



MISSOURI ForestKeepers MONITOR

WINTER 2009

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Call Before You Cut

By Steve Westin, Forestry Field Program Supervisor, Missouri Department of Conservation

WOULD YOU DREAM OF PERFORMING surgery on yourself? Would you undertake legal action without an attorney? Most folks wouldn't attempt these activities because they lack the training and experience to get the job done right. The consequences of not consulting a professional can be far-reaching. The same is true when it comes to managing your woodland, especially when timber harvesting is being considered. Caring for your woodlands is a long-term proposition where one unfortunate decision can have impacts that last for decades.

The Department of Conservation, along with many partners, is launching an information campaign called *Call Before You Cut*. This effort encourages woodland owners to use the services of a professional forester and a trained logger before they make decisions about their woods. A toll-free telephone number (877.564.7483) and a website www.callb4ucut.com are available for landowners to request information about caring for their woods and contacting a professional.

Why all the fuss? Approximately 83 percent of Missouri's woodlands are privately owned. Those private forests play a large role in providing clean air, clean water, recreational opportunities, wildlife habitat, and forest products for all Missourians.

So how do you, as a landowner, get started caring for your woodlands? The first, and most

important, step is to think seriously about why you own the land and what you want from it. Envision what you want your woods to look like in the future and what benefits you want from your trees. A professional forester will be able to suggest management activities to help you reach your goals. The good news is that many objectives can be achieved on one piece of land at the same time.

The next step is figuring out what you have in your woodlot. A forester can conduct an inventory of your woods to determine what kind of trees are present, how they are distributed, how many there are, their health, and their age. This information will be used to develop a plan which outlines activities to achieve your goals.

If a harvest is in order, use a professional forester to determine which areas to harvest and how to cut the trees. You know the value of your home, vehicle, livestock, and crops. Do you know the value of the trees in your woods? Most people don't. An estimate of the value of your timber based on current market conditions can be developed if you have a forester mark and tally the trees to be removed. With this estimate, you can solicit written bids from loggers for the trees you want to sell.

A properly conducted harvest will remove trees of all sizes, ages and quality, leaving many desirable trees and promoting the growth of high potential younger trees. A professional forester





MISSION:

To develop a network of informed citizens working to conserve, sustain and enhance Missouri's urban and rural forest resources through volunteerism, advocacy, and management.

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Courtesy of the Missouri Department of Conservation

The Missouri Forestkeepers Network is a statewide volunteer program administered by Forest ReLeaf of Missouri in partnership with the Missouri Department of Conservation. Membership is free.

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Call Before You Cut *continued from page 1*

and trained logger can design the sale to protect the aesthetics, water quality and soil resources of your woodland.

Sound confusing or overwhelming? Remember the *Call Before You Cut* toll-free number and website detailed above. Managing your woodland can be a rewarding and profitable

activity which will enhance the health and productivity of your trees. Protect the legacy your woodlands will provide for future generations by seeking advice from a professional forester before you begin actively managing your woods.

Red Oak Acorn Crop a Failure, White Oak Acorns Abound



By Jim Low, News Services Coordinator, Missouri Department of Conservation

A dedicated cadre of Forestkeeper members and Missouri Department of Conservation employees counted acorns beneath more than 6,000 oak trees last fall.

Acorns are the most important dietary staple for wildlife from chipmunks and squirrels to deer and turkeys. The annual survey of acorn production helps biologists predict wildlife population trends in this area. The 2008 Oak Mast Survey provides separate data for trees in the red and white oak groups. The distinction is important because the two families of oak trees produce acorns on different schedules. Acorns from white oaks, such as the common white, bur, and swamp white, grow and fall to the ground in about six months.

Those from red oaks, including the northern red, pin, shingle and black oaks, remain on the trees for more than a year, falling to the ground in their second autumn.

