Vol. 11, No. 4 *Fall 2003*

More Trees for Maryland

Have you seen the plastic tubes on a grid pattern emerging from old farm fields and pastures around the state, especially near stream areas? If so, then you are witnessing some of the extensive areas of new hardwood forest established in the last few years, a trend that should help slow another recent regional trend, the 30-year loss of forests primarily to developed land uses.

New Focus on Hardwood Planting

Tree planting used to focus on the planting of sunloving white pine and loblolly pine-planting applications that are tried and true. The planting of hardwood species such as oak, ash, maple, and walnut, on thousands of acres of agricultural fields has required learning new techniques to assure their growth and survival.

Why? Because most hardwood species naturally establish themselves in the forest during the later stages of forest development when the ecological conditions are more favorable for hardwood establishment and growth. Hardwoods planted in open field conditions are under a great deal of stress and need special care to survive. Those plastic tubes are used to protect the seedlings from deer. Vegetation around the seedlings must be controlled until the canopy closes or rodents may eat the roots and moisture may not be sufficient for tree growth.

Impressive Results

The effectiveness of tree planting efforts is impressive! In 2003, landowners planted 3,208 acres of forest buffers in pine and hardwood species and an additional 628 acres of upland forest with assistance from MD DNR Forest Service and state and federal cost-share programs. Planted acreage was even higher the year before, with over 5,000 acres in forest buffers alone, spurred by the generous benefits in the Conservation Reserve Enhancement Program (CREP).

This is a tremendous increase in the rate of planting forests from only a few years ago, but still falls a little short of current forest loss in our state's watersheds. The USFS forest inventory found a 3% loss of forest in Maryland from 1986 to 1999, averaging 6,115 acres of forest converted to other land uses each year. We are close to closing the gap, and it is apparent that efforts at forest conservation, coupled with continued interest in creating new forests, actually could reverse the trend of forest loss in the state.

One can ask why forest cover matters, beyond a personal preference for trees in our landscape and forest products in our stores. Forests produce the highest water quality of any major land use, are reservoirs of wildlife habitat, and are a backbone for healthy aquatic habitat in our non-tidal streams. Creating forests is a good investment in our future quality of life.

Assistance Programs Available

For landowners willing to plant forests or make forest

improvements where they can, there are cost-share and tax programs to help, as well as foresters to offer technical assistance. A few major cost-share programs are listed below. More can be found at www.naturalresources.umd.edu/costshare.htm.

- *Conservation Reserve Enhancement Program (CREP)*: Cost-share and land rental payments for buffers, highly erodible land, and wetland establishment. Cost-share 87.5%, plus signing bonuses and a small maintenance payment. Contact local Farm Service Agency.
- *Forest Land Enhancement Program (FLEP):* Cost-share for plan development at 75% of practice costs, 50% for planting trees, habitat creation, invasive species control, and forest stand improvement. Contact local Maryland DNR Forest Service office.
- *Environmental Quality Incentive Program (EQIP):* Includes some significant funding for forestry practices, including planting trees. Contact the local Natural Resources Conservation Service office.

Some other programs can also provide funding for forest improvements. For expenses not cost-shared, state and federal laws may allow deduction on income taxes, depending on active or passive management status.

Need to Maintain New Plantings

Preparing the site before planting and careful maintenance for the first several (2-5) years are essential to get a thriving new forest off to a rapid start and assume survival. Challenges to overcome include competing weeds, especially noxious or exotic invasive species, deer, voles and mice, beavers, mowers, and extreme weather. Note that the new FLEP program specifically cost-shares invasive weed control.

Not all trees survive, but over 82% of new forest buffers met minimum standards of 200 trees/acre in statewide checks from 1998-2002, which includes several drought years. Sites with fewer trees need the planting reinforced the next year to allow the trees to develop more rapidly into forest conditions. Foresters can help tailor planting and maintenance recommendations to maximize the success of new plantings. Even a couple acres can improve your local stream and watershed, and benefits will flow downstream.

If you are interested in planting trees, contact your local DNR forester or private consultant forester. Contact information can be found at www.naturalresources.umd.edu.

