

4. Previous Planning or Other Study Documents

4.1 Town Forest Committee Report (2003)

On December 11, 2001, the Board of Selectmen voted to form an ad hoc committee to investigate the history and boundaries of the Town Forest property that was originally part of the Town Poor Farm.¹⁴ The charter of this committee was to identify the approximate 46 acres mentioned in the 1923 Town Meeting Report that are the Town Forest and the acres 25 (plus or minus) “that are not”. The 46 acres were voted at the 1923 to be reserved as a Town Forest. It was felt that the remaining 25 acres (the “South Woodlot” – see Section 2) are possibly not subject to Chapter 97 and could potentially be used to site affordable housing.

The appointed members of the committee were:

- Beverly Humm – Friends of the Forest
- Alan Lehotsky – Housing Authority
- Tom Brownrigg – Conservation Commission
- Jane Anderson (chair) – Municipal Land Committee¹⁵

This committee studied deeds, maps, historical aerial photographs, and town records. They mapped stone walls on the property and worked with current Geographic Information System (GIS) aerial photographs. They had the help of an engineer with their data and the help of a title abstracting service with the historical deeds.

The committee was unable to determine from their research the part of the Town Forest that is “conservation” land. Also, the exact area of the Town Forest is not known: estimates range from 67 to 78 acres, depending upon the document. Thus, there is an 11-acre discrepancy for the total land area. The 2006 assessors’ maps indicate 67 acres.

The Town Forest Committee concluded that the committee of 1923 that investigated and recommended the setting aside of the 46 acres for a town forest did not provide any further description of the exact location. They found no record of any attempt to record the decision of the 1923 Town Meeting at the Registry of Deeds. Also, the Town Forest Committee was unable to explain why, after 1925, the assessors listed an additional 25 acres as part of the Carlisle Reservation. (These 25 acres were the “south woodlot” previously included in the Poor Farm parcels.)

Copies of the Town Forest Committee report¹⁶ and presentation to the Selectmen are available in the Town Forest files at Carlisle Town Hall.

¹⁴ Board of Selectmen, Minutes, December 11, 2001

¹⁵ Board of Selectmen, Minutes, February 12, 2002

¹⁶ Report of the Town Forest Committee to the Carlisle Board of Selectmen, January 14, 2003

4.2 Open Space and Recreation Plan (2006)

The first Open Space plan was prepared by the Town of Carlisle in 1979 and revised in 1987, 1994, 2000, and 2006. The 2006 OS&R Plan includes sections on

- Community setting
- Environmental inventory and analysis
- Inventory of land of conservation and recreation interest
- Community vision
- Analysis of needs
- Goals and objectives
- 5-year action plan
- Public comments
- Appendices with maps and other material

It is useful to provide the goals and objectives of the OS&R plan to provide continuity and a frame of reference for other planning documents. This set of goals and objectives, derived from research on community vision and analysis of needs, are as follows:

Goal 1 – Maintain the rural character of Carlisle

- Protect natural features such as open fields, woodlands, and scenic vistas
- Protect corridors for wildlife and linking trails and provide additional protected connections between existing open spaces
- Maintain a balance of protected open space throughout town
- Encourage agriculture in town

Goal 2 – Protect the town’s environment

- Protect the town’s water resources: land with surface water resources, wetlands, stream, ponds, or potential aquifer sites
- Protect natural spaces that provide ecological diversity
- Identify and protect sites with rare, endangered, or protected species

Goal 3 – Meet the town’s recreation needs

- Improve the town’s recreational facilities
- Enhance handicap accessibility
- Provide additional sites for active recreation facilities
- Upgrade existing recreation areas and facilities

Goal 4- Proactively manage land use in town

- Educate the town about the value of planning for long-term land use
- Guide where and how concentrated development occurs

- Improve the town’s ability to finance preservation of open space and recreation

There are no specific recommendations for the Town Forest property in the 2006 OS&R plan. The Town Forest and Heidke lots are described in the plan’s conservation inventory as follows:

“Since 1994, the Conservation Commission has managed the 71-acre Town Forest [see discussion on acreage in Section 1] on East Street. Since its establishment by the Town in 1925, the Town Forest has been treated by the town, and specifically managed by the Conservation Commission since 1994, as a single, undivided, open space parcel. The parcel features hilly hardwood forestlands, mature red and white pine stands, wetlands, a vernal pool, and overgrown fields.”