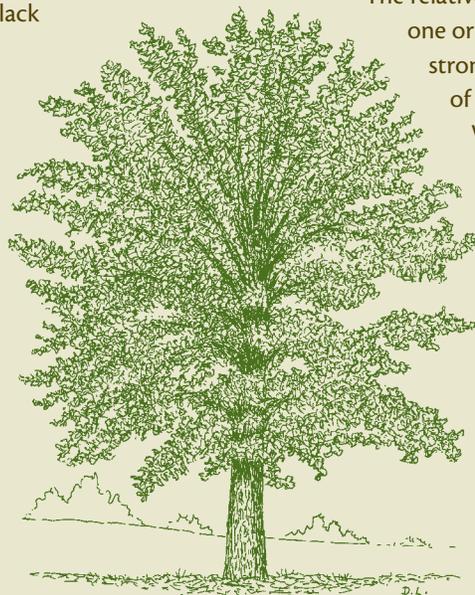
This difference in fruiting habits creates a sort of dietary safety net for wildlife. If a late freeze kills all the oak flowers in a particular area, as it did across most of southern Missouri in 2007, red oak acorns that began growing the previous year sustain wildlife

that autumn. Red oak acorns are absent the following year, but white oaks fill the gap as long as freezing weather does not strike two years running.

This year's oak mast survey showed combined red and white oak acorn abundance 17 percent above last year's level, but 49 percent lower than the average since the Conservation Department began the survey in 1960. Encouraged by abundant rainfall, white oaks produced five times more acorns than in 2007, when the Easter freeze zapped their flowers. This year's white oak acorn crop was 23 percent above the long-term average. However, this year's red oak acorn crop was dismal, the worst on record in fact.

The relative abundance of acorns from one or both oak groups exerts a strong influence on the behavior of squirrels, deer and turkeys.

When acorns of both kinds are in short supply, game animals shift their foraging activities to other food sources, such as hickory nuts and walnuts for squirrels and agricultural crops for deer and turkey. This year's shortage of red oak acorns is likely to cause all three species to congregate around white oak groves.



FEATURED SPECIES:
OZARK WITCH HAZEL

Hamamelis vernalis Sarg.

Treevia

FUN FOREST FACTS
 TO KNOW AND TELL!

There are four national-champion trees in Missouri: a bur oak in southern Boone County; a pumpkin ash in Mississippi County; an Ozark chinkapin in Barry County; and an eastern wahoo in St. Louis County.

