



Coastal Roots



January 20, 2014

<http://coastalroots.lsu.edu>

LSU CR Winter Workshop 2014: February 15

Plan to participate in the LSU Coastal Roots Winter Workshop on February 15, 2014, in 225 Peabody Hall at LSU! Meet other CR teachers and share ideas of how to incorporate CR into your classroom! Stipend: \$100 for the day.

Contact Pam (PamB@lsu.edu) if you need a registration form!

CR International, Chile!

Coastal Roots has joined up with the LSU School of Education's *Teaching in Chile Program* to bring restoration education to San Pedro de la Paz, Chile. In the *Teaching in Chile Program*, directed by **Drs. Kenny Varner, Ken Denny, and Margaret Denny**, education students spend nearly a month at **Colegio Concepción de San Pedro (CCSP)** (<http://www.colegioconcepcionsanpedro.cl/>), a K-12 school in San Pedro de la Paz, working with students in a variety of classes. This past October, students at CCSP helped install their CR nursery.

The idea began when Dr. Varner told Pam that the cities of Concepción and San Pedro were terribly affected by a huge earthquake on February 27, 2010. The earthquake hit in the middle of the night and registered 8! The shaking lasted three very, very long minutes. It was the sixth largest earthquake ever recorded on a seismograph and it triggered a devastating tsunami in which more than 500 people lost their lives. "Maybe the school would be interested in starting Coastal Roots to help restore some of the habitat that was lost," suggested Pam. Dr. Varner broached the idea with the principal, who was very interested. Next, Pam, Ed and Dr. Varner wrote a grant to the **LSU College of Human Sciences and Education Peabody Society** to help pay for the cost of the installation and Dr. Bush's airfare. We got the grant! *Thank you, Peabody Society!*

Ed Bush, Kenny Varner and Pam Blanchard traveled down to San Pedro de la Paz (about an hour's flight south of Santiago, Chile) in late October, 2013, to help students at CCSP install their Coastal Roots nursery. The CCSP students speak excellent English (as does their Professor Olive), which is fortunate because Ed speaks some Spanish and Pam only knows "Holá"! **Professors Leticia Williams** (High School Science) and **Francisco Olave** (High School English; who also was a huge help in translating) and their students did an amazing job of getting their nursery installed and their first crop of seeds planted (see pictures below!). **Principal Roberto Mora**, spent most of the two days of the installation assisting with installation. Here is a link to an article that appeared in the local paper: http://www.colegioconcepcionsanpedro.cl/contenido/index.php?option=com_content&view=article&id=799:news-letter-nviembre. Students had help from **Jessenia Poblete**, a graduate student in forestry at Universidad de Concepción, who brought restoration seeds with her and showed the students how to plant them properly. As with our restoration efforts in Louisiana, students at CCSP have planted native tree seeds of Chile: *Quillaja saponaria* (Quillay), which is commonly called the Soap Bark tree, and *Nothofagus obliqua*, which is commonly called the Roble Beech tree. On November 22, 2013, CCSP students took a field trip to Universidad de Concepción, where, with the help of Ms. Poblete, they began learning to identify common Chilean trees (see pictures on page 3; Ms. Poblete is pictured in lower left and lower right pictures). It is our hope that they will also be able to grow *Araucaria araucana*, which is the national tree of Chile and is in need of restoration due to its declining abundance. In May 2014, CCSP students will be joined by three graduate students from the School of the Coast & the Environment (also participating in the *Teaching in Chile...* (cont'd, p. 3)



Best Nursery Practices: Winter Nursery Care

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

Plants begin to go dormant in the fall preparing for the cold temperatures of winter. However, that does not mean they don't require water and care. Winter dormancy is sometimes compared to hibernation of animals. Some trees lose their leaves (deciduous) and others keep them (evergreen) throughout the year. It is important that your plants maintain adequate soil moisture. Roots sometimes grow better in the cool temperatures of fall and spring while the top of the plants store carbohydrates for the winter. This process has been going on for thousands of years allowing plants to survive severe conditions. So.....we need to maintain our trees and grasses with water even when the temperatures drop. Plants need to be watered at least three times a week even in freezing weather. Plants don't require as much water, but they do require moisture. Remember: If anticipation of a hard freeze requires you to shut off the water, water twice as long to soak plants before shutting off the water. Now, how can we teach our students about plants' winter acclimation and their growth cycle? Let's ask questions in class. Here are a few to get you started: Why do plants lose their leaves in the winter? Do plants hibernate like bears do? On a higher education level, how do our trees physiologically protect their cells from freezing temperatures? Are cold temperatures necessary for higher plant growth?

