

CANAAN COMMUNITY FOREST MANAGEMENT PLAN

CANAAN, VERMONT

MAY 2013

Canaan Community Forest Management Planning Committee

Chris Masson, Chair, Odette Crawford, Vern Crawford, Greg Noyes, Yvan Doyon,
Eugene Reid, and Morgan Wade

*With special assistance from Matt Langlais, Essex - Caledonia County Forester, Dan Kilborn,
Vermont Land Trust, and Julie Renaud Evans, Sustainable Forest Futures*

CANAAN COMMUNITY FOREST MANAGEMENT PLAN

CANAAN, VERMONT

MAY 2013

Vernon Crawford, Chair, Canaan Selectboard

Chris Masson, Chair, Canaan Community Forest Planning Committee

Dan Kilborn, Stewardship Forester, Vermont Land Trust

Table of Contents

Purpose

4

Background

4

Organization and Management

5

Community Forest Committee

5

Finances

6

General Property Description

6

Conservation Easement

7

Outholdings

8

Natural Resources

8

Wetlands, Streams, and Riparian Areas

9

Natural Communities

10

Rare and Uncommon Plants

11

Wildlife Habitat

12

Forest Resource

13

Size Classes

14

Timber Volume and Quality

14

Timber Management

15

	Stand Descriptions (1-8)
17	
	Other Resources
26	
	Cultural Resources
26	
	Recreation
26	
	Physical Infrastructure
27	
	Access and Parking Areas
27	
	Maple Sugaring
27	
	Management Plan Updates
28	
	Appendices:
	A. Conservation Easement, Vermont Land Trust
29	
	B. Conservation Plan Map, Vermont Land Trust
46	
	C. Ecological Assessment, Brett Engstrom, October 21, 2011
47	
	D. Forest Bird Habitat Assessment, Kristen Sharpless, Audubon VT, 1/2012
48	
	E. Archeological Resource Assessment, GeoArch, 3/2012
49	
	F. 2011 Resident Survey Results, Odette Crawford
50	
	G. Phase I Environmental Assessment Report, Wheeler Env Services, 2/2012
51	

PURPOSE

This plan is intended to be the guiding document for management of the Canaan Community Forest (Property) which will be owned by the Town of Canaan and managed as a single unit.



Current and future uses include education, outdoor recreational opportunities, community development, and sustainable forestry. The tract will serve as an important outdoor classroom for Canaan Schools and there is potential for both educational and commercial sugaring. The VAST trail will also be used as an ATV corridor between Canaan and Beecher Falls. Approximately 56 acres of the property will be classified as an economic development zone. Enabling the Property to pass from private ownership into the public domain will assure that all features of the Property will be available to all members of the community in perpetuity.

Management Plan

The management plan identifies and addresses issues related to natural resource protection and sustainable use of those resources. This plan will serve until the Town develops a full management plan. The plan outlines natural features and the way in which they will be managed. The more permanent management plan will mirror this management plan but will provide more detail in areas of interest to the Town.

This management plan was drafted by the Canaan Community Forest Committee, which is made up of stakeholders from the Town of Canaan, including selectmen, business owners, school representatives, and other residents. The committee has worked together since December 2010 to prepare for town ownership and management of this community forest.

BACKGROUND

The Property has been privately owned as farm and forest land since Canaan was settled. The most recent owners have been Neil and Louise Tillotson, with the title in the names of the Neil Tillotson Trust and the Tillotson Corporation. The residents of Canaan, Beecher Falls and surrounding towns have used the Property for winter and summer recreation with the tacit permission of the owners or their agents. Periodic timber harvesting has occurred.

In August 2012 a perpetual community forest conservation easement was conveyed on the property to the Vermont Land Trust. Subsequently the eased property was conveyed to the Town of Canaan. The Neil Tillotson Trust has funded the research and studies used to educate the conservation easement design and overall land transfer plan. The Neil Tillotson Trust has also provided the necessary funding for the Town of Canaan to acquire the parcel known as the Almon Kenney property located fully within the boundaries of the Property. The Kenney property consists of 10 acres with a building suitable for year round use. The acquisition of this parcel will enable the Town to provide educational opportunities on site, as well as provide adequate parking for multiple uses.

During 2011, the planning committee worked to identify objectives for a community forest owned by the Town. The donors, Trustees of the Neil Tillotson Trust, outlined their view of how this gift of land would serve the community. A survey was

administered to town residents by the Planning Board to capture their visions and intentions of how this property would be utilized. Multiple inventories were completed on the property to collect resource data on soils, timber, wildlife habitat, cultural resources, and ecological conditions. Together, these elements provide a solid foundation on which to plan for long term management of the property.

ORGANIZATION AND MANAGEMENT

Ownership of the Canaan Community Forest resides with the Town of Canaan. The Vermont Land Trust holds the conservation easement on the community forest. The Canaan Community Forest Committee shall be responsible for the management, administration, and care of the Canaan Community Forest, and shall act on these responsibilities under the supervision of the Town Select Board.

Community Forest Committee

The Community Forest Committee shall consist of seven members who shall be appointed by the Select Board, following nomination by the Committee.

- *One representative from Canaan Schools
- *One representative from the Planning Board
- *One original member of the 2011-2012 planning committee
- *Two other residents with the time and interest to participate fully
- *Two ex-officio members shall participate but not vote
 - Representative for the Select Board
 - The Town Treasurer

Terms of service shall be on a three year rotating basis with initial terms of varying lengths.

The officers of Chair, Secretary, and Treasurer shall be named annually by the committee members. The Chair will set meetings, develop agendas, and run the meetings. The Secretary will take minutes, and distribute to Committee members and the Select Board. The Committee Treasurer will work closely with the Town Treasurer to ensure related financial accounts are being properly maintained.

Meetings shall be held as needed, but not less than six times per year.

Communication with the Select Board shall be ongoing and practical, and a written report shall be submitted each year to be part of the Town's annual report.

Finances

The funds to manage and care for the Canaan Community Forest shall be held separately from the Town's general fund. Revenues generated shall be used solely for

the upkeep and care of the community forest as a sustainably managed asset; this Stewardship Fund will be managed using proper accounting procedures.

In recognition that there will be a reduction in taxes collected on the previous private Tillotson and Kenney properties, it is anticipated that some of the stewardship monies will be paid to the Town's General Fund to offset that revenue loss for a period of time to be determined jointly by the Community Forest Committee and the Select Board.

GENERAL PROPERTY DESCRIPTION

The Property consists of a large block of contiguous land located between the Town of Canaan and the Village of Beecher Falls. The acreage combines several historic farms which are no longer active. The farm houses and outbuildings have long since disintegrated although the old cellar holes remain, which may be of interest to the Canaan Historical Society. Importantly, there are a number of other large blocks of conserved land in the area, including lands of Emily Edwards, the former John Amey farm, the former Bill and Ursula Johnson farm, and across the US/Canadian border the towns of East Hereford and Saint- Hermenegilde Quebec will have a 15,000 acre community forest.

The tract is situated to the northeast of the Town of Canaan and directly west of the Village of Beecher Falls. The northern boundary is the international border shared with Canada. The VAST trail bisects the Property from west to east and serves as a multi-recreational trail for snowmobiling (VAST), cross country skiing, hiking and horseback riding. It is hoped that this trail will be used by all terrain vehicles (ATVs) in the near future and act as a connector to trails in ATV trails in Quebec and New Hampshire. This area also is directly adjacent to lands containing Canaan's water supply, the source of which lies in Quebec.

The tract is 424 acres in size and ranges from 1100 to 1400 feet in approximate elevation. It consists primarily of northern hardwood and coniferous forests with many seepage areas. The majority of the Property is wet, with limited use for development. The Property includes extended seepage forest wetlands, documented sites utilized by native Americans, and an undocumented deer yard.

Access to the Property will be provided by Green Hill Road, just south of the intersection of Powerhouse Road and Route 253. This road terminates at the former Kenney property which was just purchased by the Town of Canaan through a gift from the Tillotson Trust. This 10-acre parcel contains a house which could be used as an educational and/or community center, and will remain without easement restrictions, allowing the Town to utilize the property as it deems appropriate.

There are sizeable blocks of mature maple forest which could support commercial maple sugaring. This area is estimated to be 50 acres, and able to support

approximately 3,000 taps. Some private sugaring has occurred on the southeastern boundary of the Property within the past 15 years.

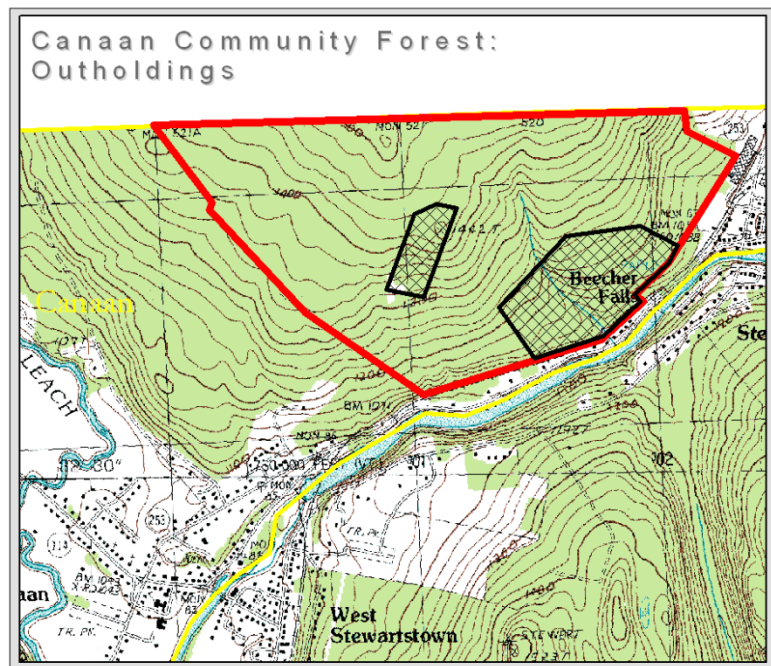
CONSERVATION EASEMENT

The Property is subject to a Grant of Development Rights, Conservation Restrictions, and Public Access Easement. This is a legal document signed by the Tillotson Trust and Tillotson Corporation prior to the land transfer, and enforced by the Vermont Land Trust, which protects the land from development for future generations, ensuring that it will always be a community forest. The primary purpose of the easement is “ensuring the availability of the Protected Property for public use and enjoyment, including, but not limited to, educational, recreational and other appropriate community activities by the people of the Town of Canaan and its schools.” Activities that do not support these conservation goals of the Property are limited or prohibited by the conservation easement. The full conservation easement and the conservation plan map are included in the Appendices. A baseline documentation report is available in the Town Office.

Outholdings

Easement outholdings are areas within the Canaan Community Forest that are not under protection of the conservation easement held by the Vermont Land Trust (called exclusions in the easement). These areas were left out of the easement due to their potential for future development by the Town in order to meet needs that may or may not be foreseen at this time. These specific outholdings are shown on Exhibit A and briefly described below.

- A 56-acre parcel on the southern end of the property, fronting the New Hampshire-owned railroad tracks within which a future industrial “energy” park may be constructed. Two areas within this envelope (one 7 acres and one 24 acres) have been identified in a report by Leach Engineering as feasible for this type of development. Access to this area will be across the NH DRED ownership – not through the conserved forest.



- A 10-acre property purchased from A. Kenney, accessed via Green Hill Road. This area is shown as an “out” on the conservation plan because it was purchased in a separate deed from the Tillotson property and therefore not considered to be part of the original property that was conserved with an easement.
- A 4-acre area adjacent to the northern line of the former Kenney property which has been excluded because, as a high point on the property, it may be a feasible site for a telecommunications tower in the future.

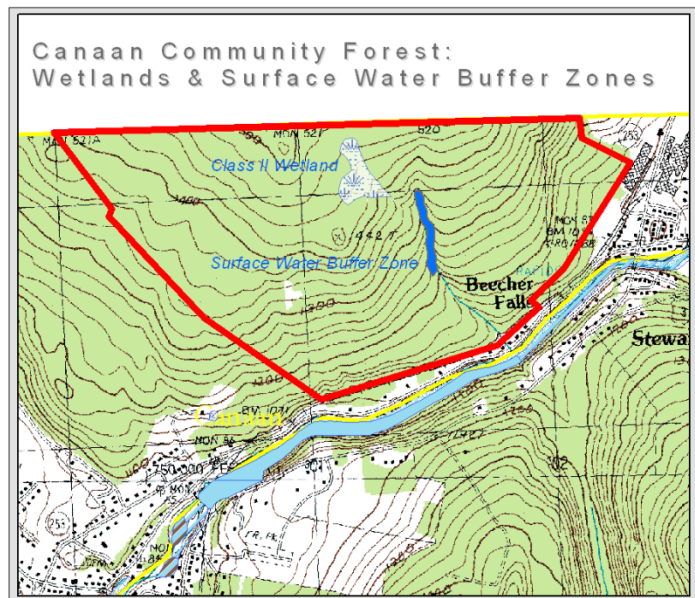
NATURAL RESOURCES

The Canaan Community Forest encompasses important natural resources including a wide diversity of natural communities, headwaters, streams, wetlands, historic sites, wildlife habitats, forest stands, and rare and uncommon plant species. A general description of these broad categories follows including preliminary thoughts about their management.

