

NATURAL RESOURCES DIVISION (DNR)

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Land Protection Initiatives

The Town holds 79 conservation restrictions (CRS) on approximately 920 acres of land. Five perpetual conservation restrictions protecting 26 acres in Concord were approved by the Board of Selectmen and the State: 11.6 acres of wetlands and uplands, including a scenic ridge at Finigan Way, were granted to the Town, as was a 2-acre wet meadow at Nashoba Brooks School. An additional 9.7 acres were granted to the Walden Woods project and Concord Land Conservation Trust on Fairhaven Hill Road, and 3 acres of agricultural land granted to CLCT on Westford Road. Funded with Community Preservation Act funds, the Massachusetts Audubon Ecological Extension Service completed baseline documentation of ten Town-held CRS. In the spring, a Natural Resources intern helped collect CR baseline documentation.

The Ralph Waldo Emerson Memorial Association granted a Trail Easement to the Town allowing the Town to complete Phase 2 of a 1-mile trail called the Emerson Thoreau Amble. The trail easement covers a 0.5-mile portion of the Amble over privately owned land, including a portion of the Mill Brook, which links Heywood Meadow and Town Forest trails. The bridge and trail are expected to be constructed next summer.

Natural Resource Management

The Division is responsible for the stewardship of approximately 1,320 acres of Town conservation land including White Pond Reservation, maintaining 19 miles of trails, and mowing 84 acres to maintain trails and open meadows. Natural resource management also includes staff support to the seven NRC subcommittees, as well as coordinating with other local and regional stewardship initiatives.

Rangers were hired this summer to assist the Division in educating the public about the Town-owned land Rules and Regulations and natural history, enforcing compliance when necessary (including issuing parking tickets for illegally parked vehicles), providing a general

educational presence on Town lands, and preparing a history of the Town Forest.

Conservation Crew were hired to perform trail maintenance, remove invasive exotic vegetation, conduct general maintenance on conservation lands, construct signs for conservation lands, monitoring mutt mitts, and removing trash. The Crew installed water bars and wire fencing to prevent erosion and direct access at White Pond. Major invasive species control efforts were undertaken at many of the conservation areas. The crew also assisted in hand-pulling water chestnut from Warner's, Hutchins, and Macone Ponds.



Conservation crew member Bruce McGarry at newly installed fencing to prevent slope erosion at White Pond.

Grants: DNR received two Garden Club grants. The first was for native plantings at Warner's Pond in the ½ acre that will be cleared of invasive species as part of the mitigation for the Warner's Pond dam reconstruction. The second grant from the River Stewardship Council will fund a portion of the printing costs of the Punkatasset Quest, a collaborative project with Musketaquid, U.S. Fish & Wildlife, Bryan Windmiller, and Thoreau School to provide training to all 4th grade Concord public school teachers to make Quests, a place-based educational model, focusing on the Blanding's Turtle.

DNR submitted a grant application to the Division of Conservation and Recreation to improve access for limited mobility users to conservation lands, a goal of the 2004 Open Space and Recreation Plan. The proposal is to construct two accessible parking spaces off Walden Street at Tuttle Lane, a fire lane in the Town Forest

between the main parking area and the Brister's Hill Interpretive Site, and a level 0.5-mile "assessed" loop trail, with signage indicating trail conditions. DNR also submitted a grant to the Garden Club to fund native plantings along the Emerson-Thoreau Amble in areas of invasive removal. Three CPC applications were submitted under the purview of the DNR requesting funds for a bridge over the Mill Brook behind Main Street Café, a White Pond watershed management plan, and a Warner's Pond watershed management plan.

Invasive Plants Control: Over the summer, volunteers and DNR staff removed invasive plants at Heywood Meadow. Natural Resources staff worked with the Concord Housing Trust at 335 Walden Street to develop, fund, and oversee a plan to remove invasive species to restore the meadow adjacent to the Town Forest.

Removal of the invasive non-native water chestnut from Fairhaven Bay continues as the U.S. Fish and Wildlife Service, the towns of Concord, Lincoln, and the Concord Land Conservation Trust, maintain efforts to control water chestnut in the Bay and Sudbury River. The seed bank of water chestnut in the sediment significantly decreased, though there were new observations of the invasive plant not far upstream of the South Bridge boathouse. This year, the harvester was launched a second time to collect additional water chestnut in the Conantum area in an effort to stem the spread of invasives further downstream.

Conservation Land Use Permits: 26 Land Use permits were granted to groups using Town conservation lands for maple sugaring, drag hunting with foxhounds, theatre production, field classroom purposes, Boy Scouts and Girl Scouts on Scout Island, and Earth Day and solstice celebrations at the Old Calf Pasture. Three permits were issued for ecological studies on conservation lands, two dealing with invasive species and one with groundtruthing computer models of wetland ecosystem integrity.

Blandings Turtle: The NRC continues its support Dr. Bryan Windmiller's research on the Blandings Turtle, a threatened species with a population at Great Meadows. Dr. Windmiller continued radio tracking turtles and has been "headstarting" a portion of the new hatchlings to increase survival rates. His research is showing that

the third largest population in New England continues to face challenges; this year all hatchlings were male. The population could be suffering from a low female recruitment, as well as mortality from road kill and loss of nesting habitat.

