critical and of high priority. These include chimney capping, installation and maintenance of gutters and down spouts, and providing appropriate seasonal attic and basement ventilation.*
- *An approach must be developed toward rehabilitation of finishes and other details. Preservation of as much historical information as possible (in previous paint layers, and in wear and tear to elements) must be balanced with presenting an appropriate and not unattractive appearance for the purposes of interpretation. An on-site meeting of historic resources staff and site managers, with assistance of consulting historical architect, should result in a written statement of approach.*

(See Abbott Lowell Cummings, *The Framed Houses of Massachusetts Bay* [Boston, 1979]; Heather A. Salvatore, "Greenwood Farm, Historical Structure Report, Phase One", May 1994; William B. Finch, "Paine/Dodge House, Developmental History and Existing Condition Assessment", June 1994; Ann Powell, "The Paine House at Greenwood Farm", June 1994; and Boston University Preservation Studies Program, "Interpretive Plan for Greenwood Farm", January 1995.)

Greenwood-Dodge House

The Greenwood-Dodge House, known simply as "the house" or "the new house" to the Dodges, was the Dodges' home at Greenwood Farm. Built about 1828, when Thomas Greenwood was married and began to take over the farm from his elderly aunt and uncle, it was the main house on the property from the time it was built. Its connected ell and barn are typical of New England farm architecture of the 19th century. The Dodges remodeled the house in 1916 from plans drawn by Robert Dodge's brother, architect Edwin S. Dodge. The second floor of the barn was remodeled for servants' rooms at this time.



Figure 3.2 Greenwood-Dodge House

(ca. 1994; photo by H. Salvatore)

The Greenwood-Dodge House is in sound condition with the exception of old systems, such as plumbing and heating which are failing. Interior finishes are deteriorated. The need for minor carpentry repairs on the exterior is accelerating, and the entire structure needs to be painted.

Demolition of all, or just the barn portion, of the Greenwood-Dodge House was proposed early in The Trustee's involvement with the property, as a means of reducing maintenance costs. Unlike the Paine House, the structure is not of sufficient historical significance to warrant being maintained solely as a museum. While it is tempting to imagine that removal of the farmhouse would allow the visitor to experience the Paine House as it was originally situated, the landscape has undoubtedly changed significantly in the almost 300 years since that time. The field layout, road layout, plantings, and even the level and location of the river and marsh are predominantly 19th- and 20th-century in character. Removal of the farmhouse while leaving the rest of the landscape unchanged would create a fiction, an experience of place that never existed. An attempted restoration of the entire property to the early 18th-century, on the other hand, would be extremely conjectural and an enormous undertaking.

Moreover, the presence of the Greenwood-Dodge House in the landscape is critical to the central interpretive theme of changing land use of the property. The small Paine House was unable to accommodate the housing needs of the 19th-century farmers, nor the 20th-century vacationers. The story of three elderly Smith siblings, one apparently handicapped, living on in the ancient Paine House, while their nephew Thomas Greenwood ran the farm and other enterprises from his large house in front, is the kind of specific and vivid story that can really engage the visitor. [This story is found in the recollections of Greenwood's daughter, Pauline Farley, in the manuscript collection.]

The Greenwood-Dodge House should be central to the operation of the property as a combination of superintendent housing, intern housing and visitor center. In the three years that The Trustees have operated the property, it has become apparent that a security presence in the heart of the property is advisable, as the cottage is too distant to fully monitor activity near the Paine House. The cottage could be either rented which would generate needed additional income to apply to ongoing maintenance of the property or offered to a qualified individual in return for labor and/or services.

Intern housing is needed for both the ecology and historic resources programs of the region to further research and preservation goals; often, intern help is available for very little cash investment if housing is provided. In addition, an annual internship devoted specifically to the historic resources of this property would aid the part-time Regional Historic Resources Manager in accomplishing the significant tasks lying ahead in developing the interpretation plan and installation for the Paine House and managing the collection and archives.

Finally, the first floor of the barn is an ideal location for a visitor center. Sally Dodge's stewardship of the property established a tradition of welcoming visitors and introducing them to the interesting features of the property. Miss Dodge also supported educational programming on ecological subjects at the property, and she envisioned use of the Greenwood-Dodge House for visitor reception. The barn provides a large, centrally-located and appropriate space for visitor orientation and could even accommodate seating for small lectures. The Boston University students' *Interpretive Plan* includes more suggestions for development of this space.

Recommendations:

- *In the immediate term, devote maintenance attention to exterior features of the house that are deteriorating rapidly.*
- *Rehabilitate the Greenwood-Dodge House for superintendent housing and intern housing. This involves systems and finishes work as specified in Bill Finch's report. An agreed-upon approach to adaptations of bathrooms, kitchens and use of space must be developed among site managers and historic resources staff. At present, the house retains the early 20th-century fixtures installed by the Dodges. Whether an approach can be developed that balances convenient modern use with preservation should be explored.*
- *Develop a visitor center in the barn.*

(William Finch, "Greenwood House, Developmental History and Priority Repairs," June, 1994; Boston University Preservation Studies Program, "Historic Greenwood Farm, Retreat and Conference Center," May, 1994.)

The Cottage

The cottage was built in 1920 or 1921 from plans obtained from a magazine (the plans are now in the archives). It has a small garage. The house and garage were used by the Dodges' caretaker. They are now used by the property superintendent and are in the process of being rehabilitated. The cottage location on Jeffrey's Neck Road, at the edge of the property, suggests that it could be rented, in return for income or labor, as a way to generate income to support improved maintenance.

3.2.4 Structures: Outbuildings

A number of outbuildings reflect important aspects of life on Robert Dodge's gentleman's farm. The garage west of the Greenwood-Dodge House was designed by Edwin S. Dodge and built in 1920-21. The family papers in the manuscript collection document the adventures of the Dodges with their vehicles and drivers. The garage is being renovated inside for use as the superintendent's workshop to support ongoing property maintenance.

A large, wood-shingled gardener's shed, date unknown, needs repair. It should be repaired for use as originally intended. A root cellar is built into the hillside in the orchard, where the Dodges wintered over some of their large vegetable crop each year. It is stable, but a door must be built immediately to secure the structure from vandalism.

A doll's house, in the woods near the animal sheds, was known as the "Jones Mansion", named for Alice Dodge's family of dolls, the Jones Family. Its remote location renders it vulnerable to vandalism, and it should be taken inside the barn until it can be utilized in an exhibit setting.

Two further buildings reflect the girls' animal raising: a pig pen, built in 1920, and a chicken coop, probably also built the same year. Both are in the hedgerow northwest of the farmhouse. Both are in poor repair. The serious ongoing maintenance commitment represented by the major structures suggests that it is not feasible to try to save these partially ruined structures, too. Each should be thoroughly measured, photographed, and demolished.

A boat house built on Diamond Stage by the Dodges in 1917 for storage and changing for swimming, now survives only as part of the foundation and a chimney. At the west end of the middle field, a stone wall surrounds an area used by the Dodges as a vegetable garden. This stone enclosure may have originally been a barn foundation.

Recommendations:

- *Take steps immediately to secure outbuildings from vandalism and further deterioration.*
- *Document and demolish chicken coops and pig pen.*

- *Repair gardener's shed for maintenance use.*

3.2.5 Collections

Dodge Family Manuscript Collection

This extensive collection documents the property and provides rich interpretive potential. It is broad in scope, with material of interest beyond the property. Included are architectural drawings and bills for renovations when the Dodges purchased the property; records of Mrs. Dodge's purchase of antiques; many family letters; records of the gardens and farm; and historic photographs. Diaries kept by Sally Dodge as a girl, in particular provide a detailed and vivid account of the Dodges' happy days at the farm.

The manuscript collection is now stored at Castle Hill in a room dedicated for this purpose on the third floor. A basic inventory of the material was made by intern Albert Rex in 1994. Photographs and other key documents have been housed in archival storage materials, but the bulk of the collection is stored in liquor cartons.

Recommendation:

- *Proper housing and shelving for the collection is needed, as well as archival processing adequate to make the collection accessible to scholars.*

Paine House Collections

As a collection, the Paine House furnishings are a characteristic expression of the Colonial Revival in New England, typical of collections formed by early-20th-century antiquarians. The furnishings are moderately well documented through invoices from antique dealers in the manuscript collection, and two articles including interior photographs published in 1930 and 1949. Included are 19th-century books, textiles, ceramics, and framed prints, in addition to 18th and 19th-century furniture. The doll collection, including some 18th-century examples with histories of use in the family, is notable.

The collections were removed from the Paine House to two secured storerooms in the second floor ell of the farmhouse in 1995, in order to empty the Paine House during repairs. The collections are adequately situated in the storerooms, as long as they are not disturbed; however, as soon as possible, fragile objects such as dolls and books should be unpacked and a plan made for conservation and proper storage. In general, the Paine House collections are in very poor condition, as described in a conservation survey conducted by Robert Mussey in November of 1993. Long-term exposure to the combined effects of light, moisture and insects have degraded the appearance of the collection.

Recommendations:

- *In the immediate term, arrange for treatment of objects suspected of active insect infestation in SPNEA's CO2 bubble.*

- *In the immediate term, examine fragile objects, such as dolls, for possible insect infestation, and provide better storage.*
- *Gather any remaining objects from the Paine House and around the Greenwood-Dodge House into storage on the second floor of the barn.*
- *Examine and catalogue collections in greater detail to determine interpretive value.*
- *Develop conservation and storage plan for long-term preservation.*

(Heather Salvatore, Greenwood Farm collection accessions log, spring 1995; Beverly Carter, "Two Guest Houses," *Home & Field*, April 1930; and Richard Pratt, "Ipswich, Massachusetts," *Ladies Home Journal*, October 1949; for a general discussion of collecting, see Elizabeth Stillinger, *The Antiquers* [New York, 1980]; Robert D. Mussey, Jr., "Overall Collections Condition Survey Report, Greenwood Farm, November 23, 1993.)