“[Heidke Land] This 8.19 acre parcel off Brook Street is almost entirely wetland. A trail across this parcel is proposed, which could link the Town Forest to the Greenough Land in winter months”.

According to the 2006 OS&R plan, uses allowed on all Carlisle Conservation Commission-managed land, including Town Forest, include:

- Walking, hiking, jogging, and running
- Picnicking
- Kite-flying
- Horseback riding
- Snowshoeing
- Cross-county skiing
- Nature study (observation)
- Other uses of a passive recreational nature

Activities prohibited except by special permission from a majority of the Conservation Commission include camping, discharge of firearms, and fires. Activities prohibited on all Conservation land include hunting, trapping, swimming, and use of motorized vehicles (with the exception of Foss Farm, where all-terrain vehicles are allowed for sled dog training). Use by organized groups can be scheduled through the Conservation Commission office.

Figure 4-1 shows the relationship of the Town Forest and Heidke land to nearby conservation parcels in Carlisle. This is part of a map included in the *Carlisle Open Space and Recreation (OS&R) Plan 2005*.

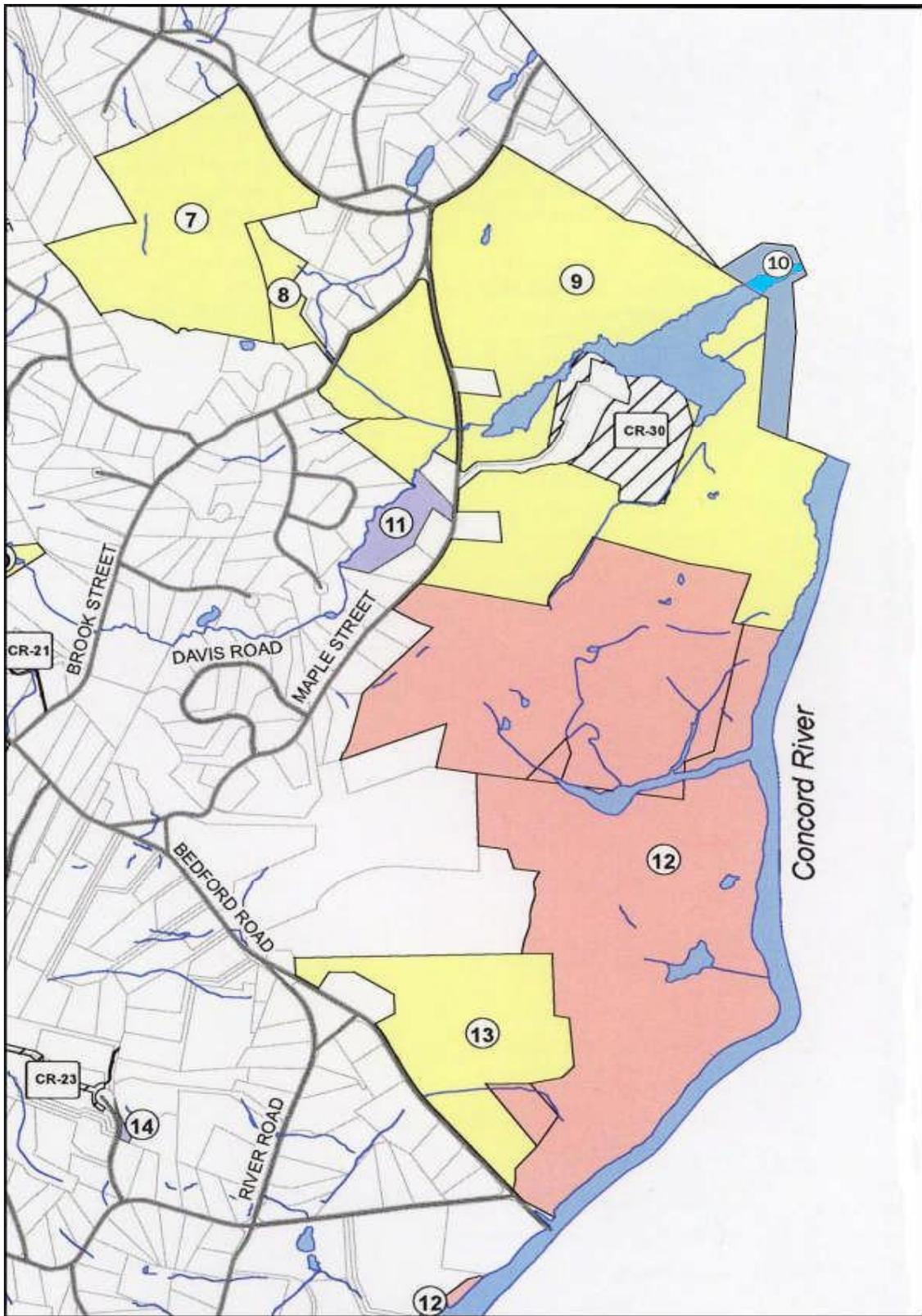


Figure 4-1. Nearby Conservation Parcels (From the OS&R Report, 2005). 7 = Town Forest, 8 = Heidke land, 9 = Greenough, 12 = Great Meadows (Federal), 13 = Foss.

4.3 NHESP Priority Habitat

The Town Forest is included in the Natural Heritage and Endangered Species Program Priority Habitat map for 2008 of priority habitat of rare species and estimated habitat of rare species. (See Figure 4-2). Priority Habitats are the filing trigger for proponents, municipalities, and other stakeholders for determining whether or not a proposed project must be reviewed by the NHESP for compliance with the Massachusetts Endangered Species Act (MESA). The Priority Habitats presented here are those published in the 13th Edition of the Massachusetts Natural Heritage Atlas, and are currently effective (the next update is due in 2010). Priority Habitat is the known geographical extent of habitat for all state-listed rare species, both plants and animals.

The Massachusetts Environmental Policy Act (MEPA) (M.G.L. c.30, secs. 61-62H) provides for the review of proposed projects for potential impacts to state-listed rare species. All projects resulting in a take of state-listed rare species on a project site of two or more acres within Priority Habitat of Rare Species may be required to file an Environmental Notification Form (ENF) with the MEPA office (301 CMR 11.03(2)). All projects that require the filing of an ENF will be screened by NHESP staff for review. Wetlands Protection Act (WPA) review is required when a proposed project is in the Estimated Habitat for rare species.

