ENVIRONMENTAL STUDIES CENTER

MOBILE COUNTY PUBLIC SCHOOLS

MOBILE, AL



Desiree Bishop Director

Susan Clement Biologist

Tracy Delcambre Resource Teacher

Troy Latham Resource Teacher

Anita Salinas Resource Teacher

Grace Phelps Bookkeeper

Kody Wiggins Grounds Keeper

Renee Perkins Custodian





Volume V, Issue II

Spring 2015

Critter Corner



Meet Leuco

Leuco is a 16 year old bald eagle who was acquired from the Alabama 4H Center in December, 2014. He comes to us fully trained to sit on a glove and will become a part of our Raptor Road Show. When Leuco was one week old he was removed from his nest, by the U. S. Fish and Wildlife Service, in Titusville, Florida. He had been observed with an injury to his beak. Unfortunately after surgery and treatment, his beak was still deformed and he was not able to tear his food up when eating. He had to be fed bite sized pieces and he had to have his beak trimmed bimonthly. Because of this, Leuco could not be released. He has been used as an educational bird at both Callaway Gardens and the Alabama 4H Center and will continue educating people about bald eagles at the Environmental Studies Center. His debut will be at the Delta, Woods, and Waters Expo at the 5 Rivers Delta Center on April 25 and then at the Environmental Studies Center's spring Open House on May 2. In the meantime, come out and see Lueco in his brand new exhibit mew at the ESC.

Page 2 Wild Adventures

What's Happening at the Center

The Environmental Studies Center has implemented a new program for middle and high school

students called W.A.T.E.R (Watershed Activities Teaching Environmental Responsibility) which was made possible through Alabama Power's Students to Stewards grant. The grant was awarded to the ESC in November, 2014 in the amount of \$7,500.

The Environmental Studies Center along with 30% of Mobile County is part of the Dog River Watershed and the staff wanted to develop a program that teaches our students about the importance of the watershed and how we can be responsible stewards of our environment. A four part program was developed centered around the 18 acre Pine Lake at ESC. Students spend all day at the ESC and are actively engaged in all aspects of the W.A.T.E.R. program. They are introduced to aquatic vertebrates and invertebrates using various sampling techniques and are also exposed to water chemistry, storm drain pollution, and watershed exploration through kayaking. Students leave the ESC with a better understanding of aquatic biodiversity and the effects we have on the watershed through non-point source pollution.







We RECYCLE!!!!

Bring your aluminum cans to the ESC and we will recycle them!!!! We sell the aluminum and use the money to support the wildlife rehabilitation program at the ESC.

Volume V, Issue II Page 3

News from Out-of-this World

Approaching Pluto

2006, the NASA discovery mission New Horizons launched. At this time, Pluto was still considered one of the nine planets within our Solar System. However, in August of 2006, the General Assembly of the International Astronomical Union was held in Prague, Czech Republic. At this meeting there was discussion about the criteria that categorize a body as a planet. This was in response to the discovery of a body the same size or even larger than Pluto further out than Pluto by Mike Brown, a Caltech astronomer. This body was then named Eris. Discussions included three choices: 1) Increase the number of planets in the Solar System to 12 which would include Pluto, Eris, and Ceres (an asteroid). 2) Keep the current nine. 3) Drop the number of planets down to eight. Astronomers voted to drop Pluto's classification to that of a "dwarf planet" along with Eris. The International Astronomical Union defines three requirements in order to categorize a body as a planet: 1) It needs to be in orbit around the Sun. 2) It needs to have enough gravity to pull itself into a spherical shape. 3) It needs to have "cleared the neighborhood" of its orbit. The third requirement is currently not met by Pluto. It will remain a dwarf planet until it crashes into many smaller objects and gains their mass. New Horizon launched

in January of 2006 to fulfill a Pluto-Kuiper Belt Mission. In

2015 will be an exciting year of discoveries for NASA. On January 19,



February of 2007 it completed a gravity assist with Jupiter, then continued on an interplanetary cruise from March 2007 to June 2015. July 14, 2015 will be New Horizon's closest approach to Pluto. After that it will continue through to 2020 with Kuiper Belt object encounters. A current mission countdown can be viewed at http://Pluto.jhuapl.edu. One can also find information about the mission and Pluto on this website. Stay tuned for much awaited new information about Pluto from the space mission that began when Pluto was still a planet.

Upcoming Events

May 2nd 10:00 a.m. until 3:00 p.m.—Open House at the ESC

May 30th 1:00 p.m. until 5:00 p.m.—Rabies Clinic benefitting the wildlife rehabilitation program -Griggs Elementary School Front Parking Lot

June 8th—Summer Camps begin

Page 4 Wild Adventures

Annual MCPSS Science Fair Winners

The annual Mobile County Public Schools Science Fair was held on February 10, 2015 at Clark-Shaw Magnet School. The overall winners are as follows:

Lisa Bramuchi-Faye Horizon Award for Most Promising 6th Grade Project
Madison Yarnell—Phillips Preparatory School—Environmental Science
"Drainage Downer"

Middle School Winner

Katie Rudolph—Phillips Preparatory School—Physical Science, Chemistry "Bioplastic: The Strengthening Effects of Glycerin"

High School Winner

Rebecca Mulholland—Murphy High—Math and Computer Science "6.0 or a Half Dozen"

Overall Winner

Carly Alexander—Phillips Preparatory School—Engineering "Saved by Seaweed?"