Wetlands, Streams and Riparian Areas

The forest encompasses headwaters for one perennial stream which drains directly into the Connecticut River as well as many ephemeral and intermittent streams. A stream may include any intermittent flow of water where there is a defined channel. The riparian areas along these streams are important for water quality as they provide for ground water recharge, filter sediment and other pollutants, provide shade, and enhance wildlife habitat.

The forest also encompasses large areas of seepage wetlands and wet-mesic forest types including one 6.6 acre Class II wetland as mapped by the Vermont Significant Wetlands Inventory. Forested wetlands account for 10% (42 acres) of the forest. In the preparation of the Final Management Plan, these areas will be given special consideration consistent with statutory requirements, current scientific evidence and good management practices for the necessary protection of wildlife habitat and wetland values.



Any activity which encroaches on a stream, riparian area or wetland must be designed to minimize the impact and maintain the natural condition. All forest management activities shall incorporate Vermont's Acceptable Management Practices (AMPs) For Maintaining Water Quality on Logging Jobs. The Conservation Restrictions provide

specific protections for Surface Water Buffer Zones (SWBZ) on the property (see the Conservation Plan in Appendix B). Within the identified SWBZ, the principle goal for management is the establishment and maintenance of a high quality, naturally vegetated buffer for surface waters that provides an array of ecological benefits, including

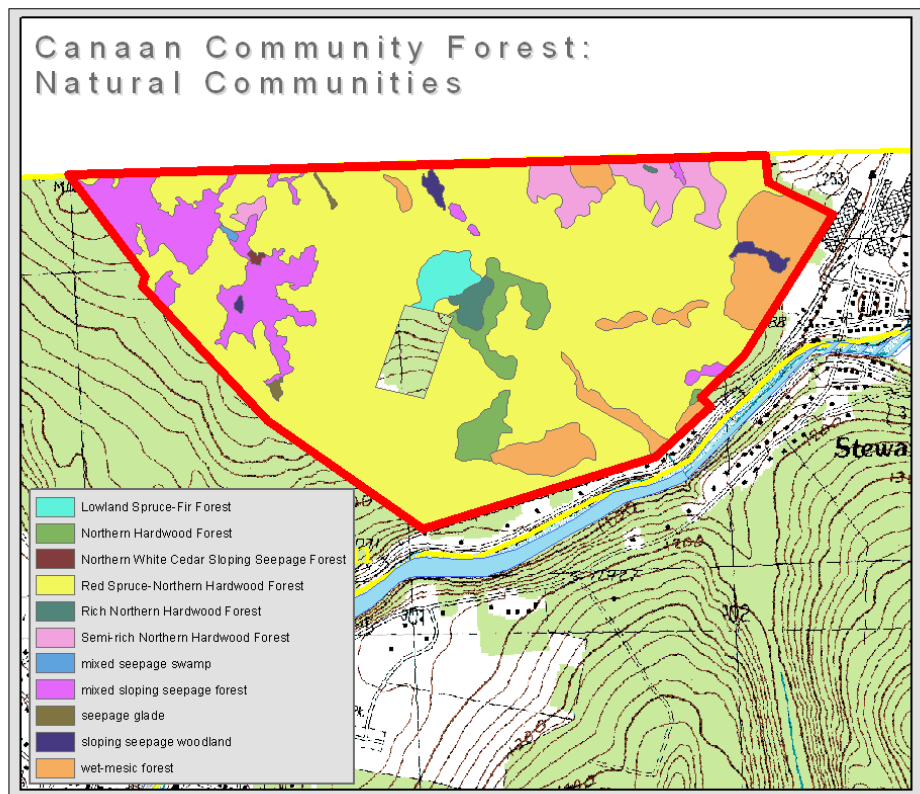
- a. buffering aquatic and wetland plants and animals from disturbance,
- b. preventing wetland and water quality degradation,
- c. providing important terrestrial and aquatic plant and animal habitat, and
- d. providing organic matter, nutrients, shade, and large diameter coarse woody debris over time for wetland, riparian, and aquatic systems.

Within the SWBZ the following management standards will apply:

1. Maintenance of existing roads and trails shall employ all applicable management practices and erosion control devices for road and stream crossings as detailed in Vermont's Acceptable Management Practices (AMPs) For Maintaining Water Quality on Logging Jobs.
2. All new roads and recreational trails will need prior approval from the Vermont Land Trust.
3. All management or use of the SWBZ shall be conducted in a manner designed to minimize erosion into surface waters or wetlands, will incorporate up-to-date ecological knowledge and management practices, and will be consistent with the principal goal and the four ecological benefits detailed above.

Natural Communities

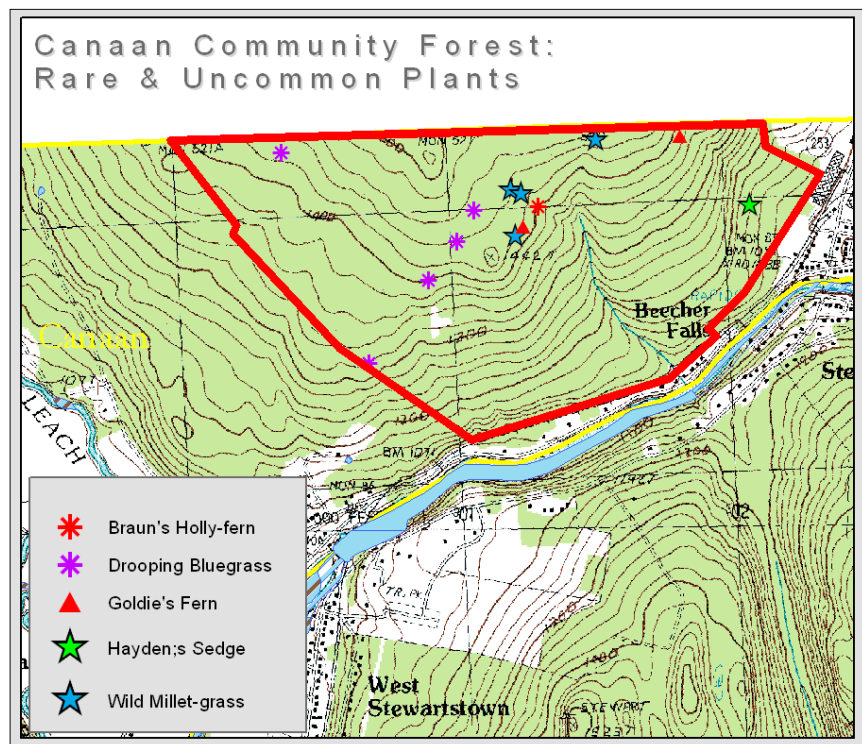
An ecological assessment of the Tillotson property was conducted in August and September 2011 (Appendix C). The assessment identified 15 separate natural communities which can be reduced to two main categories of upland and wetland. Areas of hydric soils often define small seeps and wet areas throughout the tract. The upland areas support hardwood communities with a rich mix of species. A northern white cedar sloping seepage forest is one of the more interesting wet areas on the property.



No classified natural community occurrences on the property are of state-level significance for biodiversity. All communities are quite common with the exception of the small northern white cedar sloping seepage forest, the rich northern hardwood forest and the lowland spruce–fir forest which are ranked (S3&S4) uncommon by the Vermont Natural Heritage Program. These areas, while not of statewide significance, are of local significance and contain several herbaceous species which enhance the biological diversity of the Property. Natural disturbance regimes will inform the management of the forest with the goal of maintaining, enhancing and restoring the natural communities.

Rare and Uncommon Plants

One rare (S2) and four uncommon (S3-S4) plant species were catalogued during the October 2011 ecological assessment. The “S” ranks are a rarity ranking given by the Vermont Natural Heritage Program, ranging from extremely rare (S1) to common (S5). While not listed on the Natural Heritage Program rare and uncommon plant list, the three S4 species included in the table below were S3 plants in the past and are still relatively uncommon on the Vermont landscape. They are also good indicator species of



enriched forests, especially higher elevation and/or more northerly rich forests. The Hayden's Sedge is the only obligate wetland species of the species in the table and occurs in the large sloping seepage woodland in the eastern corner of the forest. This 20-acre natural community (stand 2) will be set aside for timber management purposes. The other four species are typically upland species, though one colony of the Goldie's Fern and one colony of the Wild Millet Grass occurred in sloping seepage forest wetlands.

Common Name	Species Name	S-Rank	Notes
Hayden's Sedge	Carex haydenii	S2	Very small population

Drooping Bluegrass	<i>Poa saltuensis</i> spp.	S3	Several small colonies
Wild Millett-grass	<i>Milium effusum</i>	S4	Several colonies
Goldie's Fern	<i>Dryopteris goldiana</i>	S4	Two small colonies
Braun's Holly-fern	<i>Polystichum braunii</i>	S4	One plant

Wildlife Habitat

The community forest encompasses a variety of wildlife habitats including perennial streams, ephemeral streams and wetlands, plus hardwood, softwood and mixed forests of various ages.

Additionally a bird assessment of the parcel was conducted by an Audubon Vermont biologist during the summer season of 2011 (Appendix D). This review was intended to describe the current forest bird habitat conditions as well as provide management options for protecting and enhancing conditions for species experiencing long-term population declines. The assessment identified five habitat units including mixed mature, mixed intermediate, hardwood mature, softwood mature, and open scrub-shrub. The specific recommendations identified for each of these units will be addressed in the forest management plan.

While the property is not currently mapped as winter deer yard, evidence suggests that a significant number of deer use the parcel during the winter months. Given the value of this critical habitat component for the long term health of Vermont's deer herd, management practices will strive to perpetuate winter shelter, maintain deer mobility with travel lanes and provide accessible browse. Management practices will need to remain adaptive in order to ensure that the negative impacts of deer over-browsing the young vegetation do not devalue the timber resource or habitat values for other wildlife species.

Habitat management practices will include the following:

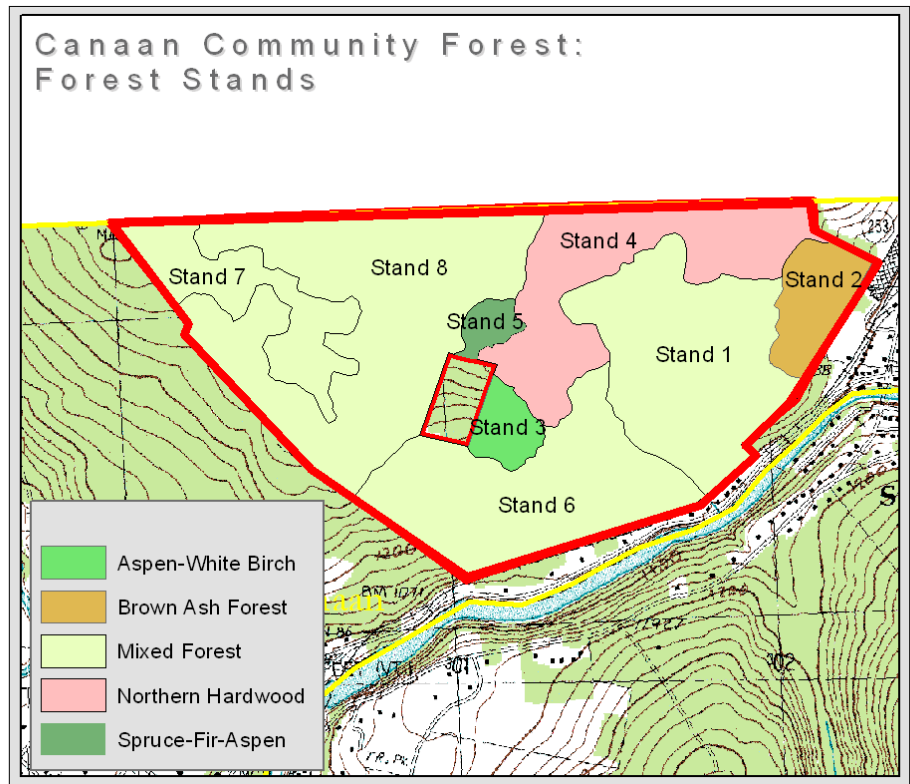
- Retaining, releasing, and regenerating yellow birch where possible for foraging nesting birds.
- Increasing the softwood component of the forest.
- Retaining inclusions of hardwoods in softwood stands and softwood inclusions in hardwood stands.
- Promoting inclusions of early-successional forest.
- Retaining groups of senescing spruce, fir, aspen, and birch for maintenance of black-backed woodpecker and yellow-bellied sapsucker habitat.
- Maintaining a diversity of fruiting trees and shrubs.
- Controlling invasive plant infestations.
- Increasing abundance of large diameter (>16" DBH) snags, cavity trees, and downed woody material.