Dodge Family Memorabilia

A few items of Dodge family memorabilia were selected in 1994 from Sally Dodge's estate (the contents of the farm house) to interpret the daily life of the Dodge family at Greenwood Farm. (The rest of the furnishings were sold at auction to benefit the property, as intended by Miss Dodge.) The objects retained document the family's activities on the farm--sports and chores--and pastimes such as their world travels.

These objects were selected by intern Albert Rex, who was most familiar with the Dodges' life at the farm through his work with the manuscript collection, and consultant Heather Salvatore, who catalogued the Paine House contents. The family memorabilia items were located in the Greenwood-Dodge House and may not have been catalogued.

Recommendation:

- *Attention should be given soon to gathering and documenting any collections remaining scattered among the buildings at Greenwood Farm, being careful to distinguish in the records, objects that are not part of the Paine House collection.*

3.3 Evaluation

Greenwood Farm's primary significance is as a cultural landscape, typical in its history but unusual in its scope and preservation. In addition, the Paine House is important as a relatively unaltered example of the now-rare early architecture of New England. Finally, because of its extensive documentation, Greenwood Farm offers The Trustees a golden opportunity to develop and expand the interpretive theme of the interrelationships of people and nature, which is evidenced in all its properties but plentifully documented and readily visible here.

3.3.1 Greenwood Farm as a Cultural Landscape

A cultural landscape is defined as "a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values." Greenwood Farm is an example of an *historic vernacular landscape*, "a landscape that evolved through use by the people whose activities or occupancy shaped that landscape." The cultural landscape of Greenwood Farm includes extant buildings, land use patterns, vistas and plantings.

Greenwood Farm reflects the varied uses to which people, for over 10,000 years, have put the rich and abundant natural resources of coastal Massachusetts. Native Americans, and then English settlers, harvested the marine and riverine resources and hunted and farmed the upland; and, in the 20th century, used the site as a country retreat for leisure time. Evidence of this typical progression of land use survives undisturbed on this property in an unusually scenic and tranquil setting. Greenwood Farm presents a rich opportunity to interpret Native American land use in coastal Massachusetts, as well as the history of archaeology. While a similar prehistoric history exists for the Crane properties, the Native American presence is perhaps better visualized at Greenwood Farm, where 20th-century developments to the property are less dramatic.

(Ref. Charles A. Birnbaum, National Park Service Preservation Brief 36, *Protecting Cultural Landscapes*, 1994; Boston University, Preservation Planning Colloquium, "Interpretive Plan for Greenwood Farm", January 1995; and Alice Dodge Herling, "The Dodges at Greenwood Farm", March 1995.)

3.3.2 The Architecture of the Paine House

As one of only 100 surviving examples of the domestic architecture of the region's earliest settlers, of which only a fraction are preserved in the public domain, the Paine House is of high priority for preservation and interpretation. The very fabric of the structure itself records important historical information about building practices and usage, and utmost care must be taken to preserve, understand, and interpret the building itself.

3.3.3 Interpretation of People and Landscape

To maximize development of the interpretive theme requires a holistic approach to preservation and planning for the property. Rather than selecting one time period, one story, or one feature as of dominant significance, we seek to understand and interpret what each surviving features tells about the past of the property. We also want to recognize the strong ecological and scenic values of the property and allow appropriate development of those aspects of the visitor's experience of Greenwood Farm.

The planning team considered, and rejected, a conceptualization of Greenwood Farm as an historic house restoration of the 1920s and '30s, which would have entailed restoring and freezing the landscape and structures to reflect the Dodge occupancy, telling the story of a

Colonial Revival country estate. Using the National Park Service's landscape planning framework, we chose a treatment of *rehabilitation*, which preserves the character-defining historic features of a property while enabling changes to accommodate modern use. A rehabilitation approach chooses a middle ground between restoration on the one hand and disregard of historic features on the other. At Greenwood Farm, restoration would have meant a significant amount of work in the landscape, both in terms of research to determine precisely what the property looked like in the Dodge period, and in terms of treatment, for example, recreating the large vegetable garden and the tennis court. Rehabilitation ensures that we will identify, document, and preserve key features like the orchard, while modifying the landscape to accommodate the ongoing life of the property: the superintendent's personal gardens at the cottage, or boardwalks to the islands, necessary to protect the marsh.

3.3.4 Interpretation of the Paine House

In keeping with the overall theme of evolving uses of the property, it is recommended that the interpretation of the Paine House not focus on only one time period. Complete reinstallation of the collection and restoration of the Paine House interiors to recreate the Dodges' guest house of the 1920s and '30s is not central to the interpretive story. Rather, an installation should be developed, perhaps incorporating photo-blowups of historic views, or excerpts from manuscript sources, that interprets previous occupants of the house as well as the Dodges. Daniel Smith's 1755 probate inventory (transcribed in the *Interpretive Plan*) provides evidence of what the house contained when used by its earliest occupants as the principal house on the property. This could be contrasted with Alice Dodge's Colonial Revival furnishing scheme.

Caution should be exercised in trying to recreate earlier periods, however. The Dodges and other occupants changed details of the house, and it is not recommended to actually furnish and portray a room as accurately representing the 18th century. (At the time of this plan, SPNEA is developing an interpretation of the Spencer-Peirce-Little property in Newbury, likewise a first-period, saltwater farm, presenting a similar, multi-generational approach. More should be learned about that project, so as both to benefit from their research and not duplicate their effort, or their interpretation.)

3.4 Principles for Future Management

In addition to the holistic approach discussed above, other key principles to management of Greenwood Farm's historic resources include research, documentation and preservation.

3.4.1 Research

To date, a number of individuals have worked with the family manuscript collection and some of Ipswich's early documentation to begin to sketch out the history of Greenwood Farm. There is a great need for gathering additional information on owners and occupants and combining it with what is already collected into an authoritative, easy-to-use history of the property. Likewise, the substantial documentation in the archives of the history of the landscape has not been systematically analyzed, and should be, soon. This further research is critical before landscape rehabilitation and Paine House restoration and interpretation is undertaken.

3.4.2 Scholarship

Because of the architectural importance of the Paine House, and the questions surrounding its date, we should be open to opportunities to tap the knowledge of professionals in the field, and to make our findings available to them. The house is listed both in the Massachusetts Historical Commission Survey of First Period Houses as well as in Abbott Lowell Cumming's book, *Framed Houses of Massachusetts Bay*, and therefor is known to scholars.

3.4.3 Documentation

As work progresses on the property, projects and changes should be documented photographically and in writing. Agreed-upon modifications of the property for contemporary use--such as adding driveway turnouts or adaptively reusing the interior of the garage--must be documented, as they alter the historic appearance of the property. Maintaining such records for future managers and researchers is a crucial part of our stewardship responsibility.

3.4.4 Preservation

Preservation issues should be in the forefront of our minds as we make the transition from private property to public institution. Traditional maintenance practices that may have been critical to preservation of the resources inevitably change when the property changes hands. Structures, collections and historic plant material need ongoing appropriate attention while major projects are going forward.

The planning team does not recommend a stringent preservation approach for the property as a whole, which would 'freeze' the structures and landscapes at a point in time, and limit flexibility in use and interpretation. However, a goal is to preserve as much of the original fabric and traditional character of the property as possible while accommodating modern uses. Decisions to change any structures or features should be made in the context of management plan goals and objectives.

The archaeological potential of the property makes it imperative that any ground disturbance or siting of new features take archaeological potential into account. This will

mean consulting with an archaeologist to determine if the particular location is of high potential, and if so, engaging in formal archaeological investigation. In addition, security of the property from unauthorized digging must be ensured.

3.5 Recommendations

High Priority

- Plan and initiate Paine House structural stabilization; plan and carry out necessary archaeological reconnaissance; create opportunities to publicize and interpret project in progress.
- Develop a plan for the restoration of interior finishes and reinstallation of the collections (or some part of them) in the Paine House.
- Conduct research on the archaeology, architecture, and family histories of the Paine House; based on this information, devise an interpretive plan.
- Implement maintenance measures for the Paine House such as chimney capping, drainage and gutters.
- Rehabilitate the Greenwood-Dodge House as the Superintendent's residence and for intern housing.
- Stabilize outbuildings and secure all structures from unwanted access.
- Move the Jones Mansion inside the barn or tool shed for temporary storage.
- Document and demolish chicken coop and pig pen.
- Gather and inventory all collections into storage in farmhouse or elsewhere.
- Survey condition of all stored collections and take measures to best preserve fragile items.
- Complete a chain of title and chronology of ownership.
- Undertake necessary work on Greenwood-Dodge House critical to preservation.

Medium Priority

- Complete a cultural landscape report and develop a landscape treatment plan .
- Develop and implement basic property interpretation.
- Begin to develop volunteer corps, tapping local expertise in historic structures and local history.
- Complete collections cataloguing using database.
- Develop and implement tours of the Paine House.
- Conduct further research on Thomas Greenwood's life.
- Develop archives management plan.
- Develop visitor services and interpretation in barn.

Low Priority

- Initiate annual historical internship working with family manuscript collection.
- Develop and begin implementation of collections conservation plan.
- Develop and implement furnishing and interior finishes plan for Paine House.
- Begin landscape treatment.
- Explore programming alliances with Crane properties and Ipswich Historical Society sites.
- Rent out cottage for income or offer to qualified individual in exchange for labor.
- Develop interpretive trail including old road, and sites of Dodge farm structures.
- Conduct further archaeological research on the ceramic artifacts found at the Paine House.

Section 4: Natural Resources

4.1 Introduction

Greenwood Farm is a spectacular 213 acre property that offers the visitor sweeping views of rolling fields and extensive salt marsh (Figure 4.1). This open and pastoral landscape is characteristic of a Massachusetts landscape of earlier years and one that is increasingly harder to find. Although the landscape has experienced varied forms of human use through the past 300 years, some of which can still be seen, the true character of the property is its natural beauty. The reservation is dominated by salt marsh with extensive frontage on the Ipswich River and includes many tidal creeks. Fields cover most of the upland at Greenwood Farm. These fields are surrounded by stands of oak/hickory forest which separate the fields from the salt marsh. Many of these trees are unusually large and old.