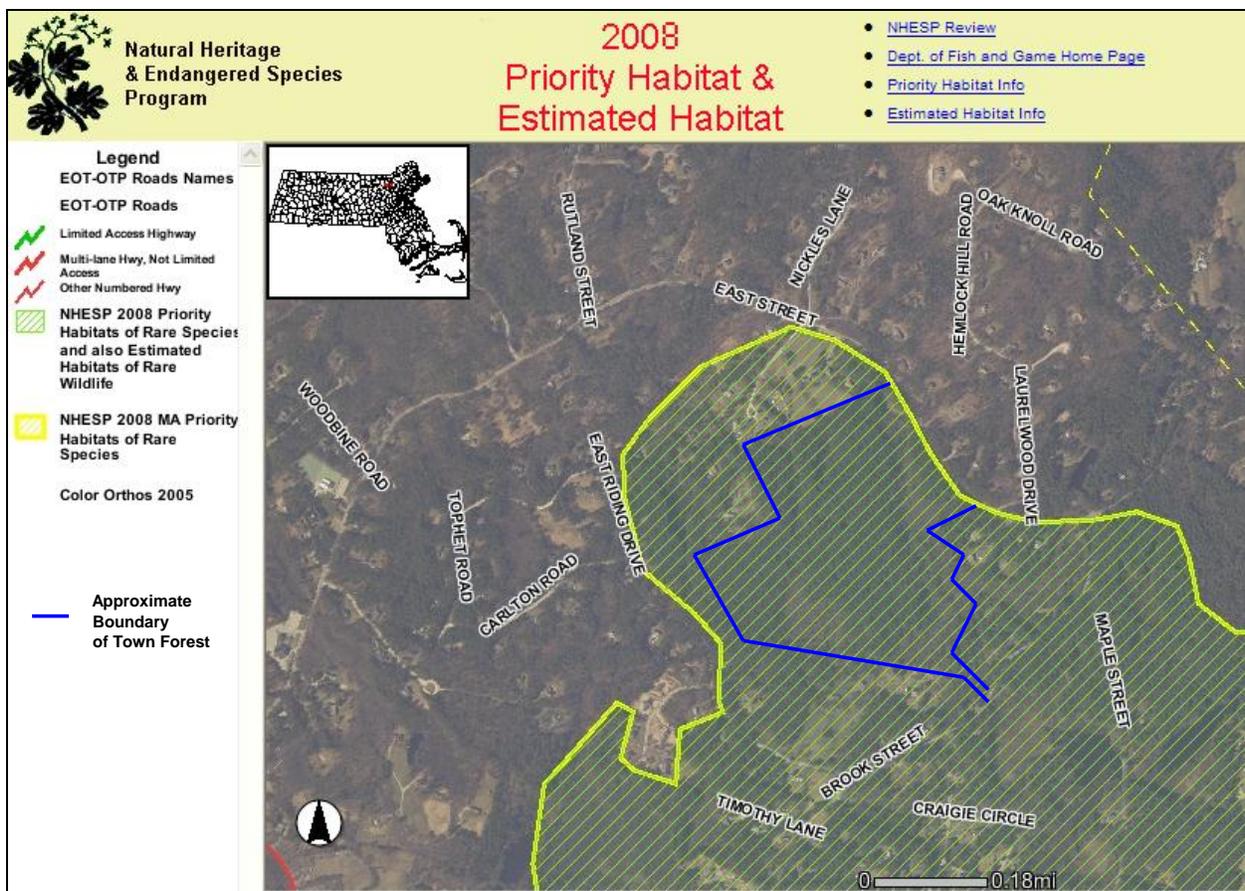


Figure 4-2. 2008 Priority Habitat and Estimated Habitat for Rare Species in the Town Forest Area

Section 4 References

1. Report of the Town Forest Committee to the Carlisle Board of Selectmen, January 14, 2003.
2. Carlisle Open Space and Recreation (OS&R) Plan 2005, Draft, January 2006.
3. MA NHESP site: http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm

5. Maintenance and Current Condition of the Property

5.1 Signs

There is a property sign for the Town Forest at the East Street entrance (Figure 5-1). This sign is in good condition, with copper caps on the supporting wooden uprights, and was placed in 2003 after the disappearance of a previous sign that had been suspended by chains between two tree trunks (to the right of the present trail entrance). A small sign on conservation land rules and uses was placed to the left of the East Street trail entrance in 2008. There are no other signs on the property. The Land Stewardship Committee maintains property signs.



Figure 5-1 Entrance Sign for Town Forest

The other seven informal entrances are all from private land. An eighth “entrance,” possible only during winter or very dry periods, has not been established on the Brook Street frontage of the Heidke lot.

Internal trail signage, the domain of the Trails Committee, is addressed in the following section.

5.2 Trails

The Carlisle Trails Committee currently maintains over forty miles of trails in Carlisle, including several on the Town Forest land. There is no set maintenance schedule for each of the trails although the Committee maintains a list of those sections that have been recently checked or cleared as the seasons progress. Members walk much of the system on a regular basis to inspect as well as enjoy the trails. Special efforts are made to check major trails after large storms. When normal trail maintenance (brush cutting and branch removal) is required for a particular

area, it is scheduled at the monthly meeting. E-mail messages are sent out to the list of volunteers and notices are put in the *Carlisle Mosquito* if time allows. On maintenance days, crews are sent out in groups to the selected areas. For a small task, members often take care of the issue themselves as the need is noticed.

