Introduction to the New 2010-2015 Standards

You may wonder why the American Tree Farm System® recently adopted revised Standards for Forest Certification and what this means for you as a certified Tree Farmer. From my perspective, strengthening our Standards offers all of us value and benefits.

Twenty years ago, no one had ever heard of forest certification. Yet today, forest certification is recognized worldwide as a measure of sustainable forest management. A growing number of consumer’s prefer wood and paper that come from internationally recognized certified forests. Tree Farm leaders had the foresight years ago to seek global recognition through PEFC (Programme for the Endorsement of Forest Certification systems) the world’s largest forest certification program.

Now that the American Tree Farm System is recognized by PEFC, its Standards are required to be updated every five years. During the past year, an independent panel completed the required five-year review and recommended changes that update and strengthen the previous Standards.

The revised Standards are designed as a guide to assist you in managing your woodlands to achieve your own objectives and maintain healthy, thriving, and productive forests. They recognize new conservation forestry practices and evolving consumer expectations, such as the growing demand for green products.

The panel members strived to incorporate elements in the Standards that recognize the diversity of land use objectives held by woodland owners. The Standards also incorporate flexibility to address different property sizes and to accommodate a wide range of forest operations.

Some items added to the Standards recognize things that many woodland owners already do, but are not getting credit for, especially by our critics. For example, we added “high conservation value forests” as recognition that some forests have significant conservation value and to encourage woodland owners to recognize those values and to find ways to help perpetuate them on their property over time. Many woodland owners have been conserving these types of forests for decades with no recognition of their efforts.

The revised Standards were adopted by the American Forest Foundation (AFF) Board of Trustees in November 2009 and are now available for use by Tree Farmers across the United States. The 2010-2015 Standards are printed in this edition of Tree Farmer Magazine and are also available online at <http://treefarmsystem.org/2010standards>.

It is now up to each of us to achieve conformance with the revised Standards by the end of 2010. This means that every one of us will need to review and update our forest management plans, something we should already be doing on a regular basis. There is real value in reviewing and updating your management plan to reflect the current property conditions and to identify future activities. It is also a great opportunity to include family members in these discussions so they can learn about past activities and contribute to updating management objectives and activity schedules.

AFF, through staff, State Tree Farm programs, and group managers, will be there to help you learn about the revised Standards and achieve compliance by the end of this year. You can take advantage of the many benefits that these strengthened Standards will offer, such as gaining and expanding access to markets, improving the understanding and acceptance of forest management activities among our friends, neighbors, and detractors and creating greater interest in future generations to continue stewarding our private woodlands.

Author
David Ford chaired AFF’s Independent Standards Review Panel. He is a professional forester, a woodland owner, and executive director of the Oregon Small Woodlands Association.
Resources to help you transition to the new Standards
AFL is working on many levels to provide you the tools you need to implement the 2010-2015 Standards. This includes:

• Offering a series of Internet-based webinars that will present additional information for landowners, volunteers, and forestry consultants. The one-hour webinar will cover how the new Standards will impact current forest management practices.

Register now, and make plans to join one or more of these webinars.
- Tuesday, April 13, from 1:00-2:00pm
- Thursday, May 13 from, 1:00-2:00pm
- Tuesday, September 14, from 1:00-2:00pm
- Tuesday, October 12, from 1:00-2:00pm
- Tuesday, November 9, from 1:00-2:00pm


• Working with the state committees to provide training to ATFS inspecting foresters.

• Your inspecting forester is a valuable resource in reviewing updates you have made to your management plan.

• We have developed a management plan addendum that will help you identify areas that will most likely need to be updated.

• The Woodland Owner Resources <www.treefarmsystem.org/woodlandresources> guide, an ever-growing tool to help you identify local resources to assist you in managing all components of your Tree Farm. This includes information for where you can obtain assistance in identifying unique features on your property, state Best Management Practices, state Tree Farm contact information, and other resource information.

• A focus in all Forests & Families newsletters on implementation of the Standards.

Who was involved in developing the 2010-2015 AFF Standards?
An independent panel of experts, representing landowners, foresters, academia, conservation organizations, and federal and state governments developed the 2010-2015 Standards that are designed especially for small woodland owners. Landowners were represented on the panel and all discussions were through the lens of what is appropriate for independent woodland owners. Representatives from the U.S. Forest Service (USFS) and Natural Resource Conservation Service (NRCS) were on the panel to ensure the Standards and in particular, management plan requirements were aligned with federal programs such as the USFS Forest Stewardship Program making it easier for landowners to participate.