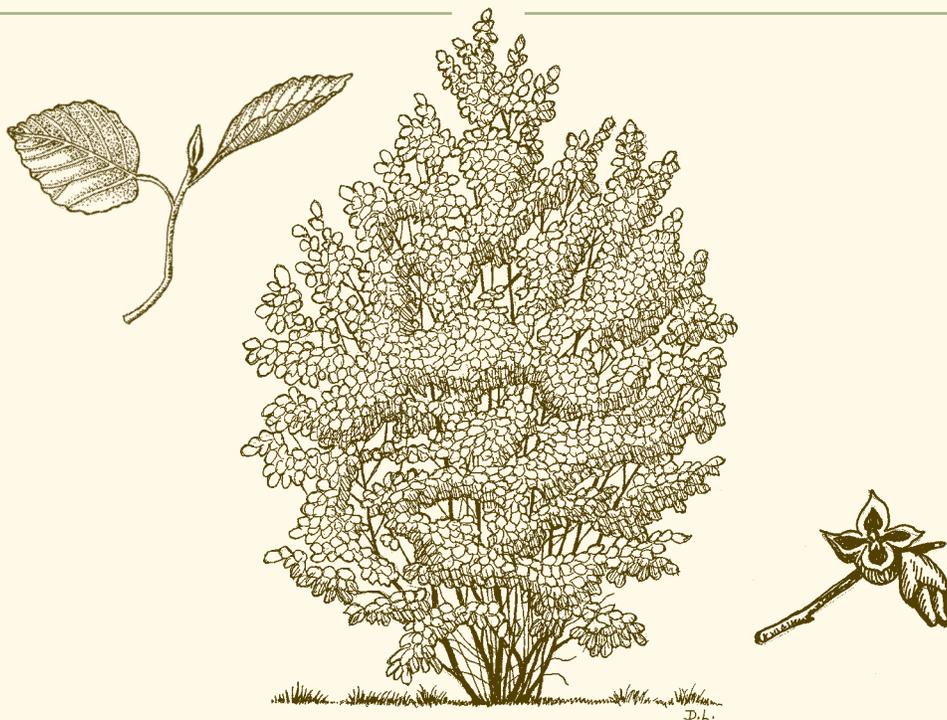
Q&A

Q: How long does it take for an oak to produce acorns?

A: Most oaks take more than 30 years before they will produce acorns. When they do produce, white oak acorns mature in about six months and red oak acorns mature in the fall of their second season.

Have a question about Forestkeepers, trees, or what you read in this issue? Contact us at information@forestkeepers.org or by mail to: Q&A, c/o Forest ReLeaf of Missouri, 4207 Lindell Blvd., Suite 301, St. Louis, MO 63108.

We may answer your question in the next newsletter.



Illustrations courtesy of the Missouri Department of Conservation

The Ozark witch hazel is the first woody species to bloom in Missouri, with its welcome yellow to red blossoms often appearing in late January or early February when snow is still on the ground. It differs from Eastern witch hazel in that the later produces flowers in late autumn or early winter.

Both species make attractive landscape shrubs, but the Ozark witch hazel is typically shorter, growing up to 9 feet and often multi-stemmed. The twig, leaves and bark are used to make witch hazel extract, which is used in shaving lotions and for many medicinal purposes. The Native Americans used this plant for skin and eye irritations, and as a tonic to apply to bruises and sprains. White-tailed deer are somewhat attracted to the leaves and shoots, and some mammals and birds eat the bark, seeds, and flowers.

LEAVES: Simple, alternate, up to 6 inches long and 3 inches wide; pointed tip with a wedge-shaped base; sometimes toothed;

hairy and usually smooth to the touch. Excellent bright yellow fall color.

BARK: Smooth on immature plants and scaly when mature; brown with reddish brown wood and almost white sapwood.

FLOWERS: Fragrant clusters or solitary blooms of four petals; yellow to dark red; ¼ to ½ inch long with narrow, ribbon-like petals.

FRUIT: A two-valved capsule which splits open in the fall and discharges seeds up to 30 feet away.

HABITAT & RANGE: Found in gravel and rocky streambeds, primarily in the southern part of the state. No serious insect or disease problems, and although it grows best in moist areas, Ozark witch hazel can tolerate poorly drained clay soils and does well in full sun, as well as partial shade.

Compiled from *Manual of Woody Landscape Plants* by Michael A. Dirr and *Trees of Missouri* by Don Kurz.

Welcome New Members

We would like to welcome the following new members to the Missouri Forestkeepers Network:

William Bowe

Kellie Elmore

Justin Mutrux

George Boyd

Shawn Esterly

Jacob Schrader

Jolene Bricker

Miles Fugate

Siegel Family

Bulldogs Conservation Crew

Vincent Hannon

George Sims

Castor River Forestkeepers

Jerrie Jackson

Crystal Stief

Betty Catanzaro

David Kemm

Jakob Stief

L.D. Davis

Vicki Maston

Eddy White

Carolyn Dunsing

Linda McAvoy

Do you know someone who might be interested in becoming a Forestkeeper? Call 1-888-9-FOREST or visit www.forestkeepers.org for details on joining our Network of over 2,000 citizens who are working to conserve, sustain, and enhance Missouri's urban and rural forest resources.

