ConservatioNews

Harrison County Soil and Water Conservation District

Vol. 30, No. 4 Fall 2012

District Co-Sponsors "The Watershed and Me A-Z"

The District was fortunate to co-sponsor a fascinating children's book, "The Watershed and Me A-Z", which discusses the importance of the Pascagoula River Basin. This beautifully illustrated book teems with stories about the plants and animals that inhabit the streams, creeks, and rivers that make up this incredible ecosystem, and highlights the interrelationship that people and animals share.

Collaborators included elementary school students, MGCCC Perkinston students and faculty, and individuals from various environmental agencies. Funding for the book's publication by MS Gulf Coast Community College are the Harrison County Soil & Water Conservation District, MS Gulf Coast National Heritage Area, and MS Department of Environmental Quality.

The book is completely original in its approach to the discussion of the watershed. Elementary-school students presented "wonder questions" and linocuts about the plants and animals in their own backyards. Art and Graphic Design Technology students from MGCC Perkinston Campus documented the flora and fauna through photographs and wood-block prints. Gulf Coast science instructors and other resource professionals provided the scientific information. Gulf Coast music instructors and students created the watershed blues song.

Althea Jerome said, "This project is about the children; they have inspired its creation and have provided many of the elements incorporated into it. We want them to see, smell and hear the many creatures, both familiar and strange, that are represented within its pages. We want them to recognize the relationship we all share with nature and hope that they are inspired to be good stewards of our home, the watershed of the Pascagoula River Basin."

A lesson plan and music supplement the book for use in elementary school classrooms. The lesson plan was prepared by Kathryn Lewis and Althea Jerome and is aligned with Common Core Standards and Mississippi's Framework. This program is intended for students grades 3rd-5th.

Editor's note: Some of the elementary schools that have scheduled, "The Watershed and Me A-Z" classroom program by teaching artists Kathryn Lewis and Althea Jerome are: Crossroads, Central, Pass Christian, St. Vincent School, North Woolmarket, Quarles, 28th Street, Anniston, Pineville, Coast Episcopal, Delisle, Woolmarket, Gaston Point, Bayou View, Pass Road, and Harrison Central.

Above: The District is co-sponsor of, "The Watershed and Me A-Z" children's book. A student shows her favorite wonder question.

For more information about a presentation of the book and lesson plan in 3rd-5th grade classrooms, contact Beth D'Aquilla at the District office 831-1647 or *beth.daquilla@ms.nacdnet.net* .

The Great Watershed Caper: What Happened Between A and Z

Daisha Walker, MGCCC Perkinston Campus' Perk Players

It is time once again to book the Perk Players Fall Touring show to come to your school. For the past forty two years the award winning Perk Players have provided quality theatrical experiences for the children of South Mississippi and is the oldest Children's Theatre Touring Company in the Southeast. This year the Perk Players will be performing "The Great Watershed Caper: What happened between A and Z".

This original play was written as a companion piece to the book "The Watershed and Me A-Z". This book combines simple scientific information with vibrant artwork created by coast elementary school children and community college students. Through wood-block, linocut art and photographs, the book highlights the Pascagoula River Basin and the animals and plant life that flourish there. It also contains a teacher's glossary to supplement its usage in the classroom.

All schools that book the Perk Players performance of, "The Great Watershed Caper: What Happened Between A and Z" will receive a free copy of the book for their library. They will also have the opportunity to book classroom workshops by two of Mississippi's top teaching artists, Kathryn Lewis and Althea Jerome; they provide a lesson plan, a classroom workshop, and a set of classroom books for your school.

The Perk Players will bring this to your school free of charge. We will tour to schools on Tuesdays and Thursdays through December 6th. The play, which runs approximately 40 minutes, is appropriate for children k-6th grade.

