



Investing in Sustainable Forestry

**A Pocket Guide for
Virginia's Forest
Landowners**

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Why this pocket guide matters

This pocket guide is designed to provide all of Virginia's forest landowners with user-friendly strategies for making profitable investments in forest management. In doing this, it also aims to help owners keep forests in the family and to think about them in terms of a much larger ecological picture. The guide uses seven sustainable forestry criteria, described by the Montreal Process, as an estate-investment strategy. The goal is to provide basic information that will help owners increase long-term revenue, reduce tax burdens, and transfer healthy and productive forests to the next generation of owners.

The pocket guide consists of four sections:

- An approach for investing in sustainable forestry.
- The seven sustainable forestry criteria of the Montreal Process and a set of corresponding investment questions landowners should ask.
- A process for using programs and services to manage a diversified and profitable forest portfolio.
- Information about the incentives, cost-share programs, and sources of assistance available for forest landowners in Virginia.

1. What does it mean to invest in sustainable forestry?

Most forest landowners in Virginia are well aware that forests provide many important benefits. Wood, clean water, soil conservation, wildlife habitat, and recreation opportunities are but a few. At the same time, most also know that managing forests for multiple outcomes is not always as easy as it might seem. The wide array of options and the time needed to orchestrate management operations can be daunting.

Making the most of your forest requires thinking about the big picture. Taking time to consider how wood, water, soil, and wildlife can be managed in a profitable and sustainable fashion is a necessary step. You wouldn't want, as the saying goes, to fail to see your forest for the trees.

Services such as clean water, biodiversity, climate stability, energy security, and local community welfare are increasingly valued, and forests can play an important role in each. Now is the time for you to consider how to manage a diversified forest portfolio. The key is identifying how various investments can be merged into one profitable and sustainable forest-management system. It may help to think of forest management as an investment strategy that promotes diversification as a formula for long-term success and stability.

An established set of guidelines for sustainable forestry, known as the Montreal Process Criteria, can be used as the framework to develop your portfolio. The next section describes this framework and lists the types of questions you should ask yourself when planning to invest in each of the guidelines. Pointers for answering the questions and for developing profitable and sustainable management strategies are also offered.

2. What is the Montreal Process?

Formed in 1994, the Montreal Process is an international working group comprised of member nations aiming to conserve and sustainably manage the world's forests. From its inception, the Montreal Process has described forests as a critical part of healthy environments and economies. When managed sustainably, they provide valuable goods and services, conserve biodiversity, and stabilize forested estates for generations to come.

The Montreal Process created seven criteria to help guide sustainable and profitable forestry worldwide. The first five address vital forest functions:

- 1) **Biodiversity**
- 2) **Forest productivity**
- 3) **Forest health**
- 4) **Soil and water conservation**
- 5) **Carbon cycles**

A sixth criterion addresses the relationship between forestry practices and healthy economies and communities:

- 6) **Economic benefits to meet social needs** (timber, recreation, and cultural values)

The seventh criterion relates to the importance of policy:

- 7) **Legal, institutional, and economic situations** (sustainable forestry and conservation policies)



Landowners learning about sustainable forestry.

How can the Montreal Process be used to guide investments in sustainable forestry?

The Montreal Process can guide landowner questions about the possibilities for sustainable forestry on wooded property. The questions listed provide a starting point for landowners who want to explore traditional and emerging investment opportunities. Each will help landowners piece together the sustainable forestry puzzle. The ultimate goal is to integrate these pieces into one diversified investment strategy.

1) What types of animals, plants, and trees are in my forest? How can I improve the diversity of each?

Identify which plants and animals are in your forest now and which could be located there in the future. If necessary, work with resource management professionals to accomplish this.

A diverse forest is a resilient forest that is less susceptible to insects, disease, or weather. When possible, manage for high quality and diverse habitats to support an array of

plants and animals. This includes having several different ages of forest as well as open areas.

Consider acquiring a conservation easement if your forest has high conservation value. In exchange for development rights, federal tax deductions and Virginia income-tax credits (which can be sold for cash) are available. Be sure to investigate the pros and cons of conservation easements before acquiring one.

Look into conservation banking if your land contains a natural resource, such as a wetland, that can be used to offset negative impacts to a similar resource occurring elsewhere. Virginia has a well-established system of wetland mitigation banking available through the Department of Environmental Quality.

2) How many and what types of trees do I own? Am I aware of which ones I can sell? Do I have nontimber forest products to market?

Inventory the species and age of trees and amount of merchantable timber in your forest. A professional forester can help if necessary. Lists of consulting foresters are available from the Virginia Department of Forestry and the Association of Consulting Foresters.

