# **New York State Department of Environmental Conservation**

Division of Lands and Forests, Region 8

6274 East Avon-Lima Road, Avon NY 14414 **Phone:** (585) 226-5330 • **Fax:** (585) 226- 2909

Website: www.dec.state.ny.us



### FOREST STEWARDSHIP PLAN

Forest stewardship is the wise management and use of forest resources to ensure their health and productivity for the future with regard for generations to come. It requires the understanding that human life spans are short and that we are the caretakers of something that future generations will need to use. The recommendations in this plan are made assuming that the owners have a decent land ethic for their property and are protecting it from damage that would reduce its capacity to produce the multiple benefits that forest lands provide to both to the owners and to society in general.

DATE: February 2021 TOWN: North Dansville

OWNER: Town of North Dansville COUNTY: Livingston

PHONE NUMBER: 585 737 2540 AERIAL PHOTO:

TOTAL ACRES: 119 WATERSHED: Finger Lakes

FOREST STEWARDSHIP ACRES: 63 HOME ADDRESS: 14 Clara Barton St. Dansville,

NY 14437

PROPERTY LOCATION: 9800 Frontage Rd

Dansville NY

LANDOWNER GOAL STATEMENT: To manage the land for multiple benefits including forest health, wildlife, recreation, and aesthetics.

DEC works in conjunction with US Forest Service to promote the Forest Stewardship Program.

REPORT BY: Brice June

Service Forester

ADDRESS: NYS DEC

6274 East Avon-Lima Road Avon, New York 14414

PHONE: 585.226.5330

# PROPERTY DESCRIPTION

This parcel contains mostly native hardwoods and softwoods offering recreational opportunities, and a variety of wildlife habitat. The entire property is 119 acres, of which 63 acres are forested and the rest is town park, brush lots, and creek / drainage area. Access to the town road allows for entrance to the property, recreational pursuits, and timber management. For stand 2, 3, and 4 access will need to be figured out for a way through neighboring property. Stand 5 might be able to be accessed through Livingston County owned land on Poags Hole Rd. The topography varies from river bottom flats to steep hill side. Most of the low lying area is listed as Federal Wetland, any type of work done there should be considered and planned through Army Corps Engineers. The owners have an interest in forest management. For more detail, an aerial map is included.

#### **SOILS**

The soils on the property are rated as average for timber productivity – Soil types consist of River wash, Steep Broken Land made of Caneadea soil materials, Arkport fine sandy loam steep, and a little Eel silt loam make up the soil types on the property. There is also a Federal land classification of Stewardship Analysis Potential (SAP), they categorize by a 1-3 ranking system. For soil information see www.websoilsurvey.nrcs.usda.gov

#### STAND DESCRIPTIONS

The following is a description of the various forest stands found on the property. A stand is considered to be an area of the forest that is relatively uniform in species composition or age and can be managed as a single unit. At the top of each description the forest type is listed along with size class, level of stocking, site class and acreage. Please refer to the forest type map on the satellite image for stand delineations

Three size classes are recognized: (1) *Seedling-Sapling* [1"- 3"], (2) *Pole* [4"-11"] and (3) *Sawtimber* [12" and up]. Three categories are used for the level of stocking: (1) *Understocked*, (2) *Well-stocked*, and (3) *Overstocked*. An understocked stand would lose growth by not having enough stems to utilize the growing potential of the site adequately. An overstocked stand has too many stems in competition, and a corresponding reduction in the growth rate. A well-stocked stand represents a somewhat ideal density for realizing the growth potential on a site. Site class is a quality measure of the ability of the area to support tree growth. It is based on tree height at age 50 for natural stands and age 25 for plantations. Sites will be classified either *Poor*, *Average*, *Good* or *Excellent*.

Timber Stand Improvement = (TSI)

# Stand 1.

# Acres – 6; Poletimber stand; Site – Good; Well-stocked

The stand is Bottomland Hardwoods, consisting of Sycamore, Cottonwood, Ash, Black Walnut, Soft Maple, Hickory, White Ash, Hawthorn, with some invasive brush such as Honeysuckle and Buckthorn in the understory. This stand was harvested roughly 20 years ago, most of the sawtimber was removed. Evidence of EAB damage is just starting. Not much saleable timber in this stand. Currently some beavers are working on cutting trees on the southern edge along the creek. Reevaluate in 7-10 yrs.

