Forest Keepers MONITOR MISSOURI FRING 2007

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And the Survey Says...

By Justine Gartner, Forestry Field Program Supervisor, Missouri Department of Conservation

A whopping 393 members of the Missouri Forestkeepers Network completed the Member Survey in November and December! Thank you for taking the time to share your thoughts and ideas.

I do apologize for any confusion our initial mailing caused. Despite this confusion, many good ideas were received. Here are some of the highlights from your replies.

OVERALL PROGRAM

When asked if the program meets your expectations, 74 percent of you said "Yes" and 21 percent said "Don't Know." Many

of you noted the educational nature of the program, the tools available to help students, and the newsletter as being the most valuable aspects of the program.

Most of the respondents who said the program did not meet their expectations indicated that they were looking for a more scientific approach to monitoring. We're hoping to develop new activities to challenge those of you with advanced skills or with a higher interest level.

PARTICIPATION

A total of 42 percent of the respondents indicated they had returned a tree observation form or activity report in the last two years. Those who did not indicated that time constraints, reluctance to submit inaccurate information, and health were the primary obstacles.

FORESTKEEPERS WEBSITE

About a third of the respondents have visited the Forestkeepers website. Those who have never

been to the site noted that they didn't know it existed or that they didn't have Internet access. Content, ease of use, and the links were the best features noted by those who had visited the site. Suggested improvements include more tree identification information, lesson plans, and help with insect and disease diagnoses.

TRAINING

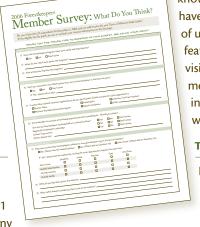
Following that same trend of thought, an overwhelming number of members ranked training on tree identification,

tree pest management, and general tree care very high. While many expressed interest in a particular training topic, attending an event wasn't as desirable as receiving that information through the newsletter or some other written publication. We will be working to meet this need.

For those who are interested in attending a workshop, check out the opportunities listed on the back page of this newsletter.

NEWSLETTER

An overwhelming majority of you like this publication. Overall, it was rated highly with respect to the ease of use and content. Some of you suggested features you would like added to the publication. Numerous ideas for potential articles were also submitted. They will be





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.

EDITOR:

Nancy von Brecht

TECHNICAL EDITOR:

Justine Gartner

ASSISTANT EDITOR:

Michelle Johnson

DESIGN:

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FOR INFORMATION, CONTACT:

Forest ReLeaf of Missouri 4207 Lindell Blvd. Suite 301 St. Louis, MO 63108

TOLL-FREE:

1-888-9-FOREST (1-888-936-7378)

information@forestkeepers.org www.forestkeepers.org

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Congratulations Awardees!

By Nancy von Brecht, Executive Director, Forest ReLeaf of Missouri

The 2006 Forestkeepers awards were presented in January at the annual Missouri Community Forestry Council Conference in Springfield. For the second time in the history of the awards, a couple was selected for the "Land Steward of the Year" award — and for the second time, that couple was Bob and Pat Perry from Rolla.

The Perrys have been members of the Forestkeepers Network since almost the beginning of the program. In 2006, they planted several hundred

trees on their own property as part of their wildlife habitat restoration efforts, and they continued TSI projects and tree observations. In addition to working on their own property, the Perrys treated unwanted vegetation and worked with a local Girl Scout troop, Cadet Troop #22, on a tree-planting project at the local Audubon nature reserve. They also



(from right) Lisa Allen, State Forester, Missouri Department of Conservation, presented the award to Bob and Pat Perry in Springfield.

coordinated a planting at the Bonebrake Center of Nature & History in Salem, and contacted the *Rolla Daily News* about the project, resulting in a nice article.

In addition, the Perrys volunteered to be mentors in the Forestkeepers Mentor & Apprentice Program, participated in a Forestkeepers focus group, picked up trash at 10 different events, attended local tree board meetings, Forestkeepers workshops and other environmental conferences, and contacted elected officials about conservation issues. Overall, on their Forestkeepers report for 2006, the Perrys reported that they and the others involved in these projects volunteered 615 hours — the equivalent of more than 15 weeks of work!

The second award winner this year was Jennifer Fruend, who was given a special Award of Merit in

the category of "Environmental Educator of the Year." Jen is a science specialist for 1st through 6th graders at Rohan Woods School in St. Louis County. In 2006, Jen worked with her students and other volunteers on three projects – one at the school, and two along area creeks – Deer Creek in Maplewood and Shady Grove Creek in Webster Groves. At Rohan Woods, Jen led a group of 2nd graders in planting 27 native trees and shrubs on the school grounds.