Think about harvesting timber when your trees reach maturity (a professional forester can help you make this determination). Promptly reforest the land if you harvest and consider reforesting abandoned pasture. Virginia's Department of Forestry often provides cost share for reforestation. Nontimber forest products, such as ginseng, mushrooms, and pine cones and tips can be sold at farmers markets or incorporated into crafts. Finally, do your best to stay on top of new income opportunities.

3) Is my forest healthy? What steps do I need to take if my forest has health problems?

Assess your forest for symptoms of insects, diseases, and the presence of exotic invasive species. Use resources from Virginia Cooperative Extension to identify these problems and to learn about technical and financial assistance options for control. Early detection can result in easy, less expensive control and can minimize your losses. So, walk your property several times a year to look for potential problems.

In addition, excessive fuels may put your forest at risk for destructive wildfires. Maintaining low fuel loads, either through regular prescribed burning or biomass removal, can help protect your land from fire.

4) Are there any water bodies in my forest? Is there any noticeable erosion? What can I do to protect water quality and reduce soil erosion?

Locate all water bodies in your forest. Monitor them for changes in flow and level. React quickly to any potential problems such as washouts and overflows.

Regularly evaluate steep and exposed areas for erosion. If problems are observed, contact the Virginia Department of Forestry or your private forest consultant to discuss options.

Use Virginia's Best Management Practices for water quality if you decide to harvest timber or create forest trails or roads. Ensure that streamside zones along waterways are protected; state tax credits are available for maintaining such riparian buffers.



Well-managed riparian buffers reduce sedimentation, moderate water temperature, and provide habitat.

5) Do I know how much carbon my forest stores, and are there income opportunities associated with it?

Determine the age and estimated growth rate of your forest. If necessary, work with resource-management professionals to accomplish this. Depending on the age, species composition, and location, your forest may be a carbon sink (actively storing more carbon than it is releasing), a carbon source (releasing more carbon than it is storing), or carbon neutral.

Actively managing your forest, through harvesting and reforestation on a regular basis, can stimulate growth that can increase carbon storage. Consider emerging carbon markets for landowners who increase carbon uptake on their forestland.



Old growth forests store large amounts of carbon.

6) How does the management of my forest benefit my family and community? Is there an opportunity to lease recreation or hunting rights? What are value-added products? How does my forest fit into the landscape?

Remember that forest management provides not only monetary benefits to landowners, but it can also enhance ecosystems, create jobs, and provide important products.

Contact the Virginia Department of Game and Inland Fisheries for information on creating a recreation or hunting-lease enterprise. Hunters and recreationists are willing to pay for access to high-quality habitat and can help monitor properties for evidence of timber theft, exotic invasive species, and forest health problems.

Speak with your neighbors and fellow forest landowners about their objectives and goals. Establishing consistent lines of communication and cooperation can enhance opportunities. Also, take time to discuss the legacy of your forest with family members. Consider developing strategies to keep the forest in the family.

7) How much do I know about local and state laws regarding forest management? Am I aware of any landowner advocacy groups that I can participate in to protect my management rights?

Learn about local forestry ordinances and the availability of options such as use-value taxation policies and Agricultural and Forestal Districts (which can help lower property taxes). These are available through your local Commissioner of Revenue office. Advocate for these if interested.

Become involved with the Virginia Forestry Association, Virginia's private forestry organization. This group informs state and local decision-makers about forestry issues. Consider joining other groups that offer similar services. Contact your Virginia Cooperative Extension agent for information on local landowner organizations.



Virginia Forestry Association members at the Lesesne State Forest's American Chestnut Research Facility.

3. How do I make my investment happen?

The first step is to think about why you own forestland. If appropriate, spend some time discussing this question with your family. Get to know your neighboring landowners and learn about the goals they have in mind. Once your goals are defined and prioritized, it's time to think about coordinating a diverse management strategy to profitably and sustainably integrate them.

A well-crafted management plan will clearly outline your objectives. Plans help integrate on-the-ground forest-management activities and are often required to qualify for cost-share programs. To begin developing a plan, answer the questions outlined in this manual and consider sharing your answers with your family, friends, and neighbors. Next, use a professional forester to help refine your responses and draft your plan. Once a plan is written, landowners are responsible for implementing

the outlined practices. A management plan that sits unused will not help you invest in sustainable forestry. Just like in other investment situations, however, opportunities may change, requiring flexibility. Building this into your plan is called adaptive management and allows for quick, yet well thought-out responses to natural disasters, market and policy changes, or other unexpected occurrences.