The Perk Players, recipients of the Best Overall Theatrical Production for Youth for the state of Mississippi in 2008, 2009, 2010, and 2012, want to make sure your school is on our schedule for another phenomenal touring season. Please contact me as soon as possible to schedule your school's performance. We book on a first come basis and our schedule fills up quickly. We look forward to visiting and performing for your school. Contact me at *daisha.walker@mgccc.edu* to schedule this free program for your school.

District Co-Sponsors "The Watershed and Me A-Z"

Third grade students at Quarles Elementary show some of the plants and animals that inhabit the Pascagoula River Basin in, "The Watershed and Me A-Z".

Teaching artist Althea Jerome brings the watershed to life in the classroom by presenting, "The Watershed and Me A-Z", to students at Quarles Elementary in Long Beach.

Flatter me, and I may not believe you. Criticize me, and I may not like you. Ignore me, and I may not forgive you. Encourage me, and I will not forget you.

William Arthur Ward

Chestnut Trees Make A Come-Back

Buck Johnson, District Chairman

At one time, the American Chestnut was probably the most important tree in the woods, as far as lumber and food was concerned. These beautiful trees had been used to make fine furniture and building homes. Because they are rot-resistant, they were also used to make fence posts.

Chestnut trees were common in the eastern United States until around the early 1900's. A fungus that attacks the bark of the tree was accidently brought into the U.S. and in about 30-40 years, the Chestnut tree was all but wiped out.

In the 1950's there was a large living Chestnut tree found in the state of Ohio. The only reason it was living was that it was resistant to the deadly fungus. Dr. Robert t. Dunstan of Greensboro, NC, grafted sections of the tree onto some surviving Chestnut root-stock, and the trees grew very well. He then cross-pollinated them with three varieties of Chinese Chestnuts, which proved to be blight-resistant, but also had excellent survival, growth, and nut production. Named for Dr. Dunstan, these chestnuts will reportedly bear in 4 to 5 years. After maturity (10 years) they can produce 10 to 12 lbs. of nuts each year. With wholesale prices for high quality chestnuts reported at $3/$5 per lb., many orchard owners are seeing better profits than those with pecan orchards.

Chestnuts are excellent wildlife trees and produce nuts most years, whereas Oaks produce heavily one year and light the next. In an interview with Dan Batson of GreenForest Nursery in Wiggins, he stated that the Chestnut trees that he planted after Hurricane Katrina are bearing well. The deer did not take to the nuts right away due to the outer shell. After examining the shells closely, it was obvious to me why the deer were reluctant. Imagine a tennis ball with a hundred sewing needles sticking out of it. That is what they look like. If you pick one up, you had better be careful.

After being on the ground for a period of time, the outer shell starts to pop open, allowing the nuts to be exposed and to fall out of the shell. I can see how deer can speed up the process, with their hard hooves being immune to the pain of the needles as they paw at the outer shell to get to the sweet nuts inside. It is very interesting how nature provides the protection of the seeds of a tree.

Chestnuts are excellent landscape trees as well as one of the best for wildlife and human consumption. This is a success story that took many years to prove itself, but could possibly equal the comeback of the deer population in our country.

The Dunstan Chestnuts are available from The Chestnut Hill Tree Farm, located in Alachula, FL. According to company literature, there has not been a single report of Dunstan chestnuts dying of blight in over 30 years.

The Harrison County Soil & Water Conservation District is considering placing a special pre-paid order for those who wish to buy a small number of the Dunstan Chestnut seedlings. Trees are container grown, 18" to 36" inches in height and the cost per tree is $20. (It should be noted that more than one tree will be needed for cross-pollination.) Delivery would be in January or February 2013 at the District office. If you are interested in participating, please contact the District office at 831-1647 or stop by the District office at 12238 Ashley Drive, Gulfport, MS, 39503.

Chestnut trees are excellent wildlife trees and produce nuts most years.

After being on the ground for a period of time, the outer shell of the chestnut starts to pop open.