Figure 4.1: Fields and saltmarsh dominate the Greenwood Farm landscape. Photo by D. Monnelly

4.2 Ecological Communities of Greenwood Farm

The landscape at Greenwood Farm is a product of centuries of human use and natural processes. Salt marsh dominates the landscape at Greenwood Farm and is part of a vast salt marsh ecosystem spread along the coast between Newburyport to the north and Cape Ann to the south. These marshes developed behind barrier islands and drumlins created by retreating glaciers. Salt marsh is one of the most biologically rich and productive ecosystems and undoubtedly attracted Native Americans, and later European settlers, to this coastal area. Salt marsh provided these early cultures with rich hunting, fishing, and grazing for livestock. With settlement, land clearing soon followed. By the mid-1600s the upland portions of Greenwood Farm were cleared for agricultural needs. It is likely that much of the upland was originally cleared except for the occasional shade tree. The present fields and orchard represent much of the original agrarian landscape although trees and shrubs have been allowed to develop along field margins to form hedgerows. More recently the fields have been maintained as part of a managed landscape for aesthetic reasons. For more detailed information on plant communities, see “Greenwood Farm Plant Communities” Appendix 4.1.

4.2.1 Salt Marsh

Salt marsh covers more than two thirds of Greenwood Farm. Salt tolerant plant species dominate this community. The low marsh is dominated by salt marsh cordgrass and is inundated twice daily by tidal waters and stays saturated for many hours. The high marsh is irregularly flooded by salt water and is only briefly inundated. As a result the high marsh is dominated by salt meadow grass, a shorter mat-forming grass prized for salt marsh hay. The high marsh typically supports a more diverse plant community than the low marsh and includes spike grass and black grass. Phragmites, an exotic giant species of grass that displaces native species, has begun to form dense stands along the upper margins of the salt marsh.

Ecologically, salt marsh offers food, cover and breeding habitat to many animals. The many creeks that meander through these marshes and drain into the Ipswich River provide feeding areas for many waders, shorebirds and other bird species including egrets, herons, sandpipers, terns and kingfishers. The marsh also provides breeding habitat for sharp-tailed sparrows, a small, often inconspicuous bird. The creeks and salt pannes provide finfish and shellfish such as mummichogs and crabs with important breeding and feeding habitat as well. Mosquitoes also utilize these marshes for breeding and mosquitoes ditches, long, straight trenches dug to drain the marsh, can be seen throughout the marsh, evidence of past attempts to control these insects. This program had only limited success and disrupted the natural ecology of the marsh more than anything else.

4.2.2 Fields and Orchards

The uplands at Greenwood Farm were cleared hundreds of years ago for agriculture. Today fields represent the second most common plant community type at Greenwood Farm. These fields dominate the center of the upland portion of the reservation from Jeffrey’s Neck Road to the salt marsh behind the houses. The size and condition of fields as well as plant species composition varies from field to field (See Appendix 4.2 for a

preliminary plant inventory of one of the fields). Grasses are dominant throughout with a few scattered trees and shrubs. Until recently, managers have mowed the fields annually. Despite the mowing, woody species such as glossy buckthorn, Japanese honeysuckle, and poison ivy are invading the fields and reducing the habitat quality for grassland birds that nest in the fields. Grassland dependent species, such as bobolinks and meadowlarks, are declining regionally as grasslands are abandoned or are converted to residential areas. A small island of trees and shrubs occurs near the middle of the roadside field potentially discouraging grassland birds. A trail also bisects this field and may influence nesting birds.

Most fields are lined by wide hedgerows that provide some wildlife species with cover and habitat. These same hedgerows may also discourage grassland-nesting birds from using these fields by fragmenting fields into smaller patches of habitat and restricting the bird's ability to see predators.

With the arrival of a new superintendent in 1997, The Trustees were presented with a unique opportunity to enhance the agricultural character of Greenwood Farm. Experienced in raising farm animals, the incoming superintendent expressed as interest in managing a small herd of cattle, using the Greenwood Farm Fields.

Based on a sound grassland management plan, the re-establishment of grazing animals at Greenwood Farm is in keeping with The Trustees' desire to promote ecologically sound agriculture across the Commonwealth. Along with potential ecological benefits, well-managed agriculture also helps The Trustees preserve many associated scenic and cultural values associated with the Greenwood Farm landscape.

A small apple orchard that is need of maintenance lies behind the Paine House. Apple trees are beneficial to many species of wildlife. Deer, fox, coyote, and many smaller animals feed on the apples while grouse eat the buds and bluebirds nest in cavities. The orchard is being shaded be encroaching forest and most trees are in need of pruning. Several trees have died out leaving gaps in the orchard.

4.2.3 Woodlands

Wooded areas at Greenwood Farm are limited to field margins, strips between fields and salt marsh, and to many small islands within the salt marsh. Species are primarily hardwood species such as oak and hickory. Two small stands of red pine occur as does a small stand of mixed softwoods. Both the red pine and mixed stand of softwoods were planted in more recent times and contain species not normally found growing naturally in this part of the state. Typically, plantations of red pine have low biological diversity; however the Greenwood Farm stands are small and provide wind breaks and shelter for wildlife.

4.2.4 Islands

Nine small islands exist within the salt marsh areas at Greenwood Farm. Although historical photographs show the larger islands were once cleared, they are now covered with trees and shrubs. The larger islands have fruit trees (i.e. apple and pear) growing amid the thick shrubby growth suggesting these islands were used in the past for fruit tree cultivation. The ecological value of these islands, wooded or cleared, is limited although some wildlife, especially migrating birds, benefit from the thick cover and berry-producing shrubs during fall migration.

Until recently, an informal pedestrian trail led visitors across the salt marsh and the small islands, terminating at Diamond Stage. As visitor use increased, managers grew concerned about the trail's impact on the salt marsh, and the trail was closed.

4.2.5 Formal Landscapes

Greenwood Farm was first developed as a working farm more than 300 years ago and later maintained as a country summer estate. The landscape and buildings reflect this history and add to the character of the property. The landscapes surrounding the Farm House and the Paine House include lawns, gardens, hedges, fruit trees and other ornamental plantings. While landscaped environments have limited ecological value, the landscape around the houses are historically important to the property and provide some of the reservations smaller wildlife such as hummingbirds, butterflies and other insects with food and host plants for larva.

4.3 Wildlife

Many species of mammals and birds use Greenwood Farm and take advantage of the available food and cover. White-tailed deer are commonly observed and are thought to be full-time residents. Deer influence the development of the reservation's plant communities by browsing on woody species, and in the past, have damaged plantings in the formal landscape. Sally Dodge requested assistance with reducing the number of deer at Greenwood Farm. In 1992 and 1993 hunting occurred during the archery and shotgun seasons under the direction of the Northeast Regional Ecologist. A single deer was harvested each year. The property opened to the public in 1994 and hunting was suspended at that time. Deer continue to be observed at the property and their impact will be assessed on an annual basis.

Birds are common throughout the property and include grassland-nesting species. Grassland birds are declining regionally and many species are listed as threatened or endangered. Bobolinks were confirmed breeding at Greenwood Farm in 1994 while Eastern Meadowlarks have been observed using fields at the property, they are suspected of breeding in the more extensive fields adjacent to Greenwood Farm on the west side of Jeffrey's Neck Road. Species associated with edge habitat are common including, sparrows, pheasant, flycatchers and swallows. The salt marsh provides habitat for many

additional species including herons, egrets, shorebirds, terns, and salt marsh nesting species including the sharp-tailed sparrow. Other wildlife observed at the property include: red fox, gray squirrels, red-bellied woodpecker and many invertebrate species including butterflies and dragonflies.

For more detailed information on breeding birds at Greenwood Farm, refer to Appendix 4.3: “Survey of Grassland Birds at the Greenwood Farm Reservation, Ipswich, MA. and Old Town Hill Reservation, Newbury, MA 1994”.

4.4 Recommendations

The overall goal for natural resource management is to maintain the natural features and ecological processes associated with Greenwood Farm while maintaining the aesthetic and historical qualities of the property. This section outlines management options for maintaining and/or improving the significant natural resources at Greenwood Farm.

Protect and maintain salt marsh.

The salt marsh and frontage on the Ipswich River are the most important ecological features at Greenwood Farm Reservation. At the same time these features are the primary attractions for visitors. However, salt marshes are vulnerable to human activity as the experience with the salt marsh trail suggests. The extraordinary value of salt marsh has been recognized by both state and federal authorities and regulations exist to protect this natural resource.

Recommendations:

- *Design a trail that replaces the original salt marsh trail that prevents ongoing impact to the salt marsh.*
- *Reduce nutrient flow from uplands by limiting application of fertilizers, especially nitrogen which is typically the limiting factor in salt water ecosystems, to fields and lawns around marsh edge and drainage ways.*
- *Maintain vegetated buffers between fields and wetlands.*
- *Monitor water quality issues associated with the Ipswich River, especially those associated with the sewer treatment plant.*
- *Prohibit salt marsh haying. While no haying is currently taking place, the practice should not be implemented at Greenwood Farm in an effort to maintain a natural salt marsh community. Research on the effects of salt marsh haying is limited but it is likely that haying decreases diversity of flora and fauna.*

- *Continue to explore Open Marsh Water Management in order to help control of salt-marsh mosquitoes, eliminate the need for redraining marshes, reduce insecticide use and restore severely altered salt-marsh habitats.*
- *Place nesting boxes for birds throughout the upper margins of marsh to attract cavity-nesting birds, especially tree swallows. Swallows consume insects including large amounts of mosquitoes and offer visitors wildlife viewing opportunities. Boxes should be maintained and be designed to discourage predators.*

Maintain fields and improve habitat for wildlife

The goal for field management at Greenwood Farm is to maintain the open fields and orchard to reflect the agricultural heritage of the property while providing, and where possible, improving habitat for wildlife. The fields at Greenwood Farm currently support grassland-nesting birds including bobolinks. Additional grassland species have been observed and the potential for these and other species to breed is high, especially if field management facilitates grassland species needs. Grassland dependent species are declining regionally with grassland conversion and succession. These fields and additional nearby grassland habitat managed by The Trustees (i.e. Hamlin, Old Town Hill, the Crane Properties) can help these declining and increasingly rare species continue to survive regionally. However, adjacent habitat is more critical for grassland species at Greenwood Farm. The fields to the west of Jeffrey's Neck Road are more expansive and support a greater diversity of grassland species. Protection of these fields would greatly improve the possibility for a viable, long-term population of these species at Greenwood Farm by maintaining the link with these productive fields.

