



# Coastal Roots



June 1, 2012

<http://coastalroots.lsu.edu>

## LSU CR Summer Institute - June 20-21 at Palmetto Island State Park

We'll be gathering for our 2012 CR Summer Institute at Palmetto Island State Park in Vermilion Parish. It will be a great time to learn about the central LA coast and share some classroom activities you are using to teach your students about coastal issues. The registration form will be sent to you by email - or contact Pam (PamB@lsu.edu). A \$25 registration fee is required. Stipend: \$100/day. Hotel and breakfast and lunch will be covered. Deadline for registration is **June 12, 2012**.

## A Look at 11 Years of Student Stewardship

The LSU Coastal Roots Program currently has 39 schools (plus two incoming in Fall 2012) across 18 parishes in the program. More than 1,924 students have participated in 31 restoration plantings in the academic year 2011-12. This past school year 16,056 native seedlings and grass plugs were planted. Native tree seedlings planted during these trips included southern bald cypress, black mangrove, water oak, nuttall oak, tupelo gum, common persimmon, common pecan, swamp red maple and catalpa. Grass plugs included seashore paspalum and bitter panicum. In addition, two schools are growing native coastal prairie plants and grasses, which include Ashy sunflower, Florida paspalum, rosin weed and partridge pea. It is interesting to note that only 10 of the current 39 schools in the Coastal Roots Program entered prior to 2005; two schools entered in 2007, and the remaining 27 schools have entered since 2008. Since its inception in 2000, LSU Coastal Roots schools have participated in 187 restoration plantings across

academic year	Students				adults and chaperones			restoration trip information	
	elem stud	MS stud	HS stud	total students	teachers	other	total adults	trip count	restoration plants
2011-2012	590 (31%)	1,115 (58%)	219 (11%)	1,924	117	250	367	31	16,056
<b>TOTAL</b>	<b>1,626</b>	<b>5,615</b>	<b>1,451</b>	<b>8,692 students</b>	<b>504</b>	<b>837</b>	<b>1,341 adults</b>	<b>187 trips</b>	<b>74,777 plants</b>

15 coastal parishes, with a total of 8,692 students planting more than 74,777 seedlings and grass plugs. More than 1,341 adults have accompanied these children on restoration planting trips.

## Research Partnership Across the LSU Campus

**Dr. Krisanna Machtmes**, School of Human Resource Education and Workforce Development, PhD graduate students in her qualitative research class and Pam Blanchard began a study of how teachers integrate the Coastal Roots Program into their schools. So far, 12 CR teachers have been interviewed. We will be contacting all our CR teachers over the next months to finish collecting the interview data. This data will be used to write papers on CR and inform others of how they might use some of the ideas to create projects of their own. We'd like to thank the CR teachers that have been interviewed thus far: Janelle Simpson, Briegh Rhodes, Joann Haydel, Natalie Lartigue, Linda Gauthier, John Giambone, Nessie Galliano, Kristy Gilpin, Linda Messina, Camille Brady, Kate Marchal, and Valerie Stewart. *Pictured from left to right: Dr. Krisanna Machtmes, Carey Hamberg, Denise Attaway, (two PhD graduate students in the qualitative research class), and Holly Carruth, from the LSU Office of Research and Economic Development. They attended a Zachary Elementary planting in Grand Isle State Park in April 2012.*



## In Memory of David Bourgeois



The family of David Bourgeois made a donation to the CR fund in the LSU Foundation in his memory in May, 2012. With five CR restoration trips to Grand Isle in April and May, David was very much in Pam's thoughts as she passed his old AgCenter office in Cut Off and many of the places he held introduced Pam to the the early days of CRs. It's been two years since David passed and we miss him terribly. We thank the family and friends of David for their donation.

### Inside this issue...

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- Pg. 6 Helping Hands

# Best Nursery Practices: Vacationing Without Worry

Dr. Ed Bush, LSU School of Plant, Environmental, and Soil Sciences

So your leaving town for a week and you are worried about your plants? What can you do to prepare?