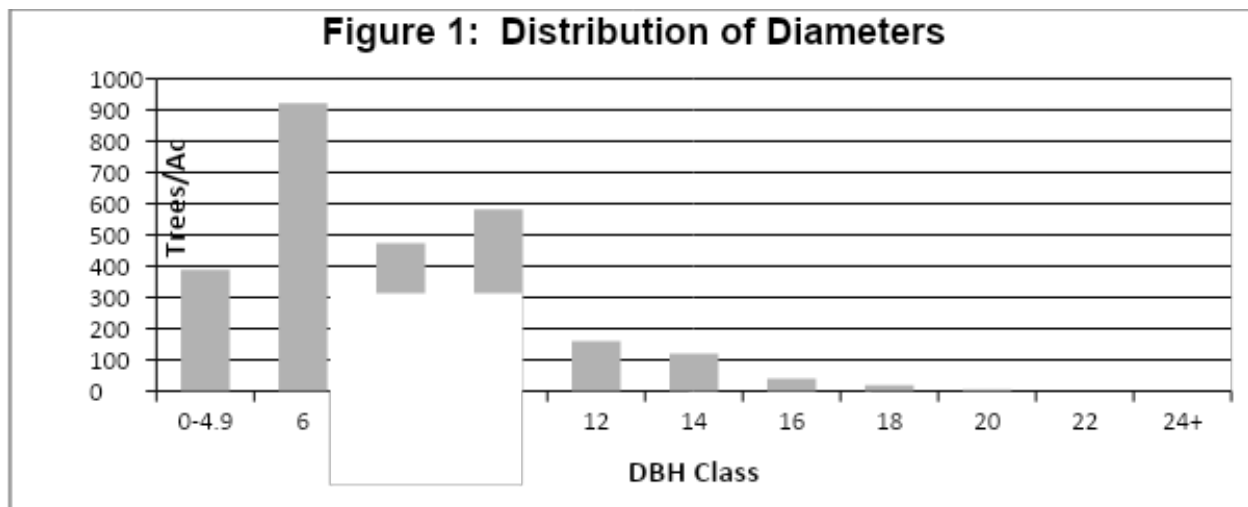
- Increasing the forests vertical structure to provide forest birds with increased foraging and nesting opportunities.
- Retaining functional winter shelter for deer by maintaining crown closure at 65% to 70% and maintaining closed canopy travel corridors 100 feet to 300 feet wide that connect core shelter areas with forage areas.

Forest Resources

A timber inventory was done in the fall of 2011 to measure, map, and evaluate the timber resources. The cruise was carried out by the Essex County Forester. Eight forest stands were identified. Pure hardwood accounts for 23% of the forest, hardwoods in mixed composition with softwoods totaled 76% while pure softwood occupied only 1%. Red maple, quaking aspen, white birch, black cherry, yellow birch and sugar maple are the primary hardwood species. Dominant softwood species include balsam fir, white spruce, red spruce and northern white cedar.

Figure 1 shows the average per acre diameter distribution of this parcel. This diameter distribution does not represent the natural cycling of a forest; 73% of the trees are pole-sized (6 inches to 10 inches) while fewer than 2% of the trees are larger than 16 inches in diameter.





Size Classes

Seedling/Sapling - Seedlings are defined as trees up to two inches in diameter while saplings are two to four inches in diameter. This forest is almost devoid of seedling sized stems. Where seedlings do occur, they have been heavily browsed by both wintering deer and moose. The sapling size class reflects the most recent cuttings within the past 25 years.

Poletimber - Trees classified as poletimber range from 4 to 10 inches in diameter. This size class of trees represents the majority of stocking on this forest.

Sawtimber - Approximately 13% of the timber resource here is in the sawtimber (12 inches+) size class. Much of this size class is accounted for as widely dispersed pulp quality hardwood stems.

Timber Volume and Quality

Sawlog volumes (Figure 2) were measured in average board feet per acre based on the International $\frac{1}{4}$ - inch rule. Softwood sawlogs were measured from 8+ inches in diameter and hardwoods from 12+ inches.

Total softwood volume was almost seven times that of hardwood. Softwood averaged about 2,200 board feet per acre while hardwoods averaged a mere 320 board feet per acre. Spruce and fir log volume was primarily scattered throughout the stands of mixed hardwood and softwoods and can be considered average quality. Hardwood log volumes consist of primarily low to medium grade red maple, sugar maple, white birch and yellow birch.

Pulp volume was measured in average cords per acre (128 cubic foot cord) for all stands. Average cord volume was almost 22 cords per acre consisting of 65% hardwood and 35% softwoods.

Figure 2 also presents total estimated volume on the forest and relative stumpage values based upon 2011 market data. The total sawlog and pulp values represent the hypothetical value if the forest was totally cleared of trees at this time.

Figure 2: Total Volume and Estimated Stumpage Value for Canaan Community Forest (2011)

<i><u>Species</u></i>	<i><u>Sawlog Volume (Board Feet)</u></i>	<i><u>Pulp Volume (Cords)</u></i>	<i><u>Sawlog Value (Dollars)</u></i>	<i><u>Pulp Value (Dollars)</u></i>
Paper Birch	9120	388	889.2	4365
Yellow Birch	6362	741	1336	8336.25
Red Maple	38953	2179	2434	24513
Sugar Maple	32827	913	7386	10271
Balsam Fir	684525	2843.6	77009	27725
Black Cherry	11156	126	335	1417
Hemlock	0	74		721
Aspen	0	1522.8		17122
Red Spruce	25304	155	2846	1511
White Spruce	198826	267.75	22367	2610
White Ash	37551	44	4036	495
White Cedar	28501	51	3705	500
TOTALS	1073125	9305.15	\$122,343.20	\$99,586.25

Timber Management

Timber management on the Canaan Community Forest will continue as forestry and timber harvesting are traditional and fundamental uses of land in Essex County. The growth, harvest, and utilization of timber have contributed to the social, cultural, and economic definition of Canaan since its founding. Objectives for the management of the community forest are as follows:

- The forest resources will be managed to achieve a continuous yield of wood products while enhancing a healthy and ecologically sustainable forest.

- Timber management decisions will be determined primarily by ecological and land capabilities, natural site and soil tendencies, natural disturbance patterns, and ecological processes.
- Timber will be managed in concert with the other uses of the forest.
- Wildlife habitat management will be integrated into timber management
- The forest will be utilized as an educational model forest resource for Canaan residents and students.

Strategies used to meet the above goals and objectives include the following:

- Uneven-aged management will be the method of choice for managing and regenerating stands.
- Limited even-aged management may be appropriate to provide certain ecological conditions.
- Timber management roads will be laid out to minimize the fragmentation of the forest and will be designed based on soil capabilities.
- In the event of a necessary salvage harvest, decisions to salvage will be utilized judiciously to ensure future forest productivity.
- Timber management will be consistent with wildlife habitat, ecological, and recreational objectives.
- Maintenance of water quality during harvesting will be of utmost priority.
- Harvesting systems that are appropriate to the site and objectives of the harvest will be chosen.
- Specific practices during harvesting will be implemented to minimize the visual and aesthetic impacts.
- Long-term soil productivity will be maintained by well-planned and executed timber harvests that minimize the effects on soil nutrients, erosion and compaction.
- As invasive plants pose a threat to forest ecosystems and forest productivity, efforts will be taken during harvesting to prevent their dispersal and establishment.
- As excessive damage to residual trees during timber harvests can negate the intended benefits of forest improvement operations, practices will be employed to minimize damage to residual trees and reduce the total area of compacted soils.
- Cultural resources including stone walls, cellar holes, and old dam sites will be protected during harvest operations.

This forest management plan is intended to cover the ten year period from 2013 to 2023. Figure 3 describes the recommended treatments for various stands.

Figure 3. Summary of Planned Forest Management

Stand	Recommended Harvest Year	Estimated Board Feet Sawlogs	Estimated Cord Pulp
-------	--------------------------	------------------------------	---------------------

1	2014	24 mbf	364
4	2014	38 mbf	245
6	2014	30 mbf	303
5	2019	none	80
7	2019	13.5 mbf	92
8	2019	61.8 mbf	460

Stand 1

Acres: 82

Current Forest Type: Mixed Forest

Natural Community: Red Spruce-Northern Hardwood Forest

Site Class: II-III

Soils: Cabot

Stand Description: Stand 1 is an even-aged mixed-wood stand composed primarily of red maple and balsam fir.

Stand Health: This stand contains a good mix of species that are all well-suited to the site/soil conditions. No serious forest health problems are threatening the stand at this time. One Japanese honeysuckle bush and an 8x8' patch of Japanese barberry were found. Wintering deer and heavy fern cover are also having an impact on seedling regeneration. Any attempts at regenerating this stand should be mindful of these potentially limiting factors.

Access/Operability: Access and operability of the majority of this stand is excellent due to proximity to landing sites and downhill skidding potential. One major stream crossing will need to be crossed with a portable skidder bridge.



Silvicultural Information:

Cruise Intensity: (26) variable radius (20/80 factor) plots

Age Class Distribution: Even-aged (60 years)

Regeneration: Lacking. 58% of mil acre plots stocked with heavily browsed red maple, white ash, yellow birch & balsam fir.

Total Basal Area per Acre: 138.5

Acceptable Basal Area per Acre: 60.1

Trees per Acre: 243

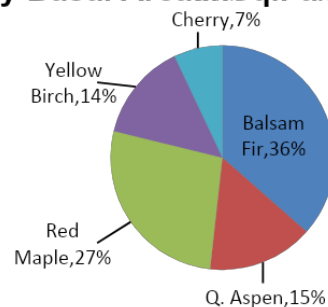
Quadratic Mean Stand Diameter: 10.22

Volume Information:

Sawtimber Volume: 1934BF/Acre

Cordwood Volume: 28.7

Stand 1: Species Composition by Basal Area in Sq.Ft./Ac

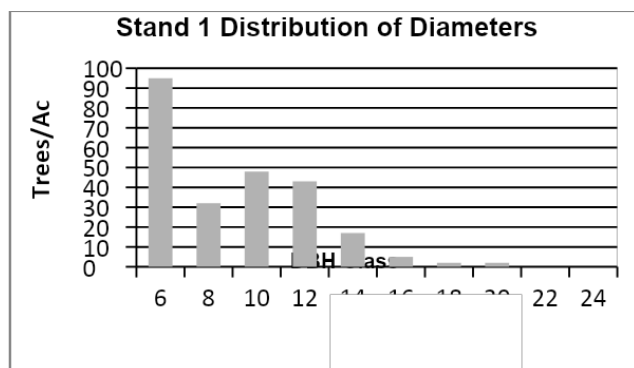


Recommended Silvicultural Plan:

Long Range Goals: Create a fine-grained, all-aged forest with a median canopy age of 150 years. Given the current condition of this stand emphasis will be placed on increasing the representation of red spruce and limiting the red maple component. To achieve this goal 1% per of the stand will be regenerated for each year between harvest entries.

Planned Management Practices: In 2014 conduct a group/patch clearcut treatment to begin the process of stand regeneration. This first harvest will concentrate groups and patch clearcuts in areas of declining aspen and balsam fir as well as areas of poor quality red maple with the goal of regenerating yellow birch and red spruce. Depending on overstory tree composition and established regeneration, groups and patches will range from a few trees to not more than 2 acres (majority less than .5 acres) in size and will not cover more than 15% of the stand. Patch clearcuts will utilize large-crowned yellow birch and red spruce as edge trees for seed. Tending between groups and patches to release crop stems and remove high risk trees will occur only along skid trails and will not reduce the basal area below 100 sq.ft./ac.

Habitat Management Practices:



- Retain groups of senescing spruce, fir, aspen and birch for maintenance of black-backed woodpecker and yellow-bellied sapsucker habitat
- Retain, release, and regenerate yellow birch where possible for foraging forest birds
- Increase the stand's softwood component
- Create inclusions of early successional forest
- Increase abundance of large diameter (>16" DBH) snags, cavity trees, and downed woody material.

Stand 2

Acres: 20

Current Forest Type: Brown Ash Forest

Natural Community: Sloping Seepage Woodland

Site Class: III

Soils: Cabot

Stand Description: Stand 2 is located on the far east side of the parcel. It is composed primarily of brown ash, black cherry, aspen, white spruce and balsam fir with speckled alder occasionally occurring in the understory. One very small population of the rare Hayden's Sedge plant occurs in this stand.

Stand Health: No stand health issues were observed.

Access/Operability: The thin, shallow to hardpan soils here present difficult operating conditions. Rutting, soil compaction, root shearing and erosion are all highly potential problems.



Silvicultural Information:

Cruise Intensity: (5) variable radius (20/80 factor) plots

Age Class Distribution: Even-aged (@ 25 years)

Regeneration: None

Total Basal Area per Acre: 60

Acceptable Basal Area per Acre: 24

Trees per Acre: 226 trees per acre

Quadratic Mean Stand Diameter: 6.97"

Volume Information:

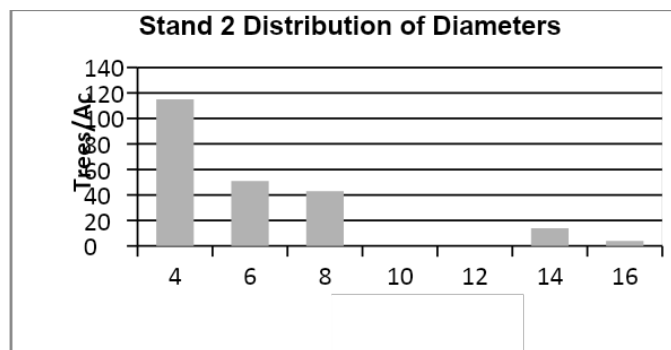
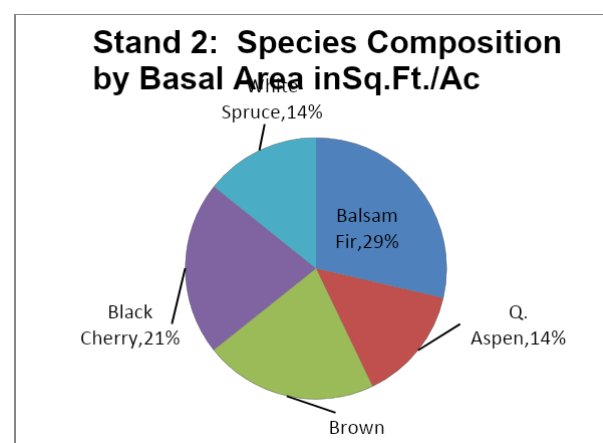
Sawtimber Volume: N/A

Cordwood Volume: 5 Cords/Acre

Recommended Silvicultural Plan:

Long Range Goals: The long range goal for this stand is to allow natural processes to determine the stands eventual composition. The ecological values of this stand far outweigh any potential timber income.

