



FWF Update Newsletter

Department of Forestry, Wildlife and Fisheries

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WILDLIFE HABITAT ASSISTANCE MADE AVAILABLE TO TENNESSEANS

Nashville, TN— The new Farm Bill has become law, and the Natural Resources Conservation Service (NRCS) reminds Tennessee landowners that now is the best time to sign up for wildlife habitat assistance. Tennessee has received an additional \$289,000 for fiscal year 2008 to help landowners who qualify for the Wildlife Habitat Incentive Program (WHIP). This latest allocation brings the amount of WHIP funds directed to Tennessee to over a million dollars this year—a record amount for the state.



Signup for WHIP is continuous, but the initial selection of applicants for the latest funding will occur by June 30, 2008. To be considered for the new allocation, your application must be completed by that date. Applications will be reviewed and ranked, and even though additional WHIP applications could be approved after June 30, the current funds must be obligated by July 31, 2008.

Conservation program allocations are drawn from a national fund maintained in Washington, D.C. If enough Tennessee landowners don't file applications when the funds become available, the funding is diverted to other states, so the sooner Tennessee applicants submit an application, the greater their chances of being approved.

In WHIP, District Conservationists help landowners develop a conservation plan that preserves wildlife habitat. NRCS provides technical and financial assistance to landowners and others to develop or enhance upland, wetland, riparian, and aquatic habit areas on their property.

NRCS offers conservation programs for a variety of conservation needs. Along with wildlife, other resource concerns to be addressed include limiting livestock access to streams, grazing distribution, wetland restoration and protection, and erosion control.

For more information about Farm Bill conservation program eligibility and signup, visit the NRCS in Tennessee website at: <http://www.tn.nrcs.usda.gov/> or contact your local District Conservationist at the nearest USDA Service Center. USDA is an equal opportunity provider and employer.

WILDLIFE MANAGEMENT CALENDAR FOR JULY

by Craig Harper, Associate Professor, Wildlife Management

Habitat Management

Mow and spray perennial forage food plots for weed control if necessary, see *Growing and Managing Successful Food Plots for Wildlife in the Mid-South*, PB 1743, for herbicide recommendations.

Collect soil test samples from plots to be planted this fall and lime now as needed

Plant Japanese/browntop millet and/or buckwheat around beaver sloughs and other areas that will be flooded in November for ducks

Construct/repair dikes and water-control structures for flooding fields/woodlands for waterfowl this fall/winter

Spray woody competitors in native warm-season grasses and other old-field habitats, multiflora rose, privet, sericea lespedeza, sweetgum, elms, etc.

- Roundup, Garlon, Arsenal, Ally, and PastureGard should be considered
- refer to [Appendix 4](#) in *Native Warm-Season Grasses: Identification, Establishment, and Management for Wildlife and Forage Production in the Mid-South*, PB 1752, for additional information

If you are interested in quail, rabbits, deer, and songbirds that use fields **do not** mow (bushhog) them! **Instead, manage them by burning and/or disking in late March/early April.** see [Native Warm-Season Grasses: Identification, Establishment, and Management for Wildlife and Forage Production in the Mid-South](#), PB 1752, for additional information

Wildlife Damage/Population Management

Put up chicken-wire fence 2 feet high around vegetable gardens to protect them from rabbits

Put up a 2- or 3-strand electric fence (one strand 6 inches above ground and the other 6 inches higher) to keep groundhogs and raccoons out of vegetable gardens

To repel deer from vegetable gardens,

- erect a single-strand electric fence (2 ½ feet above ground) with aluminum tabs attached every 3 – 5 feet.
- Smear peanut butter on the aluminum tabs. Deer are attracted to the peanut butter. When they touch the aluminum tabs with their mouths, they learn to stay away.

Nuisance crawdads in the yard may be remedied by pouring boiling water down the spout of the mound

To keep bats out of attics and out from under vinyl siding and other areas,

- close or cover up all holes and cracks so they can't get in!
- do this at night after bats have left the roost; it may be necessary to open the hole the following night to allow any bats that were trapped inside a chance to leave
- maternal colonies will migrate to hibernation sites in the fall. If you wait until then to close holes and cracks, you will avoid trapping any inside.

