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1991 OPEN SPACE PLAN

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Prepared by
The Open Space Plan Task Force
Concord Natural Resources Commission

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N1. ESTABROOK COUNTRY NATURAL VEGETATION AREA

Description. Estabrook Country is the largest remaining tract of essentially intact forest land in Concord. For the purposes of the open space framework, Estabrook Country is defined as the approximately 1,475 acres from Lowell Road on the west to Monument Street on the east, into Carlisle on the north, and to the end of pavement on Estabrook Road on the south (see Map 14). Of this, approximately 605 acres are owned by Harvard University, 225 acres are under permanent conservation restrictions, 92 acres are owned by the town at Punkatasset, 16 acres are owned by CLCT, and 200 acres by Middlesex School. The extension of this natural vegetation area into Carlisle increases its value as a large, contiguous block of forest.

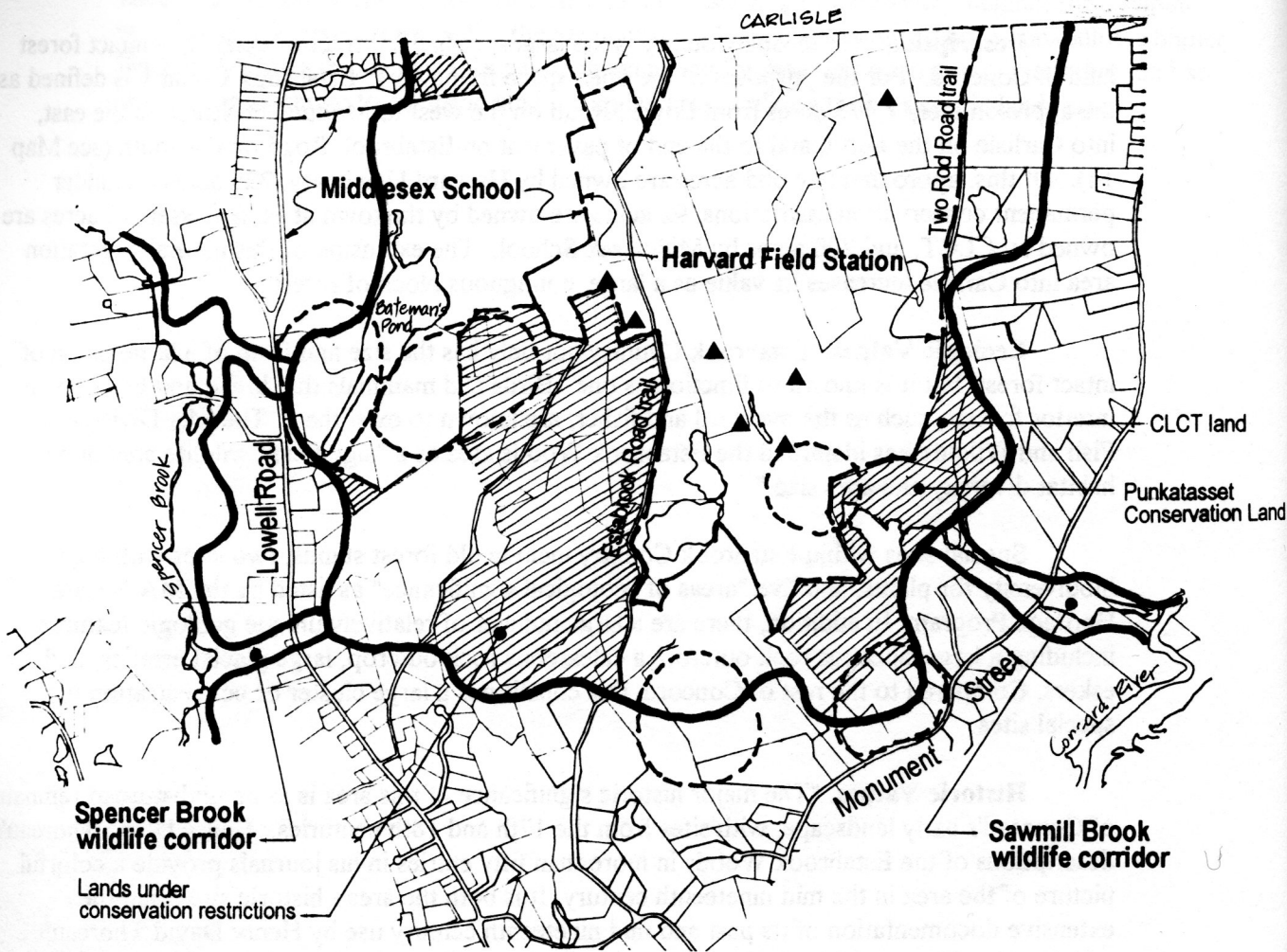
Ecologic Values. Estabrook Country not only has the size and form of a large patch of intact forest, but it is known to function as one. Birds and mammals that breed and live only in interior forests, such as the ovenbird and fisher, are known to exist there. The MA Division of Fish and Wildlife has identified the Estabrook Woods area as a "significant wildlife area due to habitat diversity and area size."