#### Stand 2.

# Acres – 7; Sawtimber stand; Site – Wet; Over-stocked

The stand is Bottomland Hardwoods, consisting of Cottonwood, Sycamore, Ash, Black Walnut, Soft Maple, Hickory, Black Locust, Willow, Hawthorn, with some invasive brush such as Honeysuckle and Buckthorn in the understory. This stand is mostly Federal Wetland that seasonally has standing water in it, most of the walnut is around the edges and the on higher ground. There might be enough volume and value to attempt an ash salvage and low grade sale here, harvesting will be heavy to pallet logs but enough saw logs should be produced to make it worth the efforts, some of the larger walnuts can be added to the sale to make it more attractive. Evidence of EAB damage is just starting. An Ash salvage sale could be done to get some value out of the trees before they are destroyed by the insects. Reevaluate in 7-10 yrs.

#### Stand 3.

# Acres – 11; Sawtimber stand; Site – Wet; Over-stocked

The stand is Bottomland Hardwoods, consisting of Cottonwood, Tulip, Sycamore, Ash, Black Walnut, Soft Maple, Hickory, Black Locust, Willow, Hawthorn, with some invasive brush such as Honeysuckle and Buckthorn in the understory. This stand is mostly Federal Wetland that seasonally has standing water in it, most of the walnut is around the edges and the on higher ground. There should be enough volume and value to attempt an ash salvage and general thinning sale here, harvesting will be heavy to Cottonwood and Tulip logs but enough saw logs should be produced to make it worth the efforts, some of the larger walnuts can be added to the sale to make it more attractive. Evidence of EAB damage is just starting. An Ash salvage sale could be done to get some value out of the trees before they are destroyed by the insects. Reevaluate in 7-10 yrs.

## Stand 4.

# Acres – 26; Sawtimber stand; Site –Good; Over-stocked

This stand is Hemlock Hardwoods, consisting of Hemlock, Tulip, Sugar Maple, Ash, Basswood, Black Oak, Red Oak, Black Walnut, White Oak, Soft Maple, Hickory, and Ironwood. This stand is steep in places but has existing skid trails through most of the stand. Most of the walnut is around the edge at the norther portion at the toe of the slope. There should be enough volume and value to attempt an ash salvage and general thinning sale here, harvesting will be heavy to over mature stems and selections to improve spacing. enough saw logs should be produced to make it worth the effort. Evidence of EAB damage is just starting. An Ash salvage sale could be done to get some value out of the trees before they are destroyed by the insects. Reevaluate in 7-10 yrs.

# Stand 5.

# Acres – 13; Sawtimber stand; Site – Wet; Over-stocked

The stand is Bottomland Hardwoods, consisting of Cottonwood, Sycamore, Ash, Black Walnut, Soft Maple, Hickory, Black Locust, Willow, Hawthorn, with some invasive brush such as Honeysuckle and Buckthorn in the understory. This stand is mostly Federal Wetland that seasonally has standing water in it, most of the walnut is around the edges and the on higher ground. There might be enough volume and value to attempt an ash salvage and low grade sale here, harvesting will be heavy to pallet logs but enough saw logs should be produced to make it worth the efforts, some of the larger walnuts can be added to the sale to make it more attractive. Evidence of EAB damage is just starting. An Ash salvage sale could be done to get some value out of the trees before they are destroyed by the insects. Reevaluate in 7-10 yrs.

Grant money is sometimes available under the EQIP or CSP program for herbicide.

# **Environmental Quality Incentives Program (EQIP)**

They are administered by the Natural Resource Conservation Service in Livingston County (243 0043 ex. 110) or see the national website at http://www.nrcs.usda.gov/programs

**EQIP 666 – Thinning/ Spraying -** some stands could benefit from thinning and herbicide treatment.

#### RARE AND ENDANGERED SPECIES

A check of the Natural Heritage database found no threatened species to be present on the property.