Each of the seasons has its share of work that fits into the Trails Committee's management schedule:

Winter: Activities include cutting and removal of trees that fall along the path to keep trails open for skiing and tobogganing heavy materials into remote sites, as well as planning, manufacture and painting of signs for trails, mapping and charting using the Global Positioning System (GPS) when the foliage is out of the way, and planning for the rest of the year.

Spring: The time before the foliage and bugs arrive in mid April is the best time to do major clearing jobs that require cutting and trimming of branches along the trails.

Summer: Heavy spring rains may require trimming of new growth along trails. Mowing areas in the sun and in open fields needs to be done at this time. The Committee has purchased a trimmer to help with this.

Fall: Boardwalks and other major projects are completed at this time when the ground is the most stable and the bugs are not biting.

Major projects such as the creation of new trails or boardwalks require months of planning. Ideally, the Trails Committee would take over a year to plan a new trail so that it can be marked and observed through the seasons to check for optimal location. The year allows the Committee to check for land drainage, and to identify particular features such as views or plants that would want to be highlighted along the trail. This time also allows the Committee to finish any permitting that may be required.

At the Town Forest, no significant issues are apparent for the trails, which are generally in excellent condition. Two footbridges have rotted out (see Figure 5-2), and the Trails Committee plans to replace them in the near future. The third footbridge, built by private citizens, is in good condition. The abutters have kept the trails clear, and they mow the old logging roads to maintain their original width. These wide trails are a great amenity during tick season for both walkers and their dogs. They also make the forest distinctive, providing long views through it, so maintaining their width should be a priority.



Figure 5-2. Footbridges Needing Repair on Town Forest Trail

No signs name the trails or give direction within the Town Forest, making it a bit mysterious to the first-time explorer. For those familiar with the area, the lack of signs is preferred. Instead of naming trails or pointing to the East Street entrance, perhaps it would be more useful to put a laminated trail map of the Town Forest on posts at a few locations, with a mark showing where the viewer is on the map.

5.3 Forests

The upland forest is primarily mature white pine with areas of red pine. The understory is commonly white oak and other deciduous hardwoods, and the groundcover is a mixture of blueberry, Canada mayflower, and associated wildflowers. A preliminary plant list for the Town Forest is provided in Appendix B. The areas of mature white pines with large dead lower branches perhaps indicate the location of a previously cleared field. In other areas the mature white pines have no large dead lower branches and were probably always growing in a thick forest. The white pine, spruce, and red pine in rows are evidence of tree planting in the 1920's and 1930's.

The low wet areas have red maples, but pines and a few spruces are also here. The Heidke land on Brook Street has a larger proportion of deciduous trees.

The vegetation throughout the Town Forest and the Heidke land appears to be healthy. Hikers in the Town Forest recommend that the poison ivy abundant at the East Street entrance be controlled.

The nature of the mature pines, planted in the 1920's and 1930's, is that they are growing very closely together and in some areas are very spindly and tall as a result of competing for available light.

Storms with high winds can cause significant tree and limb-fall; the Trails Committee is kept busy clearing the Town Forest trails and removing hazards after severe storms (see Figure 5-3).



Figure 5-3. Storm Damage (April 2007)

The forest could be harvested or thinned, but its aesthetic appeal is great and it provides deep woods habitat enjoyed by large animals, as indicated by the many game trails in the winter snow. The abutters' lands provide adequate edge habitat and clearings, so the densely-wooded Town Forest and Heidke land provide diversity. Any forest management activity would need to be undertaken under a forest management plan that had been reviewed by the Natural Heritage and Endangered Species Program.

Many of the trees have cavities suitable for nesting birds. (A bird list for the property is provided in Appendix C). Mature red pines could possibly provide nesting places for bald eagles.

5.4 Streams, Wetlands, and Vernal Pools

Skunk cabbage prevails in the low wet areas, as well as wetland shrubs along the borders. Two streams run north to south through the length of the forest, one close to East Street and the other from near the trail at East Meadow Drive. At the western-most corner is a third stream draining a wetland to the north. Three vernal pools have been certified, and there are probably others on the property. The locations of the certified vernal pools are shown in Figure 1-3.