Adapted from an article by Anne Hairston-Strang, Ph.D., Forest Hydrologist, MD DNR Forest Service

Boundary Lines

Boundary disputes have shaped American history and created the shapes of our states, as we know them today. In 1910, dreams for a greater Maryland died when the U.S. Supreme Court rejected a claim that boundary lines for Maryland started at the South Branch of the Potomac and encompassed all territory north. King Charles I had originally granted Maryland's southern border at the Potomac River's "first fountain." However, early explorers followed the bends of the Potomac, which were outlined by surveyors in the service of Lord Fairfax, a Virginia noble. Virginians charged that the Maryland boundary actually started at the North Branch and the courts ruled in their favor.

In today's society, many landowners have only a vague idea of where their property boundaries lie or unwisely assume that existing fence lines or walls accurately define their property lines. Boundaries become important when timber or improvement cutting begins; to calculate land value and property taxes; to transfer a title; to subdivide the land; construct buildings; roads or fences or to prevent timber theft.

In Maryland, if someone cuts your trees without your written consent for any reason, the law makes it possible to recover triple the value of the timber cut, even if the boundaries are unmarked. (Annotated code of MD, Natural Resources Section 5-409) However, clearly marked boundaries can ease the difficulties you may encounter as you maneuver through the legal system to get compensation.

A professional survey is the most accurate way to ensure reliable property boundaries. The most inexpensive survey contains vague descriptions of corner markers and abutting lands. A variety of corner markers have been used in Maryland such as multiple blazes on trees, an iron pipe or pin, a rock pile topped by a pointed rock, a drill hole or

Branching Out **- Vol. 11, No. 4, Fall 2003**

Editors: Jonathan Kays, Lori Bittenbender, Denni Johnson
Published four times a year and distributed to more than 5,000 forest landowners, resource professionals, and others interested in forest stewardship. For a free subscription or to send news items, dates, and comments, phone 301-432-2767 x338; fax 301-432-4089; e-mail *lb203@umail.umd.edu*; or mail to *Branching Out*, Maryland Cooperative Extension, 18330 Keedysville Road, Keedysville MD 21756. The sponsoring agencies' programs are open to all citizens without regard to race, color, gender, disability, religion, age, sexual orientation, marital or parental status, or national origin.

other unnatural mark on a rock, a concrete or granite post or the corner crossing of two stone walls. Older surveys of this kind may give boundary descriptions according to streams, old trees, rock walls and roads that may have changed over the years. If you and the neighbors agree on corner markings, perhaps this is the only survey you may need. However, if boundary disputes exist, a more detailed and more expensive survey is the way to proceed. Perhaps you can share the expense of paying for the deed search with these neighbors.

There are two other levels of survey work that can be requested: flagging property boundaries is the next step and permanently marking boundaries is the most expensive option. Whichever route you decide, be sure to request a copy of the field notes for your records.

A surveyor's job is to find the same boundaries that the original surveyor marked and therefore they will spend half of their time conducting research at the county courthouse studying old records. By law, cardinal evidence in any boundary dispute is the original monument marked in the original survey. However, following in the original surveyors' footsteps also means retracing their mistakes. Anyone who drew boundary lines with a compass before 1890 had not yet discovered magnetic declination. Early surveyors may have miscalculated by up to 12 degrees. Modern surveyors must account for changes in magnetic declination as they follow the original deed using the more current Global Positioning System (GPS) technology.

Boundary lines are permanently marked by blazing trees, erecting mounds of stones or a fence. A tree is blazed by removing a square of bark from any healthy tree within five feet of the boundary line. The cut should be made to face the boundary line. If the tree grows directly on the line, blaze it on both the front and back. When the cut is dry, use a bright, oil-based paint to make your mark. Some common marking combinations used by surveyors are one slash mark for a straight line, two slash marks for an angle and three slash marks for a corner. The next blaze should be within sighting distances of the last. It is the landowner's responsibility to keep their boundary blazes fresh and visible by repainting them every ten years.

For more information, request a copy of fact sheet 619, *How to Determine Your Property Boundaries* from the Maryland Cooperative Extension. You can download a copy from www.naturalresources.umd.edu.
Portions of this article were taken from "Boundary Surveys Prevent Disputes" by Elizabeth Webster in the autumn 2003 Forest Leaves newsletter.