Over at Deer Creek, Jen organized students, their family members and other volunteers from the community to remove honeysuckle and improve the path to the creek. They then planted about 350 trees and shrubs, focusing on native species. Ien contacted the St. Louis Post-Dispatch and the paper ran a story on this project and their plantings at the school. Efforts

at Shady Grove Creek included 5th graders from Rohan Woods, who planted 12 trees. Jen also formed a student-led Stream Team — 30 volunteers picked up one ton of trash along the creek!

Back at Rohan Woods, Jen conducted three creative tree identification projects with her students during Arbor Day week. She also hosted two public meetings — one for the Greenway District and one for the River Des Peres Watershed Coalition. Jen reported that she, her students and the other volunteers involved in these projects volunteered 961 hours — the equivalent of over six months of work!

Our congratulations to the winners, who received commemorative plaques, copies of *Trees of Missouri* by Don Kurz, and complimentary registration to the conference and awards banquet.

FEATURED SPECIES:

SERVICEBERRY

Amelanchier arborea (Michx. f.) Fern.



Illustration courtesy of the Missouri Department of Conservation

This small tree or tall shrub is known by many names in Missouri. It is often called sarviceberry, shadbush, Juneberry, or sarviss tree. Rarely reaching 30 feet in height, serviceberry is found in counties throughout most of the state. It is most conspicuous in early spring, when its showy white flowers are among the first blooms in the woodlands. Serviceberry has a narrow, rounded crown, and its dark brown wood is among North America's heaviest and hardest woods. Its compact size, flowers, attractive fall foliage, and red fruit make it useful in landscaping, especially in more natural settings, but it is not commonly planted. Many species of birds and mammals eat the fruit, including humans. Serviceberry fruits were used by the Native Americans in making bread.

LEAVES: Alternate, simple, and usually oval-shaped; 2 to 5 inches long and 1 to 2 inches wide; typically emerge after the flowers in spring; very colorful in the fall, ranging from gold to orange and flecked with reds and greens.

BARK: Smooth and light gray when young, becoming dark gray and streaked with long fissures as the trees ages. May have a reddish cast and be quite ornamental.

FLOWERS: Clusters are 3 to 7 inches long and fragrant, with 6 to 12 white flowers in each cluster. The clusters, or racemes, may be erect or droop.

FRUIT: Globe-shaped, reddish-purple, about ¼ to ½ inches in diameter. Contains a number of small seeds.

HABITAT & RANGE: Found in open woods and along bluffs, usually on well-drained slopes.

Treevia

FUN FOREST FACTS
TO KNOW AND TELL!

 The average life of a tree in a heavily-used city park is 25 to 30 years. By contrast, the average life span of a tree in a remote rural forest is 100 to 150 years.



Q: Where can I find help with tree identification?

A: There are many available resources to help with identifying trees. If you have web access, simply run a search using those terms; or go to http://www.mdc.mo. gov/forest/whatkind.htm for additional links. We recommend that you purchase a field guide for trees. The Trees of Missouri Field Guide by Don Kurz was published recently and is an excellent source for identifying local trees. You can also sign up for one of the tree identification workshops in May. Foresters from the Missouri Department of Conservation will teach you basic skills so you can learn how to identify trees on your own.

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 will try to answer your questions in the next issue.

Welcome New Members

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

Carla Appleberry Donna Binkholder John F. Bishop Blind Boone Park Renovation Group Sandy Booth

Sandy Booth Joanie Bourbeau Jo Anna Burdorf Carrollton Area Career Center FFA

Center FFA
John W. Chesney
Richard Davidson
John Christopher Davis
Guy DeVault

Guy DeVault Dee Dokken Edwards 3 E.L. Farley
Sabrina Glaser
Chris Goin
Grimes Family
Alan Jankowski
Mary Jennings
Christian Kister
Kopp Family

Shelly Lagermann Robert Lee Jessica Lier Jane Luckett Jan Mitzel Cirri Moran Tom Nowacki City of Olivette Pierce City FFA William A. Pilchard

Adam Rey
Phil Salomon
Jim Schenck
Shirley Sebeniecher
Diane Smith
Jack Spicer
Sandi Staley
Ray Trautz
Ariel Wahl
Sybille Wilson
Dustin Worthington
Yemm Forest Preserve

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 more than 1,800 citizens who are working to conserve, sustain, and enhance Missouri's urban and rural forest resources.

