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Guidelines for Management of Private Non-industrial Forests in the Adirondacks



by

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Guidelines for Management of Private Non-industrial Forests in the Adirondacks

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Cover Photos

Upper left – South Inlet of Raquette Lake
Upper middle – Hardwood pulpwood on a landing in Woodgate
Upper right – Woods road in Town of Long Lake
Middle left – Yellow birch veneer logs
Middle – Water bar on skid trail near Independence Lake
Middle right – Young angler with native brook trout in West Canada Lakes Wilderness
Lower left – Old bridge site on Indian River
Lower middle – Hardwood pallet logs in Blue Mountain Lake
Lower right – Painted turtle on the Fulton Chain

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EXECUTIVE SUMMARY

Forest land in the Adirondacks has traditionally provided both timber and amenity values. Amenity value, as used here, is meant to include a range of the non-consumptive motivations for owning forestland, including recreation, privacy, existence value, protection of open space and bio-diversity and scenic enjoyment. Amenity values have been the primary motivation behind many of the long-term private owners of large tracts. Understanding how to make timber and amenity values compatible has lead to successful management of many of these properties. Management plans state the ownership goals, describe the property's resources and determine a course of action to achieve the desired results. Silvicultural practices should target desired forest conditions while promoting regeneration, tending to growing stock, removing undesirable stems and providing revenue from financially mature timber. The competitive nature of markets for hardwood timber and logs provides the potential for sound financial management and assists in the marketing of lesser-valued, commodity grade products. Annual property taxes are significant financial burden. Many landowners have realized substantial financial relief from this burden by enrolling eligible land under Section 480a of the New York State Real Property Tax Law. Adherence to best management practices, compliance with laws and regulations and other informed policies have served to translate the desire for sustainability into sound practices.

OWNERSHIP AND MANAGEMENT OF THE FOREST RESOURCE



Why do people own forest land in the Adirondacks? How do they use it? The motivations that determine the demand for--and value of--land are evident in how the land is used. Many properties under long-term ownership were acquired generations ago. Often the landowners' ancestors have set a pattern of stewardship into motion and the current generation's role is to perpetuate and enjoy it. Continued uses and adaptations in management imply that the current owners prefer conservation of forest values over the options of developing or selling their land. Properly managed forests are capable of providing both timber and amenity values.

Throughout the Adirondacks, regardless of when land was acquired, its values are evident in how it is being used. As a general rule, buyers pay no more than the going rate to acquire land, even if they personally place a much higher value on it. The difference between the sales price and their private value is a surplus. What if the fair market value of land is higher than the value you place on your use? Would you still be willing to purchase it? Likewise, would you continue owning the land if its market value exceeded

the value you placed on it? The answer is yes on both counts if you can find a way to recoup the difference in value.

Consider the case of timberland in the Adirondacks. Someone who wants to invest in timber might examine the current growing stock, growth rates, property taxes and price trends and compare their results (some measure of *Net Present Value*, *Internal Rate of Return* or the *Capital Asset Pricing Model*) against sales prices and determine that they would have to pay more than it was worth. This is because sales prices reflect the dual nature of the land's capacity to jointly produce both timber and amenity values.

Pure investors are not motivated by amenity values, so they must find some way to recoup the market value of the amenities reflected in the acquisition and holding costs. Historically, this has been done in the Adirondacks through annual sportsmen's leases. More recently, amenity values (as well as limited development values) have been recouped by selling conservation easements to New York State. The preceding scenario is typical of outside investors, such as pension funds, that have acquired many of the former paper company lands in the Adirondacks over the past decade.

Most of the more stable long term examples of ownership in the Adirondacks have been by parties motivated primarily by amenity values. They recoup most of the acquisition and holding costs by simply enjoying the property. A wealthy few justify all of the costs in this manner. Most, however, face the same challenge as investors where these costs are concerned. Outside sales prices and the ever-increasing annual cost of property taxes can tempt owners to part with some of their land for its limited development potential. There is considerable demand for smaller "boutique forests" as second home sites. Selling their ancestor's forestland is an understandably repugnant option for many. The solution to this dilemma has usually been to examine and realize some of the revenue potential from timber management.

Sound management of timber production, properly constrained by an emphasis on amenity values, has helped many landowners perpetuate long term stewardship and

continue enjoyment of their property for multiple generations. The *science* behind forestry provides the means to guarantee long term forest health and a continuing source of revenue. The *art* used in practicing forestry makes timber production complementary to amenity values. Following the guidelines discussed in this report has helped many large Adirondack landowners enjoy the full potential of benefits the forests provide.

Planning for long term management is an essential part of stewardship. Understanding the role of silviculture in managing the forest gives landowners a realistic understanding of the trade-offs and long-term consequences of timber harvesting. Knowledge of timber values and progressive standards in the sale of timber is an important part of realizing the greatest returns once harvesting decisions have been made.

Property taxes are a significant ownership burden that many landowners have addressed by enrollment under the Forest Tax Law (480a). Sound policies to govern forest operations help protect the forest, its owners and outside contractors, while ensuring compliance with all of the relevant laws and regulations. Each of these important considerations is addressed in turn in the sections that follow.

PLANNING FOR LONG TERM MANAGEMENT



Management of large tracts of forest land requires planning. A *management plan* is a document that describes the resource, states the management objectives, outlines the activities that must take place to reach desired objectives, and states policies that ensure sustainable management of the timber resource in a manner that is compatible with amenity values. A detailed map and long range work schedule should be included. Plans change over time out of necessity; it is impossible to foresee every challenge, opportunity or obstacle that might come up. Having a formal document, however, serves to remind all parties of the original objectives and preserves a structured point of reference to ensure a process is followed, if changing the plan should become necessary.