How were my concerns addressed?
The panel provided two opportunities for public comment. The first comment period provided direction in developing the initial draft Standards. Following many months of discussion, the panel released an initial draft for an additional public comment period. Based on the comments received from the second comment period, the panel finalized their recommendations and presented them to AFF’s Board of Trustees, the body responsible for approving the Standards.

What is a management plan update verses a management plan rewrite?
Your management plan should be a working document that is active and adaptive to your property. The American Tree Farm System does not have a requirement that your plan is revised in a given time period. However, we do require the plan is active, updated appropriately, reflects your current objectives as a landowner and the current forest conditions. To help you update your plan to meet the 2010-2015 AFF Standards, we developed a management plan addendum. This addendum is available from your inspecting forester, your state Tree Farm program or the American Tree Farm System <www.treefarmsystem.org/2010standards>.

A management plan update is appropriate when:

• If a management activity was delayed. You can update your plan by including notes on why an activity was delayed. Be sure to initial and date the notes!
Meeting the new 2010-2015 Standards

The AFF Standards were developed as a guide to help you, the landowner, with the management of your forestland. The Standards offer flexibility in the way your management can meet the requirements of the 2010-2015 Standards. Below are some specific steps you can take to maintain your Tree Farm certification under the revised 2010-2015 Standards.

1) Review your management plan
When did you last review your management plan?
Your management plan is the path to reaching your objectives, and a good review can highlight areas where your management could be adapted to better meet your objectives. A few questions to ask yourself during your review include:
- Have your objectives for your forestland changed?
- Have you sold or purchased land?
- Have you completed all of the recommended activities outlined in your plan?

2) Update your management plan
Once you have reviewed your plan, make any necessary updates. Be sure to mention each of the required resource elements under the 2010-2015 Standards (see Indicator 1.1.2). ATFS recommends you contact your forester or natural resource professional if you find you need a full plan rewrite. Resources are also available on the ATFS website <www.treefarmsystem.org>, including a management plan addendum if your plan meets your objectives, but is missing some of the required resource elements for Tree Farm certification. Updates to your plan can be as simple as a handwritten note indicating when a planned activity was completed; however, be sure to include a date on any handwritten notes.

3) Research special sites
As part of your management plan update, be sure to look for any special sites that might be on your property. Special sites are areas that offer unique historical, archeological, cultural, geological, biological, or ecological value (see Standards glossary). Under the 2010-2015 Standards, Tree Farmers are required to address, in their management plan, any special sites found on their land (see Indicator 1.1.2). Paired with this management plan requirement, the Standards require Tree Farmers to research the location of threatened and endangered species and special sites (see Indicators 5.1.1 and 7.1.1). There are many resources available to help you with your special sites research – your local forester, local NRCS office, state natural heritage program, and consulting foresters. The ATFS Woodland Owners Resource online is a great place to start your search <www.treefarmsystem.org/woodlandresources>.

4) Walk your property
As you think about necessary updates to your management plan and research special sites, take the time to walk your property. A walk through your woodlands will show you if you have any problems with invasive species, if there are any special sites you had not noticed before, or if you need to re-mark your boundary lines.

5) Let your objectives direct your management activities
All of the work you have done while walking in your woodlands researching will help guide your management activities to ensure they work to reach your management objectives. Your management plan is a guide, a living document, that can change as your forest does.

Let your time spent preparing your management activities and plan to meet the requirements of the 2010-2015 AFF Standards be time where you get to know the various values of your woodlands or have an important conversation with your family about your land.
Standards Prologue
The American Forest Foundation’s (AFF’s) 2010-2015 Standards of Sustainability for Forest Certification promote the vitality of renewable forest resources while protecting environmental, economic, and social benefits and work to increase public understanding of all benefits of sustainable forestry. They are based on North American and Pan-European guidelines for sustainable forest management, encourage adaptive management, and serve as the basis for the American Tree Farm System® (ATFS) certification program. Forest owners and managers who follow the AFF Standards of Sustainability are encouraged to promote the American Tree Farm System® program by displaying appropriate signs and participating in relevant program activities.

The AFF 2010-2015 Standards of Sustainability address aspects of sustainable forest management and incorporate eight standards with various performance measures, and indicators. ATFS qualified Tree Farm inspectors, group managers, and accredited third-party assessors will conduct field verification of landowner conformance to the AFF Standards as prescribed by ATFS policies and procedures. All AFF sustainability elements (standards, performance measures, and indicators) are important and will be considered in reviews. Responsibilities, task, or obligations that are phrased with the word “must,” are core elements that are required to be certified by the American Tree Farm System. Note: Bold type throughout this document denotes words or phrases defined in the attached glossary. An asterisk symbol (*) indicates guidance provided in the appendix document.