SPRING ACTIVITY

A seasonal project to enjoy with the whole family



Spring is a great time to get out and plant a tree with your family! Select a site and allow a child to help pick the tree, based on what species would be appropriate. For tips on selecting the right tree and planting it properly, visit www.moreleaf.org, click on "Learn," and check out the "Resources & Links" page.

To plant the tree, you'll need:

- · Gloves and shovels
- Water
- Mulch
- Camera

Use the planting as an opportunity to explain that trees grow from the top, not the bottom. If you paint a mark on a tree five feet above the ground, it will still be at this height years from now. Take a look at the structure of the tree and identify the main leader — this is usually the tallest branch in the center that grows straight toward the sky.

Take a photo of your child standing next to the tree after it is planted. Repeat the photo shoot each year at the same time, perhaps on Arbor Day or the first day of school. How many years does it take for your family tree to "outgrow" the child?



And the Survey Says...

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reviewed in the coming months as we set content for future issues.

Thank you to everyone who participated in the Network in 2006. Please continue to monitor your trees and send in your observations and activity reports. If you have any comments or suggestions, contact us at 1-888-9-FOREST or e-mail us at information@forestkeepers.org.

Keep up the great work!



FORESTKEEPERS BULLETIN

Those Pesky Insects

A fever, sore throat, and runny nose are all symptoms that point to the common cold. Doctors use signs and symptoms to diagnose illnesses in patients every day. Trees also display outward indicators when they are infected with a disease or are being attacked by insects. Homeowners, like doctors, can use these indicators to diagnose problems.

Tree owners must look for signs and/or symptoms. A symptom, such as browning leaves or defoliation, is the response of a tree to an insect, pathogen, or an environmental problem. A sign is physical evidence of an insect or disease. Examples include exit wounds where a beetle has emerged from the trunk of a tree or a fruiting body, such as a mushroom, showing the presence of a wood-decaying fungus. A symptom will help narrow down the causal agent, and a sign will help confirm it.



Every tree owner should keep an eye on their trees for signs and symptoms of insects and diseases. Some problems may threaten the life of the tree, while others may only cause cosmetic damage. Identifying the specific problem your tree is experiencing is key to selecting an appropriate control method. For many problems, the best response is to do nothing as the problem is merely an annoyance.

Here are some common insect problems:

HARDWOOD BORERS

This group of insects tunnel under the bark of a tree, disrupting the flow of water and nutrients. This activity causes decline, branch dieback, or even tree mortality. In the forest, hardwood borers can degrade logs and lumber, resulting in loss of value. Stained bark, holes randomly scattered across the trunk or main branches, and wet frass on the bark below tunnel openings and extruding from tunnel entrances indicate borer presence.

The best control for hardwood borers is prevention. Trees should be planted properly and maintained well to prevent attack. Once borers have entered and created tunnels or galleries in a tree, the main objective is to stop larval feeding. This can be accomplished by probing the gallery with a flexible wire to kill the larva inside. This approach will work if only a few exit holes are noted. Severely infested trees can be sprayed with an appropriate insecticide. Please read label directions carefully and apply as directed.

SCALE

There are more than 42 different types of this tiny sucking insect which infect a variety of hardwood and softwood trees and shrubs. Scale insects, as a group, are harmful to their host because they extract sap from leaves, needles, and twigs. Some scale insects, such as the obscure scale, are found only on pin oak limbs, while others infect a variety of plants. Pine needle scale is common on evergreens. Euonymus scale is found wherever euonymus grows. Pine tortoise scale occurs on Scotch, shortleaf, and various other pines. Other scale species encountered may include cottony maple scale, tulip tree scale, and oyster shell scale.

continued on next page >

By Justine Gartner, Forestry Field Program Supervisor and Ryan Dawson, Resource Forester, Missouri Department of Conservation

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

You can access these bulletins online at *www.forestkeepers.org* by clicking on "Newsletters" on the homepage.

Those Pesky Insects

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Scale insects are difficult to control once an infestation becomes heavy. Control can be achieved during two different times of the year. A dormant oil can be applied to hardwood trees between November 25 and February 15. For scale problems on conifers, a superior dormant oil must be used during this same period. The oil basically suffocates the scale. The crawler stage of the scale can be controlled with an insecticide, but must be applied when the newly hatched insects are moving about. Once the scale has begun its feeding, it

can no longer be controlled with an insecticide.

