Purdue University - Forestry and Natural Resources



A Landowner's Guide to **Sustainable Forestry**

in Indiana PURDUE UNIVERSITY



Part 2. Planning for the Future

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Sustainable forest management is a long-term prospect. Management decisions made today will have far-reaching consequences many decades into the future. Forest landowners make, for better or worse, management decisions that impact the next two generations.

Think of your forest as a long-term investment that, if managed properly, will yield handsome dividends. Any worthwhile investment requires forethought and planning. Sustainable forest management is no exception. Many landowners are making investments in their forest knowing that the financial rewards will be reaped by their heirs.

Preparing a management plan forces you to identify your objectives. It also gives you a schedule of specific practices necessary to achieve your objectives. It is a "blueprint" that will guide foresters, wildlife managers, or other natural resource professionals to help you achieve your objectives. Perhaps one of the most important benefits of a management plan is that it will help guide management of your forest after you are gone, providing intergenerational continuity - a hallmark of sustainable forestry. Developing a forest management plan is a necessary first step in sustainable forest management.

The First Step - Who Can Help You?

Taking that first step may seem a bit overwhelming. Help is available. Professional foresters, wildlife biologists, and other natural resource professionals are available to assist you. They can help you identify your objectives and insure that they are compatible. They will also recommend specific practices needed to accomplish your objectives. Some will write a management plan for you and, if you wish, do the work that is detailed in the plan.

There are 18 Indiana Department of Natural Resources, Division of Forestry, **District Foresters** who provide forestry advice and assistance to landowners in every

Sustainable Forestry Checklist

Planning for the Future

- Get professional help
- Determine your forest ownership objectives
- ☑ Gather information about your property and its forest resources
- Write a plan that includes specific management activities and a schedule for accomplishing them
- Review your forest management plan
- ✓ Use legally binding contracts

county of the state. Their services are provided free of charge; however, there may be a waiting list for service. District Foresters can give you a good overview of your forest resources and their condition. They can help you develop a management plan and refer you to private

Your forest is a long-term investment that, if managed properly, will yield handsome dividends. It is a "goose that lays golden eggs."

professionals or other agency professionals to do the management work or to enroll you in assistance programs.

Private consulting foresters provide forest management advice and services to landowners for a fee. Many consultants are able to provide a full range of services including management plan preparation, timber appraisals and valuations, timber sale marking and marketing, tree planting, timber stand improvement work, timber



Forest Contact Information

District Foresters:

IDNR Division of Forestry 402 W. Washington St., Rm. W296 Indianapolis, IN 46204 (317) 232-4105 www.state.in.us/dnr/forestry

Private Consulting Foresters:

Call your district forester, local Cooperative Extension Service, or www.inwoodlands.org

Industry Forester:

Call your District Forester or www.inwoodlands.org

Wildlife Contact Information

District Wildlife Biologists:

IDNR Division of Fish & Wildlife 402 W. Washington St., Rm. W273 Indianapolis, IN 46204 (317) 232-4080 www.state.in.us/dnr/fishwild/biologst.htm

inventory, and tax management. You can obtain contact information on consultant foresters near you from your

district forester or county Cooperative Extension Service.

Industry foresters work for companies who purchase and/or manufacture wood products. Industry foresters, in some cases, will work with private landowners for a fee or as part of a management agreement between the landowners and the company they represent. They can offer services similar to consulting foresters, but are in the employ of a company as opposed to the consultant, who works directly for the landowner.

Much like District Foresters, Indiana Department of Natural Resources, Division of Fish & Wildlife provides **District Wildlife Biologists** to assist landowners. They specialize in assisting landowners with the development, enhancement, and restoration of wildlife habitat by providing technical advice, written management plans, and cost-share assistance. In addition, they assist farm operators in enhancing the wildlife values of agricultural lands being entered or currently enrolled in various U.S. Department of Agriculture land retirement programs. They also assist landowners with nuisance wildlife management and control recommendations. Wildlife biologists can also recommend additional sources of assistance and cost-share opportunities. All services are free of charge.