WINTER ACTIVITY

A seasonal project to enjoy with the whole family



Champion Tree Hunt

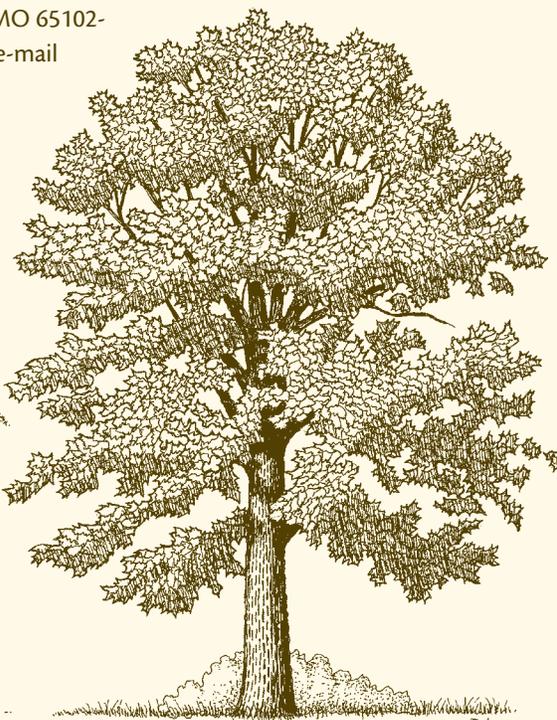
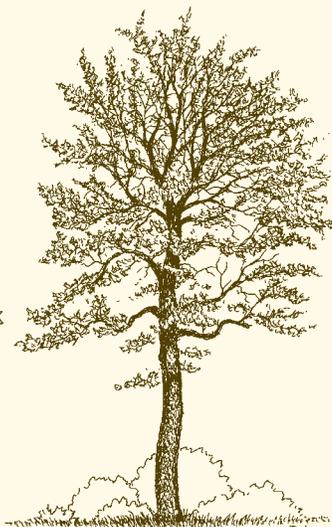
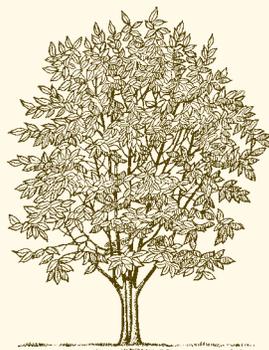
When cabin fever strikes your family this winter, consider getting out to visit our state's champion trees. Winter is a great time to appreciate these beauties when their full size is clearly visible.

The Department of Conservation has certified 116 trees as being the biggest known examples of their species in Missouri. Each tree receives a score based on its height in feet, one-quarter of its average spread in feet, and its trunk circumference in inches.

One example is the state-champion bur oak, located beside a road in southern Boone County. With a total score of 410, it not only is Missouri's biggest bur oak, but the largest of its kind in the nation. Its trunk measures 287 inches in circumference. It stands 90 feet tall and spreads over an area 130 feet across.

Details about the State Champion Tree Program are available at mdc.mo.gov/conmag/2002/12/50.htm.

Champion trees are located in 47 counties in every region of the state. For a printed list of champion trees or information about the location of those on public land, contact Donna Baldwin, P.O. Box 180, Jefferson City, MO 65102-0180, phone 573-751-4115, ext. 3111, e-mail donna.baldwin@mdc.mo.gov.





FORESTKEEPERS BULLETIN

Managing Invasive Plants

A FOREST WHICH IS HEALTHY AND SELF-

perpetuating is the goal for many landowners. Unfortunately, managing your woodlot to achieve this goal is especially difficult today. Many landowners find themselves faced with the challenge of managing a proliferation of non-native plants which have crowded out desirable trees and shrubs.

Non-native invasive plant species are those that were accidentally or intentionally introduced to an area outside of their origin. These plants are usually characterized by fast growth rates, rapid vegetative spread and prolific seed production, dispersal and germination.

In their native habitats, these plants are not a problem. But moved to new locations where they have no natural controls, they can displace and even destroy their new home's native flora and fauna. Often an invasive plant will crowd out all other vegetation, forming a forest of one type of plant — the invader.

