

**Conservation Management Directive
For Land of
The Fund for North Bennington, Inc.
North Bennington, Vermont
(Revised) November 2001**

On November 19, 1779, Thomas Hall acquired 100 acres in North Bennington, including The Mile-Around Woods. The Mile-Around Woods got its name from Trenor Park - Thomas Hall's great-grandson-in-law, a gifted and ambitious lawyer, and a compulsive worker. When Park came home in 1865 from a hectic thirteen years in San Francisco, he suffered a breakdown from overwork. He decided on his own course of therapy: Without cutting a single tree, he would design a road through the hilltop woodlot that was exactly one mile around. He succeeded.

The Mile-Around Woods (the "Woods") is now the core of the woodland holdings of The Fund for North Bennington, Inc. (the Fund"), a tax-exempt, non-profit conservation organization. Prior to Fund's acquisition of the Woods in 1994, they were part of the historic Hall Farm property that once included all of the land bounded on the east by Park Street, on the south and west by Harrington Road, and on the north by West Street in North Bennington and what is now called McCullough Road in Bennington. The Hall farmhouse was a modest structure on Park Street, while Trenor Park and his descendants for a century lived in the grand Second Empire manse known now as the Park-McCullough House.

The Park-McCullough House is on the National Register of Historic Places, and is managed by a non-profit organization to preserve its historic character.

The woodlands associated with the Hall Farm and the Park-McCullough House were historically managed for low intensity forestry and firewood cutting. Hall Park McCullough, the owner of the property for much of the 20th century, took great pride in the woodlands. He arranged for planting a small stand of white pines at the southwest corner of the Woods, but largely refrained from cutting The Mile-Around Woods. He and many of his fellow citizens enjoyed the spectacular show of spring flowers in the Woods.

In 1978, a limited cut of merchantable timber was executed in the Mile-Around Woods at the direction of Mr. McCullough's descendants. Ed Flaccus, an ecologist at Bennington College, became very concerned by this harvest. He knew the woodlands well from years of study with his science classes, and feared that additional cutting in The Mile-Around and other woods on the property would destroy the special qualities of these forests. He therefore summarized the ecological significance of the woodlands in a study for the McCullough family, and pleaded for their preservation. Dr. Flaccus's study is extensively quoted below because it is a succinct summary of the ecological qualities that distinguish these woods, and because his study was the impetus for the conservation efforts that now preserve the area for public benefit. Here are Dr. Flaccus' words:

The Mile-Around Woods

1. Diversity of spring wildflowers. The best area as regards diversity in a reasonably prescribed area, in southwestern Vermont. In fact it is one of the very best I've ever seen anywhere in New England. [Dr. Flaccus' list of wildflowers is attached as an appendix.]
2. Old-growth trees. At the lower east edge is a fairly narrow stretch of wood representing relatively undisturbed old-growth, climax Northern Hardwoods. There are a number of very large (2-3' dbh) sugar maples here with tall, forest-grown boles. On this somewhat more protected site a remnant has persisted that has escaped the very extensive wind-throw damage of the '38 hurricane and also has not been disturbed by cutting. Best evidence from a variety of sources indicates the sugar maples are at least 200 years old, therefore dating back to settlement days (more discussion of tree ages later).
3. Windthrow. All up the east side of the hill is much pit and mound topography produced by hundreds of years of windthrow. Evidence we have (ages of trees growing on the mounds; condition of rotted stumps; etc.) suggests that the majority of more recent examples date to the hurricane of September 21, 1938...
4. Other areas of Mile Round. There are at least 15 species of trees present (see appended presence list), most of which are climax species or intermediate species. There are (were) some very large individuals or these scattered through the woods elm, northern red oak, black maple-- the latter relatively rare in Vermont and occurring on limey soils) and beech...

The Ridge Woods

[Southwest] of the Mile Round, across the old-field gap is a woods covering the NE-SW trending ridge running toward the [Bennington] sewage treatment plant. On the top and downslope on the west to a stone wall is a stretch of old-growth forest which includes trees of very unusual size and age. Most of the biggest of these are sugar maples 2-3' dbh, and they are 200 or more years of age. A couple of large white ash in the area were victims of the summer '78 wind. Continuing to the SW one comes to a southerly sloping hill down to the present pasture at its foot. On this south-facing slope, as one would expect~ there is an increase in numbers of northern red oak, bitternut and shagbark hickory, and even a white oak or two. One northern red oak has a dbh of 47" -- one of the biggest forest-grown oaks I've seen, which I would estimate to be 200 or so yrs. old.

Because of some initial disagreement as to age of 2-3 foot, forest-grown sugar maples, I took some partial cores. Estimates from these, using a couple of alternative methods of calculation, are (1) 32" dbh tree: 200+ years; (2) 36.5" dbh tree: low estimate 265 yrs; high estimate 312+ yrs.