This document was prepared at the direction of the AFF Board of Trustees. It was developed by the 2008-2009 Independent Standards Review Panel under the process described by the AFF Standards Setting Procedures. Guidance documents (third-party auditing, internal monitoring, and landowner guidance) for implementation and interpretations will be used to clarify requirements of the Standards.

Standard 1: Commitment to Practicing Sustainable Forestry
Forest owner demonstrates commitment to forest vitality by developing and implementing a sustainable forest management plan.

Performance Measure 1.1
Forest owner must have and implement a written forest management plan consistent with the size of the forest and the scale and intensity of the forest activities.

Indicator 1.1.1
Management plan must be active, adaptive, and embody the landowner’s objectives, remain appropriate for the land certified, and reflect the current state of knowledge about forestry and natural resource management.

Indicator 1.1.2
Management plans must clearly state landowner’s objectives, describe desired forest conditions, include management activities aimed at reaching the desired forest condition and landowner’s objectives, document a feasible strategy for activity implementation, and include a tract map accurately depicting significant forest-related resources.

Where present, and relevant to the property, the plan must address the following resource elements: forest health, soil, water, wood and fiber production, threatened and endangered species, special sites, invasive species, integrated pest management, and high conservation value forests.

Where present, relevant to the property, and consistent with landowner’s objectives, the plan preparer may consider, describe and evaluate the following resource elements: fire, wetlands, desired species (fish, wildlife, and plant), recreation, aesthetic quality, biomass, and carbon.
Indicator 1.1.3*
Forest owner should monitor for changes that could interfere with the management objectives as stated in management plan (e.g., presence of invasive species, pest outbreaks, and indications of trespass). When problems are found, reasonable actions are taken.

Standard 2: Compliance with Laws
Forest management activities comply with all relevant federal, state, and local laws, regulations, and ordinances.

Performance Measure 2.1
Forest owner must comply with all relevant federal, state, county, and municipal laws, regulations, and ordinances.

Indicator 2.1.1
Forest owner must comply with all relevant laws, regulations, and ordinances, and will correct conditions that led to adverse regulatory actions, if any.

Indicator 2.1.2
Forest owner should obtain advice from appropriate professionals or contractors who are trained in and familiar with relevant laws, regulations, and ordinances.

Standard 3: Reforestation and Afforestation
Forest owner completes timely restocking of desired species of trees on harvested sites and non-stocked areas where tree growing is consistent with land use practices and the forest owner’s management objectives.

Performance Measure 3.1
Reforestation or afforestation must be achieved by a suitable process that ensures adequate stocking levels.

Indicator 3.1.1
Harvested forest land must achieve adequate stocking of desired species reflecting the forest owner’s management objectives, within five years after harvest, or within a time interval as specified by applicable regulation.

Standard 4: Air, Water, and Soil Protection
Forest management practices maintain or enhance the environment and ecosystems, including air, water, soil, and site quality.

Performance Measure 4.1
Forest owner must meet or exceed practices prescribed by State Forestry Best Management Practices (BMPs) that are applicable to the property.

Indicator 4.1.1
Forest owner must implement specific BMPs that are applicable to the property.

Indicator 4.1.2
Forest owner must minimize road construction and other disturbances within riparian zones and wetlands.

Performance Measure 4.2
Forest owner must consider integrated pest management to control pests, pathogens, and unwanted vegetation.

Indicator 4.2.1
Forest owner should evaluate alternatives to manage pest, pathogens, and unwanted vegetation to achieve specific management objectives.

Indicator 4.2.2
Pesticides used must be EPA-approved.

Indicator 4.2.3
Pesticides must be applied, stored, and disposed of in accordance with EPA approved labels and by persons appropriately trained, licensed, and supervised.

Performance Measure 4.3
When used, prescribed fire must conform with forest owner’s objectives, the forest management plan, and pre-fire planning.

Indicator 4.3.1
Prescribed fire must conform with the management plan and state and local laws and regulations.

Standard 5: Fish, Wildlife, and Biodiversity
Forest management activities contribute to the conservation of biodiversity.

Performance Measure 5.1
Forest management activities must maintain or enhance habitat for threatened or endangered communities and species.
Indicator 5.1.1
Forest owner must confer with natural resource agencies, state natural resource heritage programs, or review other sources of information to determine occurrences of threatened and endangered species on the property and their habitat requirements.