Planned Management Practices: Monitor stand for invasive plant infestations.



Habitat Management Practices:

- Maintain the high diversity of fruiting trees and shrubs
- Control and monitor non-native invasive plants

Stand 3

Acres: 10

Current Forest Type: Aspen-White Birch

Natural Community: Red Spruce-Northern Hardwood Forest

Site Class: II

Soils: Dixfield

Stand Description: Stand 3 is an early-successional stand which resulted from a clearcut 20-25 years ago.

Stand Health: Pockets of quaking aspen are showing severe decline due to hypoxylon canker. Regeneration heavily browsed by deer.

Access/Operability: Access to the stand is readily available by the existing network of skid trails.



Silvicultural Information:

Cruise Intensity: (3) variable radius (20/80 factor) plots

Age Class Distribution: Even-aged

Regeneration: Red maple, white ash, yellow birch.

Total Basal Area per Acre: 100

Acceptable Basal Area per Acre: 46

Trees per Acre: 608 trees per acre

Quadratic Mean Stand Diameter: 5.49"

Volume Information:

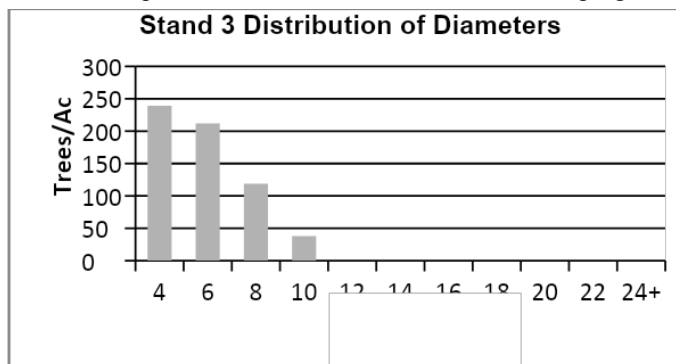
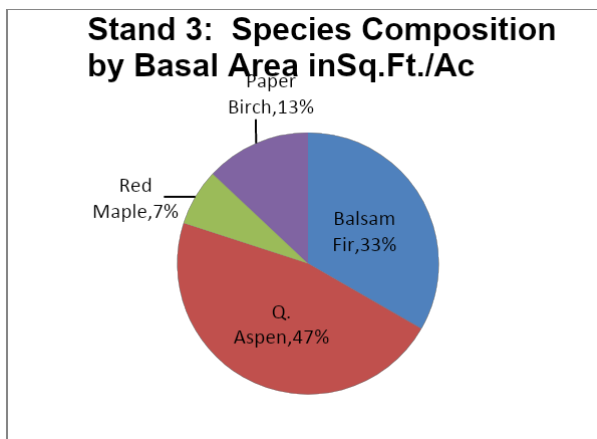
Sawtimber Volume: N/A

Cordwood Volume: 26 cords/ac

Recommended Silvicultural Plan:

Long Range Goals: The long range goal for the stand is to convert the existing intolerant mix of species to longer-lived shade tolerant species.

Planned Management Practices: None planned. Allow stand to continue developing.



Habitat Management Practices:

- Retain groups of senescing spruce, fir, aspen and birch for maintenance of black-backed woodpecker and yellow-bellied sapsucker habitat
- Retain, release, and regenerate yellow birch where possible for foraging forest birds
- Increase the stands softwood component
- Create inclusions of early successional forest
- Increase abundance of large diameter (>16"DBH) snags, cavity trees, and downed woody material. Where lacking actively recruit snags through girdling
- Monitor and control invasive plants

Stand 4

Acres: 66

Current Forest Type: Northern Hardwood

Natural Community: Northern Hardwood / Red Spruce
Northern Hardwood

Site Class: I-II

Soils: Dixfield

Stand Description: Stand 4 is a pole/small sawlog sized stand of northern hardwood with sugarbush potential. Sugar maple accounts for 50% of the stocking with 127 trees per acre. This stand should initially support a 3,500 tap operation with future potential of up to 6,000 taps. Rare/uncommon plants occurring in this stand includes the Wild Millet-grass, Goldie's Fern, and Braun's Holly-fern. These plants are all indicators of enriched soils.

Stand Health: There are no known forest health problems with this stand other than normal levels of eutypella canker and sugar maple borer damage.

Access/Operability: This stand is easily accessed using the network of established skid trails.

Silvicultural Information:

Cruise Intensity: (21) variable radius (20/80 factor) plots

Age Class Distribution: Even (two-aged)

Regeneration: Sugar maple, white ash, yellow birch, red maple

Total Basal Area per Acre: 125

Acceptable Basal Area per Acre: 57.5

Trees per Acre: 188 trees per acre

Quadratic Mean Stand Diameter: 11.06"

Volume Information:

Sawtimber Volume: 1.9 mbf/ac

Cordwood Volume: 19 cords/ac

Recommended Silvicultural Plan:

Long Range Goals: The long range goal for this stand is to develop a productive sugarbush.

Planned Management Practices: Northern hardwood thinning/crop tree release reducing the basal area to no less than 80 square feet. Release selected crop stems from competing vegetation. Pole-sized stems should receive a 2-3 sided, 5-10 foot crown release while sawtimber sized stems should be released on 1-3 sides. 25% of the stand will be maintained in species other than maple.

Tapping Guidelines: Continued sap productivity depends on maintaining healthy trees and determining the proper number of taps per tree and then distributing these taps over as large an area of tappable wood as possible. The following guidelines will be implemented to accomplish this:

- Drop lines will be 24-36" to allow vertical staggering as well as horizontal offsetting of new tap holes
- Taps should be placed at least 6" to one side and one foot above or below old tap holes which are still open
- Number of taps per tree should be based on the measured live circumference listed below

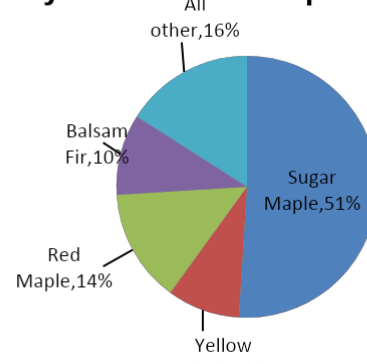
	Health Spout (5/16")	Standard Spout (7/16")
1 tap	10-14" diameter (30-42" circumference)	12-18" diameter (36-54" circumference)
2 taps	16-20" diameter (48-60" circumference)	20" & over, diameter (54"+ circumference)
3 taps	22" & over, diameter (66" & over circumference)	Prohibited

- Small diameter trees may be tapped if trees will be removed at the next thinning.

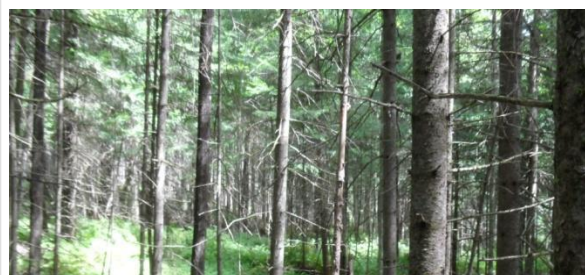


Stand 4: 2011

Stand 4: Species Composition by Basal Area in Sq.Ft./Ac



Stand 5



Acres: 6 acres

Current Forest Type: Spruce-Fir-Aspen

Natural Community: Lowland Spruce Fir

Site Class: III

Soils: Cabot

Stand Description: Stand 5 is a small aspen-dominated spruce-fir stand located on a rocky, shallow-to-hardpan flat near the middle of the parcel.

Stand Health: There are no known forest health problems with this stand other than occasional wind-thrown trees.

Access/Operability: Access to the stand is readily available via existing landings and skid roads.

Silvicultural Information:

Cruise Intensity: (2) variable radius (20/80 factor) plots

Age Class Distribution: Even-aged (@ 40 years)

Regeneration: None

Total Basal Area per Acre: 250

Acceptable Basal Area per Acre: 90

Trees per Acre: 478 trees per acre

Quadratic Mean Stand Diameter: 9.79"

Volume Information:

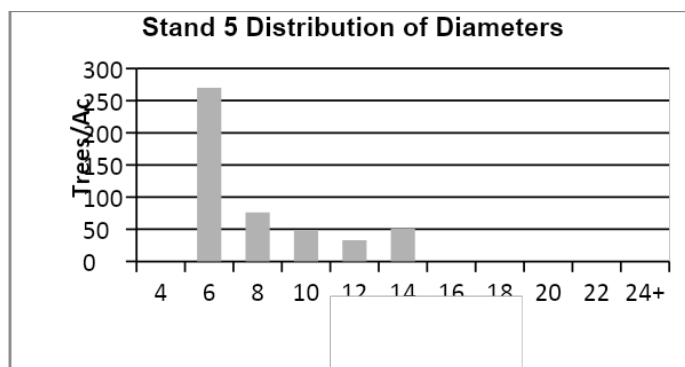
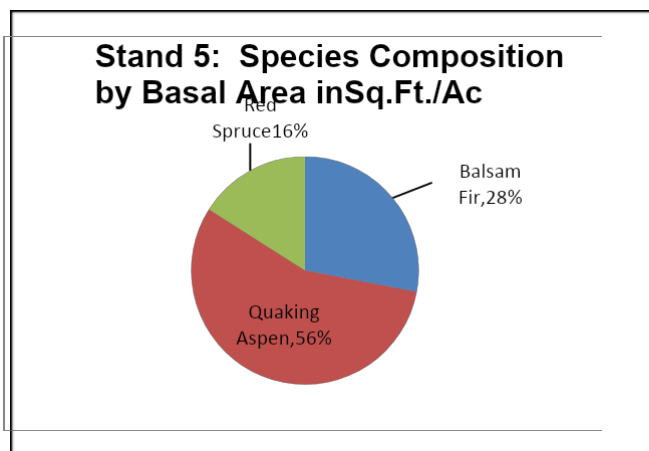
Sawtimber Volume: n/a

Cordwood Volume: 24 cords/ac

Recommended Silvicultural Plan:

Long Range Goals: The long range goal for this stand is to eventually return the species composition from the existing intolerant hardwood overstory to a multi-cohort, aging red spruce dominated stand.

Planned Management Practices: In 2019 conduct a light shelterwood/cleaning harvest focusing on aspen removal while retaining all red spruce and wind-firm balsam fir with good live crown ratio.



Habitat Management Practices:

- Retain groups of senescing spruce, fir, aspen and birch for maintenance of black-backed woodpecker and yellow-bellied sapsucker habitat
 - Increase the stands softwood component
 - Increase abundance of large diameter (>16"DBH) snags, cavity trees, and downed woody material. Where lacking actively recruit snags through girdling
 - Monitor and control invasive plants
- Increase vertical structure of stand to provide birds with greatest number of foraging and nesting opportunities.
 - Retain functional winter shelter for deer by maintaining crown closure 65-70%.
 - Maintain strips of closed canopy travel corridors 100-300' wide that connect core shelter areas with forage areas.

Stand 6

Acres: 80

Current Forest Type: Mixed

Natural Community: Red Spruce-Northern Hardwood Forest

Site Class: II-II

Soils: Cabot and Dixfield



Stand Description: Stand 6 is a mixed wood stand heavy to intolerant-intermediate hardwood. The long-range goal for this stand is create an all-aged condition with an emphasis on increasing the yellow birch representation. Past land use history has pushed this stand toward intolerant hardwood species such as quaking aspen and red maple.

Stand Health: Hypoxylon canker is affecting pockets of quaking aspen and balsam fir affected by butt rot is starting to windthrow. Heavy fern cover in places as well as browsing by deer is having an effect on the stands ability to regenerate. One patch of invasive honeysuckle was also found towards the center of the stand.

Access/Operability: Access to the stand is readily available via existing landings and skid roads.

Stand 6: 2011

Silvicultural Information:

Cruise Intensity: (25) variable radius (20/80 factor) plots

Age Class Distribution: Even-aged (@50 years)

Regeneration: None

Total Basal Area per Acre: 190

Acceptable Basal Area per Acre: 130

Trees per Acre: 288 trees per acre

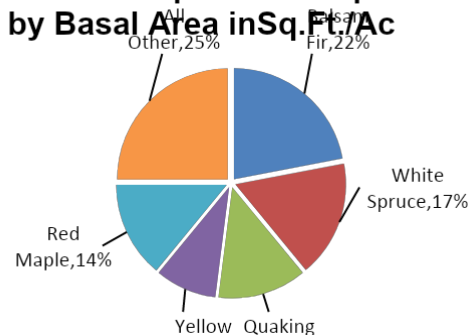
Quadratic Mean Stand Diameter: 11"

Volume Information:

Sawtimber Volume: 1.8144 mbf/ac

Cordwood Volume: 12.19 cords

Stand 6: Species Composition by Basal Area in Sq.Ft./Ac



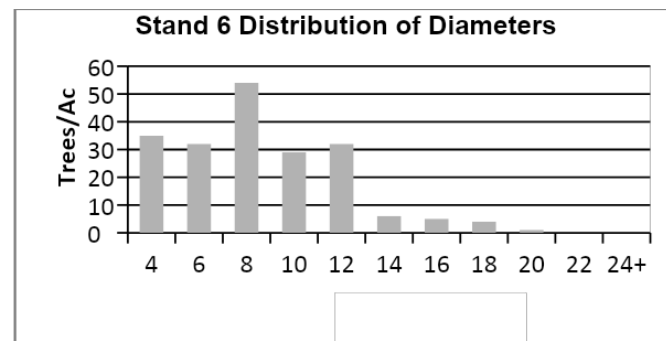
Recommended Silvicultural Plan:

Long Range Goals: The long-range goal for this stand is to create an all-aged condition with an emphasis on increasing an older age class of red spruce and yellow birch. The focus of the next several entries will be to establish new age classes by group/patch clearcut harvests. To achieve this goal 1% per of the stand will be regenerated for each year between harvest entries.