Management Objectives

The objectives of timber management are set by the landowners. These may include a broad range of possibilities, including a strong emphasis on income, or a goal of promoting community stability by supplying timber to ensure primary and secondary jobs, providing occasional revenue for other stewardship projects, or promoting biodiversity and forest health to enhance habitat for desired species. Often a plan targets

multiple goals. Clear goals are the prerequisite to successful management activities. Landowners without clear goals may muddle along from one idea to the next over a period of years, only to find they have squandered opportunities and undermined the potential of their forest. Timber growth is slow in the Adirondacks and an entire generation of landowners may have to bear the costs of poor decisions.

The planning process requires knowing not only what the desired forest conditions are now and in the future, but knowing what you have to work with to achieve these goals. Stand-level descriptions of the forest cover and the terrain are ideal. For large tracts, however, this is often impractical. An individual forest stand is the smallest unit of description, including an area containing a uniform contiguous timber type. Often stands are only a few acres in size. Larger management units are often used to combine similar stands with common access points.

Inventory of Resources

Within an individual management unit, it is desirable to know the forest type(s) present, along with the stocking (basal area, species composition, size class, acceptable & unacceptable growing stock), volume (by species and product class) and site class. Soils information, accessibility and operability are other important descriptive variables. Some areas will not be devoted to timber management, due to inaccessibility, poor productivity or simply because they have been set aside for other uses. A thorough map should delineate management units and summarize some of this information. A qualified forester can assemble this information and interact with the owners in stating their management objectives.

With a clear understanding of the landowner's goals and the potential of the land, a forester can develop a recommended plan of action. The level of information described earlier allows a forester to prescribe any silvicultural treatments necessary to contribute to the overall goals for the property. Individual management units may or many not require some level of harvesting or other treatment over the planning horizon (generally 15 to 20 years).

After discussing all of the options with the landowners, the forester will work jointly with them in creating a plan of action, including a specific work schedule. It can be difficult to assign activities to individual years. Ideally, planned forest operations are placed into five-year windows when they should be accomplished.

Policies and Amendments

Including a set of policies governing timber management in the plan is desirable. This is particularly true when a property has multiple owners. Landowners can prevent any number of problems by reaching consensus on a good set of policies in advance. Items to be addressed in these policies (water quality, liability, sales practices, contractual requirements, contractor relationships, etc.) are discussed in detail later in this report.

Management plans should be revisited and updated at regular intervals. Intervening events, such as storm damage, may force plans to be reconsidered. Apart from these obvious intrusions, five year updates provide a great opportunity for reminding all of the parties involved of agreed-upon activities, allowing any necessary revisions.

Landowners with broader goals may choose to incorporate timber management into a larger stewardship plan. The USDA Forest Service's *STEWPLAN* software provides a good framework for pulling all of the relevant information together and meeting all of the requirements.

THE ROLE OF SILVICULTURE



Silviculture is the treatment of forest stands to enhance the overall benefits from a forest. The composition of individual forest stands and the goals of the landowner will dictate what type of silvicultural system is appropriate. Foresters should draw guidance from commonly accepted guides such as Leak, Solomon and DeBald's *Silvicultural Guide for Northern Hardwood Types in the Northeast (revised)*. Silvicultural treatment implies some level of harvesting. Each harvest must be designed with four goals in mind: regeneration, enhancement of existing growing stock, removal of cull and low value trees and generating revenue from the financially mature trees.

Two broad silvicultural options are *even-aged* and *uneven-aged* management. Even-aged management implies that a stand will have trees of the same age class. The eventual result of this is clearcutting the entire stand and regeneration of a new crop of trees. This option is particularly appropriate for softwood plantations. Uneven-aged management implies that forest stands will contain more than one age class of trees. The multiple age classes of trees in the stand maintain the forest cover over the longest time period, but require more frequent harvests.

Even-aged management usually requires *clearcutting* (with seed trees left intact) or a *shelterwood* approach. *Clearcutting*, as the name implies, involves the removal of all stems in stand. Clearcut areas in the Northeast are usually quick to regenerate new forest cover, though it may or may not include desirable species. A common misconception among some Adirondack landowners is that a clearcut is equivalent to deforestation. While this perception is wrong, there is no arguing that some people find clearcuts unsightly. Additionally, if a clearcut is not properly laid out, scheduled and conducted, there is the potential for erosion and warming of water temperatures in stream corridors.

Shelterwood systems usually employ two harvests at different times. The first harvest creates space and light for the regeneration of a new crop of trees, while leaving some crown cover as a seed source and to protect the understory. Once this new crop becomes established, a second harvest removes the remainder of the overstory.

Adirondack Park Agency regulations require a permit from the agency for any clearcut over 25 acres. The APA's definition of a clearcut is different than the commonly accepted silvicultural definition. Specifically, according to APA regulations:

“clearcutting means any cutting of trees over six inches in diameter at breast height over any 10-year cutting cycle where the average residual basal area is less than 30 square feet per acre, measured within the harvested area.”

Note that under some circumstances, a shelterwood harvest falls under the APA's definition of a clearcut.

Uneven-aged management requires either a single-tree selection system for harvesting or group selection. Under single tree selection, individual trees are selected and marked for harvesting, again with the four overriding purposes of regeneration, enhancement, cull removal and financial return in mind. This approach has proven quite compatible with the desire of many Adirondack landowners to maintain a wooded backdrop to enhance enjoyment of amenities.

Alternatively, uneven aged management may be pursued using group selection. Group selection implies harvesting all of the trees in an entire area of two acres or less. This option is more appropriate than single tree selection when there is a high composition of undesirable stems, but aesthetics or other reasons make even-aged treatments undesirable. Group selection is also a good compromise between single tree selection and clearcutting as a means to enhance whitetail deer habitat.