Recommendations:

- *In accordance with The Trustees' "Guidelines for Agricultural Grassland Management," develop a grassland management plan for the fields at Greenwood Farm. This plan should outline:*
 1. *a grazing and cutting prescription that promotes the ecological, scenic, and cultural values of the fields, and promotes quality forage for a small herd of cattle.*
 2. *certain parameters including pasture size, rotation frequency, and herd size.*
 3. *acceptable methods for field rehabilitation, including fertilizer use, reseeding, etc.*
 4. *a monitoring program that provides The Trustees with quantitative feedback on future grassland management activities.*
- *Cut back field edges to discourage encroachment of woody vegetation.*

- *Reduce or eliminate woody vegetation within fields. Woody vegetation decreases the habitat value for grassland species. The occasional shrub or tree is acceptable since they provide grassland birds with lookout/singing perches*
- *Where fields abut wet meadows and swales, special consideration should be given to the preservation of these wetland types. Late-season annual mowing will help to maintain these early successional communities, but more frequent mowing or other field management activities, including fertilizer application should be prohibited within 100' of the wetland resource. This activity is regulated by the Massachusetts Wetland Protection Act. The Trustees should seek a Request for Determination (RFD) from the local Conservation Commission.*
- *Install bird boxes around the fields for bluebirds and tree swallows to encourage populations of these species and to provide the public with viewing opportunities. Boxes should be maintained and be designed to discourage predators.*
- *Move and/or keep trails along field edges to avoid bisecting fields.*
- *Maintain apple orchard. Trees need to be pruned to improve their health and several new trees need to be planted to replace dying trees and to fill gaps were trees have died and not been replaced. Research to determine "historical" variety is necessary.*

Maintain woodland integrity and aesthetic values

Wooded areas at Greenwood Farm are restricted to small patches, islands and to field margins between salt marsh and fields. These woodlands provide cover for wildlife and habitat variability to an otherwise open landscape. Large mature trees are characteristic and provide many cavities for wildlife and add an element of aesthetics to the property.

Recommendations:

- *Remove understory vegetation in selected areas to enhance views. Invasive species such as European buckthorn and honeysuckle should especially be targeted for control and removal to prevent these species from becoming a nuisance in fields and along forest edges.*
- *Maintain forest integrity by preventing additional fragmentation. Tree thinning would increase shrub and understory growth, thereby impacting views. In addition, forest thinning would improve habitat for deer, encouraging population growth thus adding to the already high deer numbers for the region.*

- *Snags and deadwood should be left standing unless they pose a public safety hazard. Dead trees provide valuable food and nesting habitat for wildlife.*

Maintain ecological values of Islands

The islands at Greenwood Farm have played an important historical role in the development of the property. These islands, especially Diamond Stage, provided residents of Greenwood Farm with access to the Ipswich River. Historically these islands had been cleared of vegetation and likely used for pasture and possibly for fruit tree cultivation. Today the islands provide thick cover for wildlife, especially birds. The abundant berry producing shrubs provide birds with a sheltered resting and refueling spot during fall migrating.

Recommendations:

- *Design a salt marsh trail that will lead visitors to these islands (see Salt Marsh Management Recommendations, above).*
- *Control and remove invasive species from islands to promote native species growth.*
- *Clear woody vegetation from around selected fruit trees.*

Maintain the formal landscape while reducing impact on native communities

Although limited, some wildlife do benefit from formal landscapes. Butterflies and other insects are attracted to flowers for nectar and food sources for larvae; in return, dragonflies and birds are attracted to the abundant insects. While the formal landscape is a minor ecological component at Greenwood Farm, it is one that with some forethought can benefit wildlife while providing visitors with delight.

Recommendations:

- *Maintain formal plantings around houses by adding and replacing existing plants with native species where possible or non-invasive exotics. Priority should be placed on plants, which provide butterflies with larva food sources.*
- *Maintain current extent of lawn around the Paine and Farm House. Control application of nutrients to prevent impact on salt marsh from runoff.*

Maintain and encourage wildlife in accordance with available habitat and appropriate levels based on ecological principles

Greenwood Farm's small size, location, and habitat diversity limit its potential to support large numbers of wildlife. Management will primarily be limited to the dominant communities and to those species, which depend on these communities. At Greenwood

Farm, management will focus on two features: primarily, grassland breeding birds and white-tailed deer. Grassland birds have been discussed under “Fields” above and little else needs to be added here. White-tailed deer have been managed at the property in the recent past and continue to be managed at other nearby properties owned by The Trustees including the Crane Properties which are located across the Ipswich River from Greenwood Farm. The deer management program at Crane was established in response to pressures on the ecological integrity of the reservation as a result of deer over-population. Deer populations within Essex County and particularly in the Ipswich area are increasing and contributing to public health and safety problems such as Lyme Disease and deer/vehicle collisions. Deer management at Greenwood Farm would compliment existing deer management by The Trustees at Crane’s and other nearby properties and provide a more effective regional approach. Any efforts by The Trustees to open their properties to hunting will be well received by the Massachusetts Division of Fisheries and Wildlife, the agency responsible for deer management in the state, and help strengthen the relationship with this agency.

Recommendations:

- *Develop a deer management plan.*
- *Manage fields for grassland birds in accordance with The Trustees’ “Agricultural Grasslands Management Guidelines” and management recommendation under Fields section above.*
- *Monitor salt marsh use by birds, in particular shorebirds, waders and sparrows.*

Develop research projects for volunteers/interns and students that support natural resource management

Recommendations:

- *Seek out volunteers to make bird nesting boxes.*
- *Establish monitoring program for grassland birds and/or birds in general.*
- *Monitor development of Phragmites.*
- *Survey salt marsh for breeding birds and for use by shorebirds at high tide for loafing/resting.*
- *Conduct a small mammal survey for the fields.*
- *Research the effects of haying on salt marshes.*

- *Work with the land owner(s) of adjacent fields on protection and management of fields.*
- *Investigate/establish studies and/or monitoring for OMWM.*

Natural Resource Recommendations - Summary

High Priority

- Design a trail that replaces the original salt marsh trail that prevents ongoing impact to the salt marsh.
- Reduce nutrient flow from uplands by controlling fertilizer applications.
- Develop a grassland management plan for the fields.
- Cut back field edges to discourage encroachment of woody vegetation.
- Remove understory vegetation selectively to enhance views.
- Prohibit salt marsh haying.
- Protect wet meadows and swales, which abut fields.
- Establish monitoring program for grassland birds

Medium Priority

- Monitor local water quality issues associated with the Ipswich River.
- Continue to encourage Open Marsh Water management.
- Reduce or eliminate woody vegetation from fields.
- Keep trails along field edges.
- Maintain the apple orchard.
- Maintain forest integrity by preventing additional fragmentation.
- Snags and deadwood should be left standing unless they pose a safety hazard.
- Maintain formal plantings around houses by adding and replacing existing plants with native or non-invasive species.
- Develop deer management plan.
- Work with adjacent field owners on their protection and management
-

Low Priority

- Place bird nesting boxes throughout the upper margins of the marsh and along the fields.
- Clear woody vegetation from around fruit trees on the islands.
- Control and remove invasive vegetative species from islands.
- Maintain current lawn around the Paine and Farm House.
- Monitor development of Phragmites.
- Survey salt marsh breeding birds and use by shorebirds at high tide for loafing/resting
- Survey small mammals in fields
- Explore/research salt marsh haying effects on biological diversity
- Investigate/establish studies and/or monitoring for OMWM.
- Monitor salt marsh use by birds.

Section 5: Visitor Services

5.1 Introduction and Goals

Greenwood Farm currently offers visitors a tranquil, scenic place to walk and enjoy nature. The combination of open fields, historic houses, expanses of salt marsh, and the distant Ipswich River characterizes this property's beauty. Greenwood Farm, however, can be more than just another pretty place. Passive and active interpretation of the historical and ecological resources of the property can be used to enhance a visitor's experience. A quiet walk will always be possible here, but a walk where one can learn about the lives of the people who used to live here, or about the abundant wildlife in the salt marsh gives Greenwood Farm added interest.

The following section describes the services now available to visitors and makes recommendations on what we can offer in the future, in keeping with the following goals:

1. Maintain Greenwood Farm for public use and enjoyment.
2. Enhance the visitor's experience by providing such things as: clearly marked trails, interpretive materials, guided tours and walks, further information about The Trustees and related properties.
3. Instill a sense of stewardship in our visitors to draw them into an active role in preservation.

5.2 Description and Evaluation

5.2.1 Property Access

Trails exist around the perimeter of some fields and through the middle of others. They are mowed in the summer and are unmarked in the winter. As the grazing program at Greenwood Farm becomes established, the trail system will likely be adapted to separate cattle from people.

