Tekle

TOWN OF CONCORD

LONG RANGE PLAN

APPENDICES

OCTOBER 1987

APPENDIX 4-D

ESTABROOK WOODS

The Estabrook Woods, well known to many Concord residents, consists, in large part, of a 672-acre nature preserve located in the northern portion of Concord (614 acres) and neighboring Carlisle (58 acres). This preserve is owned by Harvard University as a portion of the Concord Field Station. Also included in the general category of "Estabrook Woods" is the Town-owned Punkatasset Conservation Land, some land owned by the Land Conservation Trust, and some privately owned and restricted parcels. The discussion which follows will concentrate on the portion of Estabrook Woods which is owned by Harvard University.

The Field Station was established through the efforts of Professor Ernst Mayr, the Director of the Museum of Comparative Zoology, and Dr. Charles P. Lyman, Curator of Mammalogy and Associate Professor of Anatomy at the Harvard Medical School. Mayr and Lyman perceived the need for a biological preserve for use by Harvard faculty and students for study and research within easy access of Cambridge. They considered several alternatives and finally settled on the Estabrook Woods.

Acquisition of the Woods was made possible through an intensive, sustained effort beginning in October 1965 and culminating in December 1967. This effort involved first working with landowners to persuade them of the benefits of selling their land. The initial acquisition of the land was made in the name of the Nature Conservancy. A fundraising brochure was printed and approximately 600 generous donations were obtained from individuals and foundations. Approximately \$495,000 was raised for the project. The Ford Foundation made a grant of \$250,000 and \$35,000 was raised from Concord citizens. Four Concord citizens each pledged \$25,000 in interest-free loans for the project. The Concord Field Station became a reality with a substantial woodland preserve for study and research.

The Woods are held by Harvard for use by faculty, graduate and undergraduate students, and amateur naturalists for teaching and research in the environmental sciences. Harvard's purpose in obtaining the land, as stated in the fundraising literature was:

The Concord Field Station will be used for instruction and research within the scope of the educational purposes of the Museum of Comparative Zoology. The activities to be carried on at the Field Station and elsewhere in connection with its use will thus include research and field studies of all kinds related to zoology, such as ecological research and studies of populations, seasonal changes and behavior. Only such facilities will be established and maintained at the Field Station as are desirable for and consistent with the educational purposes for which it is to be used.

A brochure, distributed by a special committee to Harvard's Board of Overseers at the time of the land purchases, states, "It is planned that Estabrook Woods will form the center of a balanced ecological study area." It further justifies creation of the Field Station: "Man's environment, except for man himself, is the most important factor that will determine man's future. It

is appalling how little time, money, and attention has been paid to a truly scientific analysis of man's environment. It is one of the main objectives of our Concord Field Station to implement this research and to establish a living laboratory for these studies."

Estabrook Woods has a long and interesting history. When European colonials arrived in Massachusetts in 1620 the Nipmunks, a local subtribe of the Musketaquids of the Algonkian nation inhabited the area. In places the woods had been cleared for villages and cornfields.

A colonial map, dating from 1634, shows the Concord River as being close to the Western boundary of the new Massachusetts colony. By this time contagious diseases had decimated the Nipmunk populations and Concord's founding, in 1635, occurred at a time when there were relatively few native American Indians in the area. Attracted by opportunities for grazing cattle and haymaking along the river and the abundance of fish, European settlement was rapid. The Towns of Carlisle and Bedford were founded. Hundreds of small farms were established in the Concord valley.

For a more thorough look at the history of Estabrook Woods, see Appendix 6-B.

