

LAND USE and MANAGEMENT PLAN for the Hugh Cargill Farm

**Walden Street and Thoreau Street
Assessors' Map H10; Parcels 0217, 0220, 0221, 0222
28+/- acres**

Goals and objectives

The goals of this Management Plan are to provide guidance for the management of the remaining land of the Hugh Cargill Farm for its traditional uses, and recommend an integrated plan for management of previously developed parcels (excluding residentially developed areas) together with the remaining Hugh Cargill Farm. Traditional uses include: Drinking water protection and production, agriculture, benefit of the poor in Concord, wildlife protection, maintenance of a scenic gateway into Concord, and the general enjoyment of Concord's citizens and school children.

Open landscapes are declining regionally and in Concord, and this Plan is intended to ensure that the Hugh Cargill Farm land remain open by regular mowing or agricultural haying. The Cargill land provides a rural landscape on an important gateway into town, as well as a connection with the Hapgood Wright Town Forest. Invasive plant species should be selectively removed over time in order to restore the biodiversity of this site. These activities will be conducted in a way that maximizes the wildlife habitat provided by grasslands for butterflies, small mammals, and grassland nesting birds. Informal playing fields are also an accepted use under this plan. No activity may be conducted that will adversely impact the water quality of the Hugh Cargill well.

Although some of the original land has been carved off for other uses (and acquisition funds placed in the trust to be disbursed to needy residents of Concord), this Plan seeks to integrate management of all lands, regardless of ownership, within the original bounds to be managed for the goals and objectives stated above. This will require coordination with the School Department and Concord Water Division, and this Plan shall serve as a tool to foster such collaboration, with recognition that it shall not place new constraints on the established uses or existing controls afforded each independent authority.

No changes in permitted uses or hardscape improvements will be made to this Site without public discussion and reference to the goals listed above. This report recognizes that the intent of public discussion related to hardscape and permitted uses does not include CPW Water Division property and water supply which remains under the jurisdiction of Concord Public Works and the Public Works Commission.

In order to continue to meet the original intent of the benefactor of this land, all net income generated on Hugh Cargill land (Parcels 0217 and 0222) will be deposited into the Hugh Cargill Trust.

History and Site Description

Hugh Cargill was a British soldier who became an American and citizen of Concord. In 1799 he bequeathed the “Stratton Farm” to the Town, which was “to be improved as a poor-house, and the land to be improved by and for the benefit of the poor, and to be under the special direction of the town of Concord, for the time being, for the purpose aforesaid forever.” The Town ran the property as the “Poor Farm” until the Second World War, a period of about 140 years. In the late 1940’s, the Town petitioned the Attorney General for release of portions of the farm from the Trust for Alcott School, the police and fire station, and in 1958 the Hugh Cargill Well. Land was released from the Trust for limited purposes and not for general purposes. The Alcott piece (27 acres) was released from the Trust for “School Purposes”, and the Concord Water Division parcel (8.7 acres) released for “development and operation of a subsurface water supply”. Today, two parcels still remain in the Trust, the community garden piece (4.3 acres) and one along Thoreau Street, about 3.4 acres in size.

The north end of the original Stratton Farm is the location of the police and fire stations and a private residence; these are not considered as part of the Site. Residential development to the south is also not considered part of the Site. The remaining Cargill land is held by the Town in four parcels (**Parcels 0217, 0220, 0221, 0222**). The Site consists of the undeveloped portions of these four parcels, as well as undeveloped portions of the Alcott Campus and Hugh Cargill Well Protection Area, about 28.5 acres of fields, wetlands and woods.

Ownership, Divisional Responsibility, and Coordination

The entire property is owned by the Town of Concord. Three divisions of the Town have controlled the land since the 1950’s. This Plan recommends that the Natural Resources Division coordinate administration of this Plan, subject to approval from the School Department and the Water Division on their respective lands. The Hugh Cargill Community Garden (Parcel 0222) and the Thoreau Street Parcel (Parcel 0217) remain in the Trust and under the control of the Selectmen. The School Committee and Concord Public Works administer the Alcott land (Parcel 0221) and the Hugh Cargill Well field (Parcel 0220) respectively, and this plan will be coordinated through their boards. Figure A denotes ownership of each parcel.