Periodic inspection of the streams and the three certified vernal pools is probably all that is necessary to insure that they are not being altered or disturbed by human activity.

Figure 5-4 shows the location of some of the water features and indicates the type of vegetation associated with them. On this map, the uncolored areas within the Town Forest border are primarily white pine, with some stands of red pine.

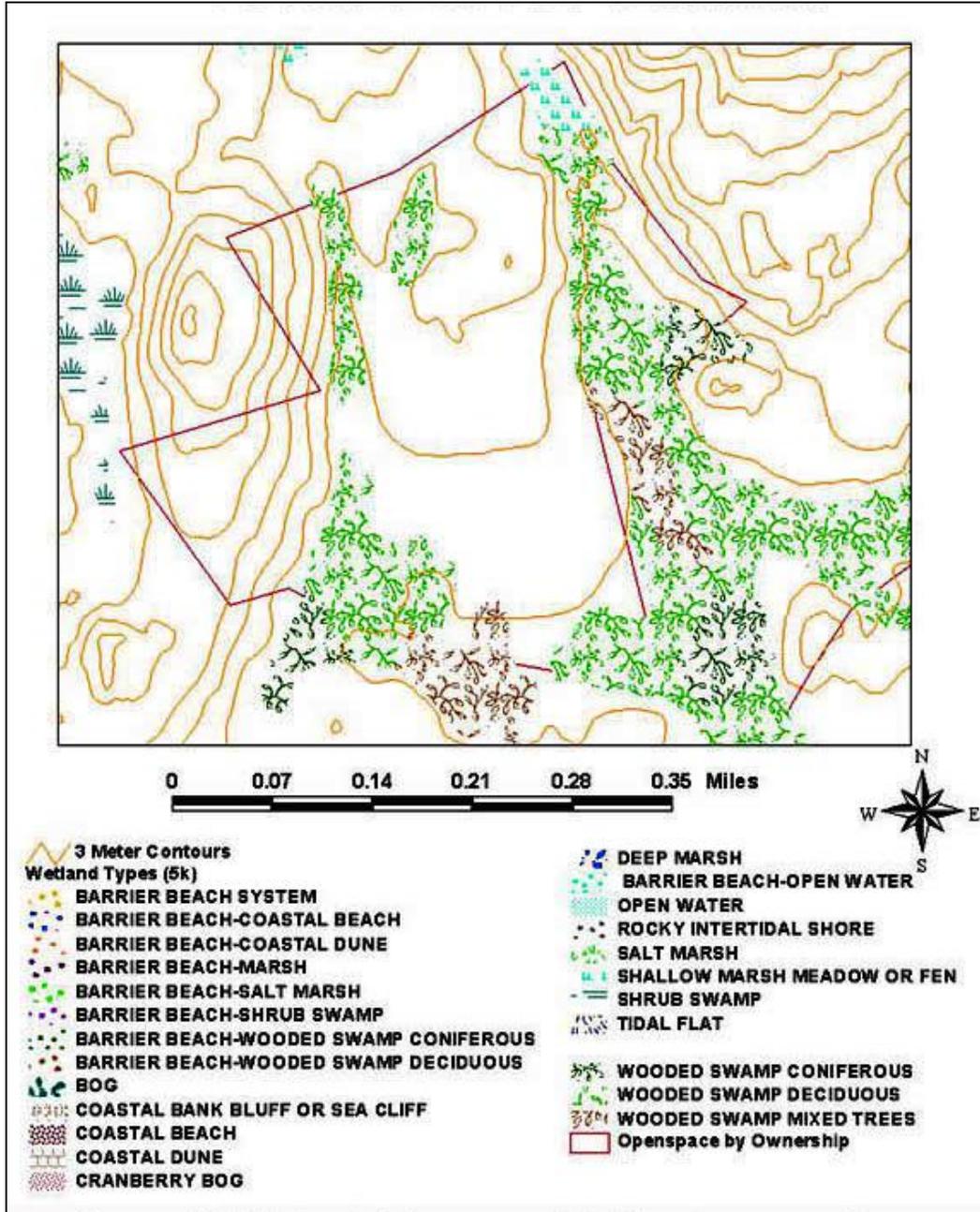


Figure 5-4. Water Features and Vegetation from 1995 Aerial Image with Contours and Wetlands Indicated (by Aleda Freedman, MassGIS, for the Town Forest Committee Report, 2003)