If timber production is the primary goal of ownership, landowners may choose to employ the full range of silvicultural options, as appropriate. On properties where amenity values drive ownership goals, there has been a tendency to embrace uneven-aged management as the system most compatible with maintaining the forested character of the land. In this case, landowners have made an informed decision to forego some of the potential revenue from timber production in both the present and future. This trade-off becomes a burden for future generations when landowners decide to retain a large concentration of undesirable growing stock, delaying the establishment of new stands. Fortunately, the continuing trend of innovation in wood products technology keeps shifting the demand to create markets for lower quality stems.

UNDERSTANDING TIMBER VALUES AND SELLING TIMBER



A surprising number of Adirondack landowners are uninformed about the true value of their timber. Undervalued timber, coupled with outdated sales techniques, can result in disappointing returns. Part of the problem is that logging contractors who work part of the year on industrial lands are driven by low margins to embrace high production techniques and equipment. Working with the same overhead on non-industrial lands, where aesthetic considerations are more important than productivity, raises their cost per unit of production considerably. Higher production costs limit how much these loggers can pay for timber.

Another view is that below market value stumpage rates for winter harvests on non-industrial lands have subsidized contractors who work at break even rates on industrial lands in the summer. Landowners who want fair market value for their timber have had to stray from the traditional approach of selling timber directly to a logger.

In the past, logging contractors have been the primary purchasers of timber, often financing their purchase by tying payment to a portion of the proceeds from the sales of

the logs they produce. Common stumpage price schedules called for the landowner to be paid 30% to 40% of the sales value of hardwood logs. This percentage was fair to all parties when average logs prices seldom exceeded \$200 per thousand board feet (MBF). At this rate, the landowner received \$60 per MBF and the logger made \$140 per MBF to cover his costs and make a profit. Hardwood log prices have skyrocketed in the past 15 years, however. Suppose sawlogs of a particular species that used to sell for \$200 per MBF now sells for \$600 per MBF. Under the old schedule of 30%, the landowner receives \$180 and the logger keeps the remaining \$420 per MBF. While the logger's costs have certainly gone up, they have not tripled. The logger cannot be faulted for purchasing timber at a rate the landowner is willing to accept, nor from making a profit. On the other hand, informed landowners cannot be faulted for abandoning a superannuated price schedule and realizing a greater return for their timber.

Most of the logger's surplus evident in this old equation has shifted to the informed landowner in the form of increased payment for the wood. Let us consider the stumpage value growth trend in two important hardwood species: soft maple and hard maple.

Growth in Timber Values

A review of the New York State Department of Environmental Conservation's *Stumpage Price Report* reveals that the most common stumpage price for soft maple in Herkimer County in 1974 was \$40 per MBF (Doyle rule). By 1984 this price had risen to \$60 per MBF, a respectable increase of 50%. By 1994, the most common price for soft maple was up to \$125 per MBF for a remarkable ten year increase of 125%. The trend of increases continues to this day (2004), as soft maple stumpage prices in this region rose to \$175 per MBF. This \$50 rise in the price represents a 40% increase over the past ten years. Note that these are nominal prices that do not account for inflation.

Soft maple is considered a lower value species that is abundant and easy to regenerate. When you examine the far more desirable hard maple, the increases are more dramatic. The most common stumpage price for hard maple in Herkimer County in 1974 was \$53 per MBF. By 1984 this price had risen to \$75 per MBF, a respectable increase of 42%.

By 1994, the most common price for hard maple was up to \$300 per MBF for an astounding ten-year increase of 300%. The trend of increases continues to this day (2004), as hard maple stumpage prices in this region rose to \$700 per MBF. This \$400 rise in the price represents a 133% increase over the past ten years.

Note that the discussion above involved the most common prices. Prices on the important hardwood species in the Adirondacks (black cherry, hard maple, paper birch, soft maple and yellow birch) can vary considerably in either direction, depending on quality, stand access and stand operability.

In what ways can landowners realize the highest values when they sell timber? It is important qualify this by stating the type and volume of timber to be sold is first determined by the goals and operational strategies discussed elsewhere in this report, and further subjected to constraints designed to protect water quality and amenity values. For any given set of trees to be harvested, how do you realize the greatest return? The answer lies in taking advantage of the competitive markets for hardwood timber and logs. A secondary consideration in terms of return--but an important operational consideration--is how to realize reasonable values for commodity grades of timber such as pulpwood, scrag (pallet) wood, softwood and firewood.

A sawmill in Boonville, NY recently determined that, within a 50 mile radius of its mill, there were 32 places to sell hardwood logs. This high number of outlets reflects the competitive nature of the markets for hardwood lumber and veneer. The ten largest companies producing hardwood lumber in the country control less than ten percent of overall production. The wide range of species, grades, and dimensions of hardwood lumber, along with its many diverse uses, creates intense competition for raw materials. Informed landowners will take advantage of the competitive nature of these markets by selling their timber through lump-sum, competitive bid sales. Similarly, in situations where a lump-sum sale of timber might not be desirable, hardwood logs can be sold through competitive bidding.

The logging business has been altered considerably by stumpage price increases. No longer the primary market for timber, many logging contractors are now service providers, harvesting timber and producing logs for a set fee per MBF, cord or ton. Hardwood sawmills and brokers are now the primary purchasers of timber, with many loggers unable to compete. Mills will pay a premium to ensure a supply of wood to the mill and are in a better position to tie capital up in timber for an extended period of time. Informed landowners are less willing to finance the purchase of their timber (or accept the risk) by allowing logs to be sold before they receive payment. More commonly, they receive a lump-sum payment before the timber is harvested. The purchaser hires the logging contractor to harvest the timber and, in some cases, deliver it to the mill.

Competitive Bid Timber Sales

In the lump-sum bid process, the trees are marked for harvest and an estimate is made of their volume by species. A detailed prospectus, including volume estimates, contractual requirements (incorporating all of the policies discussed elsewhere in this report), and time frames involved, is submitted to prospective purchasers. A formal showing is usually held, but interested parties are given the opportunity to inspect and cruise the timber on their own. Sealed bids are submitted at a specified date and time. The high bidder is awarded the sale and the timber is paid for before it is harvested. The landowner will reserve the right to refuse any and all bids, in case the bids are too low or a disreputable party submits the high bid. Adhering to the highest ethical standards in handling bid sales and carefully restricting who you submit your prospectus to, will weed out disreputable bidders.