4. What tools are available for investing in sustainable forestry?

Incentives and cost-share programs

These programs change periodically. Please contact the associated agency for details and updates.

1. Conservation Reserve Enhancement Program (CREP)—Farm Service Agency
2. Environmental Quality Incentive Program (EQIP)—Natural Resource Conservation Service
3. Riparian Buffer Forest Tax Credit—Virginia Department of Forestry
4. Wildlife Habitat Incentives Program (WHIP)—Natural Resources Conservation Service
5. Reforestation of Timberlands (RT)—Virginia Department of Forestry

Forest management certification

You might want to consider having your forest certified. Similar to the Montreal Process, certification systems lay out a set of criteria for sustainable management. Consumers buying certified products know they come from well-managed forests. Financial incentives for certifying your forest include greater access to markets and the potential to increase the prices for your forest products.

If you choose to enroll in a certification system, you must have an active, written management plan that abides by the system's criteria and allows independent inspectors to periodically visit your property.

In Virginia, the most widespread certification system for private forestland owners is the American Tree Farm System. Two other common systems in the southeast are the Sustainable Forestry Initiative and Forest Stewardship Council.

Sources of assistance

Education is an important step in investing in sustainable forestry. Now that you have read this pocket guide, you have taken that step. Many more educational opportunities are available through the Virginia Forest Landowner Education Program (VFLEP), a Virginia Cooperative Extension program that offers short courses on forest and wildlife management, land-conservation strategies, cost-share assistance, and timber harvesting and marketing. Additionally, VFLEP hosts the Fall Forestry and Wildlife Field Tours and publishes the Virginia Forest Landowner Update, a quarterly newsletter and corresponding website featuring up-to-date information on forestry and a calendar of natural-resources education events. Please visit www.cnr.vt.edu/forestupdate or contact the coordinator at (540) 231-6391 for more information.

Virginia's Link to Education About Forestry (LEAF) Program is another Extension resource that aims to provide educational experiences for Virginians by combining outdoor forestry and natural-resources learning with online courses and educational, web-based broadcasts. LEAF outdoor classrooms are located on partner property throughout the state. Each captures unique aspects of forestry and natural-resources management, offers indoor and outdoor training, and provides an opportunity for Virginians to learn while enjoying the state's history. Online-learning modules covering current forestry topics and a list of upcoming webinar presentations are available at the LEAF website: www.valeaf.org.

In Virginia, most natural resource agencies provide some level of landowner assistance, free of charge. Local contact information can be obtained from the main offices listed.

American Tree Farm System (ATFS)

American Forest Foundation
1111 Nineteenth St. NW, Suite 780
Washington, DC 20036
(202) 463-2462
www.treefarmssystem.org

ATFS is an internationally recognized, forest-certification system. Certified tree farmers adhere to sustainable forestry standards. ATFS is an advocate for tree farmers at the state and national levels.

Chicago Climate Exchange (CCX)

190 S. LaSalle St., Suite 1100
Chicago, IL 60603
(312) 554-3350
www.chicagoclimatex.com

CCX is the first carbon-trading market in the United States. Although landowners cannot trade directly on the CCX, they can work with carbon aggregators who do.

Farm Service Agency (FSA)

1400 Independence Ave. SW STOP 0506
Washington, DC 20250-0506
www.fsa.usda.gov; www.fsa.usda.gov/va

FSA helps landowners use better farm management and financial planning to increase income. It also administers conservation programs (CREP) and makes loans to landowners who cannot get them through conventional means.

Natural Resources Conservation Service (NRCS)

1606 Santa Rosa Rd., Suite 209
Richmond, VA 23229-5014
(804) 207-1671
www.nrcs.usda.gov; www.va.nrcs.usda.gov

NRCS's natural resources conservation programs help people reduce soil erosion, enhance water supplies, improve water quality, increase wildlife habitat, and reduce damage caused by floods and other natural disasters.

USDA Forest Service

Washington-Jefferson National Forest

5162 Valleypointe Pkwy.

Roanoke, VA 24019

(540) 265-5100

www.fs.fed.us

The USDA Forest Service—a federal agency of the U.S. Department of Agriculture—works to sustain the health, diversity, and productivity of the nation’s forests and grasslands to meet the needs of present and future generations. For more than a century, the Forest Service has managed public land in national forests and grasslands, currently totaling more than 193 million acres.

U.S. Fish and Wildlife Service (USFWS)

1849 C St. NW

Washington, DC 20240

(800) 344-WILD

www.fws.gov

The mission of USFWS is to work with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats. SFWS is committed to a collaborative approach to conservation and to empowering Americans to become citizen conservationists.