Town records indicate that in 2001, the Conservation Commission noted there could be possible 4-toed salamander breeding sites along the perennial stream in the western part of the property, where areas of sphagnum moss overhang the stream. The wetlands on the southwest of the site

could be good spotted turtle habitat in the spring. Figure 5-5 shows a spotted turtle found on Carroll Drive, a few feet from the boundary of the Town Forest.



Figure 5-5. Spotted Turtle Found Near Town Forest on Carroll Drive

5.5 Stone Walls and Other Human Artifacts

Stone walls run along some of the boundaries and probably indicate historical property boundaries or earlier pastures. Figure 5-6 is a map of the stone walls, made by Steve Tobin in 2001 for the Town Forest Committee's report.

Along the middle north-south trail near the north boundary trail is a rock-edged circular pool next to a group of rocks on the edge of the vernal pool. Another rock-edged square pool is next to the easternmost vernal pool, also near the trail. Both pools are approximately seven feet across and now about 12 inches deep, with muck bottoms. Perhaps they were built to provide water for livestock, or for watering the pine seedlings.

In various places are pits, probably evidence of earth mining for the logging road surfaces. The old logging roads are in excellent condition; wide, level and smooth.

The mature white pine, red pine, and spruce plantings are another human artifact.

Stone walls along the northern, some of the western and some of the southern sides seem to indicate the boundaries, and East Street is the eastern boundary. The Heidke boundaries are vague, as are some of those in the southern end of the Town Forest.

There are several older waste dumps of vegetative material along the southern boundary of the property with an East Riding Drive residence; their presence was also noted by ConsCom in 2001. The boundaries should be checked to verify if the dumps are on town land.

A soils map for the Town Forest area is in Appendix D. Photos of the Town Forest features are in Appendix E.