It is critical that you get professional assistance from one or more of the sources above to help you make informed, responsible decisions about managing your forest land. Management mistakes can have detrimental impacts on the health and growth of your forest, which in turn may affect the fulfillment of your management objectives. Take advantage of the resources available to help you make good decisions.

In addition to the professional assistance already described, other sources of help are listed in Part 8 of this *Sustainable Forestry* series entitled, *Help!* (FNR-187).

Your Objectives

Sustainable forest management is a lot like target practice - if you don't have a well-defined target, it's hard to know if your aim is good! First, you need to define your goals or objectives before you can really begin to effectively manage your forest.

Make a list of things you currently enjoy about your forest. These might include hunting, wildlife watching, camping, or mushroom hunting. Then think of other possibilities for the future; e.g., income production through the sale of timber. This will get you started. If you plan and manage carefully, you should be able to achieve a multitude of objectives. One example might be creating small openings during a timber harvest to provide a different habitat that benefits desired species of wildlife. Several objectives are fulfilled simultaneously: income is generated through the sale of timber, space is made for new trees to grow, and desired species of wildlife are attracted to the dense thicket of young trees and brush that grow following the harvest of the large trees.

List of Objective Ideas:

- Improve forest health.
- Develop timber income potential.
- Enhance hunting.
- · Provide wildlife habitat.
- Protect unique habitats and rare plant and animal species.
- Control soil erosion.
- Ensure clean water in streams, rivers, and lakes.
- Maintain the forest's beauty.
- Develop the recreation potential camping, hiking or horseback riding trails, etc.
- Protect cultural and historical features like cemeteries or significant Native American archaeological sites.
- Develop alternative income enterprises such as maple syrup, forest herbs, etc.

Prioritize your list of management objectives, in the event you discover conflicts. Resource professionals can help you avoid conflicting or unsustainable objectives. A forester can help you understand how your objectives and proposed management activities may change the condition and appearance of the forest. Thus you can be sure your objectives and the desired future condition of the forest are compatible.

Gathering Information

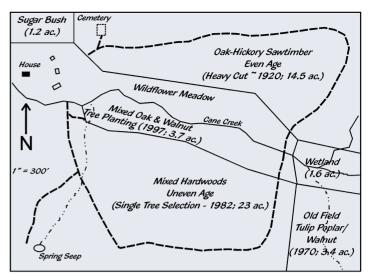
Management requires knowledge of the resources you have to work with. Professional foresters and other resource specialists can assist with resource inventories and assessments. They will help you interpret and apply inventory data to make sound management decisions.

Information to gather for your forest management plan may include:

- Property location including legal descriptions, landmarks, and access points.
- Management history; e.g., past timber harvests, tree plantings, fields retired from farming, etc.
- Types of land use and different types or ages of forest.
- Soil types and their productivity and limitations for growing trees or other vegetation.
- Water resources in or near the area.
- Topography and geologic features.
- Tree species, sizes, density, growth rate, vigor, quality for certain products like lumber or veneer, and presence of damaging insects or disease.
- · Wildlife species found in the area.
- Presence of rare species of plants or animals.
- Presence of archaeological or cultural sites like cemeteries, Native American artifacts, historic buildings, etc.
- Land uses and management practices on neighboring properties.

There are many other items to consider depending on your management interests and the features of your property, but the list included here would provide the information needed for most decisions. You can collect some of this information from your own observations and by referring to your property deeds and other records. Some data, like the tree inventory, should be collected by a professional forester.

You should also evaluate your own circumstances in order to realistically determine your level of involvement in management activities. If you are a middle-aged professional with a demanding career and a young, active



A property map will be very useful as you plan and carry out management activities.

family, you may be physically capable of doing the needed work in your woods but lack the time. Hiring a professional to do the work makes the most sense for many forest landowners. On the other hand, some woods work makes a great family project that teaches good values to children, promotes family unity, and instills a love for the forest in your heirs.