#### ARCHEOLOGICAL SITES and HERITAGE AREAS

A search of the NYS Office of Parks, Recreation & Historic Preservation (OPRHP) database found all of the area to be in the buffer of archeological significance on the property. Typical forestry management operations are not likely to be curtailed within these designated areas. However, contacting the OPRHP prior to any substantial land use changes to ascertain their impact is advisable. The OPRHP general number is 518-237-8643 and their website contains an interactive map for archeological and historic sites is <a href="http://www.nysparks.state.ny.us/shpo/resources/index.htm">http://www.nysparks.state.ny.us/shpo/resources/index.htm</a>

# **Climate Change Effects in Northern Forests**

People may disagree on causes of climate change, but it may not hurt to be prepared. Here are a few predictions:

- Temperature will increase, the temperature increase will be more in the winter that in the summer.
- More precipitation is expected annually, much of the increase is expected in the winter. Precipitation may decrease in the summer. Droughts may be possible.
- The number of storms and extreme weather events is likely to increase.
- The warmer temperatures will have both good and bad effects on forests; we do not know how this will play out.

For properties with large road systems, when replacing culverts increase the size. You will reduce your risks for costly emergency repairs. Keeping stands healthy and forest more resilient will be important. Diversify the ages of stands, older stands may not bounce back from drought or insect infestations Species diversity will be important.

**Biological diversity** – defined as the variability among living organisms from all sources including diversity within species and ecosystems.

Ecological processes & biodiversity change over time.

# **Four Components of Biological Diversity**

- Genetic diversity
- Species diversity
- Structural diversity important for animal species diversity.
- Functional diversity variation in functional characteristics of trees. Evergreen vs deciduous, shade tolerant vs light demanding, shallow rooted vs deep rooted and others.

# A goal of thinning is to:

- Increase understory plant diversity.
- Increase organic matter.

# SOIL AND WATER PROTECTION

Generally, forest management activities are exempt from the Environmental Conservation Law that regulates fresh water wetlands. However, road building (placing fill in a wetland), drainage activities, clear cutting, or building dwellings in a wetland or within 100 feet of a wetland all require permits. Consult a DEC wetland specialist for wetland boundary delineation or when planning any major disturbance in a wetland. By applying the Timber Harvesting Guidelines for New York, and following Best Management Practices (BMP's), soil and water resources can be protected.

Research has shown that it is not the act of cutting trees or their absence that causes erosion. Studies made to date estimate that 90 to 95 percent of erosion results from exposed soil in roads and from concentrated water runoff on poorly drained soils.http://www.dec.state.ny.us

For wetlands information see <a href="http://water.epa.gov/type/wetlands/index.cfm">http://water.epa.gov/type/wetlands/index.cfm</a>

Federal regulations are administered by the Army Core of Engineers see www.wetlands.com/regs/tlpgeola.htm For DEC regulations see <a href="https://www.dec.state.ny.us">www.dec.state.ny.us</a>

# WILDLIFE HABITAT

The potential for wildlife species is linked to the combination of environmental factors, such as food, water, cover, and their spatial distribution, that a given species needs to survive and reproduce in a given area. Each species has unique habitat requirements. Food sources include fruit and nuts, foliage, wood, insects and other animals. Cover includes hiding places that provide animals with protection from weather, predators, or other dangers. Specialized types of cover include breeding cover, escape cover, resting cover, and travel cover. Sources of water are streams, ponds, temporary pools and springs.

To increase species richness (the number of different species) in your forest, it is important to increase both horizontal and vertical diversity to provide as varied a habitat as possible. Horizontal diversity is the intermixing of plant communities across a large area. For example, a northern hardwoods community, a grass community, and a spruce/fir community located near each other creates a high degree of horizontal diversity. Vertical diversity occurs when there are many layers of plants. For example, moss on rocks, vines over logs, flowers and grasses, small bushes and tree seedlings, saplings and other small trees, and tall trees, all growing in a small area create many layers.

If you have a small area and you are interested in species richness, it is especially important to consider the surrounding area. The forest cover type on your property may be unique and by modifying it, you could

decrease the overall richness of your neighborhood. Or, if your cover type is the same as your neighbors, changing it could increase the diversity considerably.