“Repel” snakes by cleaning up around the house – mow more often, remove piles of wood, brush, and trash. There is no reliable “repellent” for snakes; only “snake oil” Refer to [Managing Nuisance Animals and Associated Damage Around the Home](#), PB 1624, for additional wildlife damage management information.

WATERING YOUR NEWLY-PLANTED OR MATURE TREE

Wayne Clatterbuck, Professor, Forest Management and Silviculture

Most tree problems in Tennessee are related to water; either too little as we have recently experienced during droughts, or too much. Our climate has been highly variable in the last decade with warmer average temperatures and wider fluctuations in precipitation with moisture deficits and excesses. Mature trees can lose hundreds of gallons of water per day through its leaves during the summer. When trees become stressed during moisture deficits, a thoughtful watering regime is necessary.

Below are a few questions often asked when trees are stressed by water deficits. Answers to those questions follow.

What are a few signs of water-related stress? Tree symptoms that indicate stress from water deficits are browning of leaf edges, absence of new growth in the spring, and dieback of leaves, twigs and branches.

How do I know the tree needs water? Dig or probe the soil 6 to 12 inches deep near the dripline of the tree. Is the soil moist? If so, do not water and wait a week or so to sample again. Contrary to popular belief, most tree roots and root biomass occurs in the upper 18 inches of the soil, not in a tap root.

How often should I water? The answer depends on the species of tree and the soil texture and structure. As a general recommendation for Tennessee, most trees should receive an acre-inch of water every week, through precipitation or watering. An acre-inch of water is 27,154 gallons. Dividing gallons by square feet per acre (43,560) results in 0.62 gallons per square foot. Thus, if you are watering an area that is 8 x 8 feet (64 square feet), one-acre inch, $0.62 \times 64 = 40$ gallons of water.

If possible, avoid frequent, light applications of water which encourages shallow roots that are more susceptible to summer heat stress. Less frequent, deep watering is preferred.

Where do I water for maximum benefit? Water the tree halfway between the dripline (and sometimes 10 feet or more beyond the dripline) and the trunk. Most of the feeder roots are not located near the trunk of the tree. A common practice in newly-planted trees is to only water the rootball, which does not create a favorable environment for the roots to extend laterally into the resident soil.

Can I overwater the tree? Most definitely. Too much water is just as bad as too little. Saturated soils exclude oxygen from the soil. Roots die without air. The soil should be moist, but not soggy or saturated. Wet soils also promote roots fungi and disease.

During droughty weather, most trees will benefit from supplemental watering to relieve stress from water deficits. Most all tree species, regardless of size are affected by unusual weather conditions. A thoughtful summer regime of watering is necessary to maintain trees in a healthy condition.

FOREST HEALTH FUNDAMENTALS

Wayne Clatterbuck, Professor, Forest Management and Silviculture

E.L. Barnard, a forest pathologist with the Florida Division of Forestry, recently authored an article on forest health that is appropriate for discussion in Tennessee. Below are excerpts from that article, used with the author's permission. The entire, original article may be accessed at http://www.fl-dof.com/forest_management/fh_fundamentals.html

“Forest Health” has become a popular buzzword in natural resource circles. Everyone uses it, sometimes in different ways, and for different purposes. What does forest health mean? Why is it popular? Are Tennessee's forests healthy? Are your forests healthy? Why should we care?

Defining forest health has proven to be something akin to shooting at a moving target. Different groups and individuals often have different values and definitions for forest health. Attempts to formulate a standard “one size fits all” definition are difficult because of scale. What is the scaling unit: A plantation, a particular ownership, a county, a state, a region and so forth? Such scale is not always defined, and is often prioritized differently by different people based on individual or cultural viewpoints. Another reason seems to be one’s concept of “healthy” is often linked to what he or she desires from the forest. What may be undesirable for managers, who emphasize wildlife habitat or biodiversity, may be desirable to those who are interested in recreation or timber management and vice versa.