Once the needed information has been collected, a plan of action can be developed to help you achieve your forest management objectives. Compare your management objectives to your resource base and its productive potential. Resource professionals can help you develop your plan based on realistic objectives, given the resources you have available.

Planning Management Activities

Once you have determined your objectives and gathered the needed information, you are ready to outline a course of action for the next 5 to 10 years in the form of a management plan. Your plan should include the plan preparer's name, the date the plan was prepared, location of the property, including a legal description, a summary of the inventory data, a statement of your management objectives, a description of the desired future condition of your forest, maps and/or aerial photos with separate management areas and significant features delineated, the recommended actions to take, and the timeline for those actions. Every 5 to 15 years your forest management plan should be reviewed and revised, depending on the type of forest and how intensively you wish to manage it. Your professional forester and wildlife biologist can assist you with all these details.

With a thorough assessment of your property and a good management plan you should be able to take better aim at your target objectives. Finally, keep complete records of what was done, when it was done, what it cost, and the results obtained. This will help you and the professionals who assist you to determine whether your objectives are being met. Such records will also help with future planning and could come in handy at tax time (more on tax issues in Part 8, *Help!*, of the *Sustainable Forestry* series).

Use Legal Contracts

Whether you hire a private consulting forester to help you manage your forest, you sell timber, or lease your land for hunting, written contracts should be used. A good contract protects both you and the other parties involved in case of accidents, neglect, mismanagement, or even fraud. Contracts help insure that the work gets done according to the terms of the agreement. Contracts help keep everyone honest.

Most private consulting foresters use contracts as a matter of business. Most timber buyers expect written contracts when purchasing timber. They may even have their own version they prefer to use, which may or may not be adequate for your protection. You may be better off drawing up your own timber sale contract with the assistance of a forester. You should have contracts reviewed by your attorney before signing them. Purdue Cooperative Extension publication FNR-111, *Marketing Timber*, provides an example of a timber sale contract.

Additional Information

- Alban, L.M., S.A. Thomasma, M.J. Twery. 1995. Forest Stewardship Planning Guide (Version 1.10). [computer program]. USDA Forest Service, Northeast Forest Experiment Station, Gen. Tech. Rep. NE-203. 15 p. and 3-1/2 in. computer disk.
- Fazio, J.R. 1994. *The Woodland Steward*. The Woodland Press, Moscow, Idaho. 211 p. ISBN: 0-9615031-1-4.
- Fischer, B.C. 1991. *Marketing Timber*. Purdue University Cooperative Extension Service, FNR-111. 11 p.
- MacGowan, B., B. Miller, and J. Seifert. 2001.

 Forestry and Wildlife Management Assistance
 Available to Indiana Landowners: Providers,
 Organizations and Programs. Purdue University
 Cooperative Extension Service, FNR-87. 16 p.
- McEvoy, T.J. 1998. *Legal Aspects of Owning and Managing Woodlands*. Island Press, Covelo, California. 208 p. ISBN: 1-55963-638-6.

Basic Elements of a Forest Management Plan

- Plan preparer's name.
- Date the plan was prepared.
- Property location, including legal description.
- Description of property, resources, and unique features.
- Summary of inventory data.
- Management objectives.
- Description of desired condition of the forest.
- Maps and/or aerial photos with separate management areas and significant features delineated.
- Recommended actions to take.
- Schedule of management activity.
- Year of next plan review.

Forest Management Plan Robert and Clarissa Sylvanus Property

Prepared by: Walden Forestry Consultants, French Lick, Indiana Date: October 19, 2001

Location: Jackson Twp., Orange County

Legal Description: SW1/4, NE1/4, Sec 33, T1N, R2W

General Description: 60-acre tract, dissected from southeast to northwest by the headwaters of Cane Creek. A narrow open meadow borders the creek, flanked to the north and south by steep wooded hillsides.

Soil and Water Resources

The soils for most of the wooded acreage are classified as Gilpin-Wellston silt loam, 18-50% slopes. These soils are moderately productive for forest growth, although there is little else they can be managed for. There are small areas in the stream bottom classified as Burnside soils. These are deep, well-drained stream-bottom soils. Tree growth should be a little better in these soils than on the hillsides.