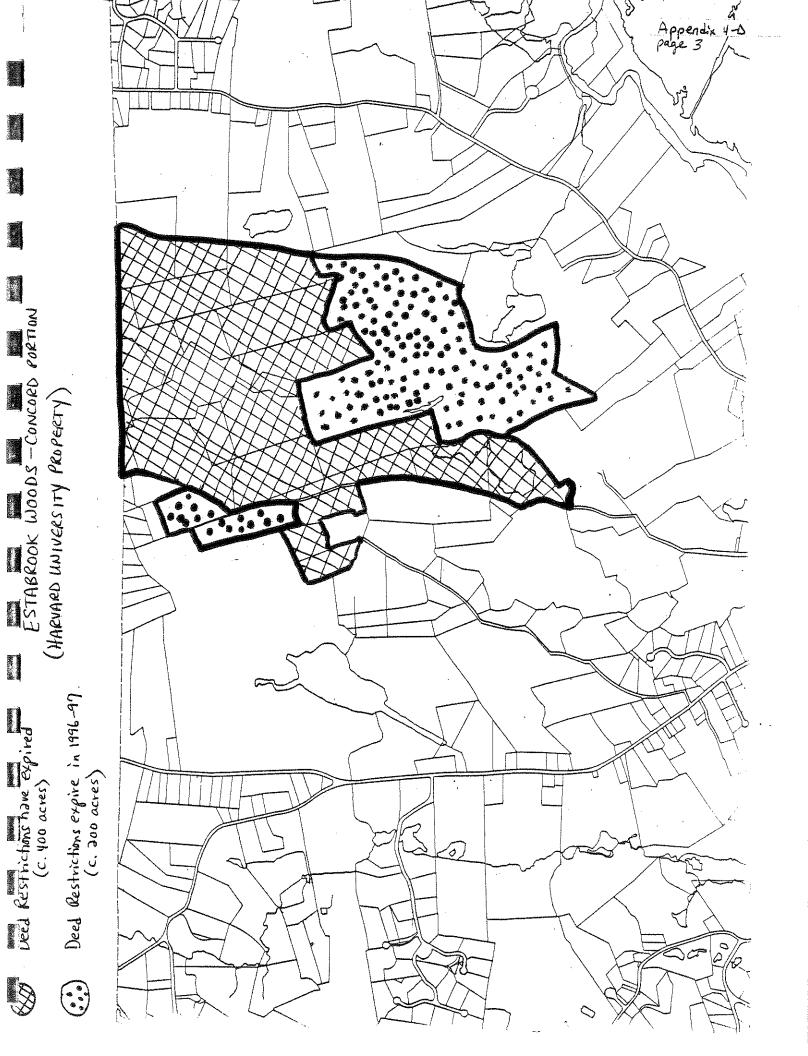
While the intention of those who donated money and those who sold the land to Harvard (at a discount rate of \$500 per acre) was clearly to restrict the land for perpetual use as a natural preserve, the actual restrictions differed with each parcel. Approximately one-third of the parcels are covered by deed restrictions expiring in 1996 or 1997. The remaining two-thirds were covered by restrictions which expired in 1975-1977. While Harvard University has assured the Town that it has no immediate plans to sell or develop the parcel, or change its current use, the lack of permanent restrictions on the parcels is an issue of major concern for the long-term fate of Estabrook Woods.

A significant effort by the Town and individuals was made in the late 1970's to convince the Board of Overseers of Harvard to permanently restrict the land. While Harvard refused to do that, it did write the following on June 20, 1978:

The facts are that the Concord Field Station is a valuable and productive adjunct of the Museum of Comparative Zoology and the best forecast we have is that it will continue to be so. The Corporation recognizes that the acquisition of the Field Station land was made possible by the generous gifts of many donors whose purposes were to give to Harvard a nature preserve for the purposes of field studies and research by the MCZ. The Corporation has no intention of disposing of the land or of diverting any of it to a use inconsistent with the purposes of the gift.

I am authorized to say that if in some future year the Corporation should have under consideration disposition of any or all of the land or use of the land for purposes other than those contemplated by the donors, it would be proper for the Corporation to give due consideration to how the land was acquired, to consult with individuals or groups who may then be interested in the land or the original donations, and, if it should seem appropriate, to seek judicial approval of such disposition or other use.

NOTE: Portions of the preceding summary have been excerpted from a memorandum prepared by Ted Watt, former Conservation Officer for the Department of Natural Resources, 5/18/79.



APPENDIX 6B

The following pages are a sample "Geographic Historic Inventory" of one portion of the Town of Concord.

As explained in Chapter 6, it is hoped that inventories can be produced for each geographic area of the Town. All inventories would then be assembled in a single indexed notebook. Six copies of the notebook would be produced, for the two Town libraries, the offices of the Planning Board and Board of Appeals, and the Historical Commission and Historic Districts Commissions.

By providing an accessible summary of the historic resources in each part of Concord, the Town's Boards and Committees, developers and interested citizens can more readily learn about sites which are considered significant. The purpose is not to regulate, but to encourage an awareness which will stimulate interest in safeguarding Concord's historic features.

The format of this sample inventory is as follows:

Cover or title page

Location Map

Area Number, Name, Location, Geography and Historic Significance.

Chronology

Alphabetical listing of historic sites, each with an identifying number.

United States Geological Survey Map of the area with historic sites indicated by number.

Photographs of a few of the sites

List of References

On each inventory page will be noted the person's name who prepared that page, and the date. Additional pages and corrections can be added at any time. This sample was prepared by Carol Dwyer in the Fall of 1987.