Steps to protect the pipes and plants:

1. Water plants prior to shutting off water source!
2. Wrap exposed pipes with insulation.
3. Remember to water manually at least 3x a week heavily to maintain soil moisture.

Notes: This is only if temperatures dip below 30°F. If you have any issues with your school nurseries please contact Pam or Ed for solutions. Remember: January is the time we recommend changing your timer batteries. Use Duracell 9V batteries; replace one battery at a time so you don't lose your programs. You might want to write the date with a permanent marker on the battery so you can keep track of when you last replaced the batteries! Happy growing!



TWO CR Teachers Win LSTA Awards!

Dr. Mary Legoria (shown at left; Westdale Heights Academic Magnet) and **Sandra Saye** (at right; Upper Pointe Coupee Elementary) were winners of two awards at this year's LSTA Institute. Mary Legoria won the **2013 LSTA Outstanding Elementary Science Teacher Award** and Sandra Saye was awarded the **Essie Beck "Rising Star" Science Education Award**. Congratulations, ladies! We are proud of you!



Pam Blanchard is awarded "Spirit of the Wetlands"!

Dr. Pam Blanchard was awarded the *Milton Cambre 'Spirit of the Wetlands' Award* at the 2013 *A Wetlands Reveillon*. Craig Howet's students from the **St. Charles Satellite School** (Luling) organized the event, catered the food (which

was delicious), and arranged for the entertainment. A silent auction raised funds for the St. Charles Wetland Watchers Park. Milton Cambre and Barry Guillot presented the award to Dr. Blanchard.



There was a Child went Forth

*THERE was a child went forth every day;
And the first object he look'd upon, that object he became;
And that object became part of him for the day,
or a certain part of the day, or for many years,
or stretching cycles of years.*

*Walt Whitman. Leaves of Grass. [c1900]
www.bartleby.com/142/.*

CR goes South! (con't.)

Program), who will assist the CCSP students with their first Coastal Roots planting trip! These grad students are **Emily Smith, Alexandra Christensen** and **Nicholas Jansen**.

A special thanks to CCSP student **Carla Castelli**, CCSP's nursery guardian, who is watching the nursery while students and teachers are on their "summer" vacation.... She is checking on the nursery to make sure the plants are doing okay and that the irrigation system is working properly. Many thanks, Carla!



Reflecting on the Wetlands!

Edna Karr High School art students, as part of their Brown Foundation Service-Learning Project on Louisiana's wetlands, are learning about and capturing our coastal wetlands in their art work. Some of their work was displayed in a recent coastal art exhibit at the Orleans Parish School Board. Last semester, **Karen Alice Clanton**, Karr's art teacher, spent the day dip netting and drawing with her art students at Jean Lafitte National Park - Barataria Preserve. Ms. Clanton has teamed up with **Mrs. Sheila Lumod**, the Karr biology teacher, on this project! Stay tuned!