Forest health is not the same as tree health. A sick and dying tree does not necessarily represent a health problem for the forest. Dead and dying trees are normal parts of a healthy forest. Generally, as trees become larger, they require more space. In turn, the land supports fewer trees with increased size. The dynamics of the forest is a reality (not steady state) that should be understood when addressing forest health issues.

Why is “forest health” so popular? First, it sounds good and it is a “politically correct” phrase. Different groups (with different value systems) support differing political agendas. Who can argue against healthy forests? Anybody interested in promoting unhealthy forests? However, the phrase represents a reasonable concept, a goal with which landowners and resource managers can identify, and to which they can aspire.

Are Tennessee’s forests healthy? Some are and some aren’t. Are your forests healthy? Forests characterized by off-site species, overstocked (too many trees), preponderance of old declining/dying trees, excessive midstory vegetation, excessive fuels, and invasive species are, by most accounts, considered unhealthy. Most all these conditions result in low vigor trees competing for scarce resources: water, nutrients, light, and space. Low vigor trees are prime habitat for certain pests that build-up populations and subsequently spread to neighboring (healthy) trees and forests. Build-up of fuel loads and fuel ladders increases the susceptibility of high fire hazard scenarios.

Should we care? Not only do healthy forests assure us of sustainable wood production, they are vital for fresh air, wildlife habitat, clean water, enjoyable outdoor recreation and quality of life. Unhealthy forests have been major contributors to major wildfires and bark beetle outbreaks. Quite often, catastrophic fires and bark beetle outbreaks are symptoms of unhealthy forests, not the cause. To the extent that unhealthy forests and forest conditions remain, and to the extent that we focus on treating symptoms (e.g., killing beetles or putting fires out), while neglecting the underlying causes of the problem (unhealthy forest conditions), we can expect more damaging fires and more pest outbreaks. Contrary to the thinking of some, a “hand off” approach is not a suitable option for developing and maintaining healthy forests. Historic land use and decades of fire suppression have resulted in an abundance of aging and overcrowded conditions. These realities, now also influenced by the threats posed by invasive, non-native pests and the sprawling wildland-urban interface with its associated land parcelization and fragmentation demands proactive land management.

So, what is the meaning of forest health? Have some fun, use your online search engine, and evaluate the various interpretations for forest health. Ultimately, we all need healthy forests. To get them, we need natural resource professionals well-versed in ecology, economics, management, and social skills making critical decisions to ensure healthy forests.

SHOULD YOU MANAGE YOUR FOREST?

Larry Tankersley, Extension Forester

Recognizing that, management is not an ecological necessity for the general function of a forest. Why then would we need to manage it?

Management is “taking action to achieve specific goals” including providing or improving habitat for a species or community of species, contributing to biodiversity, conservation, and considering the potential for providing wood and non-timber products for people.

Many people, the majority perhaps, own their forest for reasons other than timber, deer and rabbits. Many folks just like their forest. They walk through it, see it, smell it, sit and listen to the resident songbirds. Unless a forest is disturbed, it changes imperceptively slow. Forests for most folks evoke stability, security, and spirituality. For these folks management is not only unnecessary, it is disruptive, and flies in the face of personal spirituality. Many forest landowners may cast these opinions on all forests regardless of who owns them. Doing nothing is a perfectly acceptable management decision, but it ultimately is a management decision.

Other landowners wish to have certain animal species to hunt, wood to sell or burn, leaf colors to enjoy, as well as clean water to drink. These folks may choose a more active approach to their management decisions. Their method’s may bother their neighbors or fellow landowners, who cry “Not in my backyard– NIMBY”.