Indicator 5.1.2
Forest management activities must incorporate measures to protect identified threatened and endangered species.

Performance Measure 5.2
Forest owner should address the desired species (fish, aquatic, wildlife, and plant) and/or desired forest communities in the management plan and forest management activities.

Indicator 5.2.1
Forest owner should consult available and accessible information on management of the forest for desired species (fish, aquatic, wildlife, and plant) and/or forest communities and integrate it into forest management.

Performance Measure 5.3
Forest owner should make practical efforts to prevent, eradicate, or otherwise control invasive species.

Indicator 5.3.1
Forest owner should make practical efforts to prevent, eradicate, or otherwise control invasive species using a range of integrated pest management methods.

Performance Measure 5.4
Forest management activities should maintain or enhance rare species and high conservation value forests.

Indicator 5.4.1
Appropriate to the scale and intensity of the situation, forest management activities should incorporate measures to protect or mitigate impacts on rare species and identified high conservation value forests.

Standard 6: Forest Aesthetics
Forest management plans and management activities recognize the value of forest aesthetics.

Performance Measure 6.1
Forest owner should manage the visual impacts of forest management activities consistent with the size of the forest, the scale and intensity of forest management activities, and the location of the property.

Indicator 6.1.1
Forest management activities should apply visual quality measures compatible with appropriate silvicultural practices.

Standard 7: Protect Special Sites
Special sites are managed in ways that recognize their unique historical, archeological, cultural, geological, biological, or ecological characteristics.

Performance Measure 7.1
Forest management activities must maintain special sites.

Indicator 7.1.1
Forest owner must make a reasonable effort to locate and protect special sites appropriate for the size of the forest and the scale and intensity of forest management activities.

Standard 8: Forest Product Harvests and Other Activities
Forest product harvests and other management activities are conducted in accordance with the management plan and consider other forest values.

Performance Measure 8.1
Forest owner should use qualified natural resource professionals and qualified contractors when contracting for services.

Indicator 8.1.1
Forest owner should seek qualified natural resource professionals and qualified contractors.

Indicator 8.1.2*
Forest owner should engage contractors that carry appropriate insurance and comply with appropriate federal, state, and local safety and fair labor rules, regulations, and standard practices.

Indicator 8.1.3
Forest owner should retain appropriate contracts for forest product harvests and other management activities to demonstrate conformance to the AFF Standards.

Performance Measure 8.2
Forest owner must monitor forest product harvests and other management activities to ensure they conform to the management plan objectives.

Indicator 8.2.1
Harvest, utilization, removal, and other management activities must be conducted in compliance with the management plan and maintain the potential of the property to produce forest products and other benefits sustainably.

1 Auditors shall consider any complaints alleging violation of fair labor rules filed by workers or organized labor since the previous third-party certification audit. The auditor shall not take action on any labor issues pending in a formal grievance process or before Federal, State or local agencies or the courts, however, until those processes are completed. Absent a record of documented complaints or non-compliances, contractors and managers are assumed to be in compliance with this indicator.
accredited third-party assessors – A natural resource professional who has completed ATFS required training for third party assessors and is contracted or employed by an International Accreditation Forum (IAF) accredited certification body.

adaptive management – A dynamic approach to forest management in which the effects of treatments and decisions are continually monitored and used to modify management on a continuing basis to ensure that objectives are being met (Helms et al, *The Dictionary of Forestry*, Society of American Foresters, 1998).

adverse regulatory actions – Written warning, citations, or fines issued by law enforcement or regulatory bodies.

biodiversity – The variety and abundance of life forms, processes, functions and structures of plants, animals, and other living organisms, including the relative complexity of species, communities, gene pools, and ecosystems at spatial scales that range from local through regional to global (Helms et al, *The Dictionary of Forestry*, Society of American Foresters, 1998).

complaint – Labor complaints are those with formal documentation filed through the state’s fair labor practices board or similar body.

desired species – Those species of flora and fauna designated in the landowner’s management plan and not known to cause negative impacts on the local environment.

fair labor rules – Include federal, state, and local labor legislation and international labor standards cited in Programme for the Endorsement of Forest Certification systems (PEFC) Annex 3, Chapter 3.3.

forest owner – Landowner or designated representative such as, but not limited to, professional resource manager, family member, trustee, etc.