A Word about Global Positioning Systems

First developed by the Department of Defense to provide troops, ships, planes and missiles with accurate navigation with pinpoint accuracy, Global Positioning Systems (GPS) are now available for use by everyone. GPS tracks delivery trucks and stolen vehicles, guides emergency vehicles, and helps the average Joe find the nearest Chinese restaurant. GPS can also help the forest landowner.

Possible uses include:

- Find your way back to the general area of a specific tree, downed deer or remote monument.
- Calculate the acreage of a stand of trees or timber sale by obtaining locations around the perimeter of the area.
- Locate and map sale boundaries, trails, roads, and other areas of interest.

GPS systems work by "acquiring" information from satellites orbiting the earth 11,000 miles in space. The more satellites that can be received, the more accurate the data. Latitude, longitude and altitude can be acquired and used to move about your forest. It can show you which direction you are traveling, graph your route, estimate the distance to your destination and even guide you in the direction of that destination.

GPS receivers come in different sizes, from small handheld apparatuses to larger, more complex systems. They are readily available from sporting goods stores to general merchandise stores like Target. Costs range in price from $200 to $5,000.

FLEP Funding Now Available

Money for the Forest Land Enhancement Program is now available. FLEP is a new incentives program that encourages the long-term sustainability of private forestlands by providing financial, technical and educational assistance by state forestry agencies to assist private landowners in actively managing their land. Applications for FLEP will be accepted at any Maryland Forest Service Office. For more detailed information, including a listing of acceptable FLEP practices and components that are approved for cost-share assistance in Maryland, please read the article titled "Forest Land Enhancement Program Gives Private Forest Owners a Boost" found in the winter 2003 issue of *Branching Out*, which can be found on our website at wwww.naturalresources.umd.edu.

Ginseng Growers Newsletter

Natural Connections, the West Virginia Ginseng Growers newsletter, covers topics on ginseng and the harvesting and processing of different roots including black cohosh. To be placed on the mailing list, contact David Cooke, Boone County Extension agent, 304-369-9230 or David.Cooke@mail.wvu.edu.

Working Trees for Agriculture Brochure

The National Agroforestry Center recently revised their *Working Trees for Agriculture* (WTA) brochure. The brochure is designed to be an awareness-level publication that introduces readers to the concept of agroforestry practices that benefit agriculture. The brochure thoroughly explains how incorporating *working trees* into the landscape will increase agriculture productivity, protect natural resources, provide new sources of income and enhance environments for people and wildlife. To obtain your copy, contact Nancy Hammond at nhammond@fs.fed.us.

Emerald Ash Borer Found in MD

The emerald ash borer, originally from Asia, has found its way to Brandywine, MD. The emerald ash borer is a serious invasive insect that has only been detected in the U.S. in MI (2002) and OH (2003). The Maryland Department of Agriculture is working to contain the problem and destroy all infested trees before this problem becomes embedded in the state. Of the 121 infested trees, 93 have already been destroyed and the MDA is inspecting sites where the remaining trees were planted.

This borer is particularly deadly to ash trees. It belongs to a group of insects known as metallic wood-boring beetles. Emerald ash borer adults are dark metallic green in color and the larvae are creamy white and are found under bark. For more information, visit the Maryland Department of Agriculture at www.mda.state.md.us.

Temperate Agroforester

The Association for Temperate Agroforestry (AFTA) is a private, nonprofit organization that promotes the wider adoption of agroforestry by landowners in temperate regions of North America. Agroforestry practices combine trees and shrubs with crops and/or livestock to increase and diversify farm and forest production while conserving natural resources. Annual membership is $25 for one year and includes a subscription to *The Temperate Agroforester* newsletter. The organization also sponsors a biennial agroforestry conference. For more information visit www.missouri.edu/~afta/.

Maryland General Forestry Correspondence Course

Registration is now being accepted for the spring semester: Feb. 1-May 20. Work from comfort of your home, using your own woodlot, a friend's or a public forest while learning the basics of forestry, forest ecology and forest health in this noncredit course. As part of the $150 registration fee, you receive the course text notebook, appendices packed with resources, plus supplemental reading. Contact Nancy Stewart at 410-827-8056 or at nstewar1@umd.edu.

Branching Out - Vol. 11, No. 4, Fall 2003
Please send changes of address.
See page 2 for addresses and phone number.

Return Service Requested