In addition to the principle uses noted above, the Site offers many opportunities for outdoor education and should be used to cultivate the next generation of land stewards from the Alcott School and the Concord Carlisle Regional High School. To the extent possible, land use decisions will be responsive to the intent of the original benefactor, Hugh Cargill, whose primary concern was for the poor of Concord.

Land Use Regulatory Constraints

Much of the Cargill farm lies within three Zoning overlay districts: Floodplain, Wetlands and Groundwater Conservancy, and work in these areas is subject to approval from the Zoning Board of Appeals. Work in the 100-year floodplain, wetlands, and 100-foot buffer zone to wetlands is subject to approval of the Natural Resources Commission (MGL 310 CMR 10.00). Work in areas contributing to the Hugh Cargill Well is subject

to approval from the Public Works Commission, and potentially the Department of Environmental Protection. These reflect real physical limitations related to very shallow groundwater (0-5 feet) found on much of the site.

Hugh Cargill Well

In 2001, the Town gained approval from the Massachusetts Department of Environmental Protection (MA DEP) to reactivate this drinking water supply based on the successfully reconfiguration of the withdrawal system and its ability to provide adequate land-use protection around the resulting wellheads. This protection area includes the land owned by the Concord Water Division plus an additional protection overlay delineated as the “Hugh Cargill Well Protection Area”. This protection area was approved under Article 57 of the 2001 annual Town Meeting which includes a portion of Town Forest east of Walden Street and a portion of land owned by the School and the Trust to the west. “Use Restrictions” within these drinking water protection areas are outlined within the MGL. 310 CMR 22.00. These areas are shown on a recorded plan, referred to in a recorded “Conservation Restriction” and their establishment was part of Department of Environmental Protection (DEP) approval of the new well field.

Management Overlays

Different sections of the Cargill land have had different historical uses. Originally the land was entirely wooded, a swampy or at least moist forest. It was cleared and drained for farming, probably in its entirety, beginning in the 1700’s through the mid-1800’s. There has been partial reversion to forest in the wettest portions of the property. An area along Thoreau Street, more recently abandoned, supports a shrub and herbaceous community. Figure B denotes Management Overlays recommended under this Plan.

Management Overlays in this Plan are based on current, historical and potential use, and these uses extend beyond the property lines of the divisional ownerships.

Alcott Campus

This 10.7-acre area includes the developed portion of the Alcott parcel including the buildings, parking lots, existing ball fields, and landscaped lawns.

The Alcott Campus is managed according to the needs and direction of the School Committee. This Plan recommends that the School Committee address the appearance of the Walden Street side of the new school. Lighting should be in conformance with Town policy for shielded, non-glare lighting; this is an otherwise dark part of Town. While the lighting was designed with the Town standard in mind, this Plan recommends that the School Committee investigate the possibility of reducing the impact of lighting on the Walden Street side.

Landscaping, with an eye toward eventual screening, would soften the fully visible back end of the building. Though small trees are considerably more cost effective, and may have better survivability than larger plantings, this Plan recognizes that smaller trees will take many years to mature and provide the desired screening. The Town Tree Warden should be consulted in preparing a planting plan.

Community Gardens

The Hugh Cargill Community Gardens occupy the northernmost field, mostly on Trust land.

Grassland

This includes the Hugh Cargill Well Protection Area and adjoining portions of Trust and School land, a total of 19.1 acres. This Plan contemplates that a low impact playing field may be sited in the Grassland Overlay primarily on School land outside the Alcott Campus.

Hugh Cargill Well Protection Area

This area has been designated by the Concord Water Division and is shown on a recorded plan, approved by the State. The boundaries of this 9.3-acre area include a large portion of the Water Division land as well as small portions of Trust and School land. It lies entirely within the Grassland Overlay.

Woodland

There are two wooded areas; 5.5 acres of School property along Laurel and Thoreau Streets and 3.9 acres of School and Trust land at the north end of the Alcott Campus, for a total 9.4 acres.

Uses:

Permissible uses may extend across ownership boundaries. This Plan recognizes that any activity on School Department or Water Division land will need approval before implementation, and may require approval from other local boards and committees such as the Natural Resources Commission and Zoning Board of Appeals.