Conservation Education Field Days

Beth D'Aquilla, District Coordinator

Nearly 600 fourth grade students from Harrison County took part September 26-27 in the District's annual Conservation Education Field Days to learn the importance of our natural resources. Students had hands-on presentations to learn about: This Land is Your Land, Urban Forestry, Wildlife Biology, Soils, Marine Biology, Water Cycle, Recycling, Non-Point Source Pollution, Plants, Food Chain, and Water Conservation.

The District is grateful to Sheriff Melvin Brisolara for use of the Harrison County Farm. The beautiful acreage, ponds, and garden make it an ideal site to teach students about the great outdoors. We also appreciate Deputy Bob Chandler and Deputy Kurtis Owen who work hard to keep the County Farm in great shape for everyone to enjoy.

The District would like to recognize Natural Resources Conservation Service, who provided many expert staff members to carry out the Conservation Education Field Days. We also commend the experienced staff from the Jackson, Hancock, and Stone County Conservation Districts, and local Earth Team Volunteers. This was a huge 2-day field day, and we appreciate their efforts.

The District was fortunate to have MS Department of Marine Resources, MSU Cooperative Extension Service, Master Gardeners, MS Forestry Commission, Pascagoula River Audubon, MS Soil & Water Conservation Commission, and MS Assoc. of Conservation Districts Vice President Lewis Goins participate. We always enjoy Doris Kistler's company as she awaits the call for First Aid. Fortunately, no mishaps this year!

The District is fortunate to have a dedicated team to work with on such endeavors. We are grateful to all who came out to make learning about our natural resources a priority for the students in Harrison County.

MSWCC Lance Middleton teaches students about non-point source pollution.

Students learn about marine biology from the MS Department of Marine Resources.

NRCS Tyree Harrington gets the students going learning about the water cycle.

Audubon's Mozart Dedeaux teaches students about plants at the field day.

There's an APP for That!

Tyree Harrington , District Conservationist

There are application for iPhone and Android users that are really beneficial to the farming and gardening community. Apps such as TurfMgmt, SoilWeb, ArcGIS are good apps for assisting with information about identifying some turfgrasses and some weeds. Also weed eradication and control measures. SoilWEB helps to identify soil types, which is very helpful in knowing your soils drainage, permeability, use and vegetation. This is a sample of some of the apps that are helpful. For more, go to *www.itunes.apple.com*. Look under the categories of education and productivity.

Turfgrass Management Lite is a free application that contains pictures and information for identifying weeds, diseases, insects, and turfgrasses. Turfgrass Management was developed with information for identifying and diagnosing pests while in the field. Turfgrass Weeds is a virtual flashcard application. Created as a study tool for turf students at the University of Georgia, the application contains a series of flashcards with pictures of turfgrasses and weeds on the front. Tapping the card flips it over to show the common name, scientific name, family and lifecycle of species. Turfgrass Weeds has a save option for users to group specified flashcards separately for a more effective review. Also have herbicides information.

SoilWeb GPS based, real-time access to USDA-Natural Resources Conservation Service (NRCS) soil survey data, formatted for the iPhone. This application retrieves graphical summaries of soil types associated with the iPhone's current geographic location, based on a user defined horizontal precision. Sketches of soil profiles are linked to their official soil series description (OSD) page. Soil series names are linked to their associated page within the CA Soil Resource Lab's online soil survey, SoilWeb [1]. An up-to-date map of were data is available for queries can be found here *http://casoilresource.lawr.ucdavis.edu/soil_web/national_status_map.php*

Leafsnap this free mobile app uses visual recognition software to help identify tree species from photographs of their leaves. It contains beautiful high-resolution images of leaves, flowers, fruit, petiole, seeds, and bark. Leafsnap includes the trees of the Northeast.

ArcGIS is a great way to discover and use maps. Maps come to life in ArcGIS. Tap on the map or use your current location and discover information about what you see. You can query the map, search and find interesting information, measure distances and areas of interest and share maps with others.

