



Mississippi Master Naturalist Program Newsletter

Volume 2, Issue 1

Winter, 2009

Editor's Corner

The New Year brings new challenges and opportunities to the Master Naturalist Program. The 2008 program was very successful by training 27 participants and educating over 2000 citizens about the importance of natural resource protection. In 2009 we plan to train and educate additional participants and citizens about the natural resources of Mississippi. The Master Naturalist Committee has determined the dates for the 2009 Master Naturalist class and we are now in the process of scheduling next years program. I appreciate the continued support from the 2008 Master Naturalist Program participants. I will continue to send advanced training and volunteer opportunities to you through e-mails and the quarterly newsletter. Please send your advanced training and volunteer hours to cboyd@ext.msstate.edu at the end every quarter (March 31, 2009). The Coastal Research and Extension Center will host another Master Naturalist meeting early this spring.

We welcome relevant contributions, photos, announcements or other material relating to the mission of the Mississippi Master Naturalist Program that will be published in the Spring, 2009 newsletter. Please send information to Chris Boyd cboyd@ext.msstate.edu by March 15, 2009.

Upcoming Events

Advanced Training Opportunities

Diamondback Terrapin Working Group Gulf Coast Regional Meeting. The meeting will be conducted on February 5, 2009 at the Mississippi Gulf Coast Community College Estuarine Educational Center, Gautier, MS. For more information contact Marian Hanisko at 228-475-8097 or marian.hanisko@dmr.ms.gov.

MDEQ & the Mississippi Wildlife Federation will hold a two-day Adopt-A-Stream workshop at Paul B. Johnson State Park near Hattiesburg on March 26-27, 2008. For more information contact Debra Veeder at 601-206-5703 or dveeder@mswf.org or online registration is available on the Mississippi Wildlife Federation Adopt-A-Stream website at www.mswildlife.org.

Mississippi Department of Marine Resources (DMR) and partners will host Hypoxia Seminar. The seminar will be conducted on February 20, 2009 at the Mississippi State University Coastal Research and Extension Center from 9 a.m. to 11 a.m. For more information, contact DMR Shrimp & Crab Bureau Director Traci Floyd at (228) 374-5000.

Volunteer Opportunities

Mississippi Amphibian Monitoring Program. Contact Kathy Shelton at krshelton64@gmail.com or 601-528-5707.

Community Collaborative Rain, Hail, and Snow Network, for more information go to the following website: <http://www.cocorahs.org/>.

Help with Cogongrass

By: Tyree Harrington, District Conservationist

Federal assistance for the control and/or eradication of cogongrass is available through the Natural Resources Conservation Service EQIP program. To become eligible to participate in the program you must be an agriculture producer. Landowners who have a minimum of ten acres of land, raise livestock/horses or have timber land are eligible to participate.

If you do not fall into any of these categories, there is still assistance through the Mississippi Coastal Plains RC&D Council or the Mississippi Department of Agriculture Bureau of Plant Industry. One of the major differences in the programs is that it takes approximately 3 years for the control/eradication. The EQIP program will provide assistance for three consecutive years. The other programs are annual programs and there is no guarantee that funding will be provided annually to the same person.

EQIP also provides assistance for cross fencing, nutrient management, pest management, watering facilities, pasture and hayland planting, tree establishment, and other useful practices.

All applications can be filled out at your local Soil & Water Conservation District offices. For Harrison County residents the office is located at 12238 Ashley Drive, Gulfport, 228-831-1647. For Jackson County residents the office is located at 4809 Colonel Vickery Road, Vancleave, 228-826-2482.

SIGN-UPS FOR 2009 USDA'S WETLANDS RESERVE PROGRAM

Jackson, MS, Jan. 9, 2009 — The United States Department of Agriculture (USDA)-Natural Resources Conservation Service (NRCS) is announcing that the Wetland Reserve Program (WRP) has been renewed through Title II of the Food, Conservation and Energy Act of 2008, better known as the Farm Bill. The Wetlands Reserve Program is a voluntary program that protects, restores and enhances wetlands, while maximizing wildlife benefits. The USDA-Natural Resources Conservation Service (NRCS) manages the program and provides technical and financial support to help landowners who participate in WRP.

Many of the provisions of the Farm Bill became effective October 1, 2008. There has been an immediate change in easement compensation. The change in easement compensation is now the lowest of the following: fair market value of the land enrolled based on either a Uniform Standards of Professional Appraisal Practices appraisal or market survey, geographic cap established by the Secretary of Agriculture, or the landowner offer. Mississippi is in the process of reviewing their geographic rate cap for 2009. The geographic rate cap for Mississippi in 2008 was \$900.00 per acre. New provisions in the 2008 Farm Bill require landowners to own land for seven years and have an average adjusted gross income of not more than \$1 million average over the last three years.

Landowners in Mississippi with qualifying properties are encouraged to consider applying for the 2009 Wetlands Reserve Program (WRP). The WRP program is a competitive program using a combination of statewide ranking systems to fund the most environmentally beneficial projects.