Generally speaking, the lump-sum bid process works well for single-tree and group selection treatments. The higher volume of low grade stems included in second part shelterwood and clearcuts may dictate alternative sales methods.

Competitive Bid Logs Sales

A sound alternative to lump-sum competitive bid sales for timber involves landowners hiring a logging contractor to produce logs from timber and then having their forester sell

the logs . A second contract with the same logger can be used to sell commodity grade material (e.g. pulpwood, firewood, scrag and softwood) to them. The hardwood logs are sorted by species and grade (sawlogs and veneer) and can then be laid out and offered for sale under a competitive bid. Log buyers are invited to inspect, scale and grade the logs and submit bids on each set of logs at a specified time. The high bidder for each set is awarded the bid and then pays for the logs before trucking them away. Again, strict ethical standards must be followed, or the next time you try to hold a bid log sale, no one will be interested. For example, one underhanded practice that has been employed in the past is to have everyone submit their bids and then inform a favored buyer of the high bid, offering the opportunity to beat or match it. This is not only unfair, but it is a completely inconsiderate waste of the other bidders' valuable time.

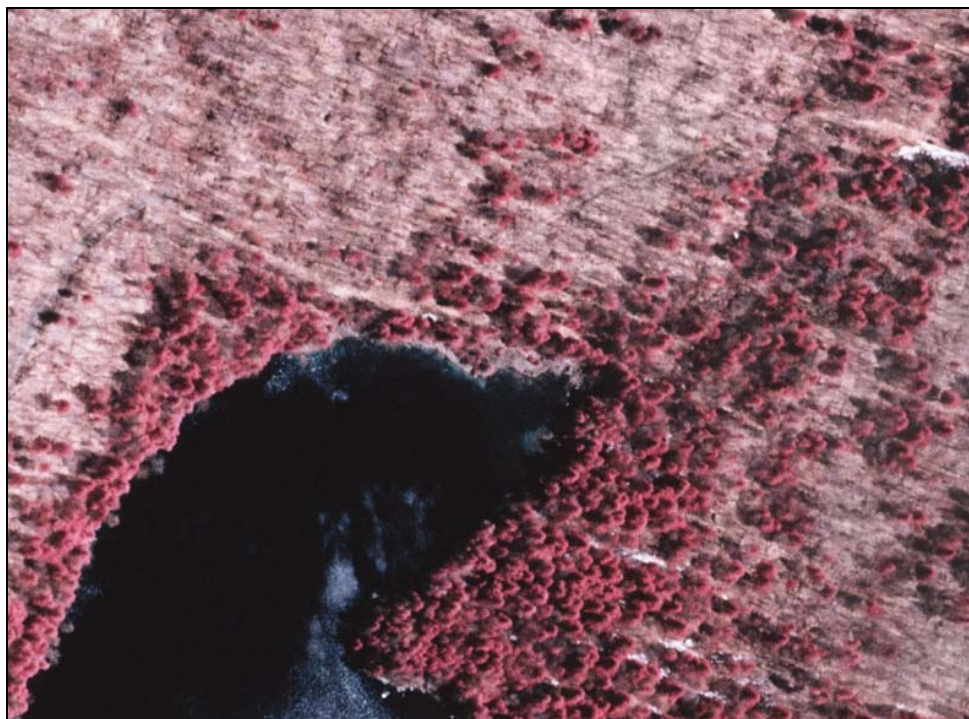
Commodity Grade Wood Products

What about the commodity grade products? As you might expect, these products have relatively low value. They may be considered byproducts in the production of valuable sawtimber. Prices do not fluctuate as wildly and, in the case of the least valuable (hardwood pulpwood and firewood), you are often lucky to get rid of them. Lump-sum bid timber sales always contain some of this material and the manner in which sawmills utilize it is quite revealing. They will usually resell small quantities of softwood logs to the contractor they hire to harvest the timber. They often give the hardwood pulpwood and firewood to the contractor, as they assigned little or no value to them in determining their bid. The market prices for pulpwood and chips do little more than cover the costs of producing them.

Setting reasonable rates in the contracts on the sale of softwood logs and then keeping rates relatively low on pulpwood and firewood is the best way to handle this situation. There is usually a prevailing rate being paid for softwood timber, depending on the rates logs are bringing. Hardwood pulpwood and chip markets in the Adirondacks come and go, but even when they are strong, there is little value left over to pay the landowner. The point of landowners asking loggers to produce pulpwood or chips is usually to remove undesirable stems and make efficient use of some of the tree tops. Prices seldom exceed

\$6 per cord for pulpwood or \$2 per ton for chips. For these reasons, it is often desirable to accept the prices set by the contractor.

PROPERTY TAXES



Property taxes are a significant burden for private non-industrial forest landowners in the Adirondacks. Taxes vary by town, county and school district, but usually range from \$4 to \$12 per acre on Class 910 private timberland. The chief inequity in the property tax system is that forest land, unlike developed property, requires few services and does not result in the enrollment of children in schools.

Understanding & Evaluating Property Taxes

Many landowners seek to minimize their tax burdens. The first step is to understand how property taxes work. Land is given an assessed value, set by local assessors. This value is, in theory, based on the fair market value of the property in its current use. The assessed value is multiplied by the tax rates for the town, county, school and any special assessment districts (e.g. water, sewer, fire) to arrive at the tax burden (billed at two different times of the year). There is little or nothing that an individual landowner can do about the tax rates. This leaves the assessment as a primary item of concern.