Find community hosted maps from ArcGIS Online – ESRI's online GIS. Alternatively you can use the authoring tools on ArcGIS.com to create your own maps that can be used in ArcGIS. If you are an existing ESRI customer this application is part of your ArcGIS system. You can share your corporate maps and extend the reach of your GIS to your iOS devices within your enterprise using ArcGIS Server.

Grand Bay NERR's Estuaries 101 Teacher Workshop

Jennifer Buchanan, MS Dept. of Marine Resources' Grand Bay NERR

In honor of National Estuaries Day, the Grand Bay National Estuarine Research Reserve (NERR) recently hosted a professional teacher development workshop entitled Estuaries 101 that utilized hands-on demonstrations and field experiences to help teachers learn how they can incorporate the new Estuaries Education Curriculum that NOAA just developed and has made available on their website, *www.estuaries.noaa.gov* into their lesson plans.

Teachers from throughout the region attended and the Harrison County Soil & Water Conservation District graciously sponsored the two educators attending from Harrison County: Gulfport Central Middle School's Cory Lombard and Kyle Elward. The teachers explored the online curriculum in the classroom and then were able to board a boat and travel out into the estuary one day and then up the Pascagoula River to discover how the habitats change as the salinity of the water decreases.

Recently the second of two curriculums on estuaries has been completed and posted online so that all teachers may have access to them. The first curriculum was designed for upper middle and high school audiences. The newest is suitable for upper elementary and middle school audiences. Supplementary resources such as video clips on a variety of estuary topics that complement these curriculums can also be found online. These videos are actually suitable for virtually all age groups. The estuary units also feature activities that teach students how to access and use real time water quality and weather data collected from estuaries around the country. Homeschool educators will also find these resources extremely valuable.

USDA, Animal and Plant Health Inspection Service (APHIS)

Scott Alls, Supervisory Wildlife Biologist

USDA-APHIS Wildlife Services is the agency charged with being the federal leader in managing conflicts between man and wildlife. These conflicts can vary widely, ranging from livestock-predator issues, protection of property, and human health and safety. Here in Mississippi the mainstay of our program revolves around the management of beavers and the reduction of beaver damage. At present the program employees 17 wildlife specialists whose primary duties are to manage beaver damage. Five of these specialists and I are certified blasters who can utilize explosives to remove beaver dams.

The beaver program has always been recognized as the Beaver Control Assistance Program (BCAP). Since the program's inception up until last year, the program focused its efforts on county roads, state highways, and private landowners. The program was funded historically by federal, state, and county funds. With federal program reductions and eliminations the program now is funded by state and county funds. This has changed the way we do business in that without the federal dollars subsidizing the program, rates have had to be increased and the delivery of service is altered somewhat. The program was on the verge of disappearing without these federal funds. Last year the Mississippi Legislature saved the program by replacing those lost federal funds.

The Mississippi Wildlife Services program also employs a full time wildlife disease biologist. This person is responsible for monitoring a wide number of disease threats to humans and livestock that can be transferred by wildlife. Currently, feral swine are the biggest threat to human health and safety as well as agriculture in this state. The disease biologist collects feral swine samples from areas all across the state and tests those to see if the animal is carrying or has been exposed to a wide range of diseases.

The program also serves the aquaculture industry in protecting catfish from fish eating birds. Mississippi's aquaculture industry is the largest in the nation and attracts a large number of wintering double-crested cormorants who can eat about 1 pound of fish a day. At times during the winter the aquaculture regions holds up to a hundred thousand cormorants. If you do the math, that is 75,000 pounds of fish being consumed daily.

One of the main things the agency does is provide technical assistance to individuals experiencing wildlife damage. This could be anything from armadillos in the flower bed to bats in the attic. A large part of my job is taking calls from the public and assisting those individuals in finding a way to alleviate the damage or nuisance. Resident Canada geese are a large issue statewide. They can impact lawns, golf courses, swimming beaches, and public parks. We work with facility managers and landowners in finding ways to minimize these impacts.