ESTABROOK WOODS

"What a wild and rich domain that Easterbrooks Country! Not a cultivated, hardly a cultivatable field in it, and yet it delight all natural persons, and feeds more still. Such great rocky and moist tracts, which daunt the farmer, are reckoned as unimproved land, and therefore worth but little: but think of the miles of huckleberries, and of barberries, and of wild apples ..."

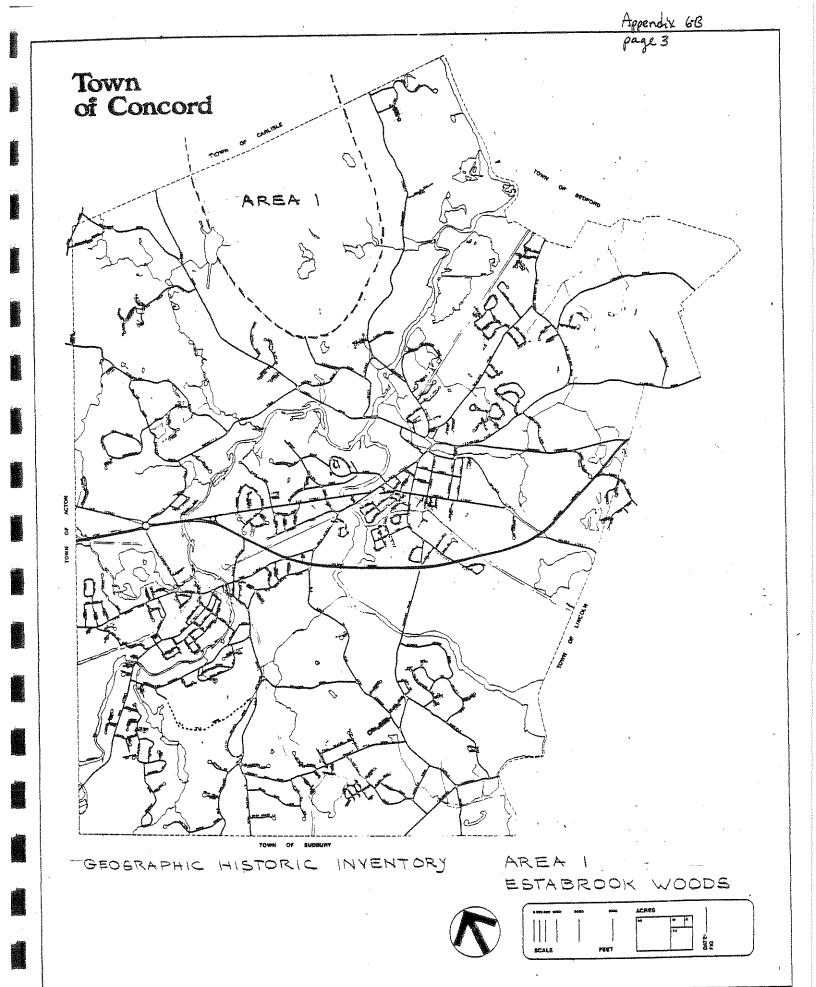
Henry David Thoreau October 20, 1857 Vol X



"It is a paradise for walkers in the fall."

Henry David Thoreau

June 10, 1853



Geographic Area #1

Name: Estabrook Woods

Location: The Estabrook Woods area is in the northern part of Concord, between Lowell Road and Monument Street, and from the end of Estabrook Road on the south, extending into the Town of Carlisle to the north. A number of the parcels west of Monument Street, and east of Lowell Road, including Middlesex School, extend into the Estabrook Woods area.

Geography: The geography of this area is extremely varied. Many of the landscape features were created by glaciation, which covered the area 20,000 years ago. The heights of land which covered the area 20,000 years ago. The heights of land include two drumlins, Punkatasset Hill and Hubbard's Hill, and an eaker ridge (the streambed from glacial meltwater). In much of the woods the soils are shallow, and in some areas bedrock is exposed, as at "Curly Pate" east of Bateman's Pond. Sawmill Brook drains southeast into the Concord River, and Dakin's Brook drains southwest into the Assabet River. There are a number of swamps as Yellow Birch Swamp, and ponds created by daming, like Hutchins Pond. One extraordinary feature of the Woods is an area of huge boulders which Channing called "the Boulder Field". Limestone, which is unusual in New England, was mined at one location in the woods.

Historic Significance: The major historic significance of this area is as an undisturbed remnant of Concord's early landscape, with sites from the 17th and 18th centuries. Henry David Thoreau's descriptions of the Estabrook Woods in more than fifty entries in his journals provide a colorful picture of the area in the mid nineteenth century. It is both the area's historic sites, and the extensive documentation of its past and mid nineteenth century use by Henry David Thoreau, which make this area of particular historic importance.