The ESC Wildlife Rehabilitation Program would like to thank the PACE students of the Mobile County Public School System for holding a baby shower for the Environmental Studies Center during Gifted Education Month. Over 1,600 items off of our Wildlife Wish List were donated. The following schools participated:

Allentown Elementary, Haskew Elementary, North Mobile Middle, Semmes Elementary, Burroughs Elementary, Meadowlake Elementary, Castlen Elementary, Causey Middle, Burns Middle, Dodge Elementary, Hollinger's Island Elementary, E.R. Dickson Elementary, Davis Elementary, Shepard Elementary, Fonde Elementary, Robbins Elementary, Brazier Elementary, Spencer-Westlawn Elementary, Griggs Elementary, Collins Rhodes Elementary, Indian Springs Elementary, O'Rourke Elementary, Craighead Elementary, Leinkauf Elementary, Eichold-Mertz Magnet, Dawes Intermediate, and Morningside Elementary.

Thank you again!



Volume V, Issue II Page 5

Wildlife Wish List

Clip-on clamp lamp Small frozen fish Canned dog and cat food

Cages Baled hay Frozen mixed vegetables
Heating pads Scratch feed Fresh fruits and vegetables

Liquid laundry soap Bleach Raw peanuts (in shell)

Liquid dishwasher soap Wild birdseed Nuts (in shell)

Wal-Mart gift cards Newspaper Dry dog food (small bites)
60-watt light bulbs Plastic wrap Unsalted sunflower seeds
Scrub brushes Dawn dish soap Canned sardines in water

Cash B & B Pet Stop gift cards



Wildlife Adoptions

For a \$25 annual donation you can help with the feeding, care, and shelter of one of the native wildlife housed here at the Environmental Studies Center. Not only can you adopt an animal for yourself but, you can give an adoption as a gift. Adoption benefits include: adoption certificate, photograph of your animal, fact sheet about the species, recognition of your adoption on the exhibit, and Environmental Studies Center e-Newsletter.

Complete the information below and mail it to the Center with your payment. Make checks payable to the Environmental Studies Center.

	Address:		
	City:		
	Zip Code:	_Phone:	
Please choose one	e:RaccoonDeer	PelicanSeagull	Alligator
Mallard DuckCanada GooseBlack VultureTurkeyCoyote			
Red-tailed HawkBald EagleWood DuckTurkey VultureScreech Owl			
Barred Owl	Great-Horned OwlGrea	t Blue HeronOther:	

Page 6 Wild Adventures

Recent Patients





Partners in Education

PVOC

degussa.

Pleasant Valley Opportunity Club

Dr. Louis Buckalew & Family



Thoughts from the Director

As you visit the Environmental Studies Center this spring you may notice a few new exhibit areas and improvements on the grounds. The Center has been the beneficiary of a few very well timed



donations since the last newsletter. The Tacon Family and the estate of N.Q. Adams have given substantial donations at the end of 2014. These monies have been used to build two exhibits that will enhance our educational program and provide a place for a few of our non-releasable birds of prey.

The Tacon Family gave a donation in the memory of their parents who always sent a Christmas donation and were very fond of visiting the Environmental Studies Center. The new bald eagle exhibit was paid for by their donation. This houses our beautiful eagle, Leuco, who is part of our raptor show. N.Q. Adams was a well known businessman and philanthropist in Mobile. He was also a member of the Mobile County School Board. Mr. N.Q. Adams always encouraged and promoted education and his family remembers us yearly with a donation. The weathering area near the front porch is a place where we can put animals on display without being enclosed in a cage. The construction was funded by the Adams Family.

Remember that a donation can be any kind of gift. It can take the form of a cash offering, service, materials for constructions, or food items for animals. One of the best reasons to donate is to help someone or something that needs assistance. Donating to a special cause is a great way to show your appreciation. Nonprofit organizations, like the Environmental Studies Center, feel a special bond with people that donate because we know that they care about what we do. Making a monetary donation in a loved one's name is a great way to honor their life and the organization at the same time, especially if that cause is close to their heart. If you would like to know more ways you can contribute to the Environmental Studies Center please visit or call. Thank all of you for your continued support.

Volume V, Issue II Page 7

Summer Day Camp at the ESC



Grades 1-2 "Nature and Me" 2 Day Camp

Students will be guided through discovery investigations of the area's natural forest environment. The program will focus on living things and their habitats. Students will gain an appreciation for our natural resources while taking nature hikes, comparing physical features of animals, and participating in interactive games that will deepen their

Dates and Times:

2 Days June 22 - 23 8:30 a.m. - 4:00 p.m. 2 Days June 24 - 25 8:30 a.m. - 4:00 p.m. Cost: \$80 per student (includes T-shirt)

Grades 1-2 "Art in Nature" 1 Day

Students will discover the beauty, colors, and patterns in nature and will use what they experience to create original art projects.