Proper forest management benefits many species of wildlife by creating more diverse habitat, increasing food producing plants and creating cover. The landowner can improve wildlife on the property by accomplishing one or more of the following projects:

- 1. Creating Brush Piles These will serve as cover for small mammals, especially snowshoe hare, birds and reptiles and amphibians. Piles can be created from limbs and logging debris.
- 2. Releasing and Caring for Apple and other Fruit Trees These trees are an important source of food for many species of wildlife. By releasing them from competing, their wildlife value will be prolonged.
- 3. Den and Cavity Tree Preservation Many species of birds and mammals require cavities in dead or living trees for nesting or shelter. The number of these trees can be a limiting factor in the number of bird and wildlife species found on the property. Snag trees may already be present on the property or they can be created by girdling trees.
- 4. Nest boxes and other nesting structures installed by the landowner can provide additional cover.
- 5. Trees, shrubs and vines that have wildlife value can be planted as food sources. Seeds of herbaceous plants can be sown.
- 6. Creating and Maintaining Openings These will serve to enhance both the horizontal and vertical diversity of the property. Openings are dominated by shrub and herbaceous plant growth. Openings can be created during harvesting activities or by cutting trees and leaving them. Downed trees provide additional cover for small mammals, reptiles and amphibians.

# FISHERIES HABITAT

The management practices that occur on individual parcels have the potential to affect fisheries and water quality on other properties in the watershed. Utilization of Best Management Practices can prevent a negative watershed and fisheries impact. Further advice or guidance can be obtained by the DEC Fisheries Department at 226-5343. Every property does not contain fisheries habitat.

### RECREATION AND AESTHETICS

The development of access roads and trails, which are important in managing for forest products, can also be used for hiking, skiing, nature interpretation, or other recreational pursuits. Seeding these trails and roads with native grasses can increase the aesthetics and be valuable to wildlife. Areas that have served as log landings, when properly located and seeded, can be effective food plots for wildlife and parking/turnaround areas for recreational use. Thinning, when timed properly, will allow the trees to grow at faster rates, becoming larger and creating a more aesthetically pleasing woodlot. Retaining the services of a forester is highly recommended to ensure that the work be carried out with proper management and care to protect future recreation and aesthetic values. Recreational opportunities are as varied and diverse as the many individuals owning forest land; the landowner's objectives and goals will dictate the possible recreation and aesthetics scenarios.

#### FOREST HEALTH

A healthy forest is more likely to be compatible with forest stewardship plans than an unhealthy forest. Just like people, healthy forests are better able to resist damaging agents than unhealthy ones. Agents that cause damage to individual trees include insects, diseases and wildlife pests, along with adverse weather events and undesirable activities by people, such as wounding of trees and air pollution. Types of damage range from reduced visual quality, deformity, growth loss, or wood destruction, to dying back of branches or premature mortality. The extent of damage ranges from a few trees to whole forest stands. When a few trees are affected the forest remains healthy, but when most of the trees are damaged the forest is at risk.

Most insects, diseases, wildlife and weather events are part of a set of natural forces changing your forest. Some of these are beneficial or do not cause much damage. Others are extensive and cause severe damage (for example, insect outbreaks). Maintaining the health of the forest to help prevent serious damage is something to keep in mind. Preventive care will help ensure that the forest provides the desired benefits.

Maintaining the health of the forest is important to help prevent damaging problems from interfering with the benefits received from the forest. Consider the following general guidelines to maintain forest health:

- 1. Consider that some amount of damage from disease, wildlife pest, insects, and weather is normal and can be beneficial to the overall health of the forest.
- 2. Remove excessive numbers of over mature, weak or damaged trees that are most likely to be affected by damaging agents. However, consider that some of these trees are beneficial to certain wildlife species.
- 3. Encourage mixtures of tree species to minimize damage from problems that attack specific types of trees.
- 4. Discourage tree species that are not well adapted for the climate and soil properties in the area.
- 5. Maintain a density of trees that provides them with adequate growing space.
- 6. Avoid wounding your trees and compacting the soil during treatments and recreational activities.
- 7. Prevent livestock from grazing in the woods.
- 8. Avoid implementing treatments during or soon after events like droughts or outbreaks of insects or diseases.
- 9. Stay informed of pest alerts and current problems.
- 10. Monitor the forest frequently for symptoms of damaging agents.
- 11. Consider utilizing pest suppression programs recommended by the state or county forestry agency.
- 12. Support regulations geared toward reducing the spread of non-native pests, and reducing levels of air pollution.
- 13. Follow quarantine regulations for specific pests and their host plants.
- 14. Salvage dead or damaged trees after a problem occurs.

# **Carbon Sequestration and Climate Resilience**

Climate change impacts to forests will be increasingly direct, through changing temperature, precipitation, and severe weather conditions, as well as indirect, through more intense stress, shifting disturbance patterns, and effects on pests and diseases. Maintaining healthy, resilient forests over time will require a clear appraisal of the risks and opportunities presented by climate change, including consideration of how local site conditions and management history might make a particular property more or less vulnerable to climate change impacts. Tools and resources are available to help foresters and landowners consider climate change information and develop management recommendations that will help adapt, or prepare forests for expected changes.