2013-14 LSU Coastal Roots Schools

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| <ol style="list-style-type: none"> 1 Pierre Part Elementary (Pierre Part, Assumption Parish) 2001 2 Abbeville High (Abbeville; Vermilion Parish) 2001 3 St. Joseph's Academy (Baton Rouge, East Baton Rouge Parish) 2001 4 St. Louis, King of France (Baton Rouge, East Baton Rouge Parish) 2002 5 Harry Hurst Middle (Destrehan; St. Charles Parish) 2003 6 Our Lady of Mercy (Baton Rouge, East Baton Rouge Parish) 2003 7 St. James Science & Math Magnet (Vacherie, St. James Parish) 2004 8 Lafayette Middle (Lafayette; Lafayette Parish) 2005 9 St. Charles Parish Satellite School (Luling; St. Charles Parish) 2006 10 St. Martin's Episcopal (Metairie, Jefferson Parish) 2007 11 Christ Episcopal (Covington; St. Tammany Parish) 2007 12 Metairie Acad. for Advanced Studies (Metairie; Jefferson Parish) 2007 ♦ d 13 Isidore Newman School (New Orleans; Orleans Parish) 2008 14 Belle Chasse Middle (Belle Chasse; Plaquemines Parish) 2008 15 Central High (Central Community Schools, E. Baton Rouge Parish) 2008 16 South Cameron High (Grand Chenier, Cameron Parish) 2008 17 St. Paul's Episcopal (New Orleans, Orleans Parish) 2008 18 Larose-Cutoff Middle (Cutoff, Lafourche Parish) 2008 19 Westdale Heights Acad. Elem Magnet (Baton Rouge, EBR Parish) 2008 20 Archbishop Chapelle High (Metairie, Jefferson Parish) 2008 21 LSU Laboratory School (Baton Rouge, E. Baton Rouge) 2008 22 Holy Cross School (New Orleans, Orleans Parish) 2009 ♦ d 23 Reeves High (Reeves, Allen Parish) 2008-10, 2013 24 Franklin High (Franklin, St. Mary Parish) 2009 25 Iberville Science & Arts Academy East (St. Gabriel, Iberville Parish) 2009 26 Bishop Noland Episcopal Day School (Lake Charles, Calcasieu Parish) 2009 | <ol style="list-style-type: none"> 27 Schools of the Sacred Heart (Grand Coteau, St. Landry Parish) 2010 28 Iberville Science and Arts Academy West (Plaquemine, Iberville Parish) 2010 ♦ d 29 Zachary Elementary (Zachary, East Baton Rouge Parish) 2010 30 Patrick Taylor Science & Technology Acad. (Jefferson, Jefferson Parish) 2010 31 Louise S. McGehee School (New Orleans, Orleans Parish) 2011 32 L. Leo Judice Montessori Elementary (Lafayette, Lafayette Parish) 2011 33 Creekside Junior High (Pearl River, St. Tammany Parish) 2012 34 Episcopal High (Baton Rouge, East Baton Rouge Parish) 2012 35 Sts. Leo-Seton Catholic School (Lafayette, Lafayette Parish) 2012 36 Lusher Charter (Middle) School (New Orleans, Orleans Parish) 2012 37 Upper Pointe Coupee Elementary (Batchelor, Pt. Coupee Parish) 2012 38 Ponchatoula High (Ponchatoula, Tangipahoa Parish) 2013 39 Rollins Place Elementary (Zachary, East Baton Rouge Parish) 2013 40 Bourg Elementary (Bourg, Terrebonne Parish) 2013 41 Montegut Middle (Montegut, Terrebonne Parish) 2013 42 Pointe aux Chenes Elementary (Pointe aux Chenes, Terrebonne Parish) 2013 43 Metairie Park Country Day (Metairie, Jefferson Parish) 2013 44 Audubon Zoo (New Orleans, Orleans Parish) 2013 45 Edna Karr High (New Orleans, Orleans Parish) 2013 46 Collegia Concepcion San Pedro de la Paz (San Pedro, Chile) 2013 47 Delta Charter Academy of Math, Science, & Tech (Ferriday, Concordia Parish) 2013 <p>Installations Anticipated for 2014</p> <ul style="list-style-type: none"> International School of Louisiana (New Orleans, Orleans Parish) St Scholastica Academy (Covington, St. Tammany Parish) Einstein Charter School (New Orleans, Orleans Parish) |
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♦ D= Dormant

DEMONSTRATION NURSERY

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

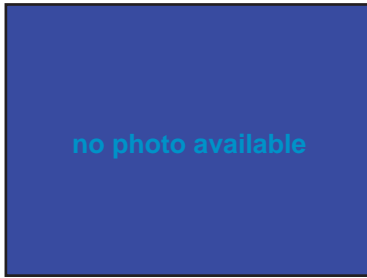
Mississippi Coastal Roots Schools

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

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| <ol style="list-style-type: none"> 1 Wool Market Elementary (Biloxi, Harrison County) 2009 2 Anniston Elementary (Gulfport, Harrison County) 2011 | <ol style="list-style-type: none"> 3 St. James Elementary (Gulfport, Harrison County) 2011 |
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Putting Down Roots - LSU Coastal Roots Plantings from October - December 2013

Photo credits: LSU Coastal Roots staff



Harry Hurst Middle
October 29, 2013
Wetland Watcher Park, St. Charles Par.