WEBWORMS

These leaf-eating caterpillars form big silken webs in the crotches of trees or at the ends of branches while they munch on leaves. In general, there are two types of web-forming caterpillars in Missouri.

Fall webworm appears in

the late summer. Caterpillars will envelop leaves with webbing as they feed. Look for large webs at the ends of branches or in the crown of host plants from middle to late summer. A variety of tree species appeal to this insect, including black walnut, persimmon, hickory, redbud, sycamore, and boxelder. As the larvae feed in colonies and live within the web, the webbing and caterpillars can be broken up with a pole early in their development to achieve some control of the insect. Chemical control is rarely recommended since they feed so late in the growing season.

Eastern tent caterpillars feed on newly emerging leaves of eastern black cherry, wild plum, and flowering crab trees, causing total defoliation. As soon as these caterpillars hatch, they begin the construction of a tent in branch crotches. This tent is continually enlarged as the caterpillars feed and grow. The larvae will crawl out to the foliage to feed from the tent and return to rest.

The eastern tent caterpillar is primarily a nuisance pest. During most years, the caterpillars are

controlled satisfactorily by natural enemies.

Destroying larval tents, preferably when the tents are still small, is effective.

INSECT-FORMED GALLS

Swollen enlargements are sometimes found on leaves and stems of various hardwood trees. These gall formations may be objectionable to the viewer, but are seldom responsible for tree mortality. Insect galls vary in color, shape and size. There are many

types of insects that produce galls on trees, including flies, wasps, and psyllid mites.
The biology of each insect is usually complex, making control by spraying impractical. Once the gall is formed, control is no longer possible.

A tree with a few galls might be protected by pruning out the galls. Leaves and other litter under the tree should be collected and destroyed in the fall. Having an arborist in insecticide is an option for trees with

inject an insecticide is an option for trees with branch galls, such as those caused by gouty oak twig gall.

BAGWORMS

This leaf-eating insect builds a sack around itself and hangs on the underside of branches. Look for tiny bags on evergreens beginning in early June. As the bag develops and increases in size through the summer, the insect it encloses can strip the needles from its host. When evergreens are completely defoliated, they will die.

Both male and female evergreen bagworms remain in their bags until they have completed feeding. Prior to mating, the male emerges from his bag, flies to the female and mates. The female lays her eggs in the bag and dies. As the eggs overwinter and remain viable, handpicking the bags in the fall is a good way to control this insect. Where that is impractical, an insecticide may be used, but it must be applied when the bags are very tiny. Spraying after the early part of June is unnecessary and achieves no control.

2nd Annual Hunt for Strange & Extraordinary Trees

We asked for them and you came through for us! A number of great photos were submitted for this year's tree hunt and we thank all members who participated. We selected just a handful of these images below and included the captions written by our "slightly-twisted" team of judges. You can see the rest of our selected strange and extraordinary trees at www.forestkeepers.org.



Face it ~ this one is truly extraordinary! Submitted by Karen Grimes



Tree considers a nose job.

Submitted by Paul Lamble



Tree succumbs to middle-aged spread. Submitted by Dan Barton



Honey, does this bark make my backside look big? Submitted by Craig Mannion



Say "Aaaah!"
Submitted by Deor Braun



Is this tree a-peeling?
Submitted by Ronald Adam



They'll always remember their first kiss. Submitted by Guy DeVault



Help me! I'm melting...
Submitted by Esther Carroll



Talk about a tree/utility conflict!
Submitted by Martha Clark

Trees unite after long separation.

Spring Reports Wanted

Submit an activity report by June 15 and you can select your choice of a thank-you gift. You can view the incentives, submit your report online, and print report and observation forms on the website. If you would like us to mail you a form, simply call us at 1-888-9-FOREST.

We hope to hear from you this spring!

Mark Your Calendar

Spring 2007 Workshops & Events

Forest & Wildlife Workshop

Portland - April 14

Tree ID Workshops

- · Wentzville May 12
- · Columbia May 15
- Rolla May 17
- · Blue Springs May 19
- El Dorado Springs & Hannibal May 22
- Monett May 24
- St. Charles June 2
- · Columbia June 9

Call 1-888-9-FOREST or check the website at *www.forestkeepers.org* for more information.

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