In 1996, managers closed the trail over the salt marsh because of the impact pedestrians were having on the marsh. To address these impacts and to preserve access to the islands, The Trustees initiated plans to develop a handicapped accessible boardwalk over the marsh. Unfortunately, in order to meet the handicapped access requirements as well as the requirements of the Conservation Commission the boardwalk would have been massive, 13' off the marsh at some locations. As a result, the project was abandoned, at least

temporarily, because it would have been unsightly and too costly. As a result the marsh access remains prohibited, except for an occasional guided walk.

The trails give visitors a varied walking experience, and will take into account certain ecological concerns such as space for ground and box nesting birds, and the fragility of the salt marsh. Generally, trails run around the edges of fields. Spur trails into wooded areas are recommended to lead to the remains of the causeway to Newmarch Street, and "Wood Island" towards Island Park Road. The two former trails are useful for interpretation of past land use and the people who lived here. The latter provides a quiet destination spot off the beaten track.

A new parking lot was constructed near the center of the property in 1996 (see Map 1). Improvements were also made to the existing driveway that leads to the Greenwood-Dodge House. The driveway entrance was widened to allow for two cars to pass and a turnout will be created halfway between the entrance and the parking lot. Parking for handicapped visitors will be provided next to the Greenwood-Dodge house.

There are two gates on the driveway, one at the entrance by Jeffrey's Neck Road and the other just beyond the parking area. The front gate will be left open unless there is evidence of undesirable nighttime activity. The second gate will generally remain closed in order to encourage visitors to use the parking lot and not drive beyond it.

Trail maps are provided for visitors; a copy is enclosed in the front pocket of this notebook.

5.2.2 Historic House Access

The Paine House is not open to the public during the ongoing stabilization and restoration work. Special interpretive programs should be done during this time. This type of interpretation, done by SPNEA and Historic Deerfield, has been popular and successful.

When the Paine House is ready for public visitation, the proposed season is May 1 to October 31 on weekends and possibly one weekday or by appointment. The hours and days will be determined by demand and marketing strategy.

5.2.3 Recreational Opportunities and Regulations

Visitors are encouraged to use the property for walking, cross country skiing, nature study, photography, painting, picnicking, etc.

The regulations are similar to those at other properties (see Appendix 5.1), including the requirement that dogs be leashed. Many people who walk their dogs on the property do not keep them on leashes once they leave the first field. This activity is monitored and violators are informed of the regulation in an effort to avoid conflicts between dogs, people, and wildlife.

5.2.4 Interpretation

The primary theme for interpretation at Greenwood Farm will be the evolving relationship of people and landscape, as outlined in *Trustees 2000*. Native Americans and English settlers were initially drawn to the property by its varied and abundant natural resources. The land affected and contributed to the lives of these inhabitants and the people certainly molded the land for their own purposes.

Boston University's *Interpretive Plan for Greenwood Farm*, January 1995 details three historical interpretive themes: Land Use, Architecture, Colonial Revitalization/Country Retreat. The plan makes suggestions about interpretive materials, methods of implementation, and areas of further research. It provides some excellent groundwork in developing interpretation on the property.

Both active and passive interpretation should be used at Greenwood Farm. Guided walks and tours should be offered for a small fee. These would feature the Paine House, history of land use, salt marsh ecology, birding, etc. At the visitor center (see below), there would be space for lectures and slide shows on historic or ecological topics.

There will be an interpretive brochure for self-guided walks on the property. Information on taking a self-guided walk shall be available in the parking area or at the visitor center. A bulletin board in the parking area will provide information about the property and a book for visitors to note comments, suggestions, or interesting sites. The visitor center will be open on a regular schedule with self-guiding displays.

5.2.5 Visitor Center

It is recommended that the first floor of the attached barn at the Greenwood-Dodge House be converted into a visitor center. This was once a working barn with hay mows and stalls for animals. The floor needs to be leveled and stabilized, but the walls and beams should be left uncovered to show the form of the original structure and evidence of the Dodge's renovations when they created servants quarters upstairs in the early 1920's.

The barn provides space for exhibits, storage, a public meeting room, and a public rest room.

5.2.6 Regional Linkage

Open Space

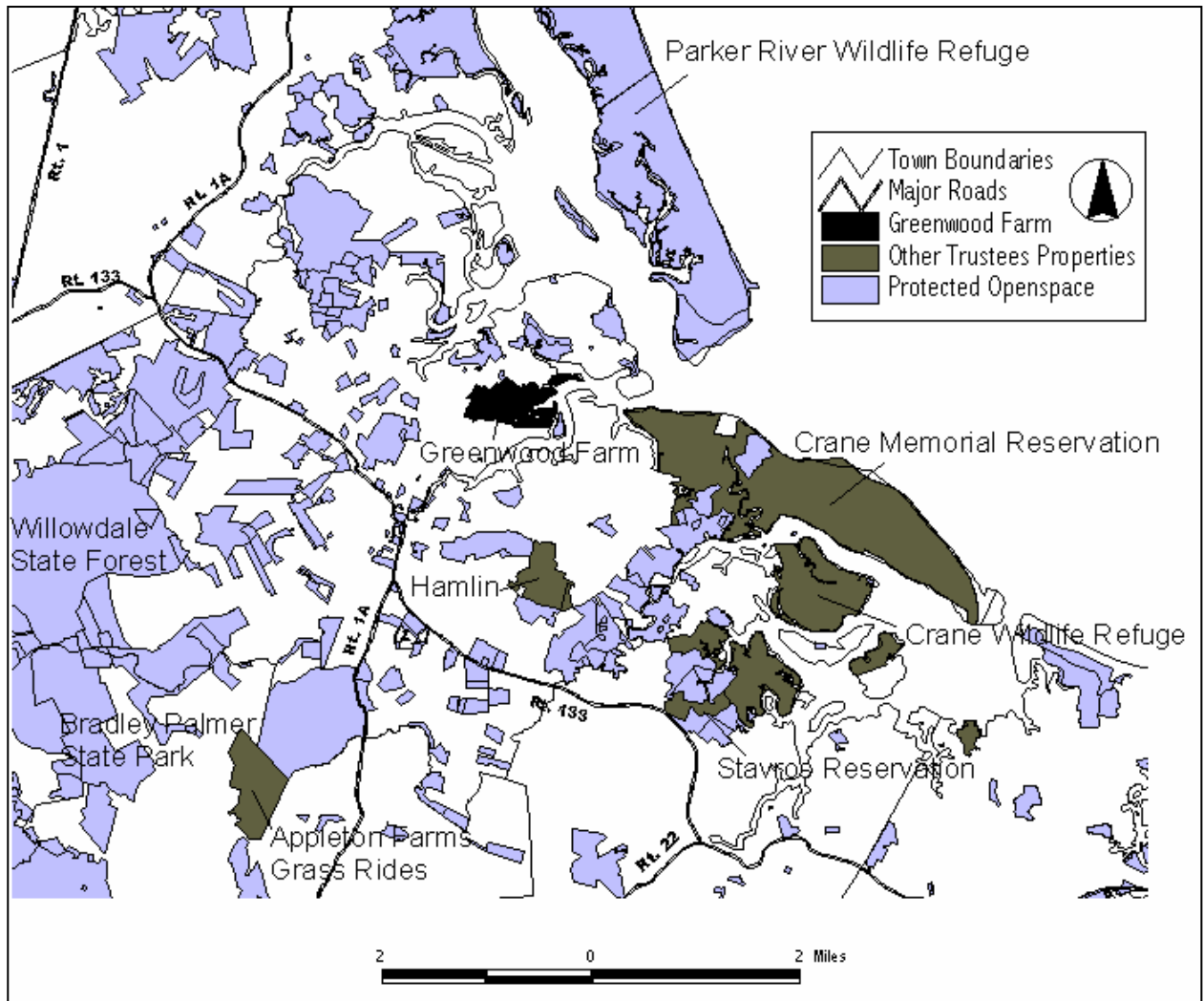


Figure 5.1: Open Space near Greenwood Farm Reservation

A map of bicycle and/or walking routes should be developed to link Greenwood Farm with other Trustees' properties or open space within the local area (see Figure 5.1). Short blurbs about each of the stops on the route should be included. This would potentially attract a younger group of visitors with whom The Trustees are trying to connect. A map of this type should be distributed (for a fee) through The Trustees headquarters, places on the route, local bike shops, the visitors center in Ipswich, Eastern Mountain Sports in Danvers, Recreation Equipment Inc. in Reading, etc. The property itself is not open for biking but makes an excellent destination for someone traveling by bicycle.

Local Historic Properties

There is potential to create a bus tour of local historic sites such as Castle Hill, the houses of the Ipswich Historical Society, and Greenwood Farm, or, alternatively, Castle Hill, Long Hill, and Greenwood Farm. It is more difficult to bring a large group to Greenwood Farm than to some of these other sites, so it would require careful planning to make a combined tour work well.

Essex National Heritage Area

Greenwood Farm is an excellent candidate for inclusion in the Essex National Heritage Area under their "Early Settlement" and "Maritime" themes. This would place Greenwood Farm in a regional context and potentially attract more visitors. Diana Hazelton of Essex National Heritage Area should be contacted to discuss the possibility of including Greenwood Farm in their brochures.

5.2.7 Organized Events

The property has hosted several large events: a memorial service for Sally Dodge, a Trustees' 1891 Society party, and the auction of Miss Dodge's estate. In the future, other large outdoor events should be considered such as a craft fair, harvest festival, or antiques show. In viewing the property as a vernacular landscape, one that changes in use over time according to the needs of the current occupants, it is best to focus events around some aspect of the past lives and uses of the land.

The main concerns with any large outdoor event at this property are parking and insects. The first can be accommodated in one of the fields, as long as the ground is relatively dry, i.e., not until late spring. The second can be a problem from late June until early September. Clearly the best time for an event is May - late June and mid September - October. Cautionary note: this period also coincides with peak bird nesting, and fields should be checked for ground nesting birds prior to setting up an event.

