



Seeing the forest and the trees

Managing forest properties

Forests today are recognized for much more than just the trees. Forests are a diverse community of plants, animals, soils, and water that are constantly changing and evolving. Understanding how to manage a forest – whether a small one on your property or a public forest consisting of thousands of acres – to improve conditions for the entire ecosystem can be a difficult task. Also, as threats such as noxious weeds, wildfire, fragmentation, and insects and disease continue to degrade a forest, sustaining a healthy and diverse forest has become an even greater challenge.

As a society, we have come to realize the vast benefits that forests provide and understand the importance of properly managing forests to maintain a healthy ecosystem. Despite the size of your forest, whether two or 2,000 acres, it is a critical piece of the ecosystem and well

worth the effort to manage. Whether your forest is small or large, it could be the model for other forest landowners to follow, which could lead to a domino effect of better forest management across the ecosystem.

The first step to managing your forest is getting to know it. This includes being able to identify tree species and understand the processes and threats that shape the health and composition of your forest. The Internet is an excellent resource for learning forestry basics (check out the Society of American Foresters website at: <http://www.safnet.org/>). An even better source is a real forester who, upon visiting the property, can give you an in-depth evaluation of your forested land (see sidebar).

Once a forester has identified the predominant tree species on your property, the next step is to get a feel for the age and health of your forest and identify any threats,

such as insects and disease, which might be contributing to the decline of your forest. With this information, the forester can start to form a picture of your forest and together with an inventory of the other natural resources on the property, i.e., rangeland, wildlife, riparian areas, etc., the forester can give you a comprehensive evaluation of your forest. With this critical information, the groundwork is laid for future management, which could include a forest stewardship plan.

What is a forest stewardship plan?

What are some typical goals of a forest stewardship plan? Landowners, similar to their properties, are very different, which leads to many different goals and objectives; however, most landowners often share several of the same goals, including: improving forest health, reducing tree mortality from insects and disease, improving wildlife habitat, generating forest products, reducing noxious weeds, improving rangeland health, mitigating wildfire danger, improving riparian health, increasing streamflows, and improving outdoor recreation. A forest stewardship plan is often a written plan, composed of multiple sections, that is designed to move a property toward these landowners' goals

How do you meet goals and take property from the current condition to the desired condition?

This section of the plan is where the forester/natural resource professional will recommend forest activities to meet your goals. For example, if a goal is to reduce tree mortality from mountain pine beetle, the forester will first take steps to protect the forest from the current epidemic then make recommendations to protect the forest from future epidemics. To protect the present forest, an evaluation of the forest stands susceptible to mountain pine beetles is completed and infested trees identified. Next, infested trees are treated to prevent beetles from spreading, healthy trees susceptible to attack are sprayed with an insecticide, and the area is monitored to gauge the effectiveness of the practices. Next, thinning might be recommended to remove unhealthy, highly susceptible trees from the forest, thus increasing spacing and reducing competition between remaining trees, making the forest more vigorous and more resilient to future attacks.

An added benefit of having a forest stewardship plan is the on-the-ground expertise and local forestry knowledge a forester will impart to the landowner. For instance, while fieldwork is being conducted, the landowner is invited to accompany the professional and learn how the forest is inventoried and evaluated. If landowners have

questions or concerns about their forest, the forester can address them in the field and show specific examples. On-the-ground assistance is also available for administering specific activities, such as marking trees for a timber sale, identifying locations for logging trails, identifying boundaries for forest thinning units, marking beetle-infested trees, etc. The forester's local knowledge and experience with contractors in the area will also assist the landowner in hiring the contractor best-suited to conduct a specific activity.

A schedule for implementing each activity is included in the plan and typically covers a 10-year period. The schedule is based on the goals and priorities of the landowner and recommends specific timeframes to complete activities. It assists the landowner in yearly planning and allocating needed resources to complete each activity. After 10 years, the plan should be revised to reflect current conditions, and, if necessary, additional activities should be recommended to ensure the landowner's goals are being achieved.

Is there funding available to landowners for forest activities?

Having a forest stewardship plan opens some doors for landowners in terms of funding. Many activities recommended in a typical forest stewardship plan qualify for cost-share assistance through several different agencies and organizations. Your local forester can assist in determining which cost-share programs would apply best to your property. Activities that may be cost-shared include forest thinning, weed eradication, tree planting, fuels reduction, aspen enhancement, stream bank stabilization, etc.

