OKLAHOMA COOPERATIVE EXTENSION SERVICE

Oklahoma's Renewable Resources

SUMMER 2003 VOL. 18 NO. 2

Division of Agricultural Sciences and Natural Resources • Oklahoma State University

Fall Webworms Make Annual Appearance

Bill Ross, Extension Forestry Specialist

Every year around midsummer Oklahomans begin to notice large masses of hairy caterpillars living in shrouds of silken webbing in their shade and ornamental trees. Beginning near the branches, the silky structures gradually enlarge as the caterpillars grow and feed. They can become very unsightly later in the summer and early into fall. The critter responsible for this potentially messy situation is the fall webworm – *Hyphantria cunea*.

Fall webworms in Oklahoma and other southern states typically have two generations per year. The first one is relatively small, and sometimes escapes notice. The webworms spend the winter in the ground as pupae and emerge as moths in April. The relatively small white moths lay their eggs on the undersides of pecans,

See Webworms on page 7

In This Issue!

Forest Land Enhancement Program Offers Assistance for Management of Private Forest Lands

Forest Landowners throughout the state who wish to institute sustainable forest management practices now have a new source of assistance in the form of the Forest Land Enhancement Program (FLEP). The FLEP program replaces the familiar Forest Incentives Program (FIP) and Stewardship Incentives Program which offered cost share assistance for approved forestry practices on

See FLEP on page 6

OWOA Plans Fall Field Day

On Oct. 11th, 2003 OWOA member Russell Cook will host the Organization's first member sponsored field day. The event will be held at Russell Cook's plantation in Bennington, OK. The activities should begin at 10:00 AM and are expected to end between 4:00 and 5:00 PM. The Field Day will include a site tour of the young plantations on Russell's farm. Extension Forester Bill Ross will discuss considerations and issues involved with pine plantations and artificial regeneration. Participants will also be able to tour Russel's Hammered Dulcimer Factory which produces fine musical instruments for distribution throughout the world. In addition a demonstration of the Marshall Tree Saw is planned that day utilizing some noncommercial hardwoods Russell has. Registration for the tour will be $5 per person to help cover the cost of the Bar-B-Que Russel is providing. If you are interested in attending or if you would like more information, contact Patt Nelson at (580)567-

Focus On Forestry Research

This feature of the Oklahoma Renewable Resources Bulletin is designed to acquaint landowners, professionals, and service providers with the many research projects which are underway at OSU by Forestry Department faculty. This issue's project focuses on the work at the Pushmataha Forest Demonstration Area. The research deals with integrating forestry, wildlife, and range management on forest lands using silvicultural methods as well as prescribed fire to manipulate plant communities.

In 1982 the Pushmataha Forest Habitat Research Demonstration Area was established to evaluate forage responses to a variety of timber harvest and prescribed fire regimes and to determine possible forest management alternatives for large scale application on Wildlife Management Areas. The results of this study and the remaining demonstration area can provide a wealth of information to forest landowners throughout eastern Oklahoma. In addition some of the results of this study have been shown to be applicable to plant communities throughout the state. Study treatments included a variety of timber harvest regimes combined with prescribed fire at different frequencies. The treatments included:

CNTL ..... Control no treatment.

RRB ..... Rough Reduction Burn, winter prescribed fire on a 4-year interval.

HNT1 ..... Harvest of merchantable pine timber, winter prescribed fire on a 1-year interval.

HT ..... Harvest of merchantable pine timber, thin remaining hardwoods to a basal area of 39 ft/acre.

HT4 ..... Harvest of merchantable pine timber and thin remaining hardwoods to a basal area of 39 ft/acre, winter prescribed fire on a 4 year interval.

HT3 ..... Harvest of merchantable pine timber and thin remaining hardwoods to a basal area of 39 ft/acre, winter prescribed fire on a 3 year interval.

HT2 ..... Harvest of merchantable pine timber and thin remaining hardwoods to a basal area of 39 ft/acre, winter prescribed fire on a 2 year interval.

HT1 ..... Harvest of merchantable pine timber and thin remaining hardwoods to a basal area of 39 ft/acre, winter prescribed fire on a 1 year interval.

CCSP ..... Clearcut, summer burn, contour rip, planted to improved loblolly pine.

PBS ..... No harvest of pine, thin half of hardwood basal area, winter burn on 1 year interval.

