

FOREST STEWARDSHIP BRIEFINGS

Timber ◇ Wildlife ◇ Water Quality ◇ Soil Conservation ◇ Best Management Practices ◇ Recreation ◇ Aesthetics

HEALTHY FORESTS ACT NOW LAW

HR 1904 - the Healthy Forests Restoration Act of 2003 - was signed by President Bush and became public law on December 3, 2003. The following is a summary of the directives of each title of this act.

Title I: Hazardous Fuels Reduction on Federal Land - Directs the National Forest Service and Bureau of Land Management to plan and conduct hazardous fuel reduction projects on specified types of Federal lands, including certain lands that contain threatened and endangered species habitat.

Title II: Biomass - Amends the Food, Agriculture, Conservation, and Trade Act of 1990 to: (1) accelerate adoption of biomass technologies; (2) create community-based enterprises; and (3) establish small-scale business enterprises to make use of biomass. Authorizes grants to persons that own or operate facilities that use biomass for wood-based products or other commercial purposes to offset the costs incurred to purchase biomass.

Title III: Watershed Forestry Assistance - Amends the Cooperative Forestry Assistance Act of 1978 to provide assistance to State foresters and State officials, or to Cooperative Extension officials at land grant colleges and universities and specified institutions, for the purpose of expanding State forest capacities and activities to address watershed issues on non-Federal forested lands and potentially forested lands. Directs the Secretary of Agriculture to: (1) develop a program of technical assistance to protect water quality; and (2) establish a watershed forestry

cost-share program.

Title IV: Insect Infestations and Related Diseases - Establishes an accelerated program to plan, conduct, and promote comprehensive and systematic information gathering on forest-damaging insects and associated diseases.

Title V: Healthy Forests Reserve Program - Establishes the healthy forest reserve program within the Forest Service for the purpose of restoring and enhancing forest ecosystems to promote the recovery of threatened and endangered species as well as improve biodiversity and enhance carbon sequestration. Sets forth eligibility criteria for private lands for the program. Specifies that lands may be enrolled pursuant to: (1) a 10-year cost-share agreement; (2) a 30-year easement; or (3) a long-term easement with a buyback option. Provides safe harbor under the Endangered Species Act of 1973 to landowners who enroll land in the program when such enrollment will result in a net conservation benefit for listed, candidate, or other species.

Title VI: Miscellaneous - Directs the Secretary of Agriculture: (1) to carry out a program to inventory and monitor forest stands and potential forest stands in the National Forest System and (with consent of the owners) on private forest land; and (2) in carrying out such program, to address issues such as the early detection and assessment of environmental threats and to develop an early warning system for potential catastrophic environmental threats to forests.

from THOMAS, Legislative Information on the Internet, Library of Congress

For more information:

- <http://thomas.loc.gov/cgi-bin/query/D?c108:7:./temp/~c108OHXYJn:>
- <http://www.whitehouse.gov/infocus/healthyforests>
- <http://www.fs.fed.us/projects/hfi/>

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SQUIRRELS AND OAK FORESTS

Ecological considerations can lead us to awareness that some animals affect their surroundings in profound ways. Perhaps squirrels have much to do with the characteristics of oak-dominated forests.

Different as Red and White

Oak species are divided into two basic groups - the white oak group and the red oak group. Some Texas examples of species in the white oak group include post oak, overcup oak, white oak, and swamp chestnut oak. Examples of the red oak group include water oak, willow oak, Shumard oak, and southern red oak.

Acorns from the white oak group begin germination soon after they fall. Red oak acorns require a period of dormancy during the winter months before germination.

Not all Acorns are Treated Equally

The influence squirrels have on forest composition is related to the way they use acorns. When acorns of the white oak group begin to fall, squirrels usually eat

them immediately. By burying, they cache only a small portion of white oak acorns, first chewing away the end of the acorn containing the embryo. This prevents the acorn from germinating after it is buried.

Generally, squirrels cache red oak acorns when they fall. In addition to contributing to future food stores, this caching also may serve to leach some of the tannins from buried acorns, making the acorns more palatable. Red oak acorns also have a period of winter dormancy allowing them to be buried without germination.

Squirrels do not recover some cached red oak acorns, thus finally leading to establishment of new trees. In their caching behavior, squirrels may carry acorns some distance from the parent tree. Some rapidly germinating white oak acorns will take root close to the parent tree before being located by squirrels. Forest surveys show that white oak seedlings and saplings are found close to the parent tree, while those of the red oak saplings are distributed farther from the parent tree.

TIMBER MANAGEMENT AND SQUIRRELS

An assortment of silvicultural practices can be devised to benefit squirrels. These practices should favor older trees because mast and dens required by squirrels are most abundant in forests containing older trees. Timber harvest using small group selection or single-tree selection techniques in uneven-age forests produce timber revenue while retaining squirrel habitat. Older den trees and some non-commercial species that produce fleshy fruit are retained to favor squirrels. This approach is useful in bottomland hardwood forests preferred by gray squirrels.

In more open upland forests composed of both pine and hardwoods, the composition of mixed species should be maintained. In forests without pines, larger den trees and mast-producing species

must be present in good numbers. These types of upland forests usually will be favored more by fox squirrels.