BERT: Natural Resources staff continued efforts this year to oversee rare species surveys near the former railroad bed to understand any potential impact from construction and operation of the proposed Bruce Freeman Rail Trail. Surveys were completed for the rare wood turtle in areas of potential habitat along the corridor.

Agricultural Leases and Community Gardens

Agricultural Leases: The Division continued to work with local farmers to retain land in agriculture, managing 13 agricultural leases covering 211 acres of farmland, and supporting three community gardens.

Gaining Ground: Gaining Ground, the leaseholder at the Thoreau Farm/Birthplace conservation land, is a non-profit organization that grows organic vegetables and fruit that it donates to ten area food-assistance programs, Gaining Ground had approximately 3.5 acres in annual vegetable cultivation, and raised and gave away over 23,000 pounds of food. A seasonal drip irrigation system and a moveable electric fence were installed with productive results. Gaining Ground expanded its sugaring operation by building a shack for boiling on the Thoreau Birthplace property which will be open for use in February.

Community Gardens: The long-standing tradition of community gardening continues to thrive under the helpful guidance of coordinators Jim Catterton, Rebecca Sheehan Purcell, Pamela Hathaway, Dale Clutter, Elisabeth Elden, John Nevins, and Ray Andrews

East Quarter Farms is the newest garden and located on the former Ammendolia farmland, accessed from the Ripley School parking lot. Currently there are 21 gardeners and a total of 56 plots. Bill Kenney plowed the fields. The garden is divided into a large area with full and half plots and a smaller area for perennials.

Cousins Field now supports two berry cooperatives through the efforts of several gardening families and individuals who are working together to manage raspberry and blueberry patches. Requests for garden plots continue to overwhelm the available space at the

Cousins Field Community Garden with over 15 families waiting for a plot.

Hugh Cargill Community Garden is located on rich farmland bequeathed to the Town by Hugh Cargill in 1793 for the benefit of the poor in Concord. Currently 50 families have 75 garden plots in production. Gardeners donated vegetables to the Concord Open Table and flowers to Town offices and tables at the Stone Soup Dinner. HCCG was able to make a substantial cash donation to the Hugh Cargill Trust for the benefit of needy Concord residents.

Environmental and Educational Activities

The Division continues to sponsor the longstanding tradition of early morning Conservation Coffees held on the first Tuesday of every month at 7:30AM. These lively and stimulating gatherings of citizens, Federal, State, and local officials provide an interesting and effective forum to exchange information, ideas, and concerns about conservation and the environment.

NATURAL RESOURCES COMMISSION



From left: Dean Banfield, George Lewis, Jamie Bemis, Chair; Elissa Brown, Steve Verrill

The Natural Resources Commission (NRC) and staff are responsible for the overall stewardship of the natural resources of the Town, and the establishment of Town environmental policy in conjunction with the Selectmen and Town Meeting. The NRC administers the state Wetlands Protection Act, Rivers Protection Act, and the recently approved Concord Wetlands Bylaw. The NRC also plays an important role in open space

planning pursuant to its authority under the Conservation Commission Act.

Wetlands Protection Act

The majority of Commission and staff time relates to administering and enforcing wetland regulations. Wetland permit applications included 42 Notices of Intent, 3 Abbreviated Notices of Resource Area Delineation, and 16 Requests for Determination of Applicability, for a total of 61 new applications. The NRC closed out many completed projects, issuing 23 Certificates of Compliance. The NRC also began working with 10 property owners to resolve new violations, and continued making progress on 4 major on-going violations. To resolve a significant tree removal violation at the Old Calf Pasture, the NRC and the Town entered into a Settlement Agreement with a Concord resident and worked with this resident to develop a 5-year restoration plan. The NRC and staff responded to 3 appeals to the State's Department of Environmental Protection (DEP), and issued 4 Emergency Certifications. The NRC received 4 Requests to Amend an Order of Conditions, and 5 Requests to Extend an Order of Conditions.

Major projects reviewed by the NRC this year consisted of an 11-unit residential development at 201 Independence Road adjacent to Gowings Swamp; an artificial turf athletic field at Fenn School; failed slope restoration at 54 Old Powder Mill Rd.; and a new proposal to redevelop 1135 Main St., which now includes plans for a canoe launch on the Assabet River. Massport received approval of its 5-year Vegetative Management Plan and work began this year. The plan included converting 3 acres of upland to grassland to support grassland bird habitat.

Wetlands Bylaw & Regulations

The Town passed a Wetland Bylaw at Town Meeting that became effective on September 10 following Attorney General approval. The Bylaw codifies the 25-foot No Disturb Zone from wetlands, protects vernal pools and their habitat, and ensures compliance by establishing fines, which will be used for noncompliant or repeat offenders. The NRC has administered the 25-foot No Disturb Zone as a policy since 1994. Town Meeting approved an amendment requiring that Wetland Bylaw Regulations be approved by Town Meeting. To this end, the NRC developed Regulations this fall and held a pub-