Describing the land use pattern of his day, Henry David Thoreau wrote: "The need of fuel causes woods to be left, and the use of cattle and horses require pastures, and hence men live far apart." April 21, 1852.

CHRONOLOGY

1664 - 1724 Boaz Brown lived near Hugh Cargill Road

1680's Thomas Esterbrook owned 380 acres west of the Old Carlisle Road.

1697 There were twenty 20-acre lots of upland pasture used in common for grazing, with shares for use bought and sold by individual owners.

1720 The pesture lots were sold to individual owners.

1735 Estabrook Road was laid out.

1754 When the Town of Carlisle was set off, Mr. Kibbe refused to allow his farm to be included so the town line was drawn around his farm. (see Hale map of 1830)

1760's There were still no fences. Estabrook Road was the new road, and Two Rod Road the old road.

late 1700's Estabrook Farm abandoned.

C. 1797 Peter Barrett began taking lime out of the quarry.

1824? Henry David Thoreau's father has a mill above present Hutchins Pond.

1851 - 60 Henry David Thoreau walks in Estabrook Woods frequently and writes about it in his journal. The families living in the area at this time are the Brooks Clarks, Jacob Farmers, Isiah Green of Carlisle, and Paul Adams.

1887 Charles Hutchins purchases the Barrett Farm on Punkatasset Hill for dairying.

1901 Middlesex School is founded with its campus on Lowell Road.

after 1906 Saw Mill Brook is damed to attract game for hunting (creating "Hutchin's Pond") and in the 1920's Mink Pond.

1920 - 30 American chestnut trees - one of the dominent species in New England - are killed by the chestnut blight.

1932 Portions of the Estabrook Road are no longer a public way.

1968 Harvard University acquires 650 acres for a Biological Field Station.

1971 The Town of Concord acquires 92 acres at Punkatasset, and the Concord Land Trust acquires 14 acres along Two Rod Road, for conservation purposes.

1987 An extensive area behind the old Raymond Emerson House is cleared and graded for agricultural purposes.

Historic Sites

- 1. <u>Boaz Brown Cellar Hole</u>: "That cellar-hole off northewest of Brooks Clark's is where Boaz Brown used to live, and the andromeda swamp behind is "Boaz's meadow," says Jacob Farmer, who has seen corn growing in the meadow." Thoreau, November 11, 1857.
- 2. <u>Brooks Clark House</u>: House at the end of Estabrook Road, owned by Brooks Clark in Thoreau's day. (date of original house?)
- 3. Black Birch Cellar Hole: east of the Estabrook Road in the northern part of the woods.
- 4. <u>Curly Pate</u>: a hill east of Bateman's Pond where Thoreau found rows of Indian corn hills. Site of the old hog pasture.

"The rocks in the high open pasture are peculiar and interesting to walk over, for though presenting broad and flat surfaces, the strata are perpendicular, producing a grained and curled appearance, - this rocky crown like a hoary head covered with curly hair, - or it is like walking over the edges of the leaves of a vast book. I wonder how these rocks were ever worn even thus smooth by the elements. The strata are remarkably serpentine or waving. It appears as if you were upon the axis of elevation, geologically speaking. I do not remember any other pasture in Concord where the rocks are so remarkable for this."

Thoreau. October 5, 1851.

"Saw a hog pasture of a dozen acres in the woods, with thirty or forty large hogs and a shelter for them at night, ...something rare in these days hereabouts."

Thoreau, June 10, 1853.

5. Estabrook Farm - cellar holes and rock walls of the original farmstead. Thomas Estabrook owned 380 acres in the 1680's. He had one horse, 12 oxen and 2 cows in 1717. This farm was abandoned in the late 1700's.

"Warren Brown, who owns the Easterbrooks place, the west side of the road, is picking barberries. Allows that the soil thereabouts is excellent for fruit, but it is so rocky that he has not patience to plow it. That is the reason the track is not cultivated."

Thoreau, October 20, 1857

Estabrook Road: the early route to Carlisle, which remains a dirt road with stone walls on either side. called it the Old Carlisle Road.

"My companion remarked that the land (for the most part consisting of decayed orchards, huckleberry pastures and forests) on both sides of the old Carlisle road, uneven and undulating like the road, appeared to be all in motion like the traveller, travelling on with him.

Thoreau, October 5, 1851.

Isaiah Green Cellar Hole? in Carlisle. "Mr. Isaiah Green of Carlisle who lives nearest to the Kibbe Place, can remember when there were three or four houses around him (he is nearly eightly years old and has always, lived there and was born there); now he is quite retired, and the nearest road is scarcely used at all."