This resulting lack of plant diversity causes numerous problems. Consider this — if your lawn is primarily a monoculture of Kentucky bluegrass, it may be effective in maintaining a manicured look, but it will not sustain a diversity of animal species. Similarly, a wetland dominated by purple loosestrife cannot sustain a diversity of native wetland plants or animals. A woodland dominated by garlic mustard and bush honeysuckle will not enable a variety of wildflowers to grow, or allow the plants needed for wildlife habitat to thrive.

If you care about Missouri's crops and wildlife, please do what you can to prevent and control the spread of exotic invasive species.

WHICH SPECIES ARE INVASIVE?

The Missouri Department of Conservation (MDC) has compiled a list of plants that are currently impacting Conservation Areas, wildlife areas, parks, and forests throughout the state. Some of the top invasive non-native plants of concern in Missouri include:

- Autumn olive
- Bush honeysuckles
- Canada thistle
- Cut-leafed and common teasel
- Garlic mustard
- Japanese honeysuckle
- Johnson grass
- Kudzu
- Multiflora rose
- Musk thistle
- Purple loosestrife
- Reed canary grass
- Sericea lespedeza
- Spotted knapweed
- Common buckthorn
- Japanese stilt grass
- Wintercreeper

WHAT IF I HAVE INVASIVE SPECIES?

If a plant stays within the boundaries of your property and does not impact any adjacent areas, then it may not be a problem. Bear in mind that most non-native plants are not invasive. Of the many non-native plants in the state, only a handful are known to truly "invade" their natural settings. However, if you are unlucky enough to have a plant spreading out of control throughout your forest, action is needed.

Most invasive plants are difficult to control and require the use of manual and chemical tech-

Adapted from the Ohio Department of Natural Resources website at www.dnr.state.oh.us/tabid/2005/Default.aspx and from the Missouri Department of Conservation website at www.mdc.mo.gov/landowner/invasive

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**PREVIOUS
TECHNICAL BULLETINS:**

- #1 Our Upland Oak-Hickory Forests
 - #2 Bottomland Forests
 - #3 Missouri's Coniferous Forests
 - #4 Urban Forests and Plantations
 - #5 The Gypsy Moth
 - #6 Dogwood Anthracnose
 - #7 The Japanese Beetle in Missouri
 - #8 Butternut Canker and Its Dwindling Host
 - #9 Asian Longhorned Beetle
 - #10 Chip Mills in Missouri
 - #11 Community Forestry
 - #12 Proper Pruning
 - #13 How to Hire an Arborist
 - #14 Can These Trees Be Saved?
 - #15 Maintenance of Backyard Trees
 - #16 Selecting Professional Tree Care
 - #17 Tree Protection During Construction
 - #18 Poison Ivy
 - #19 Tick-Borne Diseases
 - #20 Chiggers
 - #21 Snakes of Missouri
 - #22 Managing Your Forest
 - #23 Are You Protecting Missouri's Water?
 - #24 Selling Timber the Smart Way
 - #25 Timber Stand Improvement
 - #26 Benefits of Livestock Fencing
 - #27 Edge Feathering
 - #28 Managing for White-Tailed Deer
 - #29 Turkeys & Woodlands
 - #30 Underutilized Trees for Missouri Landscapes
 - #31 Managing Your Yard for Trees and Grass
 - #32 Windbreaks: Protection That Grows
 - #33 Evergreens: Selections for Your Landscape
 - #34 Specialty Products
 - #35 Heating with Wood
 - #36 Utilizing Eastern Red Cedar
 - #37 Black Walnut: Missouri's Most Valuable Tree
 - #38 Those Pesky Insects
 - #39 Diseases and Healthy Forests
 - #40 I Hurt My Tree?
 - #41 Exotic Forest Pests Are Becoming A Common Threat
 - #42 Trees Pay Us Back
 - #43 How Is Your Habitat?
 - #44 Who Owns Missouri's Forests?
- You can access these bulletins online at www.forestkeepers.org by clicking on "Newsletters" on the homepage.

