
Your Land, Your Choice

Forest Ecology and Management

Virginia Master Naturalist

Basic Training Course

Overview

This lesson plan is intended to serve as an interactive activity to accompany a presentation on forest ecology and management during the Virginia Master Naturalist basic training course for volunteers.

Objectives

- Understand the importance of forest management goals.
- Understand the basic tools available for managing forests.
- Understand threats and issues affecting forests in Virginia, particularly parcelization, fragmentation, and historical extraction practices.

Leader Instructions

1. Before the activity, participants should view the VMN Forest Ecology and Management presentation or a similar presentation that discusses forest ecology and objectives, tools, and strategies for forest management.
2. Introduce the activity. Explain that this interactive small-group activity is intended to give participants practice in thinking about different forest management goals and the strategies used to attain them. Explain that forest management begins with identifying the landowner's objectives, which may include all manner of forest uses and conservation goals (see Handout #2.) As Virginia Master Naturalist volunteers, they may have opportunities to discuss these concepts with landowners or to assist state agency personnel with forestry-related projects.
3. Divide the class into 3-6 small groups. Groups of 3 to 5 people are ideal.

Materials

- Handout #1 - Scenarios, distributed as one scenario page per small group
- Handout #2 – Forest Landowner Self-Assessment, one per group
- Blank 8.5x11”
- Writing utensils
- Masking tape and a wall for posting the sketches

Other Resources

- Forest Ecology and Management multi-media presentation
- Forest Ecology and Management reading

Time

Allow 30 minutes.

Leader Instructions, continued

4. Provide each group with one of the six scenario handouts and a copy of the Forest Landowner Self-Assessment handout.
5. Have each group share their scenario, sketch, and proposed management strategies. As each group shares their plans, post their sketch on the wall. The sketches should be touching each other, as if they are pieces of a larger map.
6. Once each group has presented and all the sketches are posted as one large map, tell the group that each of their 400-acre plots is part of a larger landscape.
7. As a large group, discuss the following questions:
 - a. How compatible are the management strategies for adjacent areas of forest?
 - b. Looking at the adjacent land uses and management strategies, how likely is it that the strategies will be effective at meeting the individual landowners' goals?
 - c. Are there places on the map where it appears that the parcelization of the land will result in fragmentation of the forest once the management strategies are implemented?
 - d. What are some ways landowners could cooperate to achieve larger goals?
8. Wrap-up the activity by pointing out that forest management requires a combination of environmental, economical, and sociocultural perspectives. Even what's best for the "environment" is not always clear; it depends on your specific environmental objectives.

Scenario 1

You just bought your dream retirement property: 400 acres of rolling hills and 80-year-old hardwoods. Your nearest neighbor remembers that the previous owner did a selection harvest about 25 years ago. The local forester informs you this harvest was a high grade that removed the best timber trees. Your primary interest in the property is to develop a couple of acres for your new home and gardens, and manage the rest for wildlife and recreation.

1. Draw a sketch of your property. Assume it is square or rectangular in shape. Include any features (e.g., streams, forest types) described in the scenario.
2. Look at the Forest Landowner Self-Assessment handout. Which management objectives are primary for your scenario? Secondary?
3. Considering your objectives, what management strategies will you use on your property? Keep in mind that you may use multiple strategies and different strategies on different parts of the property. Also keep in mind that doing nothing is a management strategy as well.
4. Indicate or draw your proposed management strategies on your property sketch.
5. Present your scenario, sketch, and plans to the other groups.

Scenario 2

You and your 3 siblings have inherited 400 acres of timberland and own it jointly. The land is about half in pines and half in hardwoods. A stream runs through the middle of it. Two of your siblings live far away. Neither of them has any interest in the property, and both are in favor of selling it. You and your oldest sister share an interest in keeping the land in the family, but you are worried about paying the tax bill on it.

1. Draw a sketch of your property. Assume it is square or rectangular in shape. Include any features (e.g., streams, forest types) described in the scenario.
2. Look at the Forest Landowner Self-Assessment handout. Which management objectives are primary for your scenario? Secondary?
3. Considering your objectives, what management strategies will you use on your property? Keep in mind that you may use multiple strategies and different strategies on different parts of the property. Also keep in mind that doing nothing is a management strategy as well.
4. Indicate or draw your proposed management strategies on your property sketch.
5. Present your scenario, sketch, and plans to the other groups.

Scenario 3

Your 400-acre property is mainly wooded, with 8 pine stands in 4 different age classes. The unpaved roads running through the woods give excellent access for hunting, and that is your family's primary interest. You would like to improve habitat for deer and turkeys, as well as taking advantage of a cost-share initiative to create quail habitat. Money is a little tight right now, so you aren't sure how many practices you'll be able to implement.