Thoreau September 19, 1851.

- Kibbe Cellar Hole: near the Carlisle line, east of the Easterbrook Road. Kibbe died in 1796. "They will be known only like Kibbe, who is said to have been a large man who weighted 250, who had five or six heavy daughters who rode to Concord meeting house on horseback, taking turns, - they were so heavy that only one could ride Thoreau, September 21, 1851 at once."
- Lime Quarry: where Peter Barrett quarried lime in the 18th

century. "He (Brooks Clark) remembered when they began to burn lime there, and bought the right to get out stone of Easterbrooks more than sixty years ago. It was Peter Barrett that began The lime sold for \$5.00 a cask (larger casks than now). But the stone was difficult to get out."

Thoreau, November 6, 1857

- Lime Kiln: Remains of the kiln where limestone was reduced to quick lime by heating.
- Paul Adams Cellar Hole: northwest of Bateman's Pond 11.
- Punkatasset Hill: Site where the Minutemen gathered on April 19th, 1775 to watch the British troops to the south.

Stonewalls oriented to magnetic north, which enclosed the 18th century pastures.

Thoreau's Mill: (?) west of Hubbard's Hill, was the site of Henry David Thoreau's father's mill. Thoreau writes, "Was that a large shad bush where Father's mill used to be? There is quite a waterfall beyond where the old dam was. Where the rapids commence, at the outlet of the pond, the water is singularly creased as it rushes to the fall . . " Thoreau, April 21, 1852.

14. Two Rod Road The earliest road to Carlisle, on the east side of the woods. Remains a dirt road. Thoreau writes, "Clark's father told him that he remembered when there were no fences between his house and Lawrence's; it was all open. This road (the Estabrook Road) was the new one; the bridle road (Two Rod Road) the old one."

Thoreau, November 6, 1857

15. Yellow Birch Cellar: "As for the yellow birch cellar hole, Ephraim Brown told him (Brooks Clarke) that old Henry Flint (an ancestor of Clark's wife) dug it, and erected the frame of a house there, but never finished it, selling out, going to live by the river. It was never finished."

Thoreau, November 6, 1857.



SITES HISTORIC



ROW WALLS ESTABLISHED FARMS
AREA 1 # 5



CELLAR HOLE ESTABROOK FARM

page 19



LIME QUARRY APERT H 9



LIME KILN

AREA 1 # 10

Estabrook Woods - Geographic Historic Inventory

REFERENCES

Bemis, Allie "Notes on the Land and People of the Estabrook Woods" Concord Academy Senior Project, 1973.

Eaton, Richard J., A Flora of Concord from Thoreau's Time to the Present Day, The Museum of Comparative Zoology, Harvard University, 1974. Excellent brief description of Concord geology, soils, and climate as well as locatlities and habitats of exceptional botanical interest, including Estabrook Woods.

Estabrook, Florence C. "Geneology of the Anglo-Dutch Estabrook's Family of the St. John River, New Brunswick 1935" (revised 1958).

Estabrook, Florence C. "The Estabrook Family in Concord Ma and on the St Johns River", St. Johns, 1953.

Fenn, Mary Gail "Thoreau's Easterbrook Country, Concord Ma." Thoreau Society Booklet No 25, Genesco, N. Y. 1970.

Hutchins, Charles L. "Some Memoranda about Punkatasset" regarding the purchase, renovations, and use of the Punkatasset Dairy Farm, 1887 to 1906." no date, Concord Free Public Library.

MacMillan, Alan Richard. "The Estabrook and Kibbe Sites in Concord: A case Study in Early Massachusetts Farm Life", thesis, Harvard University, March 1976.

Richardson, Lawrence E. Concord Chronicle, 1865-99.

Thoreau, Henry David. Journals 1850s

Wheeler, Ruth R., Concord Climate for Freedom, The Concord Antiquarian Society, 1967.

Graphic Materials

Paul Adams House drawing, Concord Museum

Concord Field Station - Estabrook Woods Museum of Comparative Zoology, Harvard University. color map showing vegetation, topography and trails in Estabrook Woods. 1973.

Estabrook House drawing: Estabrook Geneology by Florence C. Estabrook

Fenn, Mary Gail. The Estabrook Woods. black and white map indicating historic sites.

1830 Map of the Town of Concord, surveyed by John G. Hales, Published by Lemuel Shattuck, Boston.

Oral Histories

Oral History Tape by Mrs. Gladys Clark, Concord Free Public Library

Notes on a conversation with Mrs. Raymond Emerson, October 1, 1971, Carol Dwyer.