- Actually observe the irrigation system turning on and off!. This time of year at least 3/4" to 1" of water should be watering your plants every day. Use your rain gauge to measure the water output for 24 hours to make sure you are providing the correct amount of water to your plants.
- You will need to select a truly responsible helper. Please give them your phone number and school contact information so immediate action can help get your plants through the week. Have watering cans available in case your water or timer turns off.
- Check your batteries and water supply. Never assume or else it will make an ..... well you know the saying.
- Make sure to leave a key to get into school yard and access points. I would ask your helper to go with you before leaving so they can learn about the system and where shutoff valves are located.
- Trees are off and growing so don't forget to fertilize with liquid feed once a month.

We are looking forward to seeing you guys and sharing some new ideas with you!



A shape poem by **Katie Young**, LSU elementary education major.

## Engineering the SED2012 (Squirrel Excluder Device)

Several of our CR nurseries have been a favorite dining spot for local groups of enterprising squirrels. Keeping these pesky and hungry visitors away from our acorns and seeds requires some ingenuity. **Natalie Bush** (Ed's daughter, photo to the right) accepted the challenge to build a squirrel excluder device... She proudly showed off her design and has written up step-by-step directions on how to build the SED2012 (Squirrel Excluder Device-2012).



## Mary Legoria Completes PhD

We are proud to announce that **Mary Legoria**, Westdale Heights Academic Magnet Elementary (a Coastal Roots school since 2008), was awarded a PhD in Curriculum and Instruction in the LSU May graduation ceremony. Her dissertation focused on elements that children prefer to interact with in four well known children's botanic gardens. She completed her dissertation under the direction of Dr. Jim Wandersee. We are proud of you, Mary!



## FIVE America's Wetland Foundation Awards!

Five of nine America's Wetland Foundation awards for the **2012 Keep Your Eye on the Prize** contest went to students at CR-affiliated schools: **Bishop Noland Episcopal Day School** (Lake Charles, four awards, \$21,000) and **Patrick Taylor Science and Technology Academy** (Jefferson, one, \$5,000). The winnings are earmarked for educational materials, equipment, and a school wetlands restoration project coordinated by the Foundation. Overall winners in the art, photography and essay categories won \$1,000 for additional classroom equipment.

### PHOTOGRAPHY:

- Grades K-3 winner: **Kaitlin Miller**, 7, of Ragley, a student in *Candace Marque's* second grade classroom, Bishop Noland Episcopal Day School, Lake Charles.
- Grades 4-7 winner: **Aniese Kattash**, 11, of Lake Charles, a student in *Beverly Kelley's* sixth grade class at Bishop Noland Episcopal Day School, Lake Charles.
- Grades 8-12 winner: **Emily Hart**, 14, of Lake Charles, a student in *Beverly Kelley's* eighth grade class, Bishop Noland Episcopal Day School in Lake Charles.

### ART

- Grades K-3 winner: **Wesley Maze**, 9, of Bell City, a student in teacher *Libby Richards'* third grade class at Bishop Noland Episcopal Day School, Lake Charles.

### ESSAY:

- Grades 8-12 winner: **Alyssa Duffour**, 13, a student in teacher *Angela's Griffin's* eighth grade classroom, Patrick F. Taylor Science and Technology School, Jefferson.



Source: <http://www.americaswetland.com/article.cfm?id=1649>

# Putting Down Roots - LSU Coastal Roots Plantings from January through May 2012

Photo credits: LSU Coastal Roots staff



**St. Joseph's Academy**  
January 16, 2012  
*Fontainebleau State Park*



**Pointe aux Chenes Elem**  
January 18, 2012  
*LDWF Pointe aux Chenes WMA*



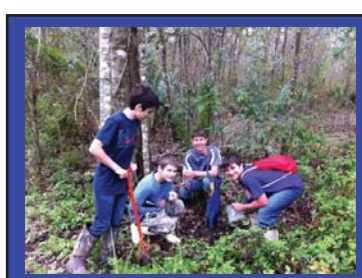
**Isidore Newman (3<sup>rd</sup>/4<sup>th</sup>)**  
January 19, 2012  
*Jean Lafitte NP, Barataria Preserve*