1. Draw a sketch of your property. Assume it is square or rectangular in shape. Include any features (e.g., streams, forest types) described in the scenario.
2. Look at the Forest Landowner Self-Assessment handout. Which management objectives are primary for your scenario? Secondary?
3. Considering your objectives, what management strategies will you use on your property? Keep in mind that you may use multiple strategies and different strategies on different parts of the property. Also keep in mind that doing nothing is a management strategy as well.
4. Indicate or draw your proposed management strategies on your property sketch.
5. Present your scenario, sketch, and plans to the other groups.

Scenario 4

You are the sole heir to a 400-acre property that has been farmed for many years. There are two 50-acre pine stands, and a strip of hardwoods along the stream that runs all the way across the property, but the rest of the land is open. You have heard there is cost-share money available for planting pines, but you'd really prefer hardwoods. You plan to visit the property for weekend getaways, when you will camp out and enjoy hiking and birdwatching. Eventually, you'll retire and build a home there, but that is at least 20 years away. Meanwhile, there are taxes to pay.

1. Draw a sketch of your property. Assume it is square or rectangular in shape. Include any features (e.g., streams, forest types) described in the scenario.
2. Look at the Forest Landowner Self-Assessment handout. Which management objectives are primary for your scenario? Secondary?
3. Considering your objectives, what management strategies will you use on your property? Keep in mind that you may use multiple strategies and different strategies on different parts of the property. Also keep in mind that doing nothing is a management strategy as well.
4. Indicate or draw your proposed management strategies on your property sketch.
5. Present your scenario, sketch, and plans to the other groups.

Scenario 5

You have 400 acres, about half in hardwood timberland and 1/2 in pasture where you raise cattle. A stream runs across the northern, wooded part of the property. Your two teenaged children are interested in developing a forest-based enterprise to earn some money. They'll be going off to college in a few years, so extra income would be appreciated. But you have also been entertaining an offer from a real estate firm, which thinks your land is just right for a high-end housing development.

1. Draw a sketch of your property. Assume it is square or rectangular in shape. Include any features (e.g., streams, forest types) described in the scenario.
2. Look at the Forest Landowner Self-Assessment handout. Which management objectives are primary for your scenario? Secondary?
3. Considering your objectives, what management strategies will you use on your property? Keep in mind that you may use multiple strategies and different strategies on different parts of the property. Also keep in mind that doing nothing is a management strategy as well.
4. Indicate or draw your proposed management strategies on your property sketch.
5. Present your scenario, sketch, and plans to the other groups.

Scenario 6

You are in charge of a 400-acre public property. This land was donated to your county, and the only deed restriction was that it be open to public recreational access. There is a stream running across the southern end of the property, and a number of trails on the northern end, where the topography is steepest. The county's budget cuts in recent years have made it difficult to maintain the trails, picnic, and parking areas, much less to do anything new.

1. Draw a sketch of your property. Assume it is square or rectangular in shape. Include any features (e.g., streams, forest types) described in the scenario.
2. Look at the Forest Landowner Self-Assessment handout. Check off any management objectives you think are important to you in this scenario. Next, choose the top five objectives and rank them from 1 to 5.
3. Considering your objectives, what management strategies will you use on your property? Keep in mind that you may use multiple strategies and different strategies on different parts of the property. Also keep in mind that doing nothing is a management strategy as well.
4. Indicate or draw your proposed management strategies on your property sketch.
5. Present your scenario, sketch, and plans to the other groups.

Forest Landowner Self-Assessment

Check off **all** the objectives for your forested land that are important to you; then choose the **5 most important and rank them** 1 to 5.

	Selected Objectives	Top 5 Ranking
Forest Improvement		
I have grassy field or lawn areas I want to plant in trees.		
I want to manage invasive species.		
I want to protect/improve the health of my forest.		
I want to improve forest regeneration (tree reproduction).		
I want my trees to grow faster.		
I want to cut dangerous dead or damaged trees.		
Forest Products		
I want to cut firewood for myself or others.		
I want to start a forest products enterprise. (Which? _____)		
I want to commercially harvest trees.		
I am interested in non-timber forest products. (Which? _____)		
Wildlife Management		
I want to create snags for cavity nesting animals.		
I want to create soft edges between lawn or field and forest areas.		
I want to provide more habitat features for wildlife. (List species: _____ _____)		
I want to discourage deer to protect the forest understory.		
Water Resources		
I want to create/enhance a riparian forest buffer.		
I want to stabilize a stream bank that is eroding.		
I want to protect woods roads from erosion.		
I am interested in pond or wetland management.		
Recreation		
I want to build recreational trails.		
I want to build roads to provide or improve vehicle access.		
I want to create a special place in the woods for some purpose. (Be specific:)		
I want to build a tree stand for hunting.		
Aesthetics		
I want to make my forest more colorful throughout the year.		
I want to block an unpleasant view or have more privacy.		
I want to create a scenic view.		
I want to protect special plants or other natural or historical features.		
Other (Be specific):		