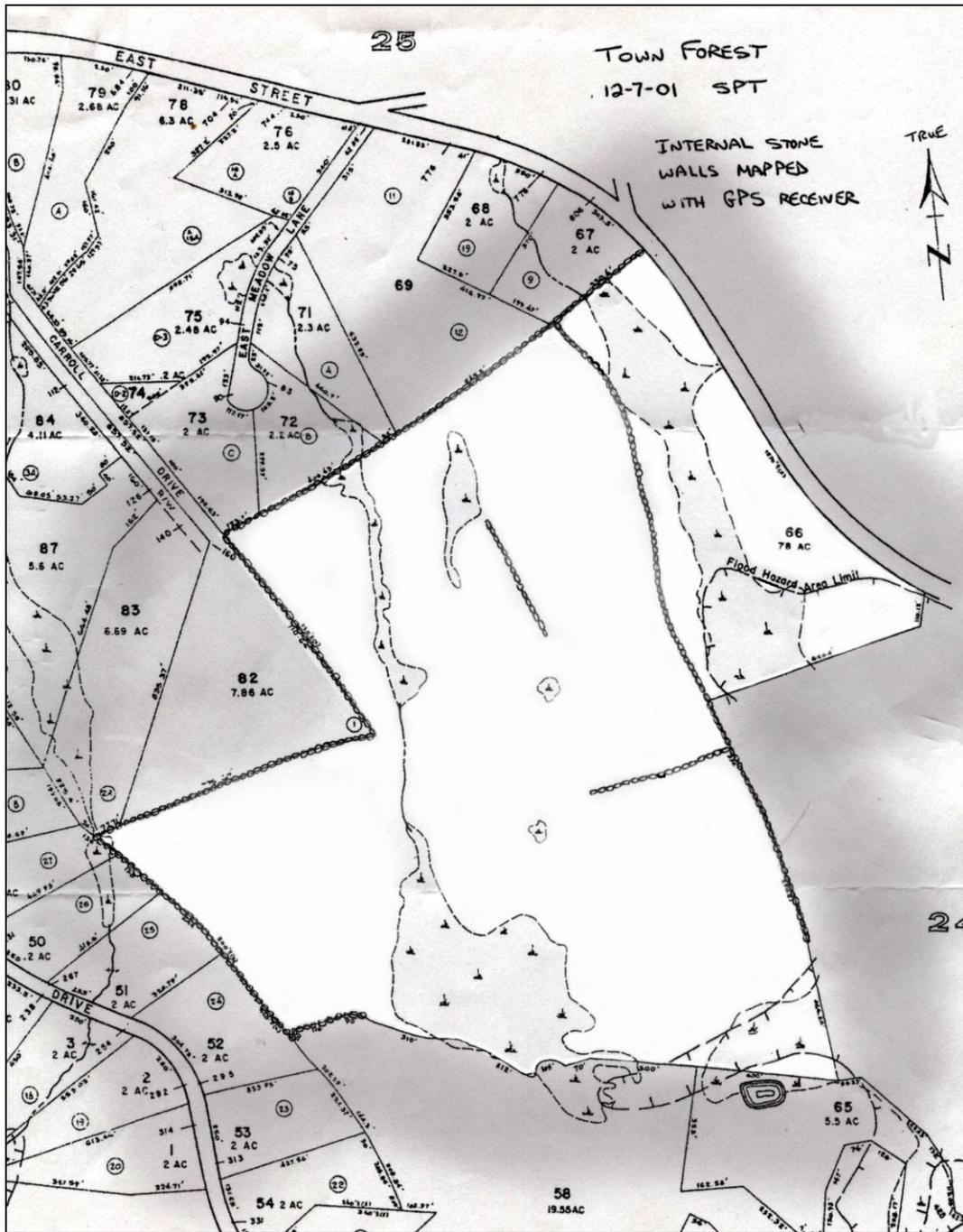


Figure 5-6. Mapping of Interior Stone Walls by Steve Tobin 12-07-2001 (Prepared for the Town Forest Committee Report, 2003)

6. Issues to be Addressed in Management Planning

The Town Forest today is a relatively little-known and lightly-utilized parcel of conservation land. The abutters and other residents use the property for passive recreation and nature study. As other residents of the town become aware of this property, usage may tend to increase as the trails provide a convenient way to do a 45-minute walk in a beautiful and secluded area.

Issues for consideration in a management plan include the following:

- Balancing the needs and desires of the abutters (for a quiet and peaceful area to walk, etc.) with the possible desire to make this property, as a Town-owned conservation parcel with good trails, better known and more accessible to the Carlisle public.
- The trails could be more clearly marked. There is some confusion about where the trails end and private property begins. Provision of a posted trail map at the entrance could be useful.
- There is only one public access (from East St.). It might be useful to provide more public access points, perhaps through easements from private property owners.
- Clearing of the poison ivy and other shrubbery around the sign and trail entrance on East Street.
- Forest management. A management plan could be developed for the heavily planted, forested sections. For example, should a serious effort be made at thinning, to encourage a healthy forest and the growth of native understory plants? Should some other type of plantation be put in place to provide income for the Town? A detailed soil survey would be needed before this decision. Or – should the peaceful forest be left as is?
- It would be useful to have a thorough native plant and animal inventory. As attested by this Baseline Assessment, there is very little information on native species available for this property. Such a study was talked about when affordable housing loomed as a possibility, but it was never done.
- Dealing with the vegetative waste dumps along the southern boundary. The dumps appear to be old, with little evidence of recent activity other than clearing away of some dump material. The location of the southern boundary should be checked.
- Building a trail through the Heidke Lot to Brook Street (thereby linking Town Forest with Greenough Land and other protected lands adjoining Greenough) is a possibility, although remote, given the permanently wet nature of the property and the length of boardwalk required.
- How to deal with parking if the property becomes more used.