**St. James SMA**  
January 20, 2012  
*Bonnet Carré Spillway*



**Archbishop Chapelle High**  
February 2, 2012  
*Bonnet Carré Spillway*



**Pierre Part Middle**  
February 16, 2012  
*Maple Bayou Hunt Club*



## 2011-12 LSU Coastal Roots Schools

- |                                                                            |                                                                                 |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| 1 Pierre Part Elementary (Pierre Part, Assumption Parish) 2001             | 25 Holy Cross School (New Orleans, Orleans Parish) 2009 ♦                       |
| 2 Abbeville High (Abbeville; Vermilion Parish) 2001                        | 26 Franklin High (Franklin, St. Mary Parish) 2009                               |
| 3 St. Joseph's Academy (Baton Rouge, East Baton Rouge Parish) 2001         | 27 Iberville Science and Arts Academy East (St. Gabriel, Iberville Parish) 2009 |
| 4 St. Louis, King of France (Baton Rouge, East Baton Rouge Parish) 2002    | 28 Bishop Noland Episcopal Day School (Lake Charles, Calcasieu Parish) 2009     |
| 5 Harry Hurst Middle (Destrehan; St. Charles Parish) 2003                  | 29 Schools of the Sacred Heart (Grand Coteau, St. Landry Parish) 2010           |
| 6 Our Lady of Mercy (Baton Rouge, East Baton Rouge Parish) 2003            | 30 Iberville Science and Arts Academy West (Plaquemine, Iberville Parish) 2010  |
| 7 St. James Science & Math Magnet (Vacherie, St. James Parish) 2004        | 31 Pointe aux Chenes Elementary (Montegut, Terrebonne Parish) 2010 ♦ L          |
| 8 Lafayette Middle (Lafayette; Lafayette Parish) 2005                      | 32 J.B. Martin Middle (Paradis, St. Charles Parish) 2010                        |
| 9 St. Charles Parish Satellite School (Luling; St. Charles Parish) 2006    | 33 Zachary Elementary (Zachary, East Baton Rouge Parish) 2010                   |
| 10 R.K. Smith Middle (Luling, St. Charles Parish) 2006                     | 34 Covington High (Covington, St. Tammany Parish) 2010 ♦ L                      |
| 11 St. Martin's Episcopal (Metairie, Jefferson Parish) 2007                | 35 Belle Chasse Academy (Belle Chasse, Plaquemines Parish) 2010                 |
| 12 Christ Episcopal (Covington; St. Tammany Parish) 2007                   | 36 Northside High (Lafayette, Lafayette Parish) 2010 ♦ D                        |
| 13 Metairie Academy for Advanced Studies (Metairie; Jefferson Parish) 2007 | 37 Patrick Taylor Science & Technology Acad. (Jefferson, Jefferson Parish) 2010 |
| 14 Isidore Newman School (New Orleans; Orleans Parish) 2008                | 38 Louise S. McGehee School (New Orleans, Orleans Parish) 2011                  |
| 15 Belle Chasse Middle (Belle Chasse; Plaquemines Parish) 2008             | 39 L. Leo Justice Montessori Elementary (Lafayette, Lafayette Parish) 2011      |
| 16 Central High (Central Community Schools, E. Baton Rouge Parish) 2008    | 40 Lusher High (New Orleans, Orleans Parish) 2012                               |
| 17 South Cameron High (Grand Chenier, Cameron Parish) 2008 ♦ D             | 41 Creekside Junior High (Pearl River, St. Tammany Parish)                      |
| 18 Grand Lake High (Lake Charles, Cameron Parish) 2008 ♦ D                 | 42 Episcopal High (Baton Rouge, East Baton Rouge Parish)                        |
| 19 St. Paul's Episcopal (New Orleans, Orleans Parish) 2008                 |                                                                                 |
| 20 Larose-Cutoff Middle (Cutoff, Lafourche Parish) 2008                    |                                                                                 |
| 21 Westdale Heights Acad. Elem Magnet (Baton Rouge, EBR Parish) 2008       |                                                                                 |
| 22 Archbishop Chapelle High (Metairie, Jefferson Parish) 2008              |                                                                                 |
| 23 LSU Laboratory School (Baton Rouge, E. Baton Rouge) 2008                |                                                                                 |
| 24 Reeves High (Reeves, Allen Parish) 2008 ♦ D                             |                                                                                 |