Special sites within Estabrook Country include old forest stands, two sites with high biodiversity for plants, and five "areas of ecological significance" as listed by the MA Natural Heritage Program. In addition, there are a large number of relatively unique geologic features, including a large siliceous rock outcrop, a calcareous rock outcrop, large glacial erratics, and eskers. Compared to the rest of Concord, this constitutes a large cluster or concentration of special sites.





Historic Values. "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." (From the Long Range Plan, 1987.)

Recreational Values. Estabrook Country is used for horseback riding, cross-country skiing, and walking because of its large size, extensive trail system, and scenic beauty. The area provides two informal intertown trails and the opportunity for a future route for the Bay Circuit trail.

Research/Education Values. Its large size, diverse habitats and proximity to the main campus make the Estabrook Woods an invaluable resource for Harvard faculty and students. Twenty-one classes of vegetation, fifty species of mammals, over two hundred species of birds, thirty-two species of amphibians and reptiles, and thousands of lepidopteran live in these woods. Students from classes in several departments regularly visit the woods as part of their training. Research projects by faculty and graduate students have already provided important new insights into plant life history strategies and animal behavior. Students and faculty from other universities, local naturalists and local high school students also use the woods in their studies, and this use is



Estabrook Country Natural Vegetation Area 14

-  Permanently protected open space
-  Semi-protected and institutional open space
-  Special sites and Areas of Ecological Significance
-  "Core" parcels = 2

actively encouraged by Harvard. The large holdings of privately held land bordering the woods provide an important buffer for protecting the research/teaching activities in the woods.

Protection/management objectives: protect or enhance the integrity of the patch.

1. Maintain open space uses of those institutional lands not permanently protected in conservation use. Lands owned by both Harvard and Middlesex School can be considered as "core" parcels -- i.e., their development would destroy the ecological values and functions of the entire Estabrook Country area.

For the field station, the town and Harvard officials have, over the past years, discussed the future of Estabrook Woods and ways in which the open space uses can be preserved in the future. While no guarantees have been forthcoming, the town has received assurances that there is no intention to sell or otherwise change the use of Estabrook Woods. Nevertheless, this area should be considered as protected only in the short term and only for as long as the woods meet research and educational purposes. The town of Concord should work with Harvard, the Concord Land Conservation Trust, and other appropriate parties to develop a plan for permanently protecting the University's holdings in Estabrook Country. The town should also help to maintain the integrity of the areas adjacent to Harvard's land.

Middlesex School currently uses the woods that lie behind its campus on Lowell Road for hiking and cross-country running and ski training. The school and its Board of Trustees is considering expanding one or several uses, such as athletic fields and parking areas, into the undeveloped area north and east of the main campus as part of its long range plan. This is another example of a land use that could erode the integrity of the area

2. Protect currently unprotected parcels at the edges of the patch that are critical to maintaining the core. Several undeveloped parcels extend into the core of Estabrook Country from its edges, and should ideally be retained in open space. Even a low density development in the center of a patch can be detrimental to its ecologic and research value. Any solution that suggests that "tucking the houses into the trees" or clustering housing on an interior parcel would harm the ecological integrity of the patch.

3. Provide corridor connections between patches. Corridor connections between patches provide the possibility for species exchange and adaptation and increase the value of a patch for wildlife. Corridors for Estabrook Country would connect to the Spencer Brook valley on the west and to the Concord River on the east. Unfortunately, these corridors are closing in fast due to residential development along Lowell Road and Monument Street. On Monument Street, the Saw Mill Brook, which flows from Punkatasset to the Concord River flood plain, appears to be the only viable remaining corridor, and should be a high priority of protection.

For all three above objectives, the Board of Selectmen and the NRC should work with the CLCT and COLF to contact landowners regarding future plans for critical parcels. Consideration should be given to acquisition of land or interests in land and also to "creative" development, such as was accomplished on the Saw Mill brook property in 1990. In addition, the Planning Board, Zoning Board of Appeals, and NRC should explore the possibility of a new overlay zoning district

to limit housing density and to encourage the use of cluster subdivisions and residential compounds rather than standard subdivisions.

4. Manage large natural vegetation areas for their ecologic values. The largely unbroken woodlands and the inaccessibility of Estabrook Country have enabled this area to function as a patch. Protecting this area means not only preventing development, but retaining a fairly uniform woodland cover and controlling the types and levels of use. Conservation restrictions protect approximately 225 acres from development, but do allow a wide range of open space uses, including agriculture, recreation, and forestry. At a minimum, the NRC should discuss with owners the ecologic role of Estabrook Country and its implications for managing their land.

The town should also continue to be alert to problems caused by recreational use of Estabrook Country. Current levels of recreational use have not detracted from the research/teaching uses of the woods, but a dramatic increase in recreational use might compromise these activities. An effort should be made to control recreational use by not greatly expanding accessibility and parking.