Landowners should review their assessments every couple of years, particularly when the periodic re-valuations are complete. Two broad questions should be asked. First, is your land being assessed on par with comparable properties in the same town? If not, you have grounds to grieve your assessment. Reasonable assessors will have some justification for the difference in the assessments, or will be willing to correct the mistake.

The second question is whether the assessment is in line with fair market values for comparable forest land, as evidenced by recent transactions throughout the Adirondack region. A landowner may find this to be a difficult question to answer without the input of outside professionals. If an assessment is substantially higher than fair market value, it should be grieved. It may be necessary to have a lawyer guide you through the process. A formal appraisal will be required if the local assessor is unwilling to grant your request to lower the assessment. An appraisal done by a qualified licensed appraiser with the MAI designation from the Appraisal Institute will have the strongest credibility.

Apart from contesting assessments, landowners should question local assessors to learn if there is any way to lower assessments by consolidating lots. Large landowners often have multiple lots, each valued individually. Consolidation of them into fewer, larger lots may bring economies of scale into the valuation process. For example, 160 acres of timberland is usually thought of as more valuable on a per acre basis than 1,600 acres. Consolidating ten 160-acre parcels would create a single lot with a lower value per acre.

When lake frontage is involved, consolidation can provide significant relief in the assessment. Often there is a valuation formula that is two- or three-tiered. The first 100 feet of frontage is valued at the highest rate, with subsequent frontage valued at a lesser rate. Suppose you owned 1,000 feet of frontage in five separate tax parcels, each having 200 feet of frontage. A total of 500 feet would be valued at the highest rate (5 x 100') and the other 500 feet would be valued at the lesser rate. Consolidating these five parcels would mean that only 100 feet would be valued at the highest rate and the remaining 900 feet would be valued at the lower rate.

The most substantial way for large forest landowners to lower their property taxes is enrollment under Section 480a of the New York State Real Property Tax Law (often called the Forest Tax Law). This program is outlined in detail in the following section.

Forest Tax Law (480a)

Section 480a of the New York State Real Property Tax Law grants substantial property tax relief to forest landowners who make a long-term commitment to timber production. Landowners can exempt up to 80 percent of the assessment on their qualified land from property taxes. The New York State Department of Environmental Conservation (DEC) administers the 480a program. The regional forester for each portion of the state is the contact person. A minimum of 50 contiguous acres must be enrolled, with smaller parcels ineligible. Only forest land may be enrolled, meaning that developed areas, wetlands, open water, cropland, pasture, and other non-timber producing areas are subtracted from total acreage. Some of the eligible forest land in a property may remain uncommitted, as long as the minimum acreage requirement is met. The property tax assessment exemption applies only to eligible, committed acreage.

A timber management plan, including a work schedule and detailed map, must be prepared for the property prior to enrollment. Ultimately, timber must be harvested from the property. This plan is completed at the landowner's expense and must be done by a qualified forester. A forester with sufficient qualifications to be listed on the DEC's cooperating consulting foresters' list is acceptable.

The management plan must meet with the requirements outlined by the DEC and be approved by the regional forester. A plan containing each of the elements discussed in the planning section of this report would meet all of the requirements. The USDA Forest Service's stewardship plan requirements, discussed earlier, will serve to meet the requirements of 480a, with minor additions.

Once the land is enrolled in the program, the landowner has several responsibilities. The landowner must identify and permanently mark and maintain the boundary line of

eligible tracts, including un-enrolled areas. Each year the landowner must submit an *Annual Commitment Form* to the assessor and the DEC Regional Forester and the local assessor. This form ensures the property tax exemption and commits the landowner to following the approved work schedule for a ten year period. Note that the initial commitment is a lien on the property filed with the county clerk.

Requirements of the approved work schedule for the property remain in place even if the landowner opts to leave the program in subsequent years. In each year that a timber harvest is scheduled, the landowner submits a *Notice of Commercial Harvest Cutting*. The landowner is required to pay 6% of the stumpage value from the timber cutting to the county treasurer. While 6% of stumpage can be a significant amount, it is still far less than the taxes would be without the 80% exemption.

Every five years after the original certification of the property, the landowner must submit a revised management plan to the DEC Regional Forester. To avoid penalties, the landowner must comply with the work schedule that was filed and approved for the property. The land is committed to timber production and the work schedule must be directed toward producing the forest crops listed in the initial application.

Withdrawal of all or part of the property from the program is possible. The landowner may simply cease to file the annual commitment form. In this case, the property tax assessment goes back to 100% and the landowner is bound by the last annual commitment. This path requires following the management plan for the next nine years. After the plan has been followed and property taxes paid in full for this entire time period, the property is formally removed from the program. The other alternative is immediate withdrawal and payment of a penalty equal to 2.5 the amount of the property taxes that would have otherwise been paid for up to the previous ten years, plus interest of at least 12% per annum. Partial withdrawal incur twice this penalty.

Many non-industrial landowners in the Adirondacks, including both investors and private parks, have chosen to enroll under 480a. It is a good match for large properties under

stable, committed ownership. This is especially true when future development of the property is incompatible with the legacy of ownership. The program should be particularly appealing for owners who are already committed to following a sound timber management plan as a part of their overall stewardship. The structure of the plan requirements often serves to remind landowners of their responsibilities, as their internal leadership changes over time.

Some landowners have examined enrollment under 480a and decided it is incompatible with their goals. Others have resisted enrolling because they fear having state control over the management of the resources. Fears of state interference have proven to be unfounded in practice. In working on large properties in the DEC's Regions 5 and 6, I have interacted with forestry professionals from five different offices. These offices are staffed with professional people, rather than bureaucrats. The state foresters provide helpful advice and assistance to ensure compliance, but do not interfere with specific operations or management decisions. Almost all of the large Adirondack properties that are enrolled have undergone unscheduled plan revisions in response to unforeseen circumstances. The DEC staff understands that changes will be necessary from time to time and will help the landowner meet the requirements for amending plans.