A wetland is formed at the confluence of three branches of Cane Creek. A sizable spring seep flows from the base of a sandstone outcrop near southwest corner of property. Cane Creek flows year round...

Timber Inventory Summary, 2001 Robert and Clarissa Sylvanus

Oak-Hickory (north stand)

(See appendix for inventory data tables)

14.5 acres

southwest aspect

10-30% slope

70 trees/acre (>9" dbh)

120 sq.ft./acre basal area

9359 board feet (bd.ft., Doyle rule) sawtimber/acre

1787 bd. ft./acre white oak

2018 bd. ft./acre black oak

1560 bd. ft./acre red oak

2103 bd. ft./acre hickory

800 bd. ft./acre sugar maple

1091 bd. ft./acre misc.

135705 total stand bd.ft.

Mixed Hardwoods (south stand)

23 acres

northeast aspect

10-30% slope

72 trees/acre (>9" dbh)...

Work Plan, 2000 - 2010 Robert and Clarissa Sylvanus

Oak-Hickory (north stand)

2001 - Clean up cemetery and repair headstones.

2007 - Grape vine control.

2010 - Tímber sale.

2010 - Install best management practices (BMPs) and repair and improve trails.

<u>Mixed Hardwoods (south stand)</u>

2007 - Grape vine control.

2010 - Timber sale.

2010 - Install BMPs and repair and improve trails and stream crossings.

Old Field Tulip Poplar/Walnut

2002 - Grape vine control and thin crop trees.

Wetland

Spring 2001 - Plant native shrubs along edge for wildlife food and cover.

2001 - Put up wood duck boxes.

Tree Planting ...

A Landowner's Guide to Sustainable Forestry in Indiana

Part 1. Sustainable Forestry - What Does It Mean for Indiana?—FNR-180

- · Sustainable Forestry Described
- Historical Perspective
- · Indiana's Forests Today
- · How This Series Is Organized

Part 2. Planning for the Future—FNR-181

- The First Step Who Can Help You?
- · Your Objectives
- Gathering Information
- Planning Your Management Activities
- Using Legal Contracts

Part 3. Keeping Your Forest Healthy and Productive
—FNR-182

- Maintaining and Enhancing Site Productivity
- Improving Tree Growth and Protecting Timber Quality
- · Regenerating the Forest

Part 4. Conserving Nature—FNR-183

- · Providing Wildlife Habitat
- · Unusual Habitats
- · Endangered Species
- Invaders! Harmful Exotic Species
- Forest Fire Not Always as Bad as It Sounds
- Fragments of Forests

Part 5. Forests and Water—FNR-184

- Livestock
- Reforestation Benefits Water Resources
- Avoid Clearing Forest
- · Forest Roads and Trails
- Best Management Practices (BMPs) for Timber Harvesting
- · Pesticides
- Protecting Sensitive Water Resources

Part 6. Maintaining the Beauty and Enhancing the Recreational and Cultural Values of Your Forest—FNR-185

- Maintain Visual Buffers Next to Public Places
- Maintain Important Scenic Views
- Tips for a Better-Looking Logging Job
- Developing the Recreation Potential of Your Forest
- Protecting and Enhancing Cultural and Historic Values

Part 7. Managing for a Diversity of Value-Added Forest Products—FNR-186

- · Forest Herbs
- Mushrooms
- Develop the Recreation Potential of Your Forest
- Christmas Trees and Greenery
- · Maple Syrup
- · Value-added Wood
- Do Your Homework!

Part 8. *Help!*—*FNR-187*

- · Cost Share Grants
- Classified Forest and Wildlife Habitat Programs
- Leaving a *Forest Legacy* Permanent Forest Protection Through Conservation Easements
- Tax Incentives
- · Education and Technical Assistance
- Carbon Sequestration
- · Forest Bank
- Forest Cooperatives
- · Forest Certification



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