St. Louis King of France
November 5, 2013
Fontainebleau State Park



Franklin High
November 8, 2013
Palmetto Island State Park



Berchman's Academy
November 14, 2013
Avery Island



Sacred Heart Academy
November 14, 2013
Avery Island



Chapelle High
November 19, 2013
Bonnet Carré Spillway



Christ Episcopal School
November 21, 2013
Fontainebleau State Park



Iberville MSA - East
November 22, 2013
BREC Cornite River Bike Park



Lusher Middle Charter
December 3, 2013
Bonnet Carré Spillway



Patrick Taylor SMT
December 10, 2013
New Orleans City Park



St. Martin's Episcopal
December 17, 2013
LDWF Pointe aux Chenes campground



Lafayette Middle
December 18, 2013
Avery Island

Connect Your CR Project With Other Great Opportunities

Disney Friends for Change Grants

Disney's Friends for Change Grants offer young change-makers, ages 5-18, an opportunity to help make a lasting, positive change in the world. Projects should highlight the creativity and commitment of young people working to meet the needs of others and show how even small actions can add up to big changes. Projects should take place on or around Global Youth Service Day, April 11-13, 2014. The deadline for application is February 6, 2014. http://www.ysa.org/disney_friends_for_change_us_grants

Junior Duck Stamp Art Contest

The U.S. Fish and Wildlife Service oversees the Federal Junior Duck Stamp Program. Students are invited to create duck stamp drawings to show what they have learned about wetlands habitat and waterfowl conservation. Check the website for details, and below for information about new curriculum guides. The deadline for submission is March 15, 2014. <http://www.fws.gov/juniorduck/ArtContest.htm#GeneralInformation>

Presidential Innovation Award for Environmental Educators

The Presidential Innovation Award for Environmental Educators Program recognizes outstanding K-12 teachers who employ innovative approaches to environmental education and use the environment as a context for learning for their students. Teachers from each EPA region will be selected to receive the award. The deadline for application is February 28, 2014.

EPA's EE Teacher Awards

EPA is welcoming applications from public school teachers (K-12) for the third annual Presidential Innovation Award for Environmental Education. The award recognizes outstanding K-12 teachers and their local education agencies nationwide for excellence in integrating environmental education into their lessons and connecting students with their communities and the natural world. Winners will receive \$2,000 to support their professional development in environmental education and each winner's school will also receive a \$2,000 award to help fund environmental education activities and programs that support the teacher. Deadline: February 28, 2014. <http://www2.epa.gov/education/presidential-innovation-award-environmental-educators>

State-Fish Art Project

The Wildlife Forever State-Fish Art Project challenges young artists to create an illustration of their state fish and a written composition on its behavior, habitat, and efforts to conserve it. The deadline for entry is March 31, 2014. <http://www.wildlife-forever.org/contest/details>

Junior Duck Stamp Curriculum Guides

Targeted at middle level students, these curriculum guides from the U.S. Fish and Wildlife Service Junior Duck Stamp program stress wildlife observation, nature journaling, and photography, while teaching students about conservation and developing art skills. The Educator's Guide contains background information for each study and drawing unit, while the Youth Guide provides instructions for students to complete the various activities. <http://www.fws.gov/juniorduck/EducationProgram.htm>

Waterways

The Smithsonian Institution has assembled this portal of resources that feature water related content from all of its museums. Links include artwork, exhibits, and other collection items from around the Smithsonian. Themes include Plants and Animals, Weather, and more. Additional links on the website include links federal jobs related to water, links to NOAA, EPA, and NPS resources, and much more. <http://my.si.edu/initiatives/waterways/waterways>

Edens on the Edge Wildlife Refuges Documentary Released

The 23-minute documentary *Edens on the Edge*, a Louisiana Sea Grant College Program production, chronicles the importance of wildlife refuges located in Louisiana's coastal zone. The video is available online for viewing at <http://www.laseagrant.org/media/Edens-on-the-Edge.avi>. A free copy on DVD can be ordered by contacting LSG publications coordinator Jessica Schexnayder at <jsche15@lsu.edu>. There is a \$5 charge to cover postage and handling of the DVD. There is no charge to persons picking up the DVD at Sea Grant offices on the Louisiana State University Baton Rouge campus. *You can also request a copy on the 2014 CR Winter Workshop registration form and Pam will have it waiting for you at the workshop on February 15.*