The application process for WRP is continuous throughout the year. Funds are allocated annually for the purpose of purchasing easements and restoring wetlands on qualifying lands. All applications received by February 27, 2009, will be considered in the first ranking period. NRCS is committed to delivering all Farm Bill programs authorized through the 2008 Farm Bill and is eager to consult with all interested parties about the many benefits that WRP and other programs have to offer. Interested landowners are encouraged to contact their local USDA-NRCS field service center to file an application.

For additional information on WRP and other conservation programs available in Mississippi visit: www.ms.nrcs.usda.gov/ or contact your local USDA-NRCS field service center.

Honey in the Hive

By: Bobby Eatberton
East Texas Chapter, Texas Master Naturalist Program

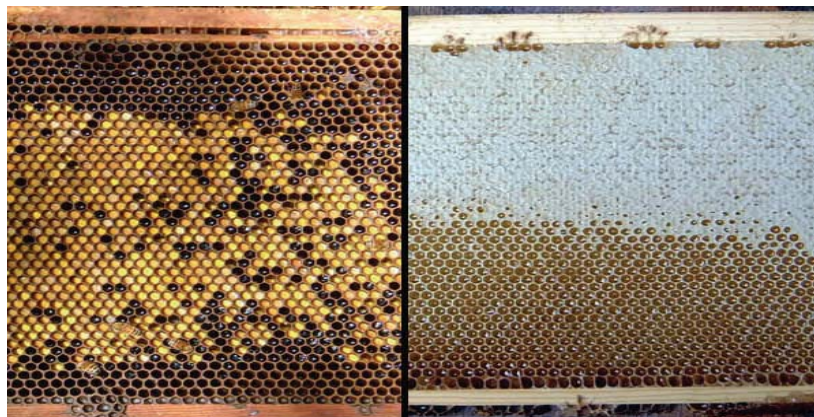
Let's take a moment to reflect on childhood memories. Can you remember when old timers stated "I can recall when we use to rob a bee hive in a tree eating the honey and the comb!!!" Well... Being a boy, the thought would have been tempting to try but I am glad after learning about bees in the wild I hadn't tasted the "old timer's way!" I won't go into great details but let's just say HONEY may not have been the only thing they were eating at the time.

Honeybees are very intelligent, interesting insects and what goes on in the hive bears these remarkable traits. Let's take honey for instance. You could ask most anyone about honey and they will say it's sticky, very sweet, and bees make it. Why...? Some would even state the bees get honey from flowers but the process is a little more intense than individuals realize. Within the hive, the bees must first draw wax combs "beeswax" so the brood can be laid by the queen and the combs can house the food stores.

Honeybees use nectar from plants to make honey. Nectar is about 80% water with some complex sugars and the bee collects the nectar storing it in a separate "honey stomach." When they return to the hive with this nectar it is turned over to the workers bees and these "house bees" chew the nectar. Their enzymes begin to break down the complex sugars in the nectar into simple sugars so that it is both more digestible for the bees and less likely to be attacked by bacteria while it is stored within the hive.

After the breaking down process is completed, the bees then spread the nectar throughout the honeycomb allowing the water to evaporate from it, creating thicker syrup. They are very mindful in task management by placing some of this evaporating nectar in cells close to the brood nest to make feeding of the new borne a quicker and easier undertaking. The rest is placed in empty combs and dried for future food stores. They can speed up the evaporation process by fanning their wings until it becomes gooey enough. Nature has instilled within these creatures the knowledge to know when the honey has reached the proper moisture content. The bees usually cap off the honey with wax when it has reached a water content of 17 to 18%. Honey that is capped off with higher moisture content can ferment causing a food shortage and their demise during winter time if not assisted with additional feeding. Now when all of these criteria have been met some of the honey can be harvested by the beekeeper, not all of it, because the bees need some during the months of dearth.

Notice the photos below; one is a combination of pollen and uncapped honey while the other reflects what capped honey looks like. So now you know the rest of the story. (Photographs courtesy of University of Minnesota)



Prescribed Fire in the Wildland/Urban Interface Hancock County Soil and Water Conservation District Commissioner

By: Joe Pettigrew

Forestry Consultant and Hancock County Soil and Water Conservation District Commissioner

The wildland/urban interface refers to that geographical area where two diverse systems; wildland and urban, meet and affect each other and give rise to conflicts between societal values and expectations concerning the management of natural resource systems. From a wild fire standpoint, a rather simple definition of the interface is areas where homes are built in the rural wildland; in other words, where combustible homes meet combustible vegetation.

Mississippi is unique in that weather and topography vastly differ from other parts of the nation. Relatively flat terrain and abundant rainfall normally afford firefighters an opportunity to control interface fires in a timely and effective manner. However, when the rain doesn't come, or a killing frost decimates the vegetation, or vegetation is allowed to accumulate, disaster is ripe. When these extreme fire conditions exist, large uncontrolled flame fronts in heavy fuels can and will destroy lives, property and natural resources.