Ensuring that forests can adapt to climate change will also help ensure that forests continue to remove greenhouse gases from our atmosphere. Forests play a vital role in the earth's carbon cycle, as they remove carbon from the atmosphere and store it in biomass (trunks, branches, foliage, and roots) and soils. Sustainable forestry practices can increase the ability of forests to sequester atmospheric carbon while enhancing other ecosystem services, such as improved soil and water quality. Harvesting and regenerating forests can also result in net carbon sequestration in wood products and new forest growth. More information and tools on climate change adaptation and carbon sequestration can be found on the following websites:

- USFS Climate Change Resource Center: www.fs.usda.gov/ccrc/
- CCRC Forests and Carbon Storage Page: <a href="http://www.fs.usda.gov/ccrc/topics/forest-carbon">http://www.fs.usda.gov/ccrc/topics/forest-carbon</a>
- Climate Change Response Framework: www.forestadaptation.org
- Adaptation Workbook: www.adaptationworkbook.org
- Template for Assessing Climate Change Impacts and Management Options: http://www.taccimo.sgcp.ncsu.edu/tbl\_sector\_list.php
- Adapting to Climate Change: A short course for land managers: http://www.fs.usda.gov/ccrc/videos/collection/adapting-climate-change-course
- Adaptation Partners: <a href="http://adaptationpartners.org/library.php">http://adaptationpartners.org/library.php</a>
- USDA Climate Hubs: http://climatehubs.oce.usda.gov/

# **Estate & Legacy Planning for Conservation**

While sixty percent of the public believes the Federal & State governments owns most of America's forests, the fact is that families and individuals own two-thirds of our woodlands (74% of New York State Forests is owned by private landowners). You & they deserve our thanks, because these forests provide great, unheralded public benefits beyond the personal meaning of owning forestland.

However, our country's private forests are at a critical turning point; one sixth of America's family owned acres of forests are expected to change hands in the next few years to a decade. More than 60 percent of current forestland owners are age 55 or older and about half of them have already retired. Without proper estate planning, forced liquidation of family forests or severe disruption of planned forest management activities is a distinct possibility.

One of the main threats to preserving private forests is simply lack of communication within families about estate planning. Without discussion, family forests are left at risk for conversion to house lots or other uses when the land changes hands. Will your family lands be legacy or just a memory in the future? For more information about this very important subject, please go to the following links or contact Cornell Cooperative Extension's Shorna Allred at Fernow Hall, Ithaca, NY 14853, srb237@cornell.edu

http://successionplanning.ning.com http://na.fs.fed.us/stewardship/estate/estate.shtml

# OTHER CONSIDERATIONS

**American Tree Farm System -** consider joining; for more information contact your DEC service forester or NYS Tree Farm 800-836-3566

New York Forest Owners Association - consider joining - see brochure enclosed with your management plan. Conservation Reserve Program, Wetland Reserve Program, Wildlife Habitat Improvement Program - these programs are available to landowners to assist them in undertaking projects on their property by providing technical advice and financial assistance. They are administered by the Natural Resource Conservation Service in Livingston County (243 0043 ex. 110) or see the national website at <a href="http://www.nrcs.usda.gov/programs/">http://www.nrcs.usda.gov/programs/</a>

As owner(s) I(we) agree that this stewardship property.	plan reflects my(our) goals and objectives for management of this
Signature	- Signature

# **Forest Service**

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# New York State Department of Environmental Conservation FOREST STEWARDSHIP PLAN - ACTIVITY SCHEDULE 10 Years

Owner: Town of North Dansville Prepared by: Brice June

Date: February 2021

YEAR	STANDS	MANAGEMENT ACTIVITY	PRIORITY
2021-22	2, 3, 4, 5	Ash salvage sale, harvest over mature timber, work on spacing. Permission to skid and land timber on neighboring property is needed.	High
2021-24	1	Look at understory for invasive brush, assess tree seedling development.  Consider treatment.	High
2022-28	ALL	Complete any unfinished work.	High
2031	ALL	Update management plan, reevaluate stands.	High
20			
20			
20			(10/2000)

(10/2000)