Planned Management Practices: In 2014 conduct a group/patch clearcut treatment to begin the process of stand regeneration. This first harvest will concentrate groups and patch clearcuts in areas of declining aspen and balsam fir as well as areas of poor quality red maple with the goal of regenerating yellow birch and red spruce. Depending on overstory tree composition and established regeneration, groups and patches will range from a few trees to not more than 2 acres (majority to be less than .5 acre) in size and will not cover more than 15% of the stand. Patch clearcuts will utilize large-crowned yellow birch and red spruce as edge trees for seed. Tending between groups and patches to release crop stems and remove high risk trees will not reduce the basal area below 100 sq.ft./ac.

Habitat Management Practices:

- Retain groups of senescing spruce, fir, aspen and birch for maintenance of black-backed woodpecker and yellow-bellied sapsucker habitat
- Increase the stands softwood component
- Increase abundance of large diameter (>16"DBH) snags, cavity trees, and downed woody material.
- Increase vertical structure of the stand.
- Retain functional winter shelter for deer by maintaining crown closure 65-70%.
- Maintain closed canopy travel corridors 100-300' wide that connect core shelter areas with forage areas.



Stand 7

Acres: 36

Current Forest Type: Mixed

Natural Community: Mixed Sloping Seepage Forest

Site Class: III

Soils: Cabot

Stand Description: Irregular shaped stand in the north-western corner of the parcel. Stand is very similar to stand 8 in species composition though much wetter due to the shallow to hardpan soils.

Stand Health: No known forest health problems affecting this stand.

Access/Operability: The thin, shallow to hardpan soils here present difficult operating conditions. Rutting, soil compaction, root shearing and erosion are all highly potential problems.

Stand 7: 2011

Silvicultural Information:

Cruise Intensity: (13) variable radius (20/80 factor) plots

Age Class Distribution: Even-aged (@60 years)

Regeneration: Some pockets of balsam fir and red maple regeneration though scant due to level of deer browse.

Total Basal Area per Acre: 135

Acceptable Basal Area per Acre: 75

Trees per Acre: 285

Quadratic Mean Stand Diameter: 9.3"

Volume Information:

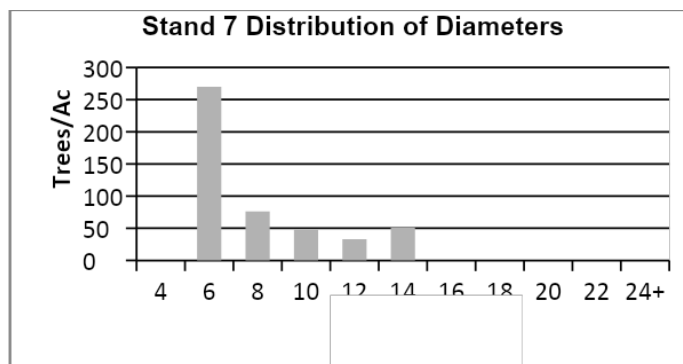
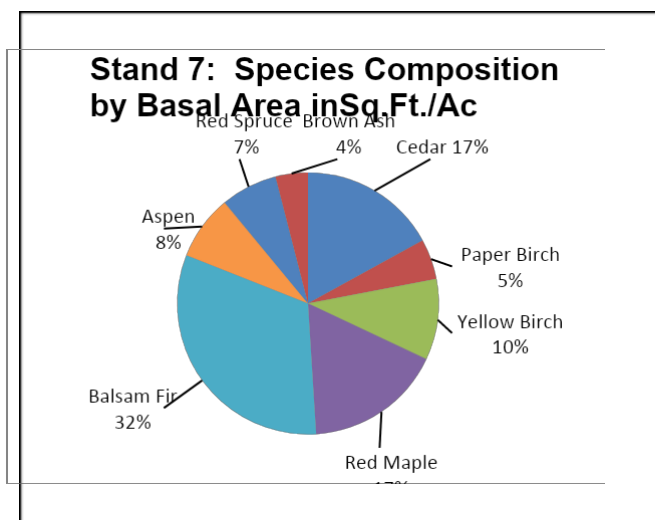
Sawtimber Volume: 2.498 mbf/ac

Cordwood Volume: 17.10 cords/ac

Recommended Silvicultural Plan:

Long Range Goals: The long-range goal for this stand is to create an all-aged condition with an emphasis on increasing the spruce-fir component for wintering white-tailed deer.

Planned Management Practices: In 2019 conduct a group shelterwood/expanding gap treatment to create and release established regeneration. Groups will cover no more than 15% of the stand and will range from several trees to 1/4 of an acre.



Habitat Management Practices:

- Retain groups of senescing spruce, fir, aspen and birch for maintenance of black-backed woodpecker and yellow-bellied sapsucker habitat.
- Increase stand's softwood component.
- Increase abundance of large diameter (>16" DBH) snags, cavity trees, and downed woody material. Where lacking actively recruit snags through girdling.
- Monitor and control invasive plants.
- Increase vertical structure of the stand to

provide forest birds with the greatest number of foraging and nesting opportunities.

- Retain functional winter shelter for deer by maintaining crown closure 65-70%.
- Maintain strips of closed canopy travel corridors 100-300' wide that connect core shelter areas with forage areas.

Stand 8

Acres: 124

Current Forest Type: Mixed Wood

Natural Community: Red Spruce-Northern Hardwood Forest

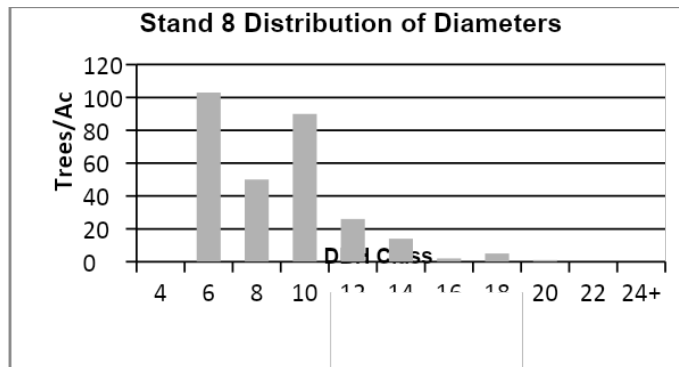


Site Class: II-III

Soils: Tunbridge, Cabot, Dixfield, Wilmington

Stand Description: Stand 8 is a large, highly irregular stand of balsam fir, grey birch and quaking aspen in a patchy distribution. The grey birch and quaking aspen occur in open glades that are minimally stocked and lack

regeneration due to high grass competition and likely browse pressure from deer. These glades resulted from harvesting during the mid 1980s which changed the hydrology of the soils causing the site to “swamp out” and establish a thick mat of grasses. Stand 8



contains five locations of the uncommon Drooping Bluegrass plant.

Stand 8: 2011

contains five locations of the uncommon Drooping Bluegrass plant.

Stand Health: Butt rot on balsam fir is evidenced by scattered windthrown stems and feeding by pileated woodpeckers. Pockets of quaking aspen have succumbed to hypoxylon canker. Both of these conditions warrant salvage attention during the next harvest entry.

Access/Operability: Access to the stand is readily available as the stand is adjacent to the interior access road and the existing landing.

Silvicultural Information:

Cruise Intensity: (40) variable radius (20/80 factor) plots

Age Class Distribution: Two-aged (25/60)

Regeneration: 35% of mil-acre plots stocked. Majority of stocking consists of over-browsed red maple saplings.

Total Basal Area per Acre: 138

Acceptable Basal Area per Acre: 72

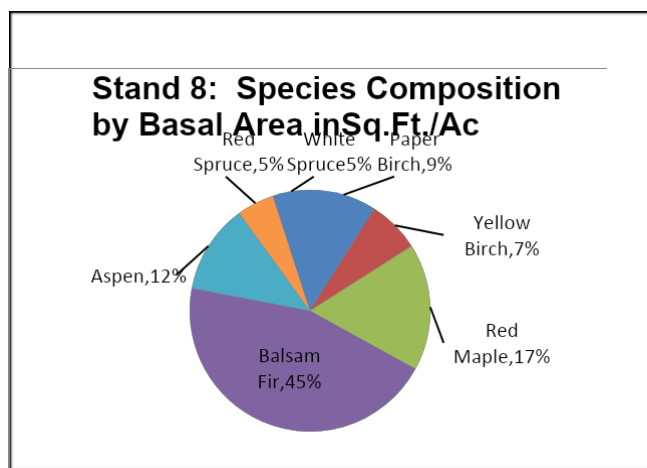
Trees per Acre: 291

Quadratic Mean Stand Diameter: 9.32

Volume Information:

Sawtimber Volume: 3.324mbf/ac

Cordwood Volume: 24.7 cords/ac



Recommended Silvicultural Plan:

Long Range Goals: Long range goals for this stand include developing a productive mixed wood stand with a heavier concentration of spruce and fir to support a sustainable yield of quality sawtimber and pulpwood forest products while supporting winter shelter for white-tailed deer. To achieve this goal 1% per of the stand will be regenerated for each year between harvest entries with a goal of 15 year harvest entries.

Planned Management Practices: In 2019 conduct a group/patch clearcut treatment to begin the process of stand regeneration. This first harvest will concentrate groups and patch clearcuts in areas of declining aspen and balsam fir as well as areas of poor quality red maple with the goal of regenerating yellow birch and red spruce. Depending on overstory tree composition and established regeneration, groups and patches will range from a few trees to not more than 2 acres (majority less than .5 acres) in size and will not cover more than 15% of the stand. Patch clearcuts will utilize large-crowned yellow birch and red spruce as edge trees for seed. Tending between groups and patches to release crop stems and remove high risk trees will occur only along skid trails and will not reduce the basal area below 100 sq.ft./ac.

Habitat Management Practices:

- Retain groups of senescing spruce, fir, aspen and birch for maintenance of black-backed woodpecker and yellow-bellied sapsucker habitat
- Increase the stands softwood component
- Increase abundance of large diameter (>16"DBH) snags, cavity trees, and downed woody material. Where lacking actively recruit snags through girdling
- Monitor and control invasive plants
- Increase vertical structure of the stand to provide forest birds with the greatest number of foraging and nesting opportunities.
- Retain functional winter shelter for deer by maintaining crown closure 65-70%.

- Maintain strips of closed canopy travel corridors 100-300' wide that connect core shelter areas with forage areas.

OTHER RESOURCES

Cultural Resources

During the fall of 2011, GEOARCH completed an Archaeological Resource Assessment on the Property. An excerpt from the report is presented in Appendix E. The full report is available at the Town Office. The report describes archaeological sensitivity variations based on project area topography, disturbances, and the availability of documentary evidence for potential historic period sites.

GEOARCH prepared these recommendations for the Property:

- (1) If and when project impacts are imminent and more clearly defined, then more detailed field inspections may be necessary in certain areas of the Property.
- (2) Portions of the landscape should be excluded from further examination because they are unlikely to affect historic properties.
- (3) Cultural resources should be considered for protection and interpretation and included as part of the full management plan.

A copy of the Archaeological Resource Assessment has been given to the Canaan Historical Society and future collaboration between the Historical Society and Community Forest Committee is likely to benefit and enrich the long-term stewardship and interpretation of the Canaan Community Forest. As specific cultural resources are found they will be catalogued and mapped.

Recreation

The community forest will be available for traditional recreational purposes in perpetuity. The Property has been used for many years by local residents for winter and summer recreation and hunting. It is the intention of the Town of Canaan that these uses be continued. For now these uses include

- snowmobiling (VAST trails),
- cross country skiing,
- snowshoeing
- hiking,
- hunting, fishing & trapping
- primitive camping and designated camping spots with lean-tos, and
- horseback riding.

It is hoped that the property will be used as a community recreational resource.

Hunting, fishing, and trapping will continue and occur under all applicable State and Federal regulations.

The existing VAST trail on the property may be upgraded to accommodate ATV use, as a connection as part of another, established, ATV trail network. Consistent with the conditions of the conservation easement, all other motorized vehicles will not be permitted recreationally on the Property. Snowmobiles will be allowed to access and use the existing V.A.S.T. trail on the Property. The full management plan will outline specific details of eventual ATV use on the Property.

Significant increased public use may compromise the ability of the Town to properly manage use of the Property. Therefore, the Town may limit access to the Property to assure compliance with any requirements of the grant of development rights and conservation restrictions or to protect the public health, and safety. Parking and safe use of the Property, will be managed so that public uses can continue while clearly maintaining the safety of visitors.