What else is included in a stewardship plan?

All plans have several requirements and standards that must be met; however, each plan is unique to the individual property and may include several unique items. The following are common elements of a typical forest stewardship plan:

- **Accurate and up-to-date maps** – utilizing recent aerial photography, topographic maps and county assessor property data, maps, are customized for each property. GIS and GPS technologies accurately determine acreages, distances, and elevations, and they pin-point locations of: property boundaries, specific management units (forest stands, riparian areas, rangeland areas, etc.), roads, water bodies, historical/cultural sites, buildings, etc.
- **Forest stand recommendations** – the forest is broken into stands of similar characteristics. Stands are

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For forestry assistance, both public and private consulting foresters are available in Wyoming. The Wyoming State Forestry Division provides free assistance to private landowners upon request; please contact your district office (<http://lands.state.wy.us/index.php/forestry>). State forestry personnel are commonly contacted to provide advice on forest management and to devise forest stewardship plans; however, since these services are free of charge, many offices have a backlog of requests. Private consulting foresters provide these same services and though they will likely charge a fee, they may be able to provide more timely service. In addition, they can also provide actual on-the-ground project work, such as forest thinning, prescribed burning, herbicide application, insecticide tree spraying, fuels reduction, etc. Check with your district state forestry office to get a list of private consulting foresters in your area.

From the brochure "You Need a Forester" by the Society of American Foresters:

What else can a forester do?

- Improve wildlife habitat and recreational opportunities
- Protect soils and water quality
- Improve protection from wildfire
- Inventory your forest to learn its quality and value
- Identify opportunities, problems, and needs
- Reestablish trees on bare land
- Improve forest stands or desired tree species
- Enhance ecological diversity
- Prevent or control harmful insects and diseases
- Administer a timber harvest and related activities
- Identify financial incentives programs and other help
- Obtain inventories and values for estate settlement

Contracts are important.

A landowner should have a contract with a consulting forester and other contractors to avoid possible misunderstandings and make clear what is expected by both parties. Items to consider in your contract:

- Location and description of the property
- Responsibility for determining and marking boundaries
- Description of services to be performed
- Ownership of data such as timber inventory, maps, computations, and analyses
- Assurances that legal requirements including workers' compensation insurance, liability protection, and other labor and safety laws are met for persons working on your property
- Contract performance and quality standards, including penalties for failure to meet contract specifications
- Amount to be paid and the schedule for payment



typically based on tree species, age, density, and/or condition. Recommendations are made for each specific stand to address forest health and the goals of the landowner.

- **Firewise recommendations** – recommendations are given to reduce fuel loads and prevent catastrophic wildfire from destroying resources on the property. If a residence is on the property, defensible space recommendations are made to create a safe area for firefighters to protect the residence. Alterations to the residence itself are also recommended to reduce the flammability of the structure.
- **Domestic livestock grazing recommendations** – improperly managed domestic livestock such as cattle, sheep, horses, etc., can have lasting negative effects on your forest. Recommendations are made to assist the landowner in devising a grazing plan to limit the damage to the forest.
- **Wildlife habitat recommendations** – recommendations are made to improve habitat for a wide range of animal species. Recommendations could include aspen enhancement, riparian improvements, fish pond establishment, rangeland improvements, invasive plant eradication, etc. Activities might include prescribed burning, forest thinning, weed spraying, stream bank stabilization, fencing, and tree planting.
- **Forest health/diversity recommendations** – recommendations are made to improve forest health and increase tree species and tree age diversity. Activities might include forest thinning, timber harvesting, tree planting, prescribed burning, and invasive plant removal.
- **Forest product production** – recommendations are made to maximize production of desired forest products. Products might include house logs, sawtimber, post and poles, firewood, and wood chips.

If you think a forest stewardship plan could help you better manage your forest, please contact your local Wyoming State Forestry Division office or a private consulting forester (see sidebar).

To learn more about the national Forest Stewardship Program, which can help you develop plans for sustainable forest management, go to <http://www.fs.fed.us/spf/coop/programs/loa/fsp.shtml>.

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