Protection of water quality within the Hugh Cargill Well Protection Area is of the highest priority. All permitted uses must conform to guidelines established by the Concord Water Division and MGL 310 CMR 22.00 to ensure the highest quality groundwater is maintained. At a minimum, no use of pesticides, herbicides, or fertilizers within the Well Protection Area is permitted without approval of the Concord Water Division. Uses under this Plan are identified below.

Community Gardens

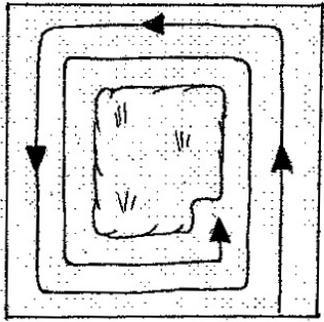
The community gardens portion of the Trust land is intended to remain in community use under this Plan. This area is plowed by Town personnel in the spring, and administration is provided by the Division of Natural Resources. An annual contribution should be paid into the Hugh Cargill Fund. New Alcott gardens could be sited on School or Water Division land.

Haying

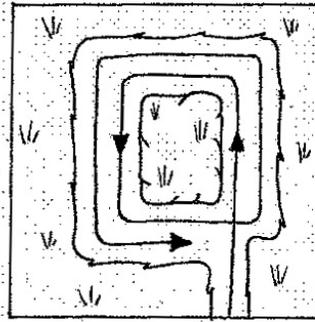
Under this Plan, haying is defined as an activity where fields are cut for production. Early cutting conducted more than once annually generally is preferred to maximize the quality of hay production, and the profit realized from the investment.

However, the major threat to survival of grassland birds in hayed or mowed fields is early cutting before the young have fledged. If the Grassland supports grassland nesting birds at some point in the future, mowing should wait until after the breeding season (July 20). The mower height should be at least 6 inches off the ground so that small mammal habitat is retained after mowing. If no grassland birds are present, haying may be conducted earlier in the season. Haying should be done in a series of parallel lines from the inside out, rather than conventional circular cutting, to avoid ‘herding’ small mammals to the center of the field where they may be killed by the mower (see diagram). Vegetated buffers (at least 25 feet) should be maintained around both sides of the agricultural ditch. Trees and shrubs should be removed to favor native grasses and forbs. Long sight lines are critical for attracting ground nesting birds, and desirable for landscape preservation.

Cutting Method to Avoid



Preferred Cutting Method



Avoid conventional cutting method on the left which herds wildlife to the center of the field. Cutting fields using the method on the right allows wildlife to escape to the field edge. (Drawing adapted from RSPB Conservation Management Advice)

Haying will be conducted by lease to a local farmer, overseen by the Natural Resources Division. In consultation with a farmer lessee, a choice may be made to manage a portion of the Grassland Overlay for production of good quality hay, with earlier mowing, or for other agricultural use like small fruits, but generally the intention is to protect wildlife with cutting only late in the season. Agricultural rents will be deposited into the Hugh Cargill Trust.

Mowing

Under this Plan, mowing is defined as an activity conducted to maintain land in its open state, and to control woody invasives. Because there is no production associated with mowing (compared to haying), the need to cut early and often is eliminated.

Timing and methodology of cutting, and maintenance of vegetated buffers, should follow the recommendations for Haying.

Mowing should be conducted by Concord Public Works, or by lease to a farmer under direction of the Division of Natural Resources,. A mowing schedule will be developed by the Natural Resources Division, with support from the Concord Water Division. The mowing schedule will be reviewed and approved by the Concord Water Division on land owned by the Concord Water Division; the School Committee will review and approve the mowing schedule on land owned by the School Department. Mowing may be conducted on a rotating schedule to provide flowers for butterflies throughout the growing season, as well as adequate time for larvae and pupae to develop. If rotational mowing is implemented, care will be taken to ensure that woody species are kept in check.

Low Impact Playing Fields

There may be locations within and adjacent to the Alcott Campus for low impact playing fields. This management plan recognizes that informal playing fields may be developed on the Alcott campus without reference to this plan, such as the former Alcott school parking lot.