The Town anticipates that, in addition to the VAST and ATV trail network, there will be additional trails developed on the property. The trails to be developed will be for recreational use of the broader community with an emphasis on loop trails for pedestrian use. The use of mechanized vehicles and horses is envisioned to be limited to VAST trails unless, after public input, the committee approves other locations. There may also be a need to have roads for temporary vehicle access for forestry and sugaring purposes, to certain parts of the property.

Any proposal for trail development, road development, sign installation, and sanitary facility placement

- Must be presented in writing to the Community Forest Committee for approval;
- Will be considered in light of the appropriate standards for trail and back country building; and
- Will be considered in light of the uses of the Property as outlined in this Management Plan.

ATV trails shall be maintained by local clubs subject to an agreement between the club and the Forest Committee, as approved by VLT.

Physical Infrastructure

Access and Parking Areas

Location: Primary access to the Property will be from Route 253 onto Town Highway #37, also known as Green Hill Road, all the way to the former Almon Kenney property, now owned by the Town of Canaan. The Kenney property is 10 acres in size and provides an area for parking of vehicles as well as potential future staging areas.

The 56 +/- acre parcel that has been identified and excluded from the conservation easement area will be accessed from a location that has not been specifically identified as of now, but will likely be from the northeastern, lower perimeter of the property near the Beecher Falls area.

Vehicles will be allowed as needed to maintain parking areas, access points, and trails as well as those vehicles associated with sustainable agriculture and forestry.

Maple Sugaring

The Canaan community forest includes approximately 66 acres of northern hardwood forest, 51% of which is comprised of Sugar Maple. A long range goal for this stand is to develop a productive sugarbush. The purpose would be to provide education opportunities for area students, produce revenue for the Town, and possible recreational activities for the local residents. Governance of the sugarbush could involve any one, or a combination of, the following:

- an operation that is established and operated solely by Canaan Schools,
- as an entire, community-wide endeavor, including Canaan Schools, and/or
- leasing taps to a local sugarmaker who coordinates with Canaan Schools in order to offer educational opportunities in sugaring to area students.

Construction of a sugarhouse is expected; location of sugarhouse will require approval by the Vermont Land Trust before construction begins.

MANAGEMENT PLAN UPDATES

This management plan was be written by the Community Forest Committee in consultation with the Essex County Forester and the Vermont Land Trust. The process included opportunity for public input. After adoption, the plan will be reviewed and updated on a ten year schedule or after any major change to the Property.

APPENDIX A

GRANT OF DEVELOPMENT RIGHTS, CONSERVATION RESTRICTIONS, and PUBLIC ACCESS EASEMENT Vermont Land Trust

**GRANT OF DEVELOPMENT RIGHTS, CONSERVATION RESTRICTIONS,
and PUBLIC ACCESS EASEMENT**

KNOW ALL PERSONS BY THESE PRESENTS that **THOMAS S. DEANS, AS MANAGING TRUSTEE UNDER THE NEIL TILLOTSON TRUST**, dated February 11, 1976, as amended, having an address at c/o The McLane Law Firm, 900 Elm Street, Manchester, New Hampshire 03105 and **TILLOTSON CORPORATION**, a corporation organized under the laws of Massachusetts, having an address at 450 Bedford Street, Lexington Massachusetts, 02420 (hereinafter, collectively, "Grantor"), pursuant to Title 10 V.S.A. Chapters 34 and 155 and in consideration of the payment of Ten Dollars and other valuable consideration paid to its full satisfaction, does freely give, grant, sell, convey and confirm unto the **VERMONT LAND TRUST, INC.**, a non-profit corporation organized under the laws of the State of Vermont, with its principal offices in Montpelier, Vermont, and its successors and assigns (hereinafter "Grantee"), forever, the development rights, perpetual conservation easement restrictions, and public access easement and monitoring access (all as more particularly set forth below) in a certain tract of land (hereinafter "Protected Property") situated in the Town of Canaan, Essex County, State of Vermont, the Protected Property being more particularly described in Schedule A attached hereto and incorporated herein.

The development rights hereby conveyed to Grantee shall include all development rights except those specifically reserved by Grantor herein and those reasonably required to carry out the permitted uses of the Protected Property as herein described. The development rights, perpetual conservation easement restrictions, and public access easement hereby conveyed to Grantee consists of covenants on the part of Grantor to do or refrain from doing, severally and collectively, the various acts set forth below. It is hereby acknowledged that the development rights, perpetual conservation easement restrictions, and public access easement shall constitute a servitude upon and shall run with the land.

I. Purposes of this Grant and Management Plan.

A. Statement of Purposes.

1. Grantor and Grantee acknowledge the objective of ensuring the availability of the Protected Property for public use and enjoyment, including, but not limited to, educational, recreational and other appropriate community activities by the people of the Town of Canaan and its schools and, to that end, the purposes of this grant are as follows:

- a. Conserving forestry values, wildlife habitats, biological diversity, natural communities, riparian buffers, wetlands, soil productivity, water quality and native flora and fauna on the Protected Property;
- b. Conserving the ecological processes that sustain these natural resource values as they exist on the date of this instrument and as they may evolve in the future;
- c. Providing for non-motorized, non-commercial recreational, educational and other appropriate community uses on the Protected Property; and
- d. Conserving open space values, and scenic resources associated with the Protected Property for present and future generations.

2. These purposes will be advanced by conserving the Protected Property because it possesses the following attributes:
 - (a) includes 364 acres of forest available for long-term sustainable management for the production of forest products;
 - (b) is located between the Villages of Canaan and Beecher Fall, serving as an important connector for recreation between these two developed areas and is considered by town residents to be an important property in Canaan for maintaining the beauty, unique rural Vermont character and strong sense of place for community residents;
 - (c) has a diversity of natural communities associated with groundwater discharge, or seepage;
 - (d) hosts a rare (S2)plant, Hayden's sedge (*Carex haydenii*);
 - (e) has the possibility for recreational, cultural and educational uses by the Town, Canaan Schools and the community, including ski trails, maple sugar making school-based, experimental agriculture, community gardens, school-based Christmas tree production and apple orchards;
 - (f) is within one mile of Canaan schools;
 - (g) 3,191 feet of frontage on the former North Stratford Railroad rail bed which may become a rail trail in the future;
 - (h) traversed by 1,100 feet of a tributary of the Connecticut River; and
 - (i) is adjacent to 15,000 acres of forest being concurrently protected by the towns of East Hereford and Saint-Herménégilde, Quebec.

Grantor and Grantee recognize the Purposes of this Grant and share the common goal of conserving these values of the Protected Property by the conveyance of conservation restrictions, development rights and public access easement to prevent the use or development of the Protected Property for any purpose or in any manner which would conflict with the Purposes of this Grant. Grantee accepts such conservation restrictions, development rights and public access easement in order to conserve these values for present and future generations. The purposes set forth above in Section I(A)(1)(a-d) are hereafter collectively referred to as the "Purposes of this Grant."

B. Management Plans.

Grantor will, from time-to-time develop comprehensive Management Plans, including updates, revisions and amendments, for the Protected Property (hereinafter "Management Plans"). The Management Plans shall:

1. Provide for the use and management of the Protected Property in a fashion which is consistent with and advances the Purposes of this Grant; and
3. At a minimum, the Management Plans shall include the provisions required under this Grant, identify actions necessary to accomplish the following and shall appropriately balance all the resource attributes of and human uses for the Protected Property:
 - a. identify and address the management needs of the recreational uses that may need special or more intensive management focus;
 - b. provide for public access and meaningful recreational links to private and public lands;

- c. include a forest management plan approved by Grantee in accordance with Section I(C), below, if the Grantor proposes to harvest timber or wood products other than firewood for permitted uses on the Protected Property;
- d. provide a plan for road, sign, trail and sanitary facility use that has minimal impact on water quality and plant, wildlife and aquatic habitat resources and historic and cultural features;
- e. provide for the sustainable use of fish and wildlife resources;
- f. provide for the identification and protection of natural communities, plant, wildlife and aquatic habitat and other ecologically sensitive or important areas;
- g. provide for use by Canaan School's educational programs; and
- h. provide, as necessary, for any proposed use of the Surface Water Buffer Zone consistent with Section IV, below.

3. Otherwise be consistent with this Grant.

Prior to the final adoption of each Management Plan, including updates, revisions and amendments, Grantor shall: (a) secure appropriate public input from the people of the Town of Canaan and from the general public, and (b) develop the Management Plans in a timely and responsive manner. Grantor shall provide Grantee with a copy of each such final adopted Management Plan.

C. Forestry Plans.

Grantor shall not harvest timber or other wood products (except for the cutting of firewood for uses permitted under this Grant, including maple sugar production, on the Protected Property) without first developing in consultation with the Vermont Department of Forests, Parks and Recreation, or any successor Department a forest management plan. Said forest management plan and any updates, amendments or other changes thereto (collectively "the Forestry Plan") shall be submitted to Grantee for its approval prior to any harvesting. Grantee's approval of the Forestry Plan shall not be unreasonably withheld or conditioned, if the Forestry Plan has been approved by a professional forester and if the Forestry Plan is consistent with the Purposes of this Grant. Grantee may rely upon the advice and recommendations of such foresters, wildlife experts, conservation biologists or other experts as Grantee may select to determine whether the Forestry Plan is consistent with the Purposes of this Grant. The Forestry Plan shall be consistent with the Purposes of this Grant and shall include at least the following elements (except that those elements of the Forestry Plan which do not change need not be re-submitted in updates or amendments to the Forestry Plan):

- 1. Grantor's forest management objectives;
- 2. An appropriately scaled, accurate map indicating such items as forest stands, streams and wetlands, and major access routes (truck roads, landings and major skid trails);
- 3. Forest stand ("treatment unit") descriptions (forest types, stocking levels before and after harvesting, soils, topography, stand quality, site class, insect

- and disease occurrence, previous management history, and prescribed silvicultural treatment including harvest schedules);
4. Plant and wildlife considerations (identification of known significant habitats and management recommendations);
 5. Aesthetic and recreational considerations (impact on viewsheds from public roads, trails and places);
 6. Historic and cultural resource considerations (identification of known resources and associated management recommendations); and
 7. Management practices to be applied within Surface Water Buffer Zones, established in Section IV below, which may include but are not limited to shading, accumulation of coarse woody debris, harvest timing, water crossings and erosion controls.

The Forestry Plan shall be updated at least once every ten (10) years (or at such other intervals as Grantor and Grantees may mutually agree) if Grantor intends to harvest timber or other wood products. Amendments to the Forestry Plan shall be required in the event that Grantor proposes a treatment not included in the Forestry Plan, but no such amendment shall be required for any change in timing or sequence of treatments if such change does not vary more than five years from the prescription schedule set forth in the Forestry Plan as approved by Grantee. In the event that any treatment unit is substantially damaged by natural causes such as insect infestation, disease, ice, fire, or wind, Grantor may elect to conduct an alternative treatment in which event Grantor shall submit an amendment to the Forestry Plan for Grantee's approval prior to conducting any alternative treatment.

Disapproval by Grantee of a Forestry Plan proposing a heavy cut (as defined below) shall not be deemed unreasonable. Grantee, however, may approve a Forestry Plan or an amendment thereto proposing a heavy cut in its discretion if consistent with the Purposes of this Grant, including for the following purposes:

1. To release an established understory,
2. To permit the planting of different species of trees or the establishment or re-establishment of a field, orchard or pasture,
3. Wildlife management, or
4. To promote natural regeneration.

"Heavy cut" shall mean the harvesting of wood products below the "C-Line" or minimum stocking level on the Protected Property as determined by applying the protocol set forth in the current U.S. Department of Agriculture, Forest Service Silvicultural Guidelines for the Northeast or by applying a similar, successor standard approved by Grantee.

II. Restricted Uses of Protected Property.

1. The Protected Property shall be used for educational, forestry, non-motorized, non-commercial recreation, habitat conservation, natural area, and open space purposes only, except as otherwise specifically permitted under this Grant. No residential, commercial,

industrial or mining activities shall be permitted. The Protected Property may be used for agricultural purposes other than maple sugaring only with the prior written permission of Grantee. Grantee may grant such permission (with or without conditions) if it determines, in its sole discretion, that any such agricultural use would be consistent with the Purposes of this Grant. No building or structures shall be constructed, created, erected or moved onto the Protected Property, including but not limited to, telecommunication towers, except as specifically permitted in both Section III below and the Management Plans.

2. No rights-of-way, easements of ingress or egress, driveways, roads, or utility lines or easements shall be constructed, developed or maintained into, on, over, under, or across the Protected Property without the prior written permission of Grantee, except as otherwise specifically permitted under this Grant. Grantee may grant such permission if in its reasonable discretion it determines that any such improvement is consistent with the Purposes of this Grant.

3. There shall be no signs, billboards, or outdoor advertising of any kind erected or displayed on the Protected Property; provided, however, that Grantor may erect and maintain reasonable signs including but not limited to signs indicating the name of the Protected Property and its ownership by Grantor, boundary markers, directional signs, memorial plaques, informational and interpretive signs, and signs limiting access or use (subject to the limitations of Section V, below). Grantee may erect and maintain signs designating the Protected Property as land under the protection of Grantee, with the prior written permission of Grantor.

4. The placement, collection or storage of trash, human waste, or any other unsightly, harmful or offensive material on the Protected Property shall not be permitted except at such locations, if any, and in such a manner as shall be approved in advance in writing by Grantee and shall be consistent with the Grant and the Management Plans. The temporary storage of trash generated on the Protected Property in receptacles for periodic off-site disposal, shall be permitted without such prior written approval.