Managing Invasive Plants

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niques. It is best to control invasive species when plant numbers are small before they dominate an area. The most effective control method varies by the plant to be eradicated. You are strongly encouraged to work with MDC to get the plant you are concerned about identified and the appropriate control strategy delineated.

The Missouri Botanical Garden is also a good source of information on invasive plants. Be sure to check out their program, *Invaders of the Gateway Region*. This is an innovative campaign whereby volunteer "citizen scientists" are empowered to become involved in efforts to more effectively slow the spread of harmful invasive species and reduce their economic and ecological damage. For more information, visit www.mobot.org/invaders.

ADDITIONAL RESOURCES

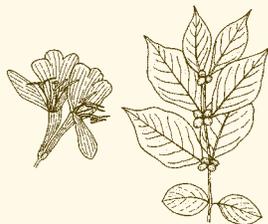
An outstanding resource for managing problem plants is the *Missouri Vegetation Manual*, which can be found on the MDC web site at www.mdc.mo.gov/nathis/exotic/vegman. This manual outlines control strategies for 24 invasive plants common to our state. These control recommendations are based on the experience of MDC employees as well as published and unpublished material on the plant species of concern.

Results cannot be guaranteed using the methods given in the manual because of the variability between sites where these plants may occur. Nevertheless, landowners can save years of experimentation by learning from the successes and failures of others.

Here are a few recommendations for the most problematic forest invaders:

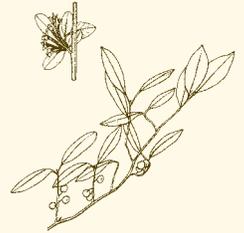
BUSH HONEYSUCKLE

Seedlings can be hand pulled when soils are moist. All of the roots should be removed or re-sprouting will occur. Bush honeysuckle stems can be cut at the base and treated with herbicide. Application in late summer, early fall, or the dormant season has proven effective. Because of the tenacity of the plant, it will be necessary to check the area in the following years for reinvasion.



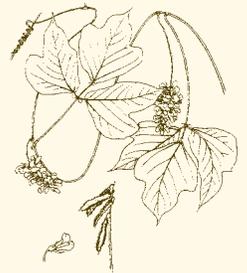
AUTUMN OLIVE

Pull and dig young plants in the spring for new infestations. Older infestations are best eradicated by a combination of mechanical and chemical treatment. Cut the plants off at the main stem and apply an herbicide to the stump to kill the root system and prevent resprouting. Cutting and stump treating is particularly effective late in the summer.



KUDZU

Infestations which are just a few years old may be eradicated by mechanical means such as cutting, grazing, digging, disking, prescribed burning and application of herbicides. Infestations which are more than ten years old are too deeply rooted for manual removal. Therefore, few options remain except the application of herbicides. Total eradication of kudzu is necessary to prevent re-growth.



MULTIFLORA ROSE

Pulling, grubbing or removing individual plants from an area can be effective when all the roots are removed. Three to six cuttings or mowings per growing season for more than one year can achieve high plant mortality. Such treatment may need to be repeated for two to four years. Cutting stems and applying herbicide is also a viable control technique.



Snapshot!

Highlights of Forestkeepers activities around the state in 2008:

CENTRAL REGION

Betsy Blake of Audrain County represented Forestkeepers at an event and completed observations at Silver Meadows Girl Scout Camp with fellow Forestkeeper Betsy O'Day, Katie Blake and Molly O'Day.

Edward Keyser of Cole County cared for trees, conducted a tree project with a youth group, attended an environmental conference, and installed and maintained food plots.

Amber Meredith completed her first tree observations in Callaway County.

Jeff and Sally Comparato of Howard County planted and cared for trees, attended a Forestkeepers training, and managed wildlife on their land.

Chuck Hird of Saline County planted and cared for trees, conducted a tree project with a youth group and installed/maintained food plots.

Lee and Alice Forker of Callaway County planted over a 100 trees and cared for 1,000 trees.

KANSAS CITY REGION

Carroll Chancellor of Pettis County cared for over 1,600 trees.