If a playing field is constructed on the Walden Street side of the Alcott Campus, this Plan recommends that the field be created without extensive grading or permanent structures. The field should be designed to revert to other uses identified in the Plan if no longer needed as a playing field. This field may be mowed more frequently to maintain turf; striped; and irrigated if necessary. No permanent irrigation structures should be installed; irrigation structures should be temporary and moveable. Playing fields that extend into the Grassland Overlay should be laid so that the minimum amount of grading is required.

Invasive Species Management

Portions of the site are becoming infested with invasive species, including glossy buckthorn, multiflora rose, purple looserstrife and Asiatic bittersweet. Invasive species threaten biological diversity and minimize wildlife habitat value and should be controlled. Regular mowing to the edge of fields may control some of these species. Other control methods will be species-specific and will be determined using best available literature and consultation with the New England Wildflower Society.

Passive Recreational Trails

Recreational trails could be designed and built on the property if they are unpaved and do not interfere with other uses. Boardwalks are considered an acceptable component of recreational trails, provided they are not pressure-treated in areas subject to Natural Resources Commission jurisdiction. Possible trail locations would be between the High School and Alcott School, and between Alcott School and Walden Street, with potential offsite connections to the Town Forest, and other town lands.

Hugh Cargill Farm Task Force

This plan was developed by the Hugh Cargill Farm Task Force, a committee that held several meetings in 2007 and 2008. The Task Force was represented by a diverse assemblage of interests for the management of this land. We recognize that the needs of

this Management Plan may change over time, and recommend that if future changes are contemplated the opinions of these Committees and Boards be sought.

The Task Force membership was as follows:

- One member of the Board of Selectmen (Virginia McIntyre)
- One member of the Planning Board (Jeff Adams)
- One member or designee of the School Committee (Fabian Fondriest)
- One member or designee of the Public Works Commission (Paul Mahoney)
- One representative from a youth sports organization (Pete Castrichini)
- One member or designee of the Natural Resources Commission (Delia Kaye)
- One member or designee of the Agriculture Committee (John Bemis)
- One member representing community gardening interests (Jim Catterton)
- One member or designee of the Historical Commission (Nancy Butman)

Alan Cathcart (Concord Water Superintendent) and Rebecca Purcell (co-coordinator of the Hugh Cargill community garden) attended many meetings and provided valuable insight to the Plan development.

Appendix A - Management Recommendations

Beginning in Spring 2008:

Resolve matter of excess fill left in location of temporary access road and turn around by ensuring that the original grades are reestablished.

Recommend that the School Committee consider landscaping improvements at Walden Street side of Alcott to soften the view of the school from Walden Street.

If a low impact playing field is proposed, CPW, School Department, and DNR will work with the proponent to site this field.

Volunteers remove invasive exotics along Thoreau Street, elsewhere as determined by Natural Resources Division. Invasives plants will be disposed of properly, which may include burning, chipping, or removal to the Concord recycling facility.

The Trails Committee will investigate the feasibility of locating a trail, to foster connections between the High School and the Town Forest and other Town lands.

CPW defines the areas which will be hand mown (well field) and which areas can be tractor mown with a goal of creating a natural and consistent landscape, in consultation with the School Committee. CPW defines how much vegetation to remain along ditch that lies to the north of the well field, in consultation with the Division of Natural Resources.

Natural Resources Division defines the areas which will be managed for grass by haying, in consultation with the Concord Water Division and the School Committee.

Once the area to be leased is determined, the Town will publicly bid the land to a local farmer, with a goal of awarding bid within one month.

Farming plan should include:

- mowing and brush hogging (aesthetics, prior to lease being awarded, subject to presence of ground nesting birds);
- Consideration of rotating fields to provide wildlife habitat in certain areas through late summer and fall;
- Late summer/early fall plowing, cover crop for winter;
- harrowing and seeding for permanent grass the following spring;
- No herbicides or pesticides. Fertilizer and lime only with permission of CPW and DNR;
- Possible limitation on date of first cutting as determined by DNR; if ground nesting birds are present, first cut delayed until July 20. If not present, hay cut at farmers' discretion;

- Lease will provide that if an area is to be used for a low impact playing field, this use will have precedence and that area will not be used for hay production until playing field is no longer used.