forest product – [Forest Produce] Any raw material yielded by a forest. Generally defined in Forest Acts or Ordinances, and subdivided conventionally into major forest products, i.e., timber and fuelwood, and minor forest products, i.e., all other products including leaves, fruit, grass, fungi, resins, gums, animal parts, water, soil, gravel, stone, and other minerals on forest land (F. C. Ford Robertson, *Terminology of Forest Science Technology, Practice, and Products*, Society of American Foresters, 1971).

forest vitality – The health and sustainability of a forest.

group manager – The individual(s) designated by the Independently Managed Group organization to manage the administrative affairs of implementing and achieving the AFF Standards and Standard Operating Procedures for group programs (SOP-01) for an ATFS certified, independently managed group program. Please refer to the ATFS Group Certification Process documentation.

high conservation value forests – Forests of outstanding and critical importance due to their environmental, social, biodiversity, or landscape values. Due to the small scale and low-intensity of family forest operations, informal assessment of HCVF occurrence through consultation with experts or review of available and accessible information is appropriate.

integrated pest management – The maintenance of destructive agents, including insects, at tolerable levels by planned use of a variety of preventative, suppressive, or regulatory tactics and strategies that are ecologically and economically efficient and socially acceptable (Helms et al, *The Dictionary of Forestry*, Society of American Foresters, 1998). A pest control strategy that uses a variety of complementary strategies including mechanical devices, physical devices, genetic, biological or cultural management and chemical management (U.S. EPA).

invasive species – Non-native species whose introduction does or is likely to, cause economic or environmental harm or harm to human health (Executive Order 13112 Feb. 3, 1999).

landowner – Entity that holds title to the property to be certified.

management plan – Documents that guide actions and that change in response to feedback and changed conditions, goals, objectives, and policies. Management plans may incorporate several documents including, but not limited to, harvest plans, activity implementation schedules, permits, research, etc. For the purposes of the American Tree Farm System® eligible management plans, plan amendments may include letters, notes, and other forms of informal updates in addition to formal plan revisions.

pesticide – Pesticides include chemicals commonly known as herbicides and insecticides.


qualified contractor – Forest contractors who have completed certification, licensing, recommended training, and education programs offered in their respective states.

qualified natural resource professional – A person who by training and experience can make forest management recommendations. Examples include foresters, soil scientists, hydrologists, forest engineers, forest ecologists, fishery and wildlife biologists, or technically trained specialists in such fields.
qualified Tree Farm inspector – A natural resource professional who has completed ATFS required training for certifying forested properties and is eligible to inspect properties on behalf of ATFS. ATFS requires all trained inspectors meet approved eligibility requirements.

rare species – A plant, animal, or community that is vulnerable to extinction or elimination.

scale – The extent of forest operations on the landscape/certified property.

special sites – Those areas offering unique historical, archeological, cultural, geological, biological, or ecological value. Special Sites include:

A. Historical, archaeological, cultural, and ceremonial sites or features of importance to the forest owner
B. Sites of importance to wildlife such as rookeries, refuges, fish spawning grounds, vernal ponds, and shelters of hibernating animals
C. Unique ecological communities like relic old-growth, springs, glades, savannas, fens, and bogs
D. Geological features such as terminal moraines, cliffs, and caves

state forestry best management practice(s) (BMPs) – Forestry BMPs are generally accepted forest management guidelines that have been developed by state forestry agencies with broad public stakeholder input.


visual quality measures – Modifications of forestry practices in consideration of public view, including timber sale layout, road and log landing locations, intersections with public roadways, distributing logging residue, tree retention, timing of operations, and other factors relevant to the scale and location of the project.

Glossary of Terms (cont.)

Third-Party Certification Assessments

Tree Farmers play a critical role in third-party certification for the American Tree Farm System®. For almost 70 years, ATFS landowners have shown the country what commitment and stewardship means on private forestlands in the United States.

Third-party certification assesses the Tree Farm program’s ability to ensure landowner conformance to the American Forest Foundation’s Standards of Sustainability for Forest Certification, elevating Tree Farm to an internationally-recognized forest certification system. This recognition also creates access to new market opportunities for certified Tree Farms.

ATFS offers affordable and accessible third-party certification to Tree Farmers through State Tree Farm Committees and through independently managed group programs.

State Tree Farm Committees are certified in one of four regions: South, West, Northeast, and North Central. Every year a few states selected to represent the entire region are visited as part of ATFS’s third-party certification assessment.

Within a state, a sample of Tree Farms is selected for a visit by certification assessors who review how the Standards are implemented on these properties. Under Independently Managed Group (IMG) programs, a sample of Tree Farms is also visited as part of the group’s third-party assessment.