### Installations Scheduled for Fall 2012

- Upper Pointe Coupee Elementary (Batchelor, Pt. Coupee Parish)
- Sts. Leo-Seton Catholic School (Lafayette, Lafayette Parish)

c= Dormant ♦ L= Leaving CR t

### DEMONSTRATION NURSERY

- UNO Coastal Education & Research Facility (New Orleans, Orleans Parish) 2010

## 2011-12 Mississippi Coastal Roots Schools

Demonstration Nursery: MS Research and Extension Center (Biloxi, MS) 2009

- |                                                         |                                                         |
|---------------------------------------------------------|---------------------------------------------------------|
| 1 Wool Market Elementary (Biloxi, Harrison County) 2009 | 3 St. James Elementary (Gulfport, Harrison County) 2011 |
| 2 Anniston Elementary (Gulfport, Harrison County) 2011  |                                                         |

# Putting Down Roots - LSU Coastal Roots Plantings from January through May 2012



**P. Taylor Sci & Tech Academy**  
**February 23, 2012**  
*City Park, New Orleans*



**Isidore Newman (5<sup>th</sup>/7<sup>th</sup>)**  
**March 1, 2012**  
*Jean Lafitte NP, Barataria Preserve*



**McGehee School**  
**March 30, 2012**  
*Grand Isle State Park*



**Zachary Elementary**  
**April 24, 2012**  
*Grand Isle State Park*



**Zachary Elementary**  
**April 26, 2012**  
*Grand Isle State Park*



**Zachary Elementary**  
**April 27, 2012**  
*Grand Isle State Park*



**St. Paul's Episcopal**  
**May 3, 2012**  
*Grand Isle State Park*



**Westdale Heights Acad.  
 Magnet Elementary**  
**May 7, 2012**  
*BREC Baton Rouge Zoo*

**Photos Not Available for  
 Iberville MSA-West,**  
**January 17, 2012**  
*Bonnet Carré Spillway*

**Franklin High**  
**January 31, 2012**  
*Palmetto Island State Park*

**LSU Lab School**  
**February 29, 2012**  
*Burden Research Station*

**Lafayette Middle**  
**April 24, 2012**  
*Grand Isle State Park*

## CR Cypress Trees Used to Study Tree Growth

Students at **Patrick Taylor Science & Technology Academy** studied several aspects of cypress tree growth for Independent Research Projects. **Thomas** and **Abrania** studied the change in chlorophyll before and after the fall equinox. Jacob selected 15 trees of the same height, divided them into three groups and watered the trees with vinegar to simulate the acidic soil of wetland environments. After six weeks, he dried the root masses and measured the mean root mass for each group. The group that received vinegar five times a week had a root mass was 19% greater than the control group, while the group that was watered with vinegar three times a week had a root mass 29% greater than control.



**Thomas and Abrania** measure chlorophyll in their CR cypress trees.  
 Photo by Dr. J. Simpson

## 2012 Wetland Ambassador Day

Join educators from CR and BayouSide Classroom on July 26, 2012, at LUMCON (Cocodrie, LA) in learning about the coastal ecosystem of Terrebonne Bay. We'll focus on wetland transects, hypoxia, plankton, and oil spill impacts. \$100 stipend, overnight accommodations on July 25, breakfast & lunch are provided. **Non-refundable \$25 registration fee. Deadline is July 13, 2012.** Contact Pam (PamB@lsu.edu) for registration information. Limited to 25 participants.



# CR Teachers Co-Host *Get Your Roots On!* Workshop at LA Environmental Ed Symposium

Four Coastal Roots teachers, **Stacy Hargrove** and **Donald Kent** (Lafayette Middle) and **Linda Beyt** and **Paula Guidry** (L. Leo Justice Montessori Elementary in Scott), co-presented and co-hosted a six hour workshop entitled *Get Your Roots On!* at the 2012 LA Environmental Education Symposium on March 9, 2012. It might have been pouring buckets of rain that day, but that did not prevent these fine teachers from providing a wonderful tour of their school gardens and educational hands-on activities for the workshop participants. Participants learned how to incorporate school gardens into the curriculum as well as a bit about how Coastal Roots fits into the curriculum at these schools.



Above: Stacy (Pic #1) and Donald (Pic #2) tour teachers through their garden and conduct a propagation lab. Linda and Paula (Pic #3) show teachers their PLT certified garden and a "garden in a glove" activity (Pic #4). Photo credit: CR.