Virginia Cooperative Extension

313 Cheatham Hall
Blacksburg, VA 24061
(540) 231-5483
www.ext.vt.edu

Virginia Cooperative Extension provides programs in four broad areas: agriculture and natural resources, family and consumer sciences, community viability, and 4-H youth development. All Virginia counties and some cities have local Extension offices; see the government pages in your phone book or visit the website above to find your local office.

Virginia Department of Conservation and Recreation (DCR)

203 Governor St., Suite 213
Richmond, VA 23219
(804) 786-1712
www.dcr.virginia.gov;
www.vainvasivespecies.org

This state agency works with Virginians to conserve, protect, and enhance their lands and to improve the quality of the Chesapeake Bay, rivers, and streams. It promotes the stewardship and enjoyment of natural, cultural, and outdoor recreational resources (e.g. state parks); coordinates statewide, nonpoint-source pollution control; ensures the safety of Virginia's dams; and provides statewide land conservation information via the Office of Land Conservation.

Virginia Department of Environmental Quality (DEQ)

629 E. Main St.
Richmond, VA 23218
(804) 698-4000
www.deq.state.va.us

DEQ monitors Virginia's air, water, and waste. DEQ is the permitting agency for air, pollutant discharge, and solid-waste management. It also manages the wetland-mitigation banking process.

Virginia Department of Forestry (DOF)

Fontaine Research Park
900 Natural Resources Dr., Suite 800
Charlottesville, VA 22903
(434) 977-6555
www.dof.virginia.gov

DOF provides basic forest management planning and information, seedlings and seed mixes for reforestation and wildlife, and BMP guidance, and it enforces Virginia's water quality, seed tree, and burning laws. The agency also administers cost-share programs and maintains lists of private forestry consultants, contractors, and timber buyers by county. Most counties have local offices; see the government pages in your phone book.

Virginia Department of Game and Inland Fisheries (DGIF)

4010 W. Broad St.
P.O. Box 11104
Richmond, VA 23230-1104
(804) 367-9369
www.dgif.virginia.gov

DGIF provides information, education, and technical assistance on wildlife management to forest landowners. It monitors wildlife populations, enforces hunting and fishing regulations, and provides technical assistance to federal agencies on cost-share programs for wildlife management on private lands.

Virginia Forestry Association (VFA)

3808 Augusta Ave.
Richmond, VA 23230-8733
(804) 278-8733
www.veforestry.org

This private, nonprofit, membership organization represents Virginia's broad forestry community. VFA is active in legislative and regulatory issues affecting forest management, and it works with media outlets on forestry issues, sponsors forestry and environmental camps for school-aged youth, provides general forestry and forest-industry information, and assists member landowners and others in interpreting regulatory requirements. VFA publishes Virginia Forests, a quarterly magazine on forest management and issues.

Virginia Natural Heritage Program

217 Governor St.
Richmond, VA 23219
www.dcr.virginia.gov/dnh

This program to save Virginia's native plant and animal life, and the ecosystems they depend on, uses a comprehensive approach of inventory, conservation information provision, protection, and stewardship. The Virginia Natural Heritage Program falls within the Virginia Department of Conservation and Recreation.

Virginia Outdoors Foundation (VOF)

101 N. 14th St., 17th Floor
Richmond, VA 23219
www.virginiaoutdoorsfoundation.org

VOF is charged with the preservation of cultural and heritage lands in Virginia. The foundation works with private landowners to establish voluntary conservation easements to protect farm and forest land.

Professional foresters

Government organizations, the forest industry, and private consulting companies employ professional foresters. They typically offer a full range of services to private landowners, including management planning, timber appraisals, timber-sale preparation, as well as administration, site-preparation and reforestation. Landowners are advised to check references and professional affiliations before choosing a forester. These references include membership in organizations such as the Association of Consulting Foresters (ACF, www.acf-foresters.org) and the Society of American Foresters (SAF, www.safnet.org). Lists of professional foresters are available from your local Virginia Department of Forestry office (www.dof.virginia.gov), and at ACF and SAF.



A pine-hardwood forest in the Piedmont of Virginia.

Summary

This manual is just the beginning. Making an investment in sustainable forestry requires vigilance and persistence. The Montreal Process offers a framework that can be used to identify the opportunities your forest offers. Tools listed in this manual can help you capitalize on your prospects. Make no mistake, it is hard work; but many also see it as a labor of love. And the payoff can be a profitable and healthy forest for you and yours to enjoy.

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