5. There shall be no disturbance of the surface, including but not limited to filling, excavation, removal of topsoil, sand, gravel, rocks or minerals, or change of the topography of the land in any manner, except as may be reasonably necessary to carry out the uses permitted on the Protected Property under this Grant. In no case shall surface mining of subsurface oil, gas, or other minerals be permitted.

6. Grantor shall not give, grant, sell, convey, subdivide, convey in separate parcels, transfer, mortgage, pledge, lease or otherwise encumber the Protected Property without the prior written approval of Grantee which approval may be granted, denied or conditioned in the Grantee's sole discretion.

7. There shall be no operation of motor vehicles on the Protected Property except for uses specifically reserved in Section III below, such as agriculture, wildlife and forest management, education, trail grooming, maintenance, for handicap access and for safety or emergency purposes, and for certain limited recreational uses as provided in Sections III(1) and (10), below.

8. There shall be no manipulation of natural watercourses, marshes, wetlands or other water bodies, nor shall there be activities conducted on the Protected Property which would be detrimental to water purity, or which could alter natural water level or flow, except as reasonably necessary to carry out the uses permitted on the Protected Property under this Grant. The construction of ponds or reservoirs shall be permitted only upon the prior written approval of Grantee, which approval shall not be unreasonably withheld or conditioned, provided that such pond or reservoir is located in a manner which is consistent with the Purposes of this Grant.

9. No use shall be made of the Protected Property, and no activity thereon shall be permitted which, in the reasonable opinion of Grantee, is not or is not likely to be consistent with the Purposes of this Grant. Grantor and Grantee acknowledge that, in view of the perpetual nature of this Grant, they are unable to foresee all potential future land uses, future technologies, and future evolution of the land and other natural resources, and other future occurrences affecting the Purposes of this Grant. Grantee, therefore, in its sole discretion, may determine whether (a) proposed uses or proposed improvements not contemplated by or addressed in this Grant, or (b) alterations in existing uses or structures, are consistent with the Purposes of this Grant. Due to the anticipated future municipal ownership of the Protected Property, Grantee may, in its sole discretion, approve future municipal uses of the Protected Property such as energy production, telecommunication improvements or public water supply.

III. Permitted Uses of the Protected Property.

Notwithstanding the foregoing, Grantor shall have the right to make the following uses of the Protected Property:

1. The right to use the Protected Property for all types of non-motorized, non-commercial recreational purposes including, but not limited to, educational activities, bird-watching, cross-country skiing, fishing, hiking, hunting, snowshoeing, trapping, walking and wildlife observation, consistent with the Purposes of this Grant. Use of the Protected Property for snowmobiling and for non-motorized, mechanized recreation such as mountain biking and by animals capable of transporting humans (including, but not limited to, horses) may be permitted in the discretion of Grantor if such uses are regulated in the Management Plans and are consistent with the Purposes of this Grant (not withstanding Section I. A. 1.(c), above, as it may pertain to snowmobiling.).

2. The right to use the Protected Property to conduct all activities allowed by the Management Plans, provided that such activities are reasonably necessary to carry out the Purposes of this Grant and are consistent with the Purposes of this Grant, and provided further that such activities are provided for in the Management Plans, such activities may include, but shall not be limited to the management of vegetation and wildlife, and the use and management of the Protected Property for non-motorized, non-commercial recreation. This Section III(2) shall not be construed to authorize the construction of new structures not otherwise specifically permitted by this Grant.

3. The right to establish, maintain and use fields, orchards and pastures for agricultural and/or horticultural purposes, recreational, scenic or open space purposes and/or for the purpose of maintaining or enhancing wildlife habitat on the Protected Property), provided

that the initial forest clearing activity required to establish such fields, orchards and pastures is a component of a forest management plan which is an element of the Management Plans and is consistent with the Purposes of this Grant.

4. The right to conduct maple sugaring operations. Further, the right to harvest timber and other forest products, together with the right to construct and maintain roads necessary for such activities, installing all erosion control devices and employing all applicable recommended practices described in the publication "Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont," a Vermont Department of Forests, Parks and Recreation publication dated August 15, 1987 (or such successor standard approved by Grantee) and in accordance with a forest management plan which forest management plan shall be a component of the Management Plans (see Section I(B) and (C), above).

5. The right to maintain, repair, improve and replace existing recreational trails, together with the right to clear, construct, repair, improve, maintain and replace new trails, provided that the location, use and construction of such new trails are consistent with the Purposes of this Grant and are provided for in the Management Plans.

6. The right to conduct periodic, temporary community and public entertainment events on the Protected Property, including concerts, fairs and celebrations, together with the right to erect tents and other temporary structures for such events.

7. The right to charge members of the public reasonable fees for admission to and use of the Protected Property, provided that such fees are collected only for community and public recreation, education or entertainment events on the Protected Property (including, but not limited to, children's activities, concerts, fairs and celebrations) or such fees as reasonably necessary to support Grantor's management of the Protected Property. The right to charge organizations reasonable fees for recreational use of a portion of the Protected Property provided that such use does not unreasonably interfere with the access of the general public to the Protected Property. Fees shall not be based on place of residency. All fees charged for admission to or use of the Protected Property shall be consistent with the Purposes of this Grant, especially that of public access, and shall be provided for in the Management Plans.

8. The right to issue temporary special use permits or licenses authorizing the commercial or non-commercial use of the Protected Property for recreational, community entertainment, educational, agricultural, forestry, or research purposes, provided that any such permit or license (i) does not unreasonably interfere with the access of the general public to the Protected Property, (ii) is for uses consistent with the Purposes of this Grant, and (iii) authorizes only uses of or actions on the Protected Property consistent of this Grant.

9. The right to construct and maintain sugar houses or similar forestry structures or facilities, and agricultural structures in support of agricultural uses which have been approved under Section III(3), above, together with necessary access drives and utilities, on the Protected Property, provided that such structures and facilities are used exclusively in functional support of forestry (or agriculture, if approved) conducted on the Protected Property and related educational activities, and provided further that such construction has been approved in writing in advance by Grantee. Grantee's approval may include designation of a complex surrounding the structures and shall not be unreasonably withheld or conditioned, provided that the structure

or facility is located in a manner which is consistent with the Purposes of this Grant. Grantor shall not deem unreasonable a condition by Grantee that certain structures must be located within a complex (meaning an area designated by Grantee within which certain structures are or shall be grouped together).

10. The right to permit non-commercial, recreational all-terrain vehicle ("ATV") use on, and the maintenance and repair of, the existing trail on the Protected Property (depicted as "ATV Trail" on the Canaan Town Conservation Plan referenced in Schedule A attached hereto) provided that it connects to a legally established network of ATV trails off the Protected Property; and provided that such use, maintenance and repair has no significant negative impact on the conservation values expressed in the Purposes of this Grant and is supervised and managed by the Grantor in accordance with terms and conditions approved by the Grantee and included in the Management Plan. The ATV Trail, or portions thereof, may be relocated but only with the prior written approval of the Grantee, which approval may be given, denied or conditioned in Grantee's sole discretion. The Grantor's right to permit ATV use on the Protected Property may be terminated by the Grantee at any time if, in its sole discretion, it determines that: (a) such use is having a significant negative impact on the conservation values expressed in the Purposes of this Grant; or (b) that Grantor is failing to supervise and manage such use in accordance with the terms and conditions approved by the Grantee in the Management Plan. As used herein, the term "ATV" means motorized vehicles, other than snowmobiles or motorcycles, of the sort exclusively and typically associated with recreational off-road use.

11. The right to construct, repair, maintain, and use a minimal number of minor structures (for example: deer stands, gazebos, hunting blinds, lean-tos, Adirondack shelters, tent platforms, tree houses, children's play houses, privies, kiosks, outdoor fireplaces) on the Protected Property provided that such structures shall not have any access roads or drives, utility services or facilities, waste disposal systems, or plumbing, and shall not be used for year-round, continuous residential occupancy or for any commercial activity and shall not exceed 300 square feet of floor space and fifteen feet in height. Grantor shall secure the written approval of Grantee prior to the construction of any such minor structure, which approval shall not be unreasonably withheld or conditioned, provided that the structure complies with the requirements of this Section III(12) and the number and location of such structures are consistent with the Purposes of this Grant.

12. The right to construct, maintain, repair and replace a permeable surfaced access drive and parking area, said parking area not to exceed 2000 square feet, at such location mutually agreed upon in writing by Grantor and Grantee. Said access drive and parking area shall be used only in connection with uses permitted under this Grant. Prior to the commencement of construction on such access drive or parking area, Grantor shall secure the prior written approval of Grantee, which approval shall not be unreasonably withheld or conditioned, provided the drive and parking area are of a size, location and configuration which are consistent with the Purposes of this Grant and this Section III(13).

IV. Surface Water Buffer Zones.

Those areas, in forest cover or in other natural vegetation, lying within fifty feet (50') of each bank or shore of the perennial streams, rivers, ponds, vernal pools, and other wetlands, or

within wetlands themselves, on the Protected Property depicted as “SWBZ” on the Canaan Town Conservation Plan, described in Schedule A attached hereto and incorporated herein, or any successor maps approved by Grantors and Grantee depicting the Protected Property, as those waters may move from time to time, shall be designated as Surface Water Buffer Zones (hereinafter “SWBZ”).

Within the SWBZ described herein, the goals, prescriptions and restrictions of this Section IV are in addition to the provisions of Sections II, III and V, and where inconsistent, the provisions of this Section IV shall supersede the provisions of Sections II, III and V.

The principal goal for management within the SWBZ is the establishment and maintenance of a high quality naturally vegetated buffer for surface waters that provides an array of ecological benefits including but not limited to:

- 1) buffering aquatic and wetland plants and animals from disturbance;
- 2) preventing wetland and water-quality degradation;
- 3) providing important terrestrial and aquatic plant and animal habitat;
- 4) providing organic matter, nutrients, shade, and large diameter coarse woody debris over time for wetland, riparian and aquatic systems.

Within the SWBZ the following management standards shall apply:

- 1) Maintenance of existing roads and trails shall employ all applicable management practices and erosion control devices for roads and stream crossings as detailed in the Vermont Department of Forests, Parks and Recreation’s Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont (AMPs) or its successor standards, unless otherwise approved by Grantee.
- 2) Roads and recreational trails first approved by Grantee if it finds, in its sole discretion, that such activities are not in substantial conflict with the management practices necessary to maintain a high quality buffer.
- 3) Any management or use of the SWBZ shall be conducted in a manner designed to minimize erosion into surface waters or wetlands, shall incorporate up-to-date ecological knowledge and management practices, and shall be consistent with the principal goal and the four ecological benefits detailed above.

V. Public Access.

Grantor covenants and agrees that the Protected Property shall be available to the general public for all types of non-commercial, non-motorized dispersed recreational and educational purposes (including, but not limited to, educational, bird-watching, boating, cross-country skiing, fishing, hiking, hunting, snowshoeing, swimming, trapping, walking and wildlife observation) consistent with the Purposes of this Grant. Notwithstanding the foregoing, Grantor may limit or restrict public access to the Protected Property to assure compliance with the requirements of this Grant, to protect natural habitats, or to protect the public health or

safety Grantor may condition any approval of a conveyance of the Protected Property under Section II(6) upon the conveyance of a separate Grant of Public Access Easement to Grantee in a form approved by Grantee.

VI. Enforcement of the Restrictions.

Grantee shall make reasonable efforts from time to time to assure compliance by Grantor with all of the covenants and restrictions herein. In connection with such efforts, Grantee may make periodic inspection of all or any portion of the Protected Property and for such inspection and enforcement purposes, Grantee shall have the right of reasonable access to the Protected Property. In the event that Grantee becomes aware of an event or circumstance of non-compliance with the terms and conditions herein set forth, Grantee shall give notice to Grantor of such event or circumstance of non-compliance by hand or by certified mail, return receipt requested, and demand corrective action by Grantor sufficient to abate such event or circumstance of non-compliance and restore the Protected Property to its previous condition. In the event there has been an event or circumstance of non-compliance which is corrected through negotiation and voluntary compliance but which has caused Grantee to incur extraordinary costs, including staff time, in investigating the non-compliance and securing its correction, Grantor shall at Grantee's request reimburse Grantee all such costs incurred in investigating the non-compliance and in securing its correction.

Failure by Grantor to cause discontinuance, abatement or such other corrective action as may be demanded by Grantee within a reasonable time after receipt of notice and reasonable opportunity to take corrective action shall entitle Grantee to bring an action in a court of competent jurisdiction to enforce this Grant and to recover any damages arising from such non-compliance. Such damages, when recovered, may be applied by Grantee to corrective action on the Protected Property, if necessary. If the court determines that Grantor has failed to comply with this Grant, Grantor shall reimburse Grantee for any reasonable costs of enforcement, including court costs and reasonable attorneys' fees, in addition to any other payments ordered by such court. In the event that Grantee initiates litigation and the court determines that Grantor has not failed to comply with this Grant and that Grantee has initiated litigation without reasonable cause or in bad faith, then Grantee shall reimburse Grantor for any reasonable costs of defending such action, including court costs and reasonable attorneys' fees. The parties to this Grant specifically acknowledge that events and circumstances of non-compliance constitute immediate and irreparable injury, loss and damage to the Protected Property and accordingly entitle Grantee to such equitable relief, including but not limited to injunctive relief and ex parte relief, as the Court deems just.