Qualifying forestland for a real property tax exemption under Section 480a of the New York State Real Property Tax law involves several steps. A formal application to the Department of Environmental Conservation's Regional Forester includes a completed *Application for Certificate of Approval* form, a management plan for the property, and a property map. After these are submitted, the Regional Forester has 60 days to inspect the property and approve the application or to suggest necessary revisions to the plan. After the application is approved, an initial *Commitment of Land to Continued Forest Crop Production* form is signed and notarized by the landowners and filed with the County Clerk. This simple one-page form must be filed with the Regional Forester and the local assessor in all subsequent years. With these items complete, an *Application for Real Property Tax Exemption for Forest Land* form is submitted to the local assessor. Acceptance of this form by the local assessor completes the process.

Calculating Annual Property Tax Savings

How much are the potential savings? Individual landowners can make an informed estimate of their own circumstances with the assistance of a qualified forester. An example drawing from actual tax rates helps illustrate the savings. Suppose you own a 25,000 acre property in the Adirondacks. Subtracting acreage for inaccessible areas, open water, stream corridors, wetlands, developed (or developable) and sensitive areas might leave you with 17,000 acres eligible for enrollment. In a sample of Adirondack towns in Herkimer and Hamilton counties, I found average assessed values of \$366 per acre and average combined tax rates (school, county, town, etc.) of \$20.42 per thousand dollars of assessed value. The annual property tax for undeveloped forest land that results is \$7.47 per acre.

Using our large example property, this comes to \$127,000 per year in property taxes on the 17,000 acres of productive timberland. Enrolling the property under 480a would lower the assessment by 80%. Instead of \$366 per acre, the landowner would be paying taxes based on a value of \$73.20 per acre. Annual property taxes drop from \$7.47 per acre to \$1.49. In our example the property taxes drop to \$25,400. This is a saving of \$101,600! Following these parameters, potential annual property tax savings for a range of property size are shown in Table 1.

The savings are dramatic in this case because of the large size of the property, but savings are often eye-opening because they free up landowner funds for other aspects of stewardship and enjoyment. They also reduce the pressure to make short term timber management decisions to keep up with the annual pressure to pay the bills.

A grid showing potential property tax savings per acre for a wide range of assessed values and tax rates is shown in Table 2. For an accurate estimate of potential savings specific to your property, contact a qualified consulting forester.

Table 1. Potential property tax savings* for various sizes of eligible forest land parcels enrolled under Section 480a of the New York State Real Property Tax Law.

<u>acreage</u>	<u>annual taxes</u>	<u>480a enrolled taxes</u>	<u>annual tax saving</u>
100	\$ 747	\$ 149	\$ 598
500	\$ 3,735	\$ 745	\$ 2,990
1,000	\$ 7,470	\$ 1,490	\$ 5,980
2,000	\$ 14,940	\$ 2,980	\$ 11,960
3,000	\$ 22,410	\$ 4,470	\$ 17,940
4,000	\$ 29,880	\$ 5,960	\$ 23,920
5,000	\$ 37,350	\$ 7,450	\$ 29,900
6,000	\$ 44,820	\$ 8,940	\$ 35,880
7,000	\$ 52,290	\$ 10,430	\$ 41,860
8,000	\$ 59,760	\$ 11,920	\$ 47,840
9,000	\$ 67,230	\$ 13,410	\$ 53,820
10,000	\$ 74,700	\$ 14,900	\$ 59,800
15,000	\$ 112,050	\$ 22,350	\$ 89,700
20,000	\$ 149,400	\$ 29,800	\$ 119,600
25,000	\$ 186,750	\$ 37,250	\$ 149,500
30,000	\$ 224,100	\$ 44,700	\$ 179,400
35,000	\$ 261,450	\$ 52,150	\$ 209,300
40,000	\$ 298,800	\$ 59,600	\$ 239,200
45,000	\$ 336,150	\$ 67,050	\$ 269,100
50,000	\$ 373,500	\$ 74,500	\$ 299,000
100,000	\$ 747,000	\$ 149,000	\$ 598,000

* These estimates assume an assessed average value of \$366 per acre and a combined annual tax rate of \$20.42 per thousand dollars of assessed value.

Table 2. Annual property tax savings per acre resulting from enrollment under Section 480a of the New York State Real Property Tax Law for various assessed values and annual tax rates.

assessed value per acre	tax rates per \$1,000 of assessed value					
	\$ 10.00	\$ 15.00	\$ 20.00	\$ 25.00	\$ 30.00	
\$ 100	\$ 0.80	\$ 1.20	\$ 1.60	\$ 2.00	\$ 2.40	
\$ 150	\$ 1.20	\$ 1.80	\$ 2.40	\$ 3.00	\$ 3.60	
\$ 200	\$ 1.60	\$ 2.40	\$ 3.20	\$ 4.00	\$ 4.80	
\$ 250	\$ 2.00	\$ 3.00	\$ 4.00	\$ 5.00	\$ 6.00	
\$ 300	\$ 2.40	\$ 3.60	\$ 4.80	\$ 6.00	\$ 7.20	
\$ 366	\$ 2.93	\$ 4.39	\$ 5.86	\$ 7.32	\$ 8.78	
\$ 400	\$ 3.20	\$ 4.80	\$ 6.40	\$ 8.00	\$ 9.60	
\$ 450	\$ 3.60	\$ 5.40	\$ 7.20	\$ 9.00	\$ 10.80	
\$ 500	\$ 4.00	\$ 6.00	\$ 8.00	\$ 10.00	\$ 12.00	
\$ 550	\$ 4.40	\$ 6.60	\$ 8.80	\$ 11.00	\$ 13.20	
\$ 600	\$ 4.80	\$ 7.20	\$ 9.60	\$ 12.00	\$ 14.40	
\$ 650	\$ 5.20	\$ 7.80	\$ 10.40	\$ 13.00	\$ 15.60	
\$ 700	\$ 5.60	\$ 8.40	\$ 11.20	\$ 14.00	\$ 16.80	
\$ 750	\$ 6.00	\$ 9.00	\$ 12.00	\$ 15.00	\$ 18.00	
\$ 800	\$ 6.40	\$ 9.60	\$ 12.80	\$ 16.00	\$ 19.20	
\$ 850	\$ 6.80	\$ 10.20	\$ 13.60	\$ 17.00	\$ 20.40	
\$ 900	\$ 7.20	\$ 10.80	\$ 14.40	\$ 18.00	\$ 21.60	
\$ 950	\$ 7.60	\$ 11.40	\$ 15.20	\$ 19.00	\$ 22.80	
\$ 1,000	\$ 8.00	\$ 12.00	\$ 16.00	\$ 20.00	\$ 24.00	
\$ 1,500	\$ 12.00	\$ 18.00	\$ 24.00	\$ 30.00	\$ 36.00	
\$ 2,000	\$ 16.00	\$ 24.00	\$ 32.00	\$ 40.00	\$ 48.00	