## CR and Cub Scout Pack #22 Team Up

Do you ever wonder where those extra trees you grow and don't have time to plant go? Well, on April 15<sup>th</sup> this year, Sts. Leo-Seton School's Cub Scout Pack 22, along with family and friends, planted 200 cypress seedlings in Henry Guidry Park in Henderson, Louisiana. The cypress seedlings were planted as part of a project to outline the border of the park with native cypress trees. **Antoinette DeBossier**, with the National Oceanic Atmospheric Administration, coordinated the planting with the Henderson mayor and taught the scouts how to identify the trees in the park by their bark and leaf shape. CR provided the trees and planting supplies.



## EDS Ranked #5 in Energy Star Campaign

**Bishop Noland Episcopal Day School** (Lake Charles) ranked #5 nationally in education category of the 2011-2012 *Change the World, Start with ENERGY STAR* Campaign Top Pledge Drivers. By encouraging their families to take small, energy-saving steps that make a big difference, EDS helped all of us save energy, money, and the environment. Together they saved over 953,275 pounds of greenhouse gases from being emitted into our atmosphere! Way to go, EDS!



## MS Coastal Roots Report by Dr. Gary Bachman

Schools that participated in the MS Coastal Roots Program this past year included Anniston Elementary, St. James Elementary and Woolmarket Elementary, all had successful planting sessions with live oak as the main tree crop. The demonstration site at CREC also planted live oak acorns. The trees produced by the schools were given to the MS Department of Marine Resources and planted in their restoration efforts on Deer Island. We have shifted part of the focus of the MS CR to include issues and growing systems involving local food.

Earthbox growing systems have been placed in the remaining schools and they are using the Earthbox curriculum to promote plant-science concepts that can be incorporated into classroom lessons. Pictured (top to bottom): Anniston Elementary, St. James Elementary and Woolmarket Elementary



## Swamp School Summer Camp!

Barry Guillot (Harry Hurst Middle) and Craig Howat (St. Charles Satellite Center) created the St. Charles Parish Swamp School summer camp for students in 4<sup>th</sup> - 6<sup>th</sup> grade that will run for two weeks (June 4-5 and June 11-15) at the Bonnet Carre Spillway. They will be incorporating some Coastal Roots activities by having the campers find, map, measure and record some of the data for the trees Coastal Roots schools have planted out there. In addition, there will be canoing, crabbing, and fishing! Sounds like fun!

# Helpful Hands

A big thank you to **Garret Thomassie** and **Alexis Luke** at the **Golden Meadow Plant Materials Center** for the two huge bundles of bitter panicum (destined for St. Paul's and Abbeville High CR nurseries). Alexis graciously provided a tour of the GMPMC. Bitter panicum grown by CR schools is planted on beach dunes on Grand Isle and in Cameron and Vermilion parishes.



"I didn't mind helping!" This was the protest from **Mrs. O'Connor** at Westdale Heights Academic Magnet Elementary School, when we asked to take her picture so we could recognize the helping hands she gives to **Mary Legoria** and her students. She watches the WHAM school gardens carefully and turns on the water when plants need a bit more water than they are getting from the irrigation systems.



*"Unless someone like you cares a whole awful lot, nothing is going to get better. It's not."*

*- Dr. Seuss, The Lorax*

## LSU Coastal Roots Restoration Partners

We thank our restoration partners for their willingness to work with and educate our LSU Coastal Roots students about the restoration needs of their site as well as other important coastal issues.

- Avery Island, Inc.
- Baton Rouge Recreation (BREC) – Dept. of Conservation
- Mae's Beach, Cameron Parish
- Cheniere au Tigre
- City Park, New Orleans
- Coastal Plain Conservancy
- Grand Isle Port Commission
- Jean Lafitte National Historic Park & Preserve
- LDWF Pointe aux Chenes WMA
- Louisiana State Parks
- Maple Bayou Hunt Club
- NRCS Coastal Prairie Restoration
- US Army Corps of Engineers, Bonnet Carré Spillway
- Wetland Watcher Park, St. Charles Parish



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## LSU Coastal Roots Seedling Nursery Program



LSU Coastal Roots: Helping the LA coast one seedling at a time!

<http://coastalroots.lsu.edu>