Roger Harms of Benton County completed an impressive total of 22 tree observation forms, and monitored wildlife.

Jim and Kathy Freeburger of Benton County planted 75 trees and cared for 200 trees.

Patricia Fitzgerald of Jackson County cared for numerous trees and surveyed over 534 trees in her tree observations report.

NORTHEAST REGION

Milton Krueger of Clark County cared for over a 100 trees, collected and submitted samples for pest management, treated unwanted vegetation, and surveyed for wildlife use and population numbers.

Theresa Casey and 75 of her students at Mark Twain High School in Ralls County planted and cared for trees, helped build/enhance an outdoor classroom, and turned in eight tree observation projects.

NORTHWEST REGION

James Brown of Gentry County planted, trimmed, and cared for trees.

John Casey of Holt County planted trees, celebrated Earth Day and used Forestkeepers materials in the classroom. John and his students at South Holt School completed seven tree observation projects.

Charles and Ellen Lebold of Clinton County, who are fifth-generation farmers, cared for over 1,300 trees.

Susan Franklin and her students at Norborne High School in Carroll County completed multiple tree observation projects.

OZARK REGION

Bob and Pat Perry of Phelps County planted trees, worked on outdoor classrooms and tree identification trails and projects, attended three trainings, recruited a 4-H group to Forestkeepers, removed honeysuckle, represented Forestkeepers at two events, and led conservation education hikes for middle school students.

Cindy Craig of Howell County advocated at the Home and Garden Show in her community by wrapping and bagging 2,200 individual trees and handing them out with information about planting the right tree in the right place.

Daniel and Cookie Hatch of Texas County used Forestkeepers materials in the classroom, attended the Missouri Envirothon, where their team took 8th place. They also used accepted harvesting practices on 120 acres and surveyed for wildlife use and population numbers.

ST. LOUIS REGION

June Kreyling of Jefferson County attended her first Forestkeepers training, and then completed her first tree observation report.

The Principia Upper Roots and Shoots Club constructed an electric fence to contain four goats on their wooded campus. The students then released the goats to eat 2,000 square feet of honeysuckle-infested forestland. Several native wildflowers and white oaks are now growing on the cleared property.

David Hagen of St. Louis City cared for trees in his neighborhood.

Steve Lovell represented Forestkeepers at the Tree Farmers convention.

Dan Morrissey of St. Louis County planted and cared for trees and conducted Arbor Day/Earth Day observances.

SOUTHEAST REGION

Kim Hindman of Cape Girardeau County planted over 600 trees, treated unwanted vegetation, and installed/maintained food plots for wildlife.

Shannon McNew of Cape Girardeau County cared for trees, attended an environmental conference, contacted her legislator regarding conservation issues, and conducted Arbor Day/Earth Day observances.

Nicky DeVoto of Wayne County picked up trash and maintained a public area.

SOUTHWEST REGION

John Hopkins of Greene County cared for 400 trees.

Logan Skelley of Jasper County spent time staking young trees, cutting limbs, mending fences and wood-chipping downed branches after the severe ice storms this past winter.

Robert Kipfer of Greene County planted over 900 trees and cared for 2,000-plus trees, among many other activities.

Mark Your Calendar!

Spring 2009 Workshops

Landowner Workshop

Jefferson County – April 18

Tree Identification Workshop

Rolla area – April 27

Native Flowers and Invasive Plants

Troy – April 30

Watch your mailbox, check the website at www.forestkeepers.org or call 1-888-9-Forest for more information. We hope you can join us for one or more of these free events!



Backyard Woods Tip Sheets

Thanks to the Backyard Woods program of the USDA Forest Service, the NACD, and The National Arbor Day Foundation, a series of twelve tip sheets is available for landowners in Missouri. You may request the series of black & white glossy sheets customized for our state, and/or a complete color manual with all 12 tip sheets published for landowners across the U.S. Just give us a call or send us an email (limited to one set and/or manual per member).

You may also download the Missouri tip sheets from the Forestkeepers website.



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