I regard this area as having a very unusual stand that is truly old-growth dating back to settlement or pre-settlement days. There is of course no way of being absolutely certain that it has not been disturbed in its existence. But what evidence there is to go on suggests to me that it has very likely not been appreciably disturbed by man. While I cannot claim to have been in every woodland in southern Vermont, I have been in many areas and have not seen anything comparable.

There follows some comments about the stand:

I. “All-aged” (or better many-aged). My interpretation is that it is essentially “all-aged” (many aged), which is characteristic of old-growth, climax or virgin stands. There are sugar maple stems of a variety of diameters.

2. High proportion of sugar maple at NE end. This does not indicate necessarily that other species were cut out. In fact the older an old-growth stand is in the Northern Hardwood Region the more likely it is to show high proportions of either sugar maple or beech; this is because these are the two species with the highest Climax Adaptation Numbers (most shade-tolerant, hence most able to reproduce in their own shade)

3. Sugar bush or not. There is no way of telling whether the older maples were at some point in earlier life ever tapped. So this question cannot be answered with absolute certainty. But evidences suggesting sugar bush are lacking. The trees have neither the broad crowns nor even wide spacing one associates with sugar bushes, nor the shrub and herb species (shrub diversity; hayscented fern, for example). There are no visible remains of wood roads, etc. The whole appearance of the stand rather indicates forest-growing conditions. There are no cut stump remains in this area; that assures us there has been no cutting in, say the last 50 years. (There are a few cut stumps lower on the south-facing slope near the pasture.)

4. Prevalence of windthrow. The many soil pit-mounds, especially on the ridge-top suggest to me that the large trees on that (east) edge of the ridge were blown down. Some with stumps rotted the appropriate amount implicate again the hurricane of 1938. Since this site is more exposed than the lower part of the Mile Round (with sugar maples of comparable size), the wider spacing of trees and their lack on the top might well be a result of higher windthrow frequency.

5. Site quality. This is not as good a site for forest growth as the lower Mile Round; the latter is lower – more mesic – more protected. East slopes are generally more mesic (moist) than west slopes, and the Ridge Woods is on a slope to the west. Nevertheless the soils are here as in the Mile Round are influenced by limestone-dolomite outcrops, resulting in limier soils and better growth of sugar maple than on acid-igneous derived soils (as in the Green Mountains).

6. Understory growth. As is to be expected in climax stands of Northern Hardwood the shrub layer is depauperate (relatively few species of shrubs can put up with either the degree of shade or the competition from sugar maple reproduction). I have not visited this area in spring so cannot speak to the question of the richness of spring flora; at this time of year [October] much, in some cases all, of the remains are gone. Even so, appreciable amounts of some the more persistent ones-- e.g. wild ginger, hepatica, Streptopus, etc. were noted.

In summary then, I regard the Ridge Woods stand as a very unusual one. Though small, it is in my opinion very important, since essentially undisturbed stands are all but non-existent at lower altitudes in Vermont (as true or even more so in all the other New England states). I believe it is essential to get some examples--small though they might be-- set aside as examples of what climax forest is and how it behaves as a system. Should it prove possible to withdraw a piece from the cutting to be pre-served for this and future generations, I would regard it as a great contribution. Saving a tree here and there, or even saving a narrow strip or very small patch, is hardly worth doing.

My suggestion would be ~ piece approximately 200 yards wide running from the north end southwest along the ridge and down the south-facing slope to the pasture. I have not had time to pace this carefully, but my guess is it might amount to 15-20 acres.

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As a result of Dr. Flaccus' analysis and prescription for conservation, Babs and Bill Scott soon afterward donated 16 acres, including the stand of majestic old oaks, to the Vermont chapter of The Nature Conservancy to be preserved un-cut and undeveloped. No further harvesting was planned for the remaining woods, including The Mile-Around.

In the mid-1980s, the Hall Farm ceased operations. Several generations of tenant farmers had not been able to find a financially feasible way to maintain the dairy herd. After much family discussion, Davis Cherington, a land-use planner, was hired to develop a conservation plan for the entire property. He recommended that the farm and its woodlands be divided into several large parcels, each of which would be restricted by conservation easements. Some of these easements allowed limited residential development, but the woodlands were all to be protected from any future development that did not involve traditional forestry. In the early 1990s, the plan was executed, and The Vermont Land Trust acquired a comprehensive conservation easement on the properties.

In 1994, the Scotts donated their fee interest in the 45-acre parcel of The Mile Around Woods to the Fund, along with several adjoining meadows. This donation became the nucleus of The Fund's current land holdings. Starting in 1998, the Fund acquired five more parcels of woodland and meadow. In December 2000, the Nature Conservancy transferred title to its 16-acre parcel, retaining a strict conservation easement.

The Fund's woodland is open to the public. The Fund has marked or constructed miles of trails through these woods and adjoining fields. The properties are extensively used by the public for hiking and, in season, for cross-country skiing. The woods have very limited directional signage, and there is no plan to install interpretive signs or otherwise to change the essential character of the area. A map of current trails is attached as an appendix.