Sally Dodge was eager to have local students and other people tour the property. In the short term, a limited number of tours, particularly of the work at the Paine House should be done. Regularly scheduled tours of the Paine House and visits from school groups for historical or ecological lessons are in the medium to long term goals. As mentioned above, Greenwood Farm could be one stop on a tour of historic properties.

Greenwood Farm has and will continue to host programs led by non-Trustees staff and volunteers. For example, Massachusetts Audubon Society did a wildflower walk in September of 1995, Richard Foreman brings his ecology students from Harvard University to study the salt marsh every fall, and Bob Shaw led a bird walk for the Ipswich River Festival in June of 1996.

Another type of program which requires a little more involvement from Trustees' staff, is a field trip organized by John Ferrick, a teacher at the Whipple Middle School in Ipswich. Every spring the seventh grade class canoes down the Ipswich River stopping at Greenwood Farm on their route. The Superintendent meets them at Diamond Stage and gives them a brief talk (10-15 min.) about the history of Greenwood Farm and Diamond Stage and information about salt marsh ecology. These trips run for four or five weeks in a row with a different part of the class coming out each week.

5.2.8 Membership

Information will be provided at the bulletin board in the parking lot, in the Paine House and visitors center, and on guided walks.

5.3 Recommendations

High Priority

- Install new parking area with bulletin board, membership and basic interpretive information
- Provide parking closer to the Paine House
- Begin construction of boardwalk (if it can be designed so that it is simple and non-intrusive to the salt marsh environment)
- Provide interpretation during rehabilitation phase at Paine House
- Contact Diana Hazelton re: inclusion in Essex National Heritage Area
- Increase public awareness of The Trustees

Medium Priority

- Develop and provide self-guiding interpretive materials
- Provide expanded interpretive materials/programs
- Open Paine House for tours and train guides
- Provide a clear and varied trail system that addresses ecological impact on birds and salt marsh
- Provide educational programs - school visits, lectures, walks
- Establish local and regional linkages for Greenwood Farm

Low Priority

- Renovate barn and set up exhibits for a visitors center
- Host annual revenue-producing event

Section 6: Land Conservation

6.1 Introduction and Goals

Thanks in large part to the Dodge's commitment to Greenwood Farm over many years, the boundaries are relatively compact and the property is relatively coherent. After his initial purchase of the bulk of the property in 1916, Robert Dodge continued to buy adjacent parcels to help secure his viewshed and keep it from being developed. The resulting 213 acres are buffered on two sides by salt marsh and on one side by salt marsh and some undeveloped upland (see Map 1). The fourth side abuts Jeffrey's Neck Road.

The goal of any future land conservation action is to protect land adjacent to Greenwood Farm in a manner that secures and enhances its visual and ecological integrity.

6.2 Description and Evaluation

6.2.1 Present Configuration of the Reservation

Greenwood Farm occupies approximately 85% of a low, long hill (oriented to the northwest/southeast) along with adjacent wetlands that serve as a visual and ecological buffer. Due east of the hill comprising the core of the property, five small, low, drumlin-shaped islands rise from the marsh. On Newmarch Street, to the south, the property does include the easterly portion of another low hill on which numerous houses have been developed. Runoff from these residential properties enters Greenwood Farm marsh along the southern boundary, but is subject to strong tidal flushing from the tidal creek north of Newmarch Street and south of the hill at the property's core.

In retrospect, one might wish that the Dodges had acquired additional land on the east side, and even the west side, of Jeffrey's Neck Road to protect the approaches to the Reservation. Nevertheless, the property controls much of its immediate watershed and the core of the property is amply buffered from the residential land uses to the north, west, and south.

6.2.2 Management Considerations

No additional land needs to be secured to address management concerns, but there are parcels that should be tracked to avoid negative impacts on viewsheds and wildlife habitat.

6.2.3 Vehicular Approaches to the Reservation

Jeffrey's Neck Road, along the western boundary of Greenwood Farm, provides the only vehicular approach to the Reservation. As one proceeds northward from the Route 1A intersection, Jeffrey's Neck Road becomes more and more rural. On the western side in the vicinity of Greenwood Farm, rolling agricultural meadows define the landscape.

The scenic integrity of Greenwood Farm would be diminished to some extent if these meadows on Jeffrey's Neck Road (opposite the Reservation entrance) were developed.

6.2.4 Views from the Reservation

From the core of Greenwood Farm, in the vicinity of the Paine House, little if any land protection is necessary to secure the viewshed. From the meadow on Jeffrey's Neck Road, views of the rolling hayland on the west side of Jeffrey's Neck Road would be degraded by development. Efforts should be made in collaboration with the Town of Ipswich and the owners involved to avoid development of the land across Jeffrey's Neck Road.

6.2.5 Ecological Considerations

As we have pointed out, Greenwood Farm incorporates most of its immediate watershed within its present boundaries. However, with regard to habitat values, the property is not entirely self-contained and self-sufficient. It is likely that songbird diversity at Greenwood Farm depends upon retention of the open meadow habitat located directly across and southward on Jeffrey's Neck Road (see Critical Lands). Were that habitat to be diminished significantly by development, the attractiveness of Greenwood Farm to songbirds could be lessened. It is also desirable to coordinate grassland management with these properties to promote ground nesting birds.

6.2.6 Critical Lands

Critical lands include those which would have a negative impact on the property if they were to be further developed or would have a positive impact on the property if they were to be acquired. They are prioritized below.

High Priority

- The property at 52(?) Jeffrey's Neck Road, Tax Map 22D, Lot 48 owned by the Wendel Realty Trust could have a significant impact on both the viewshed of Greenwood Farm and the nesting habits of grassland birds if it were developed. This property is directly across Jeffrey's Neck Road from Greenwood Farm.
- The property at 20-30 Jeffrey's Neck Road, Tax Map , Lot owned by the Sisters of Notre Dame de Namur Novitiate is also important as part of the larger greenway extending northwards on Jeffrey's Neck Road to the Wendel property and Greenwood Farm. In the next five to ten years, it is likely that the Novitiate will have to sell or

develop at least part of their land. They have an aging population and few Novitiates. Reportedly the order is in the process of consolidating and reducing its real estate holdings. The Town's recently adopted Great Estate bylaw should help to avoid standard grid development of this property.

- Sister Patricia Rollinger who is the administrator of Cuvilly Arts and Earth Center (owned by Notre Dame) is committed to preserving the 23 acres used by Cuvilly for their pre-school and community farm. Essex County Greenbelt has assisted in doing a natural resources inventory on the property to help them determine what they have now.

Medium Priority

- Land on Treadwell Island and Tilton Hill. Both of these parcels of land are in the viewshed from the heart of the property on the far side of the Ipswich River looking south east. Currently, the view is of a few houses and wooded hillsides, a pleasant contrast to the crammed development seen on Little Neck.

Treadwell Island is only accessible by boat, so the likelihood of it being further developed is small. The existing houses are mostly hidden by trees.

- Tilton Hill is part of Castle Neck and is accessible off of Argilla Road. The side facing Argilla Road has a few houses; the side facing the Ipswich River and Greenwood Farm has none. Any houses built there could probably be positioned so that they would have little impact on the viewshed of Greenwood Farm. Because this parcel, including the associated saltmarsh, is the largest remaining unprotected parcel in the Ipswich River estuary, its protection will be critical to maintaining the ecological diversity of the estuary. It is also noteworthy that Tilton Hill is part of Crane's historical land holdings.

While neither of these locations poses an imminent threat, careless development would have a negative impact on the viewshed from the houses and the marsh trail.

Low Priority

- There is an in-holding at 53 Jeffrey's Neck Road, Tax Map 22D, Lot 39 owned by Elsie M. Gazeaud. It is about a 1/3 acre lot with a single story house and garage set between the Superintendent's house and the front field. The parcel is not necessary for any management reason, but it would be convenient to eliminate the in-holding and have control over the appearance of the property. (The garage is quite dilapidated.)

6.3 Recommendations

High Priority

- Complete research at the Assessors' Office and compile a Critical Lands Database for Greenwood Farm. Research deed for Wendel property in Salem. [Land Conservation Center with volunteer]
- Communicate protection priorities to the Town's Open Space Committee, Town Planner, and the Essex County Greenbelt Association.

Medium Priority:

- Conduct a habitat analysis of the open hayland on Jeffrey's Neck Road in relation to the diversity of bird life at Greenwood Farm. [Associate Director for Planning and Ecology, Regional Ecologist, Greenwood Farm Superintendent, and Land Conservation Center]
- Conduct an ecological assessment of the upland area on Newmarch Street.
- Initiate and develop contacts with owners of high and medium priority Critical Lands. [Greenwood Farm Superintendent with Land Conservation staff]
- Work with Essex County Greenbelt on protection strategies for the Notre Dame property.

Reports available from The Trustees of Reservations

- Boston University, Preservation Studies Program. 1994. Historic Greenwood Farm Retreat and Conference Center. Report to The Trustees of Reservations. Beverly, MA.
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- Mussey, R.D., Jr. 1993. Overall collections condition survey report. Report to The Trustees of Reservations. Beverly, MA.
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- Salvatore, H.A. 1994. Greenwood Farm, Ipswich, Massachusetts, historical structure report, phase I. Report to The Trustees of Reservations. Beverly, MA.
- Wheeler, K. 1997. Findings from the Paine-Dodge House, Ipswich, MA: results from two phases of archaeological investigations in 1996. Report to The Trustees of Reservations. Beverly, MA.

Greenwood Farm
Plant Community Descriptions
1995

Russell Hopping

c/o The Trustees of Reservations
572 Essex Street
Beverly, MA 01915-1530

Methods

Plant communities were delineated using aerial black and white photographs flown in late June of 1979 with a scale of 1" = 200'. Contrasts between shades as well as differences in texture were used to define plant communities. The results of the delineation were used to produce a GIS (geographic information systems) map depicting plant community cover types. Plant communities were then field checked by The Trustees' ecologists for accuracy and evaluated for species composition and community structure based on canopy, shrub layer and ground cover dominance during the summer of 1994 and the fall of 1995. Field data were used to revise the GIS map (figure 1) and to develop the following plant community descriptions. In addition, each community was assigned an abbreviated code for GIS purposes. Plant community descriptions were based on species dominance from 1995 field notes by The Trustees' ecologists and previously defined communities from Massachusetts Natural Heritage Program (1992), Maine Natural Heritage Program (1991), the New York Natural Heritage Program (1990) and various state and federal agencies where possible.