FORESTRY IN PRACTICE – POLICIES FOR MANAGING OPERATIONS



“Sustainability” is currently a popular watch word when it comes to forest management. Its popularity is due in part to fuzzy definitions that can preempt disagreements over how it is practiced. Putting aside the current hype over the idea of sustainability, it is important to recognize that forestry has always been about long-term decision making and recognizing trade-offs in protecting future options. All management activities should be conducted in a manner that protects the inherent productivity of the land.

One aspect of sustainability that is easy to agree upon is the need to protect soil and water quality. Topsoil is in short supply in Adirondack timberlands, so it is important to keep it in the forest and out of the watercourses. Landowners do not own the water or the organisms that depend on it, so they have no right to pollute it. The emphasis on protection then is two fold: protecting your land and preventing damage to public resources.

Best Management Practices for Water Quality

Many non-industrial landowners in the Adirondacks were quick to adopt the New York State Forestry Best Management Practices for Water Quality (BMPs) when they were finally introduced in January of 2000. Others remain uninformed about BMPs. Best Management Practices are a relatively new concept in New York. Other states were years ahead in promoting water quality protection of this type. While New York was slow to act, it did produce one of the most user-friendly guides to BMPs. Contractually requiring that all harvesting is in compliance with the *New York State Forestry Best Management Practices for Water Quality BMP Field Guide* is a sound way to protect the land. Protecting water quality is an important step in protecting the sustainability of the timber resource. Following BMPs offers partial protection of aesthetic resources as well. The practices should be a requirement for all activities on the forest, including road and trail construction.

In keeping with the spirit of the BMPs, landowners should follow all pertinent government regulations regarding water quality and timber harvesting. If the landowner has ceded direct control of these activities to a contractor, this party should be contractually obligated to demonstrate compliance with all laws and regulations and obtain any necessary permits.

Perhaps the most common permit that will be needed is for stream crossings. Both temporary and permanent stream crossings that have the potential to impact classified streams require a permit. Note that a crossing does not necessarily have to be on a classified stream to be jurisdictional. Many smaller or intermittent streams are tributaries of classified streams. The agents who administer these permits for most of the Adirondacks are the New York State Forest Rangers.

There is no more professional, helpful or courteous person with regulatory authority than the New York State Forest Ranger. Large Adirondack landowners should seek to develop a strong working relationship with the Forest Rangers within their districts. Familiarizing the rangers with your property can only help them give you the best possible service on

necessary permits and make their job easier and more efficient in the event of a rescue or fire emergency.

Occasionally permits for larger stream crossing may be dealt with at the Regional Office level of the New York State Department of Environmental Conservation. The Forest Ranger often remains the field agent in these cases. Certain harvesting activities involving clearcuts or harvesting and crossing activities within ¼ mile of any designated Wild, Scenic or Recreational River will require permits from the Adirondack Park Agency.

The Forest Ranger inspects proposed crossing sites, gives advice on their timing and locations, and issues a permit specifying the conditions under which a crossing may take place. Generally a portable bridge is advisable for a temporary crossing. These bridges are easy to install and remove, and they protect the stream beds and banks. Depending upon the situation, BMPs may dictate water diversions or seeding to protect the approaches to the crossing after the harvesting is complete. Permanent crossings on gravel roads, such as bridges and culverts, must follow the same permitting process.

Timber harvests and related activities should be scheduled in ways that minimize any potential conflicts with other uses of the property. The best times for harvesting most Adirondack sites are in the winter and in the driest part of the summer and early fall. The spring and fall mud seasons are not a good time to have equipment on the thin, wet, erosive soils that characterize many parts of the Adirondack forest. Working within these windows of opportunity, harvests should be sited and timed to avoid conflicts with amenity enjoyment of the property.

Some landowners have made the choice to forego timber management potential by further limiting the window of time available for harvesting. Larger properties can often shift the location of operations to avoid conflicts. The timing of harvesting operations for individual sites must be judged on a case by case basis. Some sites that might logically be harvested in the summer are only accessible with frozen winter roads, ruling out summer

harvests. One thing that must be avoided is the unsustainable practice of shifting harvests to wet periods of the year, simply because the landowners will not be there to enjoy the property at that time. Single season inconveniences such as occasionally encountering a log truck or hearing harvesting equipment should be preferable to damaging the land by harvesting a site in the wrong season.

Timber Harvesting Agreements

Protection of gravel roads and multi-purpose trails on the property should be a primary consideration in any harvesting plan. Some roads and trails must be used out of necessity in accessing various stands. The proper construction and maintenance of winter roads should only enhance the trail system. Skidding on established trails should be kept to a minimum. Any trails that would be damaged beyond repair by skidding should not be used. Timber sale contracts should specify roads and trails that may only be used with advance permission, in a manner acceptable to the landowner, and that any ruts should be repaired with a bulldozer upon completion of the harvest.