If your property is selected for participation in the certification assessment, your State Tree Farm Committee will contact you to check your availability for a field visit. During this visit, and in preparation of the visit, the auditors will be assessing your conformance to AFF Standards in much the same way an inspector would during a Tree Farm inspection. It is a great opportunity to showcase how your forest management practices meet AFF Standards and you will be a proud representative of all the Tree Farms in your state. All participation in these assessments is strictly confidential.

Your management plan is a key document for the assessment. There are a number of resources available on the Tree Farm website to ensure your management plan meets the requirements of AFF Standards. If you have any questions, contact your State Tree Farm Committee, inspector, or ATFS staff. The Woodland Owner Resource <www.treefarmysystem.org/woodlandresources> is available as a guide to the resources available in your state.
My Forest, My Standards

Amelia Wright, 2002 Eastern Regional Outstanding Tree Farmer of the Year.

“We are only temporary stewards of the land.” This is what my father told me some 50 years ago, and it is still true today. For Tree Farmers across the United States this is the underlying motivation to do the right thing for your woodlands, to manage in a sustainable way.

I remembered my father’s message when I began to prepare my first management plan for my Tree Farm in Sussex county, Delaware. Understanding that my father hoped I would leave the land in better shape than when I first became its steward, I contacted the Delaware state heritage staff and the local NRCS office to do an assessment of my property for special sites. They found some state species of interest but no threatened or endangered species. Asking for an assessment was considered by some a foolish thing to do as it could invite additional regulation of my land; however, the data they provided gave me great insight into the value of my forest for things in addition to timber. The assessment included valuable soil maps and other information that helped me shape my objectives for the forest.

My woodlands, which had been owned by previous generations of my family, include Wright’s Creek, a small creek at the headwaters of the Nanticoke River, a small part of the Chesapeake Bay Watershed. Following the state heritage staff’s assessment, I set about to prepare for a timber harvest. The Delaware Forest Service Best Management Practices (BMPs) staff helped me with marking the harvest area near the creek. Together, we decided to leave a wider creek side buffer than was required under the Delaware BMPs. This wider buffer established an area in which we could preserve the Atlantic White Cedar, a rare species in my area, along with a variety of native trees and shrubs to encourage bird habitat and provide shade for the creek. The timber buyers appreciated having this area well marked ahead of the bid process so that they could see exactly what was being offered for harvest. Continuing to work with the Delaware BMP staff, we took extra care to determine the location and method of ditch crossings to ensure that the creek was not damaged. We also considered the aesthetics when deciding where to put our loading decks.

Water quality studies were conducted in the clear cut area two years after the harvest to determine if there were any negative impacts on the creek from the harvest. None were found, and I believe that this was because of the site assessment and pre-planning work that I did with the state agency staff. We reforested the area with natural regeneration of pines and Tulip Poplar and planting some additional Atlantic White Cedar. To do my part to fight against invasive species, we sprayed herbicides with backpack sprayers. Making use of the extra buffer, I installed wood duck boxes near the creek and in an existing small pond. These are monitored and maintained by a hunting tenant.

The information gathered as part of the special sites assessment of my property gave me the opportunity to proactively prepare for any activities that may involve laws and regulations. Being able to identify and mark special sites whether cultural or environmental, prior to forest management activities saves a great deal of time and confusion, often when time and money are of the essence.

What did it cost me to protect the expanded buffers? The timber company said about two loads of loblolly pine and some of my time and energy. I truly believe this is a small price to pay for accomplishing my long-term goals and protecting my property for all my objectives.

I strongly urge you to get to know your land and take great pride in the value it holds. Useful information is available from local and state natural resource agencies and NRCS offices, historical societies, neighbors, and others. While we may only be temporary stewards, let us do no permanent harm.

How to Deal with Pest on Your Property

Kamal J.K. Gandhi, Daniel B. Warnell School of Forestry and Natural Resources, University of Georgia, Athens, Georgia

Integrated Pest Management (IPM) is an ecologically, socially, and an economically acceptable approach to management of forest pests including insects, diseases, and weeds that can be a cost-effective way for landowners to control pest. An IPM program can include various methods to maintain the populations of forest pests below economic damage thresholds, while maintaining the quality of the environment (Helms, 1998). In contrast to pest control, which serves to eliminate pests from forests, IPM strives to reduce the populations of pests to a level that is either socially or economically tolerable (Pedigo, 1998). Since the 1960s, a wide variety of techniques such as silvicultural, biological, mechanical, genetic, and chemical control methods are used in IPM. Typically, combinations of these control methods are employed rather than a single method (e.g., only chemical control) to achieve tolerable levels of forest pests (Pedigo, 1998).