In woodlots or younger forest stands, den sites and food supplies can be supplemented artificially. Nest boxes can be installed in trees at a height of 20 to 30 feet. These boxes are about two feet in height and about one foot wide on each side. The entrance should be about three inches in diameter and cut into a side, not front, of the box. Locate the box such that the entrance hole easily is accessible from the tree bole or a nearby limb.

Corn can be provided in feeders or by planting corn patches adjacent to squirrel habitat. Squirrels will feed on whole kernel corn. Dry whole ears can also be used.

by Carl Frentress, Regional Waterfowl Biologist, Texas Parks and Wildlife Dept., Athens, TX

For more information:

- Carl Frentress, TPWD, Athens, (903) 675-4177
- <http://www.nsr1.ttu.edu/tmot1/sciucaro.htm>
- <http://www.nsr1.ttu.edu/tmot1/sciunige.htm>

by Carl Frentress, Regional Waterfowl Biologist, Texas Parks and Wildlife Dept., Athens, TX

For more information:

- Local Texas Parks and Wildlife Office
- <http://apc.tamu.edu/wfsc406/mgmtplan/AppendixU.pdf>

BMP EFFECTIVENESS MONITORING

For almost 15 years, the Texas Forest Service has promoted the use of Best Management Practices (BMPs) to prevent or reduce the amount of water pollution when conducting forestry operations. While it is common knowledge that BMPs are an effective and practical means of mitigating forestry non-point source pollution, there is no quantifiable data to substantiate their obvious aesthetic improvements.

The Texas Forest Service recently began a stream monitoring project designed to test the effectiveness of the state recommended BMPs. Four sites under intensive forest management will undergo rigorous habitat assessments, biological and physiochemical monitoring before and after forestry operations. Sites were selected that encompassed the higher topography and erodibility hazards found in East Texas commercial forestlands. Each site has a designated reference (above the treatment area) and test (below the treatment area) section.

The following list shows the methods, frequency and parameters that will be monitored on the four sites:

- * Habitat Assessment -- Twice per year (spring and fall) -- Texas Commission on Environmental Quality method
- * Biological -- Twice per year (spring and fall) -- Benthic macroinvertebrates, fish
- * Physiochemical/grab samples -- Monthly -- Dissolved oxygen, pH, conductivity, temperature, turbidity, total nitrogen, total phosphorous, total suspended solids
- * Physiochemical/storm samples -- As required (15-20 storm events estimated per year) -- Total nitrogen, total phosphorous, total suspended solids

Statistical analysis will be performed comparing the habitat assessment, biological and physiochemical "test" section results on each of the four project sites before and after the treatment to see if they are significantly different. This same analysis will be used to test for differences between the reference and test sections within sites, so that any changes due to natural variability in the test section would not be falsely attributed to a treatment effect. A final report will be produced documenting the results of this project.

by Hughes Simpson, BMP Forester, Texas Forest Service, Lufkin, TX

For more information:

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WINTER BRINGS HIGH FIRE RISK

The winter wildfire season has arrived. Some areas have seen an increase in the number of accidental wildfires. Hard frosts have killed vegetation and have sent grass, weeds and trees into dormancy. Any wildfires that arise now have more fuel to burn, thus increasing the likelihood of damaging wildfires. Good fire safety is needed to prevent an increase in fires in the outdoors this winter.

Wayne Shew of the Texas Forest Service urges an increased emphasis on outdoor fire safety. Putting in firebreaks around material to be burned, staying with all fires until they are completely out, and burning household trash in burn barrels topped by

metal hardware cloth or screen will prevent many accidental fires.

Shew noted that from now until vegetation green-up in the spring, wildfire danger can rise and fall quickly, depending on the prevailing weather. Dormant vegetation can dry quickly during dry, windy weather, so wildfires are possible within days - or even hours - after a rain, should dry, windy weather occur immediately following a rain. Wildfire activity sometimes even increases after a light rain because people falsely believe that the rains have eliminated the fire danger and they fail to exercise adequate safety precautions with outdoor burning.

Continuing Education for Logging Professionals

2004 BMP Workshops
7:30 am - 3:30 pm

Feb. 27	Jefferson
Aug. 20	Lufkin
Oct. 15	Lufkin

2004 Aesthetics & Communications Workshops
1:00 pm - 5:00 pm

May 14 Diboll

- Fee (per workshop): \$10 for TFA/TLC members; \$35 for non-members

- For registration, call TFA at (936) 632-8733

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TIMBER TAX INFORMATION

The recent tax cut resulted in some sweeping tax law changes, including a significant reduction in the tax rate and a generous depreciation deduction important to timberland owners. Here are some websites that may be helpful to forest landowners:

- Publication - *Tax Tips for Forest Landowners for the 2003 Tax Year* - Larry Bishop, USDA Forest Service: http://sref.info/spotlight/tax_tips_2003a
- USDA Forest Service Southern Region: <http://www.southernregion.fs.fed.us/spf/taxtips/>
- National Timber Tax Website: <http://www.timbertax.org/>
- IRS publications and forms: <http://www.irs.gov/>
- Texas Forest Service Forest Economics Information: <http://texasforestsERVICE.tamu.edu/forest/economics/default.asp>



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