Wetland

Salt Marsh: (WET-SM)

Salt marsh is the dominant community at Greenwood Farm. Approximately 2/3rds of the property is salt marsh which surrounds the upland portion of the property on three sides. Salt marsh at Greenwood Farm extends to the Ipswich River and is part of a larger salt marsh ecosystem of the lower Ipswich River.

I. Low Marsh:

This intertidal marsh community is subjected to regular inundation by semidiurnal tides. The vegetation is nearly monospecific stands of *Spartina alterniflora* (salt marsh grass). A few species of marine algae can form dense mats on the surface sediments. Other associates may include *Salicornia europaea* (common glasswort), *Spergularia marina* (sand spurry) and *Sueda maritima* (sea blite).

II. High Marsh:

This community lies between mean high tide and spring tide elevations. *Spartina patens* (salt meadow grass) is dominant and may form dense pure stands or occurs in association with *Distichlis spicata* (spike grass). At higher elevations *Juncus gerardii* (black grass) becomes more common. Other less common species include *Polygonum ramosissimum* (bushy knotweed), *Solidago sempervirens* (seaside goldenrod), *Atriplex patula* (marsh orach), *Aster* (spp.), and *Plantago maritima* (seaside plantain).

III. Marsh-Upland Border:

This community occurs in a narrow band along the upland edge of salt marshes where freshwater influence from the upland is not strong. Characteristic species include: *Panicum virgatum* (switchgrass), *Phragmites australis* (common reed), *Myrica pensylvanica* (bayberry), *Solidago sempervirens*, *Baccharis halimifolia* (groundsel tree), *Iva frutescens* (marsh elder), *Juniperus virginiana* (red cedar), and *Toxicodendron radicans* (poison ivy). *Iva frutescens* is particularly common and dominates broader areas where salt water inundation is infrequent. Less common species include *Andropogon gerardi* (big bluestem) and *Scirpus robustus* (salt marsh bulrush). *Phragmites australis* forms monospecific stands along upland edge.

IV. Salt Panne:

Salt pannes are shallow depressions in the salt marsh where the marsh is poorly drained. Pannes occur in both low and high salt marshes. Pannes in low marsh usually lack vegetation, and the substrate is soft, silty mud. Pannes in high salt marsh are irregularly flooded by spring tides or flood tides, but the water does not drain into tidal creeks. Evaporation in these pannes causes salinity levels to be higher than sea water. Characteristic species include: dwarf species of *Spartina alterniflora*, *Salicornia* spp., *Plucea purpurascens* (salt marsh fleabane), *Plantago maritima*, and *Spergularia marina*.

Wet Meadow: (WET-WM)

The wet meadow community is located along the north edge of the roadside field and covers a small area, less than .25 acres. This area experiences temporary and seasonal flooding. Water depth is generally less than 6 inches deep. In addition to flooding this area is mowed annually. Dominant species include *Lythrum salicaria* (purple loosestrife), *Iris versicolor* (blueflag iris) and sedges (spp.) in the wettest portion and *Solidago* (goldenrod sp.) and grasses (spp.) in the drier portions. *Lythrum salicaria* is extremely abundant and is likely crowding out other species. *Rhamnus frangula* (Glossy buckthorn) is invading from the surrounding edge and will likely pose a problem in the future to this community.

Swale: (WET-SW)

This low area bisects the southeast field, draining runoff to the salt marsh. Some tidal influence is likely at the lower elevations. Substrate is typically damp with little to no standing water. A partial species list includes: *Ilex verticillata* (winterberry), *Vaccinium corymbosum* (highbush blueberry), *Viburnum recognitum* (arrow-wood), *Cornus amomun* (silky dogwood), *Cornus racemosa* (gray dogwood) and *Rosa* (rose sp.). *Lythrum salicaria*, *Typha latifolia* (cat-tail), and *Spartina pectinata* (slough grass) are less common. *Lonicera* (honeysuckle sp.), *Rhamnus frangula* and *Rosa multiflora* (multiflora rose) occur at the beginning of the swale at its highest elevation. *Phragmites australis* occurs at the lower edge between salt marsh and swale. An inventory during growing season will undoubtedly produce more species for this community.

Shrub Swamp: (WET-SS)

This community is restricted to a low spot adjacent to wet meadow. Shrubs form dense contiguous cover > 1 m in height throughout this community. *Rhamnus frangula* dominates with *Lonicera* sp., *Prunus serotina* (black cherry) and *Celastrus orbiculatis* (Asiatic bittersweet) less frequent. *Ulmus americana* (American elm) occurs as emergent covering less than 25%. Approximately 50% of the elms are dead or dying, likely due to Dutch Elm Disease or infrequent flooding. *Prunus serotina*, *Malus pumilla* (common apple), *Pyrus communis* (domestic pear) and *Juniperus virginiana* are less frequent in canopy.

Shrub

Successional Woodland: (SHR-SW)

A broadly defined community occurring on land that was cleared in the past and abandoned, allowing succession to take place. Species composition can be variable depending on location but generally shrubs up to 4 m high dominate and form semi-open to contiguous coverage over greater than 50 % of area. Trees form an emergent canopy covering < 50% of the community. This community is restricted to the larger islands and

the isolated upland along the southeast corner which is separated from the main reservation by a creek and associated salt marsh.

Canopy: Low and sparse, generally emergent. Species frequency varies with location but generally *Quercus rubra* (red oak) is dominant. Additional species include: *Betula populifolia* (gray birch), *Populus tremuloides* (quaking aspen), *Prunus serotina*, *Acer rubrum* (red maple), *Juniperus virginiana* and less frequently, *Pinus strobus* (white pine), *Salix* (willow sp.), *Pyrus aucuparia* (mountain ash), *Ulmus americana*, and *Carya* (hickory spp.). The occasional domesticated fruit tree is scattered throughout suggesting some of this land had been used for orchards prior to abandonment.

Shrub Layer: The shrub layer is dominated by *Rhamnus frangula* with *Myrica pensylvanica*, *Viburnum recognitum*, *Crataegus* (hawthorn sp.), *Amelanchier* sp., *Rosa* sp., *Aronia* (chokeberry sp.), *Lonicera* sp. and *Rhus typhina* (staghorn sumac) less frequent and forming dense thickets with branches touching throughout.

Ground Layer: Sparse due to shading by overstory.

Regeneration: Trees, especially oak, are colonizing and reproducing and will eventually shade out some of the understory. The larger islands will likely continue to support thick shrub understory due to extensive edge of island. The islands will eventually resemble the smaller islands which are dominated by oak in time since this seems to be the natural plant community associated with islands of this type throughout the salt marsh ecosystem along the North Shore.

Forested Upland

Red Pine: (FOR-RP)

This species is found occasionally throughout the property, but is generally restricted to two stands which were undoubtedly planted. The largest stand is located just to the north of the Paine House along the salt marsh edge. The other stand is located along the southern edge of the central field next to the parking lot between the field and the oak / hickory woods.

Canopy: *Pinus resinosa* (red pine) entirely. Canopy is relatively closed and community resembles plantation.

Shrubs: The understory is sparse to absent. A few ericaceous shrubs and deciduous tree seedlings occur.

Ground Layer: Sparse, needs to be surveyed during growing season.

Regeneration: Red pine is not reproducing and in time these stands will be replaced by colonizing trees such as *Quercus* and *Carya*.

Mixed Coniferous: (FOR-MC)

This community is restricted to the south side of the main entrance. Area is less than 1 acre and was undoubtedly planted and includes several species of conifers.

Canopy: An even aged stand dominated by *Pinus strobus*, *Tsuga canadensis* (eastern hemlock), and *Picea* (spruce spp.). Additional species include *Pinus resinosa*, *P. rigida*, and a species which appears to be an *Abies* (fir sp.). Canopy cover is 75% or greater.

Shrub Layer: Dominated by *Rhamnus frangula*, especially along edge with driveway. Several *Rhododendrons* (sp.) were planted as well along the drive.

Ground Layer: Variable depending on light conditions but generally very sparse. Needs to be surveyed during growing season.

Regeneration: Little to none. This forest will continue to age and as trees die, other species will colonize. *Rhamnus frangula* will continue to colonize and will likely form dense shrub layer with more light.

Oak / Hickory: (FOR-OAK/HIC)

This is the common forest type at Greenwood Farm, especially along edges, between fields and on islands.

Canopy: *Quercus rubra* is generally the dominant species. Both older spreading trees and younger straight trees exist. Older trees are large, > 4' dbh, and were likely planted for landscaping or as shade trees between fields. *Carya ovata* (shagbark hickory) and *Carya glabra* (pignut hickory) are common and in places replace red oak as dominant species. Less common species include *Quercus alba* (white oak) and *Nyssa sylvatica* (tupelo). Subcanopy includes hickories and oaks with *Pinus resinosa*, *Picea* (sp.), *Tsuga canadensis*, *Betula populifolia*, *Prunus serotina* and *Sassafras albidum* (sassafras). Hickory may be absent from islands.

Shrub Layer: The shrub layer is variable due to extensive edge found with this community. Along edges and openings shrubs are dense. Under thick canopy shrubs are sparse. Species dominance varies and includes *Myrica pensylvanica*, *Lonicera* sp., *Rhamnus frangula*, *Viburnum recognitum*, *Prunus serotina*, *Rosa* spp., *Amelanchier* sp., *Cornus* spp., *Gaylussacia* (huckleberry sp.), and *Rhus typhina* (staghorn sumac). *Kalmia latifolia* (mountain laurel) is rare and undoubtedly planted.