Conservation Connect for Schools

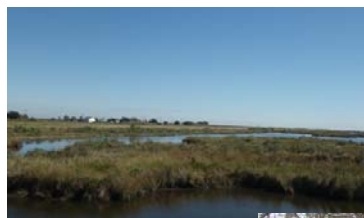
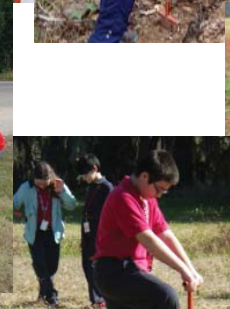
Conservation Connect is a new web-based video series that connects middle school students with the great outdoors and conservation careers. Produced by the U.S. Fish & Wildlife Service, National Conservation Training Center, each episode will help students learn about wildlife careers, and new technologies utilized to study and protect wildlife. An introductory broadcast for teachers and visitor services specialists will give a preview of the five- to seven-minute episodes, and illustrate how these videos can supplement the use of existing EE curriculum, citizen science projects, and STEM content. <http://distancelearning.fws.gov/ctn.html>

Captain Planet Foundation Grants

The Captain Planet Foundation awards grants based on its mission: To give the next generation of environmental stewards an active understanding and love for the natural world in which they live. Their program supports hands-on environmental projects designed to encourage innovative initiatives that inspire and empower children and youth around the world as they work individually and collectively creating environmental solutions in their homes, schools and communities. Find out more at <http://captainplanetfoundation.org/apply-for-grants/> Deadline is Jan 31 for fall and winter projects.



A Few of Pam's Favorite Picts from 2013!



"Most of the important things in the world have been accomplished by people who have kept on trying when there seemed to be no hope at all." - Dale Carnegie

Helping hands...



We are very aware that it "takes a village" to grow big, robust Coastal Roots seedlings. We want to thank **Mr. Buddy Ricaud**, the facilities manager at **St. Louis, King of France School**, for his hard work in helping to care for the Coastal Roots nursery, as well for his good work around the school and parish grounds. A big warm thanks, Mr. Buddy!



We Welcome New Schools to CR!



Metairie Park Country Day
October 3, 2013
Metairie, LA



Edna Karr High
October 25, 2013
New Orleans, LA



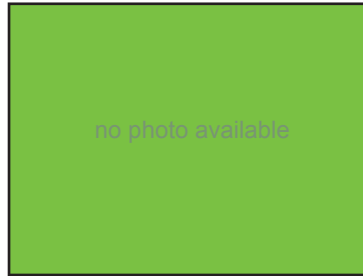
Delta Charter Academy
December 5, 2013
Ferriday, LA



Repairs to Nurseries Keeps Ed Busy!



St. Louis King of France
reinstalled
September 17, 2013
Baton Rouge, LA



Reeves High
(repaired)
December 11, 2013
Reeves, LA



**UNO Coastal Education
 Research Facility** *reinstalled*
December 19, 2013
New Orleans (Chef's Pass), LA

CR and the Practice of Reaching Out

With the number of CR school nearing 50, time is precious for Pam and Ed. However, we realize that sharing the stewardship that our CR schools participate in is important. So, we participated in four outreach events in the Fall 2013. The first was the **Brown Foundation Service Learning Celebration** in September 2013. The Brown Foundation has been very generous in supporting the CR schools in the Greater New Orleans area. They have provided much of the affiliation fee, as well as other expenses associated with our stewardship project, such as the expenses related to the restoration trip and keeping up the nursery. **St. Martin's Episcopal School** helped with the CR exhibit at the event! The second event was the **Ferriday Rotary Club** talk that Pam and Ed gave last October. This talk (our first Rotary Talk!) was at the invitation of **Steve Dawkins**, the husband of Emily Dawkins. Emily is the CR teacher at Delta Charter Academy School, which just started their CR nursery this fall!

The third event was **LA Sea Grant College Program's Ocean Commotion**, which was held in October 2013. This is always a fun event... and one that we have participated in since the very start of both Ocean Commotion and Coastal Roots! Ed had the expert help of **Mrs. Linda Messina's St. Joseph's Academy students** at the Coastal Roots exhibit. Finally, the fourth event was a seminar in the **LSU School of Renewable Natural Resources** in late November at the invitation of **Dr. Richard Keim**. It was a busy semester!