Fire managers recognize that not all forest and wildland fires are bad. Sometimes forests and wildlands really need a good fire---not wildfire, but one that comes at the right place at the right time and is conducted under

very careful control. This scientific use of fire by prescription is a useful tool for fire managers to protect resources and is called a prescribed fire.

The most common use of prescribed fire is to reduce wildland fuels, such as grass, yaupon holly, gallberry holly, waxmyrtle, pine needles, and hardwood leaves. These fuels build up rapidly in our area and increase the potential threat of wildfire. Studies and experience have shown that wildfires occur less frequently, burn less intensively, and cause less damage when fuels have been reduced by prescribed burning. The benefits to wildlife in general are enormous when prescribed fires are used as a management tool.

Prescribed fire does produce smoke and ash and the area may look unsightly for a month or two. Local residents can expect to experience these inconveniences for only a few days about once every two to three years. But, the protection afforded by these prescribed burned areas is invaluable when a raging wildfire threatens. Prescribed burning on a regular rotation provides an inexpensive insurance policy that local residents should not turn down.

Master Naturalist Participate in 2008 Crane Fest

By: Stephanie Pendleton, Mississippi State University Extension Agent

In an effort to celebrate National Wildlife Refuge Week, the Gulf Coast NWR Complex held the Crane Fest on October 25, 2008. The event took place on the grounds of the Mississippi Sandhill Crane Refuge in Gautier. The festival was an educational opportunity for those in the area to learn about the Mississippi Sandhill Crane's endangerment and the importance of the wet pine savannah habitat their survival demands.

The MSU-ES Master Naturalists had a booth for children along with their parents. The objective of this exhibit was to demonstrate how to use recycled items to make bird feeders as well as use nature to create art. It sometimes takes providing examples to people to illustrate and bring awareness to the many ways one might recycle or use common items for uncommon good.

Children and parents were encouraged to provide the needed elements for wildlife in their own backyards- food, water, and shelter. Bethany Carlisle and Tom Link started the day off with a bang; by noon over 40 bird feeders had already been made and carried away. Over 55 bird feeders in total were made from recyclables such as milk jugs and water bottles. Each bird feeder came along with a hook for hanging made from metal clothes hangers, bird seed, and a bird food recipe book.

The nature art allowed the children to use spent flower petals, pine straw, old bird's nests, plant seed, and many other materials common to the landscape to create their own masterpieces without even picking up a pen or pencil. Countless works of art were created throughout the day.

Over a hundred visitors were reached at the Crane Fest. It was a definite success and could not have been done without the help of the volunteers: Bethany Carlisle, Tom Link, Stephanie Pendleton, Bess Moffatt, and Anna Tolar.



DMR, Partners to hold Hypoxia Seminar Feb. 20 at MSU Extension Center

BILOXI, Miss. – On Friday, Feb. 20, 2009, the Mississippi Department of Marine Resources (DMR) and partners will hold the second in a series of seminars aimed at enhancing familiarity between interested groups and increasing awareness of the programs, needs and opportunities that are relevant to marine research of Mississippi waters. “Hypoxia in the Mississippi Bight” will be the subject of the seminar, to be held from 9 a.m. to 11 a.m. at the MSU Coastal Research and Extension Center, 1815 Popp’s Ferry Road, Biloxi (exit 44 off of Interstate 10).

Keynote speaker Dr. Stephan Howden, University of Southern Mississippi Department of Marine Science (USM/DMS) associate professor at Stennis Space Center, will share an overview on the dynamics of hypoxic occurrences.

Additional supporting talks scheduled are:

- “Hypoxia & Geological Oceanography” — Dr. Charlotte Brunner, USM/DMS Stennis Space Center
- “Hypoxia & Biochemical Oceanography” — Dr. Kevin Dillon, USM Gulf Coast Research Laboratory
- “Hypoxia & Biological Oceanography” — Dr. Kjell Gundersen, USM/DMS Stennis Space Center
- “Mississippi Department of Environmental Quality’s (MDEQ) Role Addressing Hypoxia” — Richard Ingram, MDEQ
- “Fisheries - Hypoxia Aspects” — Buck Buchanan, DMR Finfish Bureau

All interested parties are welcome to attend. For more information, contact DMR Shrimp & Crab Bureau Director Traci Floyd at (228) 374-5000.

The Mississippi Department of Marine Resources is dedicated to enhancing, protecting and conserving marine interests of the state by managing all marine life, public trust wetlands, adjacent uplands and waterfront areas to provide for the optimal commercial, recreational, educational and economic uses of these resources consistent with environmental concerns and social changes. Visit the DMR online at dmr.ms.gov.

Websites of Interest

www.msucare.com

<http://www.youtube.com/watch?v=tO7BSKMm3tY>

<http://bugguide.net/node/view/15740>

This newsletter was compiled by Dr. Chris Boyd. For more information, visit our office at 1815 Popp’s Ferry Road, Biloxi, MS 39532 or telephone (228) 388-4710.