Ground Layer: The ground layer is variable and generally absent under dense overstory or dominated by grasses (spp.). *Toxicodendron radicans* is common along edges.

Regeneration: Both hickory and oak are present in sapling (< 6" dbh) and seedling stages. *Nyssa sylvatica* is also reproducing in low spots. This community is encroaching on fields.

Non-Forested Upland

Landscaped: (NFU-LSCP)

This community occurs around buildings and is generally very homogenous and managed for turf grasses, perennial plantings and ornamental trees and shrubs. Shrubs and hedges occur throughout as landscaping lining walkways and driveways. Areas of lawn are mown frequently during the growing season. No leaf litter is allowed to accumulate during the fall and winter. Between 0 - 15% of the lawn is shaded by a canopy of mature trees. Tree species vary greatly and resemble the species composition found in the Mixed Coniferous Community with additional hardwood species.

Field: (NFU-GR-F)

Fields represent the second most common community type at Greenwood Farm. A series of fields separated by tree and shrub hedgerows dominates the center of the upland portion of the reservation from Jeffrey's Neck Road to the salt marsh. The size, condition and species composition varies from field to field. Grasses are dominant throughout with a few scattered trees and shrubs.

Fields are not hayed but are mowed 1 - 2 times annually with a rotary mower. Woody species are invading fields, especially *Rhamnus frangula* which could threaten the viability of the fields. A partial species list includes: *Dactylis glomerata* (orchard grass), *Phieum pratense* (Timothy grass), *Andropogon scoparius* (little bluestem), *Toxicodendron radicans*, *Hieracium* (hawkweed spp.), *Solidago* (goldenrod spp.), *Daucus carota* (Queen Anne's lace), *Anemone virginiana* (thimble weed), and *Cichorium intybus* (chicory).

The shrub border surrounding the fields includes most of the shrub species found in the Successional Woodland and Oak/Hickory communities and is encroaching on fields. This edge is very beneficial for wildlife, especially birds, due to the cover and food availability but potentially could pose a threat to field habitat over the long term if not controlled. The fields themselves support, or have the potential to support, grassland species such as bobolinks (*Dolichonyx oryzivorus*). One pair of bobolinks was observed and suspected of breeding in the middle of the central field in 1994 (see "Grassland Bird Survey for Greenwood Farm 1994").

Orchard: (NFU-GR-O)

The orchard is located behind the Paine House and entirely composed of *Malus* (apple). Trees are in good shape except for a few which have large broken limbs. Some pruning and brush removal would benefit this orchard. Grass dominates ground layer. Three

trees need to be replaced along the north side of trail. Although apple is an exotic species it is not invasive and has tremendous value for wildlife.

Preliminary Plant Species List for Fields at Greenwood Farm

Species information was collected August / September 1997

	Common Name	Status	Habitat
Anacardiaceae			
Rhus	staghorn sumac		edge
Toxicodendron radicans	poison ivy		edge
Apiaceae			
Daucus carota	queen Anne's lace	NN	
Asclepiadaceae			
Acclepias syriaca	common milkweed		
Asteraceae			
Achillia millefolium	yarrow	NN	
Ambrosia artemisiifolia	common ragweed		ruderal
Artemisia vulgaris	common mugwort	NN	ruderal
Aster ericoides	many-flowered aster		
Aster vimineus	small white aster		
Centaurea nigra	black knapweed	NN	
Chrysanthemum leucanthemum	oxeye daisy	NN	ruderal
Cichorium intybus	chicory	NN	ruderal
Cirsium arvense	Canada thistle	NN	
Cirsium vulgare	bull thistle	NN	
Erigeron strigosus ?	rough fleabane		
Euthamia graminifolia	grass-leaved goldenrod		
Hieracium canadense	Canada hawkweed		
Hieracium pratense	field hawkweed	NN	
Leontodon autumnalis	Fall dandelion	NN	
Solidago juncea	early goldenrod		
Solidago rugosa	rough-leaved goldenrod		
Tanacetum vulgare	tansey	NN	
Taraxacum officinale	common dandelion	NN	
Tragopogon pratensis	yellow goat's-beard		
Unkown composite			
Berberidaceae			
Berberis vulgaris	common barberry	NN	
Brassicaceae			
Berteroa incana	hoary alyssum	NN	ruderal
Caprifoliaceae			
Lonicera morrowii	honeysuckle	NN	
Viburnum recognitum	arrowwood		
Cornaceae			
Cornus racemosa	panicled dogwood		edge
Cupressaceae			

Juniperus virginiana	red cedar		edge
Cyperaceae			
Carex sp. (Ovales group)	sedge		wet
Carex vulpinoidea ?	sedge		
sp.	sedge sp.		
Dioscoriaceae			
Dioscorea villosa?	wild yamroot		
Ericaceae			
Vaccinium corymbosum	highbush blueberry		wet
Fabaceae			
Trifolium arvense	rabbit-foot clover	NN	ruderal
Trifolium hybridum	Alsatian clover	NN	ruderal
Trifolium pratense	red clover	NN	ruderal
Vicia cracca	cow vetch	NN	
Fagaceae			
Quercus rubra	red oak		edge
Gramineae			
Agropyron repens	quack grass		
Agrostis alba	redtop bentgrass		
Alopecurus pratensis ?	meadow foxtail	NN	
Anthoxanthum odoratum	sweet vernal grass	NN	
Arrhenatherum elatius	tall oats grass	NN	
Bromus sp.	brome grass	?	ruderal
Dactylis glomerata	orchard grass	NN	
Digitaria sanguinalis	crab grass	NN	ruderal
Festuca elatior (Poa ?)	meadow fescue		
Festuca ovina	sheep fescue	NN	
Festuca rubra	red fescue		
Lolium perenne	English rye grass	NN	ruderal
Phleum pratense	Timothy	NN	ruderal
Secale cereale	rye	NN	ruderal
Hypericaceae			
Hypericum perforatum	common St. Johnswort	NN	
Hypericum sp.		?	
Iridaceae			
Iris versicolor	blue flag		wet
Juglandaceae			
Carya glabra	pignut hickory		edge
Carya cordiformis	bitternut hickory		edge
sp.			
Juncaceae			

Juncus tenuis	path rush		edge
Lamiaceae			
Prunella vulgaris	self-heal	?	ruderal
Liliaceae			
Smilacina sp.	Solomon's-seal		edge
Lythraceae			
Lythrum salicaria	purpleloosestrife	NN	
Oleaceae			
Syringa vulgaris	common lilac	NN	
Plantaginaceae			
Plantago lanceolata	English plantain	NN	ruderal
Polygonaceae			
Polygonum convolvulus?	field bindweed	NN	
Rumex acetosilla	field sorrel	NN	
Rumex crispus	curled dock	NN	
Rhamnaceae			
Rhamnus frangula	glossy buckthorn	NN	
Rosaceae			
Amelanchier sp.	serviceberry		
Aronia melanocarpa ?	black chokeberry		
Crataegus sp.	hawthorn	?	
Potentilla canadensis?	dwarf cinquefoil		
Potentilla recta	rough-fruited cinquefoil	NN	
Prunus americana ?	wild plum		
Prunus serotina	black cherry		
Prunus virginiana	chokecherry		
Pyrus communis	pear	NN	edge
Pyrus sp.	crabapple sp	?	
Rosa multiflora	multiflora rose	NN	
Rosa virginiana	Virginia rose		
Rubus flagellaris	dewberry		
Rubis sp.			
Rubis sp.			
Spiraea latifolia	meadowsweet		wet
Rubiaceae			
Galium verum	yellow bedstraw	NN	
Galium mollugo	wild madder	NN	
Scrophulariaceae			
Linaria vulgaris	butter-and-eggs	NN	
Smilacaceae			

Smilax sp.	greenbrier		
Ulmaceae			
Ulmus americana	American elm		wet
Vitaceae			
Parthenocissus quinquefolia	Virginia creeper		
Vitis riparia ?	river grape		

NN = Not Native

GREENWOOD FARM
Ipswich, Massachusetts

For the protection and enjoyment of the Reservation, visitors shall comply with the regulations listed below.

REGULATIONS:

1. Motorized vehicles are prohibited on the Reservation except in designated parking areas and on the entrance road. The use of snowmobiles, trail bikes, motorcycles and all off-the-road vehicles are prohibited.
2. Cutting or removing vegetation is prohibited. Trees, shrubs and wildflowers are of scientific interest - all are part of the beauty of the landscape.
3. All fires are prohibited. The density of surrounding woodlands, the generally dry conditions of the forest floor, and the exposure of drying winds make the use of fire hazardous.
4. Disturbing, removing, defacing, cutting or otherwise causing damage to a natural feature, sign, poster, barrier, building or other property on the Reservation is prohibited.
5. Camping is prohibited for public health reasons.
6. Littering is prohibited. Please carry out what you carry in.
7. The possession of alcoholic beverages is prohibited.
8. Conduct which disturbs the tranquillity of the Reservation or its enjoyment by others is prohibited.
9. Disturbing nesting birds or other wildlife is prohibited. The Reservation provides a rare habitat for many varieties of birds and animal life.
10. Pets are prohibited on the Reservation at all times, except when leashed, for the protection of plants and wildlife.
11. Firearms and hunting are prohibited on the Reservation except with the prior written permission of the Superintendent.
12. Excavation or removal of archaeological artifacts from the Reservation is prohibited.
13. The Reservation closes at sunset. Entering or remaining on the property after that time is prohibited.

Greenwood Farm is a property of The Trustees of Reservations. Visitors are welcome, but on the understanding that they use the area at their own risk, and that they will comply with all of the above regulations. Whoever disregards or violates any of the above regulations is hereby forbidden to remain upon these premises, and is subject to arrest, fine and imprisonment as provided by law. The Trustees of Reservations cannot assume responsibility for injuries or for the loss or theft of personal property.

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