Contracts between the landowner and the timber purchaser or logger should be used for all harvesting activities. These contracts should be approved by the landowner's lawyer, though they may require significant input from a forester to protect the land and address all of the landowner's concerns. The foregoing discussion addressed Best Management Practices, timing and location of harvests and protection of roads and trails. All of these items should be incorporated in the contract. Further contractual requirements will place as much of the liability as possible on the timber purchaser and specify requirements for liability insurance. Current limits of liability specified in many contracts call for between \$1,000,000 and \$5,000,000 in insurance coverage, with the landowner being named as additional insured. Some larger landowners should undergo a risk assessment to determine an adequate level of liability insurance protection.

Similar to liability protection, another requirement calls for the loggers to be covered with worker's compensation insurance by the purchaser. Certificates proving liability and

worker's compensation insurance should be provided to the landowner before any harvesting takes place.

Contracts specify cash penalties for littering or polluting the harvesting site. Requirements for post-harvest remedial work, such as bulldozing of ruts or seeding of landing sites should be spelled out in detail. The contract should require that the purchaser provide a cash performance bond to be held by the landowner or the landowners' forester to ensure compliance with the contract. This important safeguard helps ensure compliance, particularly with the post harvest requirements.

Trained Logger Certification

As we have seen, logging contractors may or may not be the actual purchasers of the timber. Purchasers or not, they play an important role in putting operations into practice. Having well-qualified logging contractors working on your property is one of the most important aspects of protecting your land and achieving desired results. If you are hiring or contracting directly with loggers, you and your forester are in a direct position to ensure you have the right people for the job. If your timber is sold directly to a mill or broker, your contract should specify that you or your forester has final approval of the contractor who harvests the timber. While many timber buyers employ only well-trained, reputable loggers, the best of these contractors are in constant demand. Requiring landowner approval prevents the temptation to use unqualified people when the buyer experiences short term scheduling difficulties.

How do you know if someone is well-qualified logger or if they are well suited to the work that must be done? Your forester should be familiar with a wide range of contractors. Beyond this, require that loggers who work on your property have achieved Trained Logger Certification in New York State. According to the New York Logger Training Program:

“The Trained Logger Certification (TLC) program was developed to recognize loggers who complete a training schedule involving three “core” areas of knowledge and skills. During the three-year validation period of TLC, these individuals make a

commitment to continuing their education in order to improve themselves and maintain their TLC status.”

While there are still some excellent loggers who have not yet reached this status, the list of those who have is a great source of information. For more information about this program or to view the list of certified loggers in New York, visit the New York Logger Training website (www.nyloggertraining.org).

Safety Plans

Every harvesting site requires a safety plan. Ideally, logging contractors would take it upon themselves to pull together the necessary information for a plan, but this is often overlooked. Loggers commonly work far from home and may be unfamiliar with both the property and the various local jurisdictions. Waiting until an accident takes place in a remote location to figure out how to contact emergency personnel and give them directions to the site could make an easily treatable injury far more dangerous. All of the necessary safety information can fit upon a single sheet of paper. It should be distributed to everyone on the job site and they should all be familiar with it. The plan tells them how to reach the nearest phone and who to call when they do. It will give the caller accurate directions to the log landing nearest the accidents that can be read to the 911 operator.

The safety plan should contain, at a minimum, the contact phone numbers for the local fire department, the state police, the nearest forest ranger, the forest ranger dispatch number in Ray Brook, the logging contractor, the landowner’s forester, the purchaser’s forester (if they have one) and the caretaker. Additionally, it should contain the coordinates (Lat/Long & UTM) of the nearest potential helicopter landing site and concise, accurate directions on how to access the property and the job site. The persons on the site should have instructions to flag a trail to the injured person and to unlock any gates and meet and lead the emergency personnel to the accident.

Lawyers can best advise landowners on their obligations regarding safety plans. Logging is a very hazardous activity that is further compounded by remote Adirondack locations.

Decency dictates that the parties involved in a timber harvest will ensure a safety plan is in place.

EVALUATE THE MANAGEMENT OF YOUR FOREST LAND

The following list of questions should serve to help your evaluation the management of your forest land and determine if there are improvements that can be made.

- ✕ Why do you own your land? Have you placed the proper emphasis on the benefits that are most important to you? Are you managing the property to its fullest potential while avoiding potential conflicts in use?
- ✕ Do you have a management plan that contains each of the elements outlined in the planning section of this report? Does this plan accurately reflect your ownership goals? Are there provisions for periodic updates and amendments to the plan?
- ✕ Do you understand the silvicultural system(s) used on your property? Do the systems in place further your goals?
- ✕ Do you understand the growth in timber values in recent years? Are you taking advantage of the competitive nature of markets for hardwood timber and logs to realize the highest returns for timber you have decided to harvest? Do you have a system in place for the efficient removal of low value timber?
- ✕ Is the assessment value of your forest land consistent with fair market values? Are there opportunities to consolidate parcels and lower assessed values?
- ✕ Have you made an informed analysis of the benefits of enrollment under Section 480a of the New York State Real Property Tax Law? How much could you save annually? Does the program fit with your long term ownership goals? If you decide to enroll some or all of your eligible acreage, is your current management plan adequate?
- ✕ Have you adopted New York State Forestry Best Management Practices for Water Quality?
- ✕ Do you know and follow all of the laws and regulations pertaining to your forest management operations? Do you obtain all of the required permits? Have you developed a working relationship with the New York State Forest Rangers in your district?
- ✕ Are your forest management policies incorporated into your timber sale contracts? Do you hold a performance bond to ensure compliance and remedial work?
- ✕ Do the loggers working on your property have New York State Trained Logger Certification status? If not, have they completed at least some of the training necessary to become certified?
- ✕ Do you require a safety plan for all of the timber harvesting operations on your property?