The first step in IPM is to accurately identify and monitor forest pests within a stand; this step is critical in assessing whether a pest species may cause damage to trees. Not all species cause damage, and some species such as insect predators may be beneficial to forest stands. Mistaking trivial pest activity can result in money spent on management activities that may not be needed; here a net loss may occur from using IPM (Pedigo, 1998). Monitoring of forest pests can be conducted by visual surveys for signs of tree decline and mortality, and with traps targeting key species. Correctly identifying a forest pest also aids in gathering information about their biology such as their life-cycle, seasonal activity, and behavior, which may be crucial for implementing IPM in forests.
Once the pest species is identified and population levels are accurately estimated, the next step is to determine an action and economic damage threshold for this forest pest. If the pest populations are low as compared to the economic damage threshold, then prevention is the best option. Here, IPM should strive to lower the population peaks of pests to prevent outbreaks from occurring in the future. Prevention is one of the most cost-effective and benign approaches of IPM (U.S. EPA, 2009). Silvicultural activities such as maintaining tree vigor by planting at the right site, avoiding overstocking of trees, preventing damage to the stems and roots of residual trees and prompt slash removal during harvesting and thinning activities, adequate watering and fertilizing of trees, planting resistant species, etc., may prevent build-up of forest pests such as southern pine beetle. Any other forest stresses such as wildfires, drought, windstorms, and icestorms may further increase the susceptibility of trees to attacks by forest pests.

If the pest populations are close or higher to that of the economic damage threshold and preventive methods have not been effective or unavailable, then IPM should strive to either directly reduce the pest populations using control methods, and/or indirectly by altering the habitat (such as removing a certain tree species) to bring down their population levels. Simple activities such as physical removal of pests (e.g., weeds), trapping of insects, removal of infected trees, and installing mechanical barriers around trees can be conducted, especially when the pest populations are localized. Biological control methods are more sophisticated, and include both introducing pest enemies from elsewhere (particularly for non-native pests), and conserving and enhancing natural enemies within forest stands. These pest enemies may include a variety of species such as birds, mammals, bacteria, virus, and insects (e.g., parasitic wasps and predatory spiders). The use of chemicals is generally minimized under IPM, but may also include pheromones that disrupt insect mating in forest stands. Regular monitoring of forest pests may be required to ascertain whether IPM activities have significantly reduced tree damage by forest pests.

Overall, IPM is a multi-faceted approach and a tiered-system to manage forests in a way to minimize impacts from pest populations, while maintaining the health and integrity of forest stands. Properly applied, an IPM program can be economically beneficial for forest stands for the long term. If you suspect that you have forest pests causing damage in your stands, contact the local Extension agent in your area. They will provide confirmation of the problem and guidance with appropriate control and suppression programs.

Literature Cited


Examples of IPM Techniques

- **Silvicultural:**
  - Planting species in the right site
  - Avoiding overstocking
  - Preventing damage to stems and roots during harvesting
  - Removing slash during thinning and harvesting activities

- **Mechanical:**
  - Removal of weeds or trapping of pests
  - Installing mechanical barriers
  - Removing affected trees

- **Biological:**
  - Enhancing natural enemies habitat
  - Introducing pest enemies
  - Enemies can include: birds, mammals, insects, bacteria or viruses

- **Chemical:**
  - Pheromones
  - Repellents
  - Herbicides
  - Pesticides

Tree Farm is Value

When someone asks you “Why is the Tree Farm program important to you?” The answer may just roll off your tongue. “Well,” you say. “It just makes good sense! It generates income; helps me maintain the value of my woods; helps me enhance the beauty of my woods with all its wildlife, clean flowing streams, healthy trees and special places. It’s my responsibility and as a steward of the land it helps me leave it better than I found it!”

Last year more than 1,500 woodland owners (representing 815,000 acres of woodlands) learned the value of the Tree Farm program as they become new members of the largest national forest conservation program in the United States. Today the American Tree Farm System® has more than 75,000 members Tree Farmers who collectively own 24.3 million acres of woodlands across the country.

What’s important to this national collection of woodland owners varies as much as their respective forests. For some, it is the advocacy efforts of the Tree Farm program. AFF informs and leads grassroots actions on issues of critical importance to private woodland owners, including property and estate taxes, markets for biomass, funding for conservation forestry efforts, participation in emerging carbon markets, and others. AFF works at multiple levels to retain the social license to manage your woodlands.