Scientific research has been conducted in The Mile-Around and Ridge Woods by The Nature Conservancy and by ecology classes at Bennington College. These groups are expected to continue to monitor natural conditions on the property. The property has been used annually for field studies by classes at The North Bennington Graded School, often in partnership with the Vermont Institute of Natural Sciences or the Bennington County Natural Resources District. Private schools in the area, such as the Hiland Hall School, regularly bring students to the woodlands for study purposes.

All rifle hunting has been banned on the property due to the intensive community use. Bow hunting for deer may be authorized from time to time on a limited basis in areas removed from existing trails.

There is currently no policy of restricting individuals to the woodland areas. However, organized activities such as competitive running meets are not permitted without prior permission, which will not be granted if the use appears incompatible with existing uses. No bicycles are permitted on the property. Motor vehicles are restricted to farm access, and for stewardship purposes. Public access to a particular area might be restricted in the future on a

very limited basis if necessary to preserve or protect fragile ecological resources. No such restriction is currently planned, nor has any such resource been identified.

In light of the ecological diversity of this area, extensive public use and historic management practices, The Fund for North Bennington, Inc. has adopted the following policies for management of its woodlands:

Purposes. The woodlands shall be managed for purposes of conserving natural habitat, restoring old growth forest, providing trails for public use and for non-motorized recreation, and to serve as a laboratory for scientific study and education.

Policies. To advance these purposes, The Fund for North Bennington, Inc. shall manage its woodlands as follows:

1. There shall be no commercial harvesting of trees.
2. Trees shall be cut only for the following purposes:
 - A. Construction and maintenance of trails.
 - B. Protection of the public safety.
 - C. Removal of diseased specimens.
 - D. Occasional removal of dead or downed trees for firewood.
3. Invasive, non-native species such as honeysuckle, buckthorn, barberry and euonymus may be removed from the forest floor.
4. Trees may be trimmed and cut along the boundaries of adjacent meadows and pastures to maintain the historic dimensions of those adjacent areas.
5. There shall be no construction of buildings or shelters.
6. Historic stone walls shall be preserved.

The Fund for North Bennington, Inc.

By: _____
Robert E. Woolmington, President

McCullough Woods (Mile Round Woods) Partial Species list

Trees

sugar maple (*Acer saccharum*) -
beech (*Fagus grandifolia*)
black (sweet) birch (*Betula lenta*)
yellow birch (*B. lutea*)
paper birch (*B. papyrifera*)
northern red oak (*Quercus rubra*)
american elm (*Ulmus americana*)
basswood (*Tilia americana*)
white ash (*Fraxinus americana*)
black cherry (*Prunus serotina*)
hop hornbeam (*Ostrya virginiana*)
hemlock (*Tsuga canadensis*)
white pine (*Pinus strobus*)
black maple (*Acer nigrum*)

Shrubs

red-berried elder (*Sambucus pubens*)
alternate leaved dogwood (*Cornus alternifolia*)
tatarian honeysuckle (*Lonicera tatarica*)--introduced
buckthorn (*Rhamnus cathartica*)-- introduced
choke cherry (*Prunus virginiana*)

Herbs (Partial list, Spring flora only)

Hepatica (*Hepatica acutilobula*)
bloodroot (*Sanguinaria canadensis*)
Canada mayflower (*Maianthemum canadensis*)
spring beauty (*Claytonia caroliniana*)
trout lily (*Erythronium americanum*)
dutchman's breeches (*Dicentra cucullaria*)
squirrel corn (*Dicentra canadensis*)
Trillium (*Trillium grandifloria*; *T. erectum*)
wild onion (*Allium tricoccum*)
yellow stemmed violet (*Viola pubescens*; *V. eriocarpa*)
blue violet (*Viola septentrionalis*; *V. papilionacca*)
round-leaved yellow violet (*V. rotundifolia*)
Canada violet (*Viola canadensis*)
Spurred violet (*Viola rostrata*)
toothwort (*Dentaria diphylla*)
toothwort (*Dentaria laciniata*)
sweet cicely (*Osmorhiza claytoni*)
twinberry (*Mitchella repens*)
miterwort (*Mitella diphylla*)
pennsylvania sedge (*Carex pennsylvanica*)
plantain-leaved sedge (*Carex plantaginea*)
foam flower (*Tiarella cordifolia*)
waterleaf (*Hydrophyllum virginianum*)
Christmas fern (*Polystichum acrostichoides*)
dwarf ginseng (*Panax trifolius*)
marginal shield fern (*Dryopteris marginalis*)
spinulose shield fern (*Dryopteris austriaca*, var. *spinulosa*)

McCullough Woods presence

Herbs (cont.)

walking fern (*Camptosorus rhizophyllus*)
wild ginger (*Asarum canadense*)
blue cohosh (*Caulophyllum thalictroides*)
Kidney leaved butter cup (*Ranunculus abortivus*)
Baneberry (*Actaea rubra*)
Baneberry (*Actaea pachypoda*)
Jack-in-the-Pulpit (*Arisaema triphyllum*)
herb Robert (*Geranium robertianum*)
bedstraw (*Galium tricoccum*)