Date and Time:

1 Day June 30 8:30 a.m. - 4:00 p.m. Cost: \$40 per student (includes T-shirt)









Grades 2 - 6 "Wildlife Palooza" 1 Day

Students will visit with native wildlife of the Mobile area. They will learn how these wonderful creatures survive in the wild and how these critters interact with each other. Also, they will develop an understanding of how each animal is beneficial to our environment and the people living in it. Activities include visiting the outdoor animal exhibits, viewing birds of prey up close, and a nature walk to look for signs of wildlife.

Date and Time:

1 Day June 10 8:30 a.m. - 4:00 p.m. Cost: \$40 per student (includes T-shirt)

Grades 3 - 4 "The Secret Life of Trees" 1 Day

Ever wonder what happens in the forest when no one is around to see? During this camp students will learn many secrets about the trees and forests including what creatures live among the trees, how some trees survive fire, and how to identify common trees in our area. Activities include nature walks, a scavenger hunt, and art activities.

Date and Time:

1 Day June 11 8:30 a.m. - 4:00 p.m. Cost: \$40 per student (includes T-shirt)

Grades 5-6 "Feathers to Rockets" 2 Days

Come explore air travel with us as we investigate the "science" of FLIGHT. How do feathers help birds fly? How do airplanes fly? How do rockets go into space? We will also take a trip to the Coast Guard's Aviation Training Center.

Dates and Times:

2 Days July 15 - 16 8:30 a.m. - 4:00 p.m.

Cost: \$80 per student (includes T-shirt and cost of field trip)

Grades 6-8 "WATER Activities" 1 Day

W.A.T.E.R (Watershed Activities Teaching Environmental Responsibility) will be a fun filled day of adventures that will explore our interactions and the effects we have on the Dog River Watershed. Students will collect and observe aquatic insects from Pine Lake, take water samples and measurements, build storm drain models, and discuss water safety to include kayaking on our 18 acre Pine

Lake.

Date and Time:

1 Day June 17 8:30 a.m. - 4:00 p.m. 1 Day June 18 8:30 a.m. - 4:00 p.m

Cost: \$40 per student (includes T-shirt)



Grades 3-4 "Let's Get Physical with Science" 2 Days

Get your hands on unforgettable learning experiences and see how science can be truly amazing. Be a part of the wonder, discovery and exploration that is science. Learn how you can make it snow on the warmest of days and get vacuum-packed in the process. Students will learn the science behind the WOW! By taking part in inquiry-based activities that follow the scientific method, students will learn through exploration and strengthen their critical thinking skills.



2 Days June 8 - 9 8:30 a.m. - 4:00 p.m. Cost: \$80 per student (includes T-shirt)



Grades 5-6 "The Wonderful World of Nature"

2 Days

This camp is designed to combine outdoor recreation activities with environmental education experiences. Camp activities include trail hikes, fishing, saltwater aquarium presentations, and an 'up-close' look at the Center's wildlife collection. Participants will learn about the important plants of the forest and examine insect-eating plants in a pitcher plant bog.

Dates and Times:

2 Days July 21 – 22 8:30 a.m. – 4:00 p.m. Cost: \$80 per student (includes T-shirt)



Grades 6-8 "Investigations in Microscopy" 1 Day

Students will learn the basics of microscopy starting with the simplest magnifiers and ending with compound microscopes. Students will learn the parts of the microscope and develop the skills needed in microscopic investigation. The camp will involve hands-on activities that include observing patterns in nature, studying pond life, preparing slides, and using the compound light microscope and stereoscope.

Date and Time:

1 Day July 14 8:30 a.m. - 4:00 p.m. Cost: \$40 per student (includes T-shirt)

Grades 6 - 8 "How and Why We Recycle"

Students will learn the importance of recycling and learn to set up a recycling program in their home. We will visit 2 recycling centers on Brookley Field to get a behind the scenes look at how products are recycled. We will visit the Keep Mobile Beautiful Recycling Center to sort and drop off recyclables.

Date and Time:

1 Day July 23 8:30 a.m. - 4:00 p.m. Cost: \$40 per student (includes T-shirt)

For a registration form please visit our website at www.mcpsesc.com. Look for it under the forms tab.

ENVIRONMENTAL STUDIES CENTER

MOBILE COUNTY PUBLIC SCHOOLS

MOBILE, AL

6101 Girby Road Mobile, Alabama 36693

Phone: 251-221-5000 Fax: 251-221-5002

Open 8:00a.m.-4:30p.m. Monday—Friday

Individual Admission: Free \$2 Donation appreciated

Group tours: Reservations required Contact 251.221.5000 for pricing information

Non-profit organization





Wild Adventures

The Environmental Studies Center is a natural sciences education facility designed to provide unique learning experiences. In addition, wildlife rehabilitation plays a vital role each day here at the Center. With over 500 acres of rich woodlands, the Center affords teachers, students, and the general public an opportunity to experience firsthand the natural environment. Natural resources include pine and bay forests, swamps, freshwater streams, carnivorous plant bog, and a twenty-acre lake.

Man-made resources include numerous