A third group of landowners want to create a forest that is “better”, where “better” is something valued by the landowner, manager, neighbors and society. This aspiration is sometimes called, “restoration”. Restoration is active management that is not “doing nothing” but is not totally commodity driven either. Using a restoration philosophy all points on a spectrum of values and behaviors are available as goals for management. *(Adapted from Brenda C. McComb. Wildlife habitat management : concepts and applications in forestry / c2008: CRC Press/Taylor & Francis Group, Boca Raton, Florida.)*

THOUGHTS ON TENNESSEE TIMBER THEFT

Larry Tankersley, Extension Forester

Finding that someone has cut and removed some of your trees is extremely distressing for many of us. **Did someone steal your trees?** A person commits the crime of “theft of property” when that person knowingly obtains or exercises control over the property without the owner’s consent with intent to deprive the owner of property.

Was it an accident? This is an important element of the situation. If the taking of the timber is an accident or negligence, the matter is civil not criminal.

Here’s the problem. Timber theft is covert with few witnesses, identifying the thieves is difficult. Questions surrounding intent can make the legal framework regarding the “theft” as problematic as the theft itself.

Timber theft cases are rarely reported because prosecutions are relatively uncommon. The legal hurdles for obtaining a criminal conviction for timber theft are challenging, because all elements of the crime must be proven “beyond a reasonable doubt”. Depending on when the theft is discovered and investigating the crime often presents unique forensic challenges.

Proving criminal intent beyond a reasonable doubt is compounded if a court can be persuaded that the theft was an accident and unintentional. Lack of intent may preclude the possibility of a criminal conviction. In this instance, civil remedies are our only recourse.

A boundary dispute or discrepancy effectively eliminates pursuit of a criminal conviction. To pursue a criminal action, the burden of establishing the actual boundary is then on the state, which must absorb the survey costs. A state cannot successfully prosecute a timber theft unless and until the property lines are well-established.

Considering the costs of a survey, the risks associated with ownership disputes, and the considerable uncertainty regarding intent makes pursuing criminal sanctions unjustified in the minds of local prosecutors. It might be good to have law enforcement speak at your next County Forestry Association meeting.

THE SKINNY ON FATWOOD

Adam Taylor, Assistant Professor, Forest Products

Fatwood is pine wood that is heavily impregnated with resin. The resin content makes the wood very easy to burn and thus fatwood is valued as a kindling. Fatwood is known by many names, including lighterwood and pitchwood. Fatwood can occur naturally in the stumps of dead pine trees but it can also be induced with chemical treatments.

Fatwood itself and the chemicals in the wood have been harvested from pine trees in the US southeast for many years. However, most fatwood now comes from countries in central America. It is widely available in many hardware stores and from the internet. Fatwood is usually expensive compared to other ways of starting a fire (paper and matches) but it is easier and more convenient – and more interesting!

WOOD PRODUCTS EXTENSION BLOG

Adam Taylor, Assistant Professor, Forest Products

A new compilation of the enquiries received (with responses) by the Wood Products Specialist has been started. Check <http://forestproductsextension.blogspot.com/> frequently – you may find an answer to your questions. You can also submit questions at that site.

HARDWOOD ANALYSIS AND TRENDS (HAT) – June 2008

David Mercker, Extension Specialist I, Forestry

Hardwood crossties have long-been the choice for railroads. Activity in this area has been robust over the past few years, largely a function of R.R maintenance and new construction projects. High fuel prices are also causing increased activity in rail travel, with both demand- and supply-side functioning well. Cross ties are processed from either smaller, low-grade logs, or from the center of better quality logs (after grade lumber has been removed from the outside).

Recently, crossties have been one of the more profitable products originating from hardwood mills. Upper-grade lumber markets continue to be difficult, especially for open-grained species such as red and white oaks. Following a two year trough where #1 common red oak lumber had leveled, downward pressure resumed in May, with prices dropping 1.6 percent. The same grade and thickness of white oak lumber has fallen 4.7 percent in 2008, largely due to the drop in dollar value and reduced demand from overseas markets.

New home construction has seen slight improvement, though the manufacturers of secondary products have not realized the affect of the increase. Overall hardwood lumber production in 2008 is down 22.2 percent in the Eastern US. This reduction could ease supply-side pressures, and curtail additional downward pricing. We are in a wait-n-see mode. Hopefully better news will follow.

Summarized with permission from the Hardwood Market Report – Memphis, TN.

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