Bill Hamrick with MSU Extension Service shows landowners a wild hog trap at the recent Wild Hog Workshop, co-sponsored by the District.

Lots of calls come in regarding feral swine. I assist numerous landowners by demonstrating the most effective trapping techniques and techniques that can present a barrier and hopefully keep hogs off the property. Feral swine will become the biggest wildlife problem to landowners in the state. High reproductive rates, wariness, intelligence, and the lack of territoriality make them difficult to deal with. Couple that with the fact you have to remove about 80% to just maintain a population and you can see the challenge they are.

We get a lot of calls from homeowners who have bats in their attics and walls. A lot of times, all that is required is the placement of a bat excluder and then repair to the structure once the bats are gone. We loan cage traps and share techniques to homeowners experiencing damage from various species. This could include raccoons, armadillos, skunks, and possums.

Another issue that we see down here on the coast more and more frequently is threats to pets by urban/suburban coyotes. I get numerous calls from homeowners in Harrison, Jackson, and even Hancock counties who have lost cats or dogs to these predators. It seems as if since Hurricane Katrina, the amount of vacated property has increased. This, in my opinion, has increased habitat suitable to coyotes and their primary prey, rodents such as rats and rabbits. With the increase in food and shelter coyotes have been able to carve out a living all the way down to Highway 90. Coyotes, being opportunistic in nature, take advantage of the presence of other prey such as cats, dogs, and domestic fowl.

My office is in the USDA Wiggins Field Office on East Pine Ave. You may reach me at 601-928-2250 or 601-543-9752.

Introducing Mississippi Marketmaker: A Web-Based Tool To Market Your Food Products

Randy Coker, Dr. Benedict Posadas and Amanda Seymour

Mississippi MarketMaker is a free internet tool linking growers and producers with grocery stores, food processors, specialty outlets and food industry groups. The program also makes agricultural and seafood businesses accessible to individual consumers. Mississippi MarketMaker is a part of the national MarketMaker network which includes 19 states and Washington D.C.

When a potential buyer searches for food products in Mississippi MarketMaker (MM), the search covers all of the food business in the entire website. Membership in MarketMaker is FREE. Your Extension Service is maintaining it for you. It covers ten economic sectors: Agritourism, Buyers, Eating and Drinking Places, Farmers, Fisheries, Food Retailers, Processors, Wholesalers, and Wineries. Each of these sectors contains additional sub-categories which can help to narrow the search, when using MarketMaker. Registering your business on MarketMaker is also FREE, and only takes a few minutes.

In addition, MarketMaker allows you to do market research to help businesses target potential customers based on many variables (age, household type, race, income, education level, foreign born and food preferences). This is a great way to allocate limited advertising dollars or advertise to a specific demographic or region.

Mississippi MarketMaker can be viewed at *http://ms.marketmaker.uiuc.edu/* or by searching for "Mississippi MarketMaker" in your favorite internet search engine. You can also follow MM on Facebook at *http://www.facebook.com/foodmarketmaker*. Mississippi MarketMaker can be found on Facebook at *https://www.facebook.com.MSMarketMaker*. and on Twitter at *http://twitter.com/#!/FoodMarketMaker*. In addition a new smart phone application has recently been released. It can be found by typing *http://ms.foodsearcher.com/* into the browser on your smartphone.

"This program is funded in part through grants provided through Gulf States Marine Fisheries Commission, Oil Disaster Recovery Program, under NOAA Fisheries grant award number NA10NMF4770481".

Earth Team Volunteer Sprouts New People's Gardens

Justin Fritscher, NRCS Mississippi

When horticulturist Dr. Christine Coker first learned of The People's Garden Initiative, she searched for a registered garden in her coastal Mississippi community.

The Mississippi State University professor learned that the state's coastal counties were not home to this initiative's garden, prompting her to take the reins. Coker, an Earth Team volunteer with NRCS, has already nurtured five gardens in Harrison and Jackson counties, and she promises more will sprout in the future.