The remedies described herein are in addition to, and not in limitation of, any other remedies available to Grantee at law, in equity, or through administrative proceedings. No delay or omission by Grantee in the exercise of any right or remedy upon any breach of Grantor shall impair Grantee's rights or remedies or be construed as a waiver. Nothing in this enforcement section shall be construed as imposing a liability upon a prior owner of the Protected Property, when the event or circumstance of non-compliance occurred after said prior owner's ownership or control of the Protected Property has terminated.

VIII. Miscellaneous Provisions.

1. Where Grantor is required, as a result of this Grant, to obtain the prior written approval of Grantee before commencing an activity or act, and where Grantee has designated in writing another organization or entity which shall have the authority to grant such approval, the approval of said designee shall be deemed to be the approval of Grantee. Grantor shall reimburse Grantee or Grantee's designee for all extraordinary costs, including staff time, incurred in reviewing the proposed action requiring Grantee's approval; but not to include those costs which are expected and routine in scope. When Grantee has authorized a proposed action requiring approval under this Grant, Grantee shall, upon request, provide Grantor with a written certification in recordable form memorializing said approval.

2. It is hereby agreed that the construction of any buildings, structures or improvements, or any use of the land otherwise permitted under this Grant, shall be in accordance with all applicable ordinances, statutes and regulations of the Town of Canaan and the State of Vermont.

3. Grantee shall transfer the development rights, public access easement, and conservation easement and restrictions conveyed by Grantor herein only to a qualified holder, as defined in Chapter 34 of Title 10 V.S.A., in accordance with the laws of the State of Vermont and the regulations established by the Internal Revenue Service governing such transfers.

5. In the event the development rights or conservation restrictions conveyed to Grantee herein are extinguished by eminent domain or other legal proceedings, Grantee shall be entitled to any proceeds which pertain to the extinguishment of Grantee's rights and interests. Any proceeds from extinguishment shall be allocated between Grantor and Grantee using a ratio based upon the relative value of the development rights and conservation restrictions, and the value of the fee interest in the Protected Property, as determined by a qualified appraisal performed at the direction of either Grantor or Grantee in the year of this conveyance. Grantee shall use any such proceeds to preserve undeveloped and open space land in order to protect the aesthetic, cultural, educational, scientific, and natural resources of the state through non-regulatory means.

6. In any deed or lease conveying an interest in all or part of the Protected Property, Grantor shall make reference to the conservation easement, restrictions, and obligations described herein and shall indicate that this easement and restrictions are binding upon all successors in interest in the Protected Property in perpetuity. Grantor shall also notify Grantee of the name(s) and address(es) of Grantor's successor(s) in interest.

7. Grantee shall be entitled to rerecord this Grant, or to record a notice making reference to the existence of this Grant, in the Town of Canaan Land Records as may be necessary to satisfy the requirements of the Record Marketable Title Act, 27 V.S.A., Chapter 5, Subchapter 7, including 27 V.S.A. §§603 and 605.

8. The term "Grantor" shall include the successors and assigns of the original Grantor, Thomas S. Deans, as Managing Trustee under the Neil Tillotson Trust - dated February 11, 1976, as amended and Tillotson Corporation. The term "Grantee" shall include the successors and assigns of the original Grantee, Vermont Land Trust, Inc.

INVALIDATION of any provision hereof shall not affect any other provision of this Grant.

TO HAVE AND TO HOLD said granted development rights, conservation easement and restrictions, public access easement and access for monitoring, with all the privileges and appurtenances thereof, to the said Grantee, VERMONT LAND TRUST, INC., its successors and assigns, to its own use and behoof forever, and the said Grantor, THOMAS S. DEANS, AS MANAGING TRUSTEE UNDER THE NEIL TILLOTSON TRUST - dated February 11, 1976, as amended, and the TILLOTSON CORPORATION, on behalf of itself and its successors and assigns, does covenant with the said Grantee, its successors and assigns, that until the ensealing of these presents, it is the sole owner of the premises and has good right and title to convey the same in the manner aforesaid, that the premises are free from every encumbrance, except those of record, not intending hereby to reinstate any interest or right terminated or superseded by this Grant, operation of law, abandonment of 27 V.S.A. Ch. 5, Subch. 7; and it hereby engages to warrant and defend the same against all lawful claims whatever, except as aforesaid.

The undersigned have executed this Grant as of the ____ day of August, 2012.

GRANTOR

Thomas S. Deans, as Managing Trustee of the
Neil Tillotson Trust and not individually

TILLOTSON CORPORATION

By:_____
Thomas S. Deans, its President,
Hereunto duly authorized

COMMONWEALTH OF MASSACHUSETTS

_____, ss

August ___, 2012

Before me, the undersigned notary public, personally appeared Thomas S. Deans, whose name is signed on the attached document voluntarily for its stated purpose. The identity of such person was proved to me through satisfactory evidence of identification, which was () photographic identification with a signature issued by a federal or state governmental agency, () oath or affirmation of a credible witness, or () personal knowledge of the undersigned.

AFFIX
SEAL

Notary Public
My Commission Expires: _____

HERE

=====

SCHEDULE A
PROTECTED PROPERTY

Being all and the same land and premises decreed unto Frederick E. Tillotson, Thomas S. Deans, Everett Pearson, Grafton J. Corbett III, Esq. and Benjamin F. Gayman, Esq., Trustees of the Neil Tillotson Trust, by Amended Final Decree of Distribution issued by the Vermont Superior Court, Probate Division, Essex Unit in the Estate of Neil Tillotson, Docket No. P2349-04 ExTF on July 18, 2011, said Amended Decree having been received for record on December 30, 2011 and being recorded in Book 59, Pages 636-639 of the Town of Canaan Land Records, in which said decree said land and premises are more fully and particularly set forth and described as follows:

"424 Acres of land in Canaan, Vermont:

Being all and the same lands and premises conveyed to Neil E. Tillotson by the following deeds:

(1) Warranty Deed of Desire Therrien dated October 5, 1951, and recorded in Volume R, Page 108 of the Town of Canaan land records; excepting and excluding therefrom a portion of a 10.03 acre parcel conveyed by Warranty Deed of Neil E. Tillotson to W. Bruce Tibbetts and Ghislaine L. Tibbetts dated October 7, 1987, and recorded in Volume 34, Pages 53-55 of the Town of Canaan land records.

(2) Warranty Deed of Clayton Tirrill and Clarice Tirrill dated June 18, 1953, and recorded in Volume R, Page 157 of the Town of Canaan land records; excepting and excluding therefrom, a portion of a 10.03 acre parcel conveyed by Warranty Deed of Neil E. Tillotson to W. Bruce Tibbetts and Ghislaine L. Tibbetts dated October 7, 1987, and recorded in Volume 34, Pages 53-55 of the Town of Canaan land records.

(3) Warranty Deed of Frances Crete dated October 3, 1951, and recorded in Volume R, Page 107 of the Town of Canaan land records.

(4) Warranty Deed of Fred C. Carlton dated August 22, 1952, and recorded in Volume R, Page 147 of the Town of Canaan land records.

(5) Warranty Deed of Rose A. Marshall dated October 1, 1954, and recorded in Volume R, Page 200 of the Town of Canaan land records."

Specific reference is also made to the Warranty Deed dated January 24, 2008 and recorded in Book 55, Pages 448-449 of the Town of Canaan Land Records from Thomas S. Deans, Managing Trustee of the Neil Tillotson Trust, to Tillotson Corporation, and to the Final Decree of Distribution issued by the Essex District Probate Court in the Estate of Neil Tillotson, Docket No. P2349-04 ExTF, said decree being dated June 29, 2004 and recorded in Book 50, Pages 144-145 of the Town of Canaan Land Records.

Said property being depicted on a survey entitled "Survey Prepared For Neil Tillotson Trust Between the Northerly side of Vermont Route 253 and the United States/Canada Border, Canaan, Essex County, Vermont" dated December 21, 2010, Revised June 11, 2012 by F. W. Cowan and Sons, Inc. and recorded in Map Slot 9, Page 10 in the Town of Canaan Land Records.

Excepted and excluded from this description of the Protected Property are the following two (2) parcels of land:

1. A fifty-six and four-tenths (56.4) acre parcel more particularly described as follows:

Beginning at a tall leaning iron pipe marking the northwest corner of land now or formerly belonging to Ethan Allen, Inc. identified as parcel R8-4 on the Canaan Tax Maps; thence proceeding
North 44° West a distance of 605 feet, more or less, along the Protected Property to a point; thence turning and proceeding
North 81 ½° West a distance of 1,030 feet, more or less, along the Protected Property to a point; thence turning and proceeding
South 60 ½° West a distance of 1,300 feet, more or less, along the Protected Property to a point; thence turning and proceeding
South 17 ½° East a distance of 875 feet, more or less, along the Protected Property to a point on the northerly boundary of land now or formerly belonging to the State of New Hampshire identified as parcel U5-69 on the Canaan Tax Maps; thence turning and proceeding
South 89° 54' East a distance of 650 feet, more or less, along the northerly boundary of lands of the State of New Hampshire; thence turning and proceeding
Easterly a distance of 370.6 in a curve along the northerly boundary of lands of the State of New Hampshire, said curve having a chord bearing North 75° 06 East a distance of 368.8 feet; thence turning and proceeding
North 67° 49' East a distance of 587.6 feet, more or less, along the northerly boundary of lands of the State of New Hampshire; thence turning and proceeding
North 37° 04' West a distance of 173.1 feet, more or less, along the northerly boundary of lands of the State of New Hampshire; thence turning and proceeding
North 67° 43' East a distance of 726.1 feet, more or less, along the northerly boundary of lands of the State of New Hampshire; thence turning and proceeding
North 49° 34' East a distance of 245.0 feet, more or less, along the northerly boundary of lands of the State of New Hampshire to the point of beginning.

2. A four (4) acre parcel more particularly described as follows:

Beginning at a ¾ inch iron rod marking the northwest corner of a 10.1 acre parcel of land now or formerly owned by the Town of Canaan, said parcel is identified as parcel R7-4A on the Town of Canaan Tax Maps; thence proceeding
North 36° 40' East a distance of 200 feet, more or less, along the Protected Property to a point; thence turning 45° to the right and proceeding

North 81° 46' East a distance of 300 feet, more or less, along the Protected Property to a point;
thence turning and proceeding
South 59° 30' East a distance of 288 feet, more or less, along the Protected Property to a point;
thence turning and proceeding
South 36° 45' West a distance of 388 feet, more or less, along the Protected Property to a $\frac{3}{4}$
inch iron rod marking the northeast corner of lands of the Town of Canaan; thence
turning and proceeding
North 59° 38' West a distance of 280.5 feet, more or less, along the northerly boundary of lands
of the Town of Canaan; thence proceeding
North 59° 36' West a distance of 220.6 feet, more or less, along the northerly boundary of lands
of the Town of Canaan to the point of beginning.

Meaning and intending to include in this description of the Protected Property all of the land with the buildings and improvements thereon lying northerly of Vermont Highway #253, in the Town of Canaan, Vermont, **except as excluded above**, and generally described as containing 364.33 acres, more or less.

NOTICE: Unless otherwise expressly indicated, the descriptions in this Schedule A and in any subsequent Schedules are not based on a survey or subdivision plat. The Grantor and Grantee have used their best efforts to depict the approximate boundaries of the Protected Property and any excluded parcels, complexes or special treatment areas on a plan entitled "Vermont Land Trust – Tillotson Trust – Canaan Community Forest Property, Town of Canaan, Essex Co., VT, June 2012" signed by the Grantor and Grantee (referred to throughout this Grant and its Schedules as "Canaan Community Conservation Plan"). The Canaan Community Conservation Plan is based upon Vermont Base Map digital orthophotos, the survey referenced above, and other information available to Grantee at the time of the Plan's preparation. Any metes and bounds descriptions included in the Schedules herein are approximate only. They are computer generated and are not the result of field measurements or extensive title research. The Canaan Community Conservation Plan and any metes and bounds descriptions herein are intended solely for the use of the Grantor and Grantee in establishing the approximate location of the areas described and for administering and interpreting the terms and conditions of this Grant. No monuments have been placed on the ground. The Canaan Community Conservation Plan is kept by Grantee in its Stewardship Office. **The Canaan Community Conservation Plan is not a survey and must not be used as a survey or for any conveyance or subdivision of the land depicted thereon.**

Grantor and Grantee do not intend to imply any limitation on the area of land included in this description, should a survey determine that additional land is also encumbered by the Grant. If, in the future, the Grantor or Grantee shall prepare a survey of the Protected Property, of any portion thereof, or of any excluded lands, and that survey is accepted by the other party or confirmed by a court, the descriptions in the survey shall control.

Reference may be made to the above described deed and record, and to the deeds and records referred to therein, in further aid of this description.

APPENDIX B

**Conservation Plan Map
Vermont Land Trust**

APPENDIX C

**Ecological Assessment
Brett Engstrom
October 21, 2011**

APPENDIX D

**Forest Bird Habitat Assessment
Kristen Sharpless
Audubon Vermont
January 2012**

APPENDIX E

**Archeological Resource Assessment
GeoArch
March 2012**

APPENDIX F

Resident Survey Results Odette Crawford 2011

APPENDIX G

Phase I Environmental Assessment Wheeler Environmental Services February 2012