AFF has a unique position in that it can work at all government levels (through its national office, right down to the grassroots levels in your home state and community). You can join the Grassroots Action Network which will provide you with alerts regarding the forestry policy priorities (for example, Farm Bill implementation, renewable energy, and climate change). To join the Grassroots Action Network sign up at <www.forestfoundation.org/public.html>.
Landowners can participate in the many education and outreach activities available, from workshops to field days to the National Tree Farmer Convention. Training and tools to help Tree Farmers become even better stewards of the land are available for the asking, as is professional advice and hands-on assistance with forest management. For example, the Ties to the Land program, launched in conjunction with Oregon State University, provides training, materials, and workshops for folks facing tough decisions about estate planning.

The American Tree Farm System provides something that no other organization does; it is the largest national community of woodland owners in the United States and all are committed to maintaining the integrity of their land. Many of you embrace this community every day by inviting others on to your property, from schoolchildren, church and civic groups, to adult landowners. This is the true spirit of being an American Tree Farmer.

Certification is no small component of the “what’s important” to members. AFF is NOT “standing still.” While the Tree Farm program can boast being the oldest certification program in America (since 1941), keeping you, as a Tree Farmer, competitive in global markets; ensuring your management activities are compatible with new conservation forestry practices; and keeping the pulse on consumer expectations – is paramount to AFF. Our Standards serve to guide you in meeting your objectives to help maintain your woods as the most vital, healthy, thriving forest possible.

Today, consumers want “green.” The new Standards put you, as a Tree Farmer, into an elite category of private forest landowners who exemplify a national – indeed, a global axiom: The American Tree Farm System, a high-quality certification system that is globally recognized, provides market access by assuring buyers that you have been managing your timber in a sustainable manner. Additionally, certification will give you a leg up accessing and participating in emerging markets, like carbon and biomass.

Tree Farm: the sign of good forestry
Part of the “price you pay” for what matters begins to accrue when you put the green and white, diamond-shaped Tree Farm sign up for display. At that time, you are making a statement, and you are making a commitment. Tree Farmers are legitimate and genuine stewards of the land.

And now the value accrues: The sign at the edge of your Tree Farm (or the logo on your jacket or baseball cap) tells others that you are committed to protecting watersheds and wildlife habitat, as well as conservation of the soil. Those signs and that logo also state that you are contributing to the production of the wood and other products that the citizens of this nation need and use.

Tree Farming makes dollars and cents – and sense. It provides access to markets (both current and emerging); enables your participation in USDA conservation funding programs (you now have access to almost $3 billion in funds to support conservation forestry through the Farm Bill); and helps to ensure that the investment made by family woodland owners of today, are intact and working for the next generation.

We’ve discussed the values of Tree Farming. But what we said was only part of the story. Tree Farming is ultimately what you see happening because of your efforts: a stream running clear, filtered by a streamside forest; a college fund and/or retirement plan growing from the assets of your woodland harvests; a return of grouse populations because of the new young forest you created; dates filled on the calendar noting upcoming visits from students and teachers, the local Scout troop, the legislative commission, or your annual hunting trip.

Perhaps that question: “Why does Tree Farming matter?” is best answered by taking a walk in your woods and letting the answer come to you – in sight and in sound.

Your responsibilities as a certified Tree Farmer are:
1) Maintain and keep an up-to-date management plan that meets the AFF Standards of Sustainability.
2) Cooperate with inspectors and certification assessors, all of whom are professional foresters.
3) Notify ATFS with changes to your address or ownership.
4) Proudly display the Tree Farm sign of sustainability on your certified lands. To make it easier to make that statement and that commitment, you can order the Tree Farm sign online at <www.treefarmsystem.org/ordersigns>.

Feeling a bit weighted with responsibility? Managing and sustaining forests and committing to their future viability are awesome responsibilities. The Tree Farm program asks that those responsibilities be taken seriously.

However, life’s circumstances change, objectives become shifted, things happen within your families and your lives, and to the woodlands you own. The Tree Farm Program is voluntary. Choosing not to participate holds no penalties.

If you chose not to participate in the American Tree Farm System, you will need to:
1) Notify your state committee or the American Forest Foundation so that we can update our database and remove you from our rolls.
2) No longer claim your wood as certified or as being certified in the American Tree Farm System.
3) Remove your Tree Farm or Family Forest sign.

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