One garden is behind her MSU Coastal Research and Extension Center office in Biloxi; another is nestled in a courtyard at Woolmarket Elementary; and another is atop green roofs in Gulfport, where she is working with the Armed Forces Retirement Home to manage a two-acre rooftop garden. This rooftop garden provides the perfect habitat for pollinators, boasting a carpet of sedums, bulbines, and other green roof species. She is also using the garden as a research site. Coker, an Associate Research and Extension Professor in Urban Horticulture, is one of two Certified Green Roof Professionals in Mississippi. The other GRP is Dr. Gary Bachman, also based at the MSU Coastal Research and Extension Center.

When not managing the Beaumont Horticultural Unit, which is part of the MSU Coastal Research and Extension Center, Coker networks with communities and schools to find more locations to sow the seeds of new People's Gardens. She has been teaming with the Harrison County Soil and Water Conservation District and NRCS to tour school gardens and greenhouses.

NRCS is promoting The People's Gardens as an important tool for teaching children about plants, nature and healthy eating.

Christine Coker (right), a Mississippi State University horticulture professor and Earth Team volunteer, teaches Leigh Anne Leech and Debra Veeder about irrigating raised garden beds.

Out and About the County

Dan Longino, Field Technician

Summertime brought another mess to the beach, with smashed dunes, skeletal piers, and buckled concrete. Decades ago someone convinced other local powers-that-be that the beach should have sand pumped in higher and wider. As you ride along during bright summer days, the crowds of families and tourists show that the beach is really popular. In winter, the solitary r unners and strolling walkers enjoy acres of solitude but are very much is public view, even at water's edge.

The elevation of the beach is pretty much at eye level to the roadway and strong winds cover the pavement with deposits of the fine sandcastle-building sand that will not resist the wind unless dampened by high tides and tamped by waves. Sand fences are carefully erected, allowed to build up a rudimentary dune, then they are pulled up and replaced. Vegetated dunes are also carefully planted and then kept very low as they begin to block the view.

Gulfport plans to pile up a new and higher harbor while just across Beach Boulevard are blocks of empty land. Old-timers thanked the five to ten steps of now-buried concrete seawall for breaking the strength of smaller hurricanes until 1947 when they began thanking the railroad tracks.

Hurricane Camille made folks appreciate the 20-30 foot elevation of the old Pass Christian to Mobile

Highway, now shortened to Pass Road. More recently, we saw Hurricane Katrina make a distinction between north of I-10 and south of the interstate for storm surge safety.

A tourist once asked "Why do you build on the sea side of the sea wall?" I told him hurricane area folks just have an odd, expensive sense of humor because I don't really know the answer. You might as well ask why we are allowing hard-to-control cogongrass to spread?

Corn Casserole

1	Can cream style corn
1	Can sweet whole kernel corn
1	Egg
1	Box of Jiffy cornbread mix
8 oz	Sour cream
2 Tbs	Butter melted

Pre-heat oven to 350. Combine all ingredients in a large mixing bowl. Pour into baking dish. Bake for 45 minutes to 1 hour.

Arbor Day Tree Giveaway

Friday, February 8, 2013

7:30 a.m. to 3:00 p.m.
at the District office

12238 Ashley Drive,
Gulfport, MS 39503

Trees are free to landowners and schools.
Live Oak in 5 gallon containers
Southern Magnolia in quart containers
Sawtooth Oak - bare root
Chickasaw Plum - bare root
Mayhaw - bare root
Native Pecan - bare root

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The Harrison County Soil and Water Conservation District holds a regular monthly board meeting on the first Thursday of each month. This meeting is open to the public and held at the District Office, 12238 Ashley Dr., Gulfport, at 11:30 a.m. This board meets to administer the program of soil and water conservation in Harrison County. An equal opportunity employer.

Visit the Harrison County Soil and Water Conservation District website at *http://hcswcd.co.harrison.ms.us*