The results of this study over the past 20 years have revealed several important findings. Most notably is the effect of fire period. Plots which receive fire at intervals of four years or more tend to move toward a woody plant structure. Those plots which receive fire at intervals of 3 years or less tend to move toward a grass dominated plant community. Legumes, cool season grasses and other plants preferred by many wildlife species increase with the addition of fire to the ecosystem. Species richness, that is the diversity of plants found on the plots, also increased with the addition of forest management and prescribed fire.

An analysis of standing crops on the various treatments and their correlation with recommended stocking rates is presented in Table 1.

Table 1. Standing Crop and Recommended stocking rates for treatments included in the Pushmataha Forest Demonstration Area. Adapted from work done by Dr. Terry Bidwell.

	Standing Crop lbs./acre	Acres/Cow
CNTL	142	267
RRB	414	92
HNT1	2,913	13
HT	278	137
HT4	1,313	29
HT3	1,670	23
HT2	2,056	18
HT1	3,826	10
CCSP	462	82
PBS	3,000	13

See Research on page 5

Comanche County Wildlife Club to Represent Oklahoma at National WHEP Invitational

This July the Comanche County Wildlife Clubs senior 4-H WHEP team will travel to Las Cruces, New Mexico to represent Oklahoma at the National Wildlife Habitat Evaluation Program Invitational Contest. The Comanche County teens secured their spot at the national competition by winning the State WHEP competition held May 17th at Boomer Lake in Stillwater, OK. Over 65 youths from 7 counties participated in the state wildlife contest which includes aerial photo interpretation, wildlife foods identification, and management practices recommendations. At the National event contestants will also develop management plans for urban and traditional wildlife based on objectives identified in a mock management scenario. The Comanche County team consists of members Gary Talavera, Mariam Presley, and Melissa Misel. The team is coached by Karen Landoll with assistance from past state champ Katrina Landoll and a host of adult volunteers, county extension personnel and many more.

The Comanche County WHEP team captured first place honors in the senior division at the recent State WHEP contest. Pictured is Ms. Jan Kunze from OG&E, Coach Karen Landoll, Melissa Misel, Mariam Presley, and Gary Talavera.

Additional recognition was given at the State Contest for the following individuals: Overall High Individual Senior Division, Wildlife Foods Senior Division, and Management Practices Senior Division - Gary Talavera; Aerial Photos Senior Division - Mariam Presley. In the Junior Division the Okmulgee County team coached by Terry Dillsaver and Bruce Burton captured first place

See WHEP on page 7

Jay Forestry Team to Travel to West Virginia

Oklahoma's annual State 4-H Forestry competition was held this year on April 15 at Robbers Cave State Park. Nearly 100 4-H youth participated in the event hosted by Eastern Oklahoma State College. The contest features a variety of forestry skills including tree identification, compass and pacing, estimating forest products and forest management evaluation. For the second straight year, the winning senior team is from the community of Jay in Delaware County. Jennifer Carter, Chance Hughes, Jim Bob McGhee and Tonya Moulton are members of the team coached by Jeff Orr. The team will travel to the 4-H Forestry National Invitational to be held July 27-31 at the Jackson's Mill State 4-H Camp and Conference Center near Weston West Virginia.

Other results include high scoring senior individuals 1st place Cass Davis (Ft. Towson), 2nd place Ashley Orr (Jay) and 3rd place Weston Lovell (McCurtain). The winning junior team was from Ft. Towson. Jenny Bennett, Christina Draper, Andrew Henry and Megan Horn won on a team coached by Alisha Brents. High scoring junior individuals were 1st place Andrew Henry (Ft. Towson), 2nd place Kyle Cooper (Jay) and 3rd place Jonathan Orr (Jay).

4-H Forestry judging in Oklahoma is generously sponsored by the Oklahoma Forestry Association. District and State competitions are a collaborative effort of a number of agencies including Oklahoma Cooperative Extension Service, OSU's Forestry Department, Ouachita Mountains RC&D, Eastern Oklahoma State College, the Natural Resources Conservation Service and Oklahoma Department of Agriculture, Food and Forestry – Forestry Services.

New Extension Publications Available

The following new/revised Publications are now available from OSU Cooperative Extension:

F-5032 Recreational Lease Opportunities for Oklahoma Landowners
L-314 Wildlife Management Notes No. 12: Biodiversity and Ecosystem Management
F-5044 Safe Use of Chainsaws
To receive a copy of these publications or any other extension publications visit your County Extension Office or the OSU Publications Web Site at http://pearl.agcomm.okstate.edu/

Pond Tips For Summer

Marley Beem, Assistant Extension Specialist – Natural Resources

Never stock fingerlings on top of bass – they will be eaten. Fingerling stocking on top of existing fish populations usually does not improve fishing.

Never dump bait buckets into ponds. Shiners can outgrow bass and become a problem. Likewise don't transfer fish from other ponds unless you are willing to take the risk of introducing parasites.

Use herbicides only after identifying your weed, understanding withdrawal times, and looking for underlying problems like excess nutrients or shallowness. Take steps to avoid loss of oxygen due to decay of dead weeds. County Extension offices can advise you – bring them a sample of your weed.

Don't be too quick to stock grass carp – they aren't a cure-all for weeds and sometimes hurt the quality of fishing by eliminating beneficial plants. Explore alternatives like spot treatments with herbicides to open up areas for casting.

Remove small trees from dams before they grow large and cause leaks.

Don't let pond weeds totally cover and shade the pond. If you wait too long, total shading of a pond can lead to loss of oxygen loss and a fish kill. This is most commonly a problem with floating plants like duckweed.

Dense green water means a fish kill is likely. If you cannot see a submerged object in 12 inches of water, a low oxygen fish kill is likely to occur soon. Look for ways to reduce nutrient inputs – if feeding fish, stop immediately. Consider harvesting as many as practical as soon as possible.

See Pond Tips on page 7

Field Guide to Oklahoma Plants Available

Thanks to Authors R.J. Tyrl, T.G. Bidwell, and R.M. Masters land managers and naturalists alike have a new tool for the identification and study of Oklahoma Plants. The Field Guide to Oklahoma Plants: Commonly Encountered Prairie, Shrubland, and Forest Species is available for purchase.

This book comprises synopses of 203 species. Each synopsis includes information about the taxon's (1) morphology, (2) taxonomy and nomenclature, (3) geographic distribution, (4) ecology, and (5) economic and/or wildlife significance. A full-page illustration by noted botanical artist Bellamy Parks Jansen accompanies each synopsis. Also included are two chapters that give an overview of the vegetation of Oklahoma and contributing ecogeographical factors. An illustrated glossary of the common botanical and ecological terms used to describe the

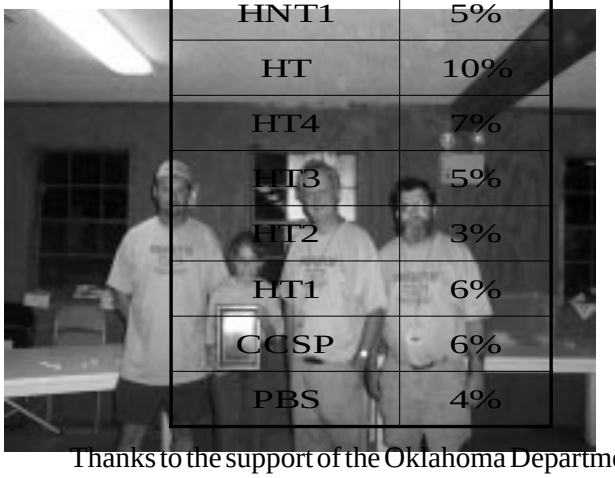
nd a comprehensive index is

implies, the objective of the a guide that facilitates the commonly encountered, , or biologically/economically envision the book's users to in the plants of Oklahoma, entists, or individuals who uty of the state's plants. In rves as the official guide for nd Judging Contest: Judging Rangeland for Livestock and Wildlife Values.

If you are interested in ordering a copy of the "Field Guide. Contact Cindy Neal in the Plant and Soil Sciences office, 368 Ag Hall, or call 744-6421, to place your order. The "Field Guide" will be sold for $25.00 per copy (plus $5.00 shipping and handling if mailed out). Checks should be made payable to OSU, Plant and Soil Sciences Department.

Bailey Raines Earns Outstanding Camper Recognition at 47th Annual Youth Forestry and Wildlife Camp

Each year the staff and participants of the Oklahoma Youth Forestry and Wildlife Camp select one camper to be the outstanding camper for the year. This selection is based on attitude, skills, knowledge gained, and general relationships with other campers. This year the Outstanding camper was Bailey Raines from Purcell, Oklahoma. Bailey received a backpack, scholarship to attend the 2004 camp, and a plaque provided by Ms. Mattie Clymer-Lawless.



Outstanding Camper for the 2003 Oklahoma Youth Forestry and Wildlife Camp Bailey Raines. Also pictured Camp Director Kenneth Hitch, Bill Ross, and Marley Beem.

Others recognized for excelling at the annual camp included Brandon Miller - Outstanding Jr. Leader and A.C. Raines - Outstanding Adult Leader. In addition Corey Collette of Stillwater and Katrina Landoll of Elgin were inducted into the Oklahoma Youth Forestry and Wildlife Camp Jr Leader Hall of Fame.

The 47th Annual Youth Forestry and Wildlife Camp was held June 2-7, 2003 at Beavers Bend State Park near Broken Bow, Oklahoma. The camp was attended by 57 youths and 12 adult volunteers from 26 counties and Texas. Campers participated in a variety of hands on activities including forestry skills, multiple resource tours, forest hydrology, GPS, forest insects, urban forestry, and wildlife. Campers also participated in a variety of recreational activities such as tubing, flyfishing, outdoor photography, air rifles, hiking, woodworking, and swimming.

Continued

The Oklahoma Youth Forestry and Wildlife Camp is made possible by generous financial support from Cimarron County Conservation District, Herron Lumber Company, Huber Engineered Woods, Hurliman Forest Products, Kerr Center for Sustainable Agriculture, Kiamichi electric Cooperative, Longacre Lumber Company, Oklahoma Forestry Association, Oklahoma Woodland Owners Association, Ouachita Mountains RC&D, Pan Pacific Products, Weyerhaeuser Company, Woodward County Conservation District, and Woody's Hardwoods. Additional personnel and support was provided by Huber Engineered Wood, Natural Resources Conservation Service, Oklahoma Department of Wildlife Conservation, Oklahoma Department of Agriculture Food and Forestry, US Forest Service, and Weyerhaeuser Company.

Research *continued from page 2*

An economic analysis revealed the following internal rates of return for the various treatments:

Treatment	IRR
CNTL	3%
RRB	4%
HNT1	5%
HT	10%
HT4	7%
HT3	5%
HT2	3%
HT1	6%
CCSP	6%
PBS	4%

Thanks to the support of the Oklahoma Department of Agriculture, Food, and Forestry this research will continue to provide useful results for the management of public and private lands alike. Many of the treatments in this study are scheduled for application on a large scale on the Pushmataha Wildlife Management Area in the near future. If you would like more information on the Pushmataha Forest Habitat Research Demonstration Area, contact Kenneth Hitch at (405) 744-5442. Tours are periodically scheduled on the area for various groups. If you are interested in arranging a tour for your group or if you would like information on upcoming tours, contact Kenneth Hitch.

FLEP *continued from page 1*

private non industrial lands until they were eliminated by congress in the 2002 Farm Bill. The purpose of FLEP is to support the management, maintenance, enhancement and restoration of forests on NIPF lands. Unlike the previous programs, which required land managers to show commercial forest production for consideration, FLEP may be used for a variety of sustainable management objectives including wildlife habitat improvement, erosion control, development of recreation opportunities, and agroforestry.. This should expand the availability of cost share assistance to forest landowners in areas where FIP/SIP was previously unavailable.

FLEP is administered by the USDA Forest Service in cooperation with the State Foresters. Congress appropriated $100,000,000 for FLEP through the Commodity Credit Corporation for the five-year life of the Farm Bill. The Forest Service has requested that $20,000,000 be allocated for the first year of the program. To participate, a State must develop a state priority plan in cooperation with its Forest Stewardship Committee, and receive concurrence from the Forest Service. The State Plan must describe how the funds will generally be allocated to four program components: program administration, technical assistance, education and cost-share assistance.

Landowners must have a written forest management plan that generally meets the requirements for a comprehensive Forest Stewardship plan to be eligible.

Oklahoma will receive approximately $519,000 for federal FY 2003, and expects to use nearly three-fourths of this amount for forestry cost-share practices with landowners. Landowners eligible to apply for cost-sharing include private individuals, groups, corporations (those excluded are those primarily involved in primary wood processing, those that issue public stock and utilities), tribes and other private legal entities. Landowners must have a written forest management plan that generally meets the requirements for a comprehensive Forest Stewardship plan to be eligible. Landowners without a plan may still apply for cost-shares, but a plan must be completed before ɔn will be approved

ɜt-share practices traditional site and tree planting, at improvement and improvement, to olving agroforestry, improvement, and priority plan will establish priorities for cost-share practices.

When the program is approved, application forms will be available at all Forestry Services and conservation agency offices statewide. Forestry Services hopes to submit its final priority plan to the Forest Service in July and may be able to begin accepting applications for FLEP cost-share assistance in August or September. Limited cost-share funding is already available for landowners whose forests were damaged by the December 2000 ice storm in 20 counties across southeastern Oklahoma. Contact your local Forestry Services office for more information about this program, and to find out the status of FLEP.

WHEP *continued from page 3*

honors. The Okmulgee County team consists of members Kate Dillsaver, Jamie Owen, Mathew Allen, and Stephanie Allen. Michael Lowry of Canadian County captured the overall individual honors as well as first place finish in Management Practices and Wildlife Foods. In fact Michael scored a perfect score in Wildlife Foods. Taylor Swanson of Cherokee County captured first place in the aerial photo interpretation component of the junior division.

The Okmulgee County WHEP team captured first place in the Junior Division at the STATE WHEP contest held in Stillwater. Pictured are Stephanie Allen, Kate Dillsaver, Jamie Owen, and Mathew Allen. Also pictured are coaches Bruce Burton and Terry Dillsaver.

The 4-H wildlife habitat evaluation program is a nationally recognized and award winning program that teaches youth the principles of wildlife conservation and leadership development skills. The contest is a competitive event that consists of three activities: wildlife food identification, interpretation of habitat from aerial photographs, and prescribing wildlife management practices. Each year the contest focuses on an individual eco-region such as tall grass prairie, eastern deciduous forest, or wetlands. The eco-region for this year's contest was urban.

The Oklahoma 4-H wildlife habitat evaluation program is supported by OSU Wildlife Extension, OG&E, Oklahoma Department of Wildlife Conservation, and the Oklahoma Chapter of The Wildlife Society. For more information about the program, please contact your local county Extension office or Kenneth L Hitch RREA Extension Specialist, Department of Forestry, Oklahoma State University, Stillwater, OK 74078, (405) 744-6432. Contest photos and more about the program may be viewed on the Internet at agweb.okstate.edu/fwa/whep/wheppage.html.

Webworms *continued from page 1*

walnuts and other hardwood species. After hatching the caterpillars feed, crawl down the tree and pupate in the ground. A second generation emerges, the life cycle is repeated, and this generation then spends the winter in the ground.

Fall webworm infestations are ugly to some, but rarely do any serious damage. An exception is in the case of pecan trees, which may suffer reduction in both nut quantity and quality when defoliation is severe. Trees are almost never killed by the creatures. Control is needed where pecan production is desired, but is optional for ornamental trees.

Chemical controls should be initiated when webs and caterpillars are small and little damage has been done. Mature fall webworm colonies require high pressure sprayers to penetrate the webbing. Compounds containing *Bacillus thuringiensis* (Bt) are effective with little impact on non-target organisms. No chemicals should be sprayed on the ground to control pupae or emerging moths, however. That approach is ineffective on the moths and damaging to other living things.

Some non-chemical, low cost options include pruning branches when the webs are small, finding and removing egg masses before they hatch or placing sticky traps on

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Pond Tips *continued from page 4*

Don't allow too much cattle access. Heavy livestock traffic can trample banks, muddy water and shallow out edges leading to future weed problems. Consider fencing off most of the pond to restrict access to just a few points. A ten foot wide section of shore is wide enough to permit watering. Gravel with an underlayment of geotextile may be needed to protect the watering area. Plans and information available on request.

Take some time to learn more about managing your pond by ordering a copy of "Managing Pond Fisheries in Oklahoma". It is available for $3.00 from Oklahoma Department of Wildlife Conservation, PO Box 53465, OKC 73152

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Oklahoma's Renewable Resources

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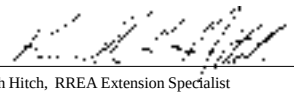
Renewable Resources Managing Editor Kenneth Hitch

Cooperative Extension forest, wildlife, and range specialists are available to assist your land management education needs. Feel free to contact them at the phone number or address listed below. Thank you for your interest in Oklahoma's renewable resources.

Sincerely,



Kenneth Hitch, RREA Extension Specialist

State Office:
008C Agricultural Hall, OSU, Stillwater, OK 74078 • (405) 744-6432
http://agweb.okstate.edu/fwa/

Upcoming Events

For more information on upcoming events call Extension Forestry and Wildlife @ (405) 744-6432.

August 21&22 **Choctaw Nation Landowner Workshop**. Antlers/Hugo. For information contact Myrl Redman, (580) 298-5563.

October 11 **Oklahoma Woodland Owners Association Field Day.** Bennington, OK. For information contact Patt Nelson (580) 569-4287.

October 14 **Pushmataha Forest Demonstration Area Field Tour.** Clayton OK. For information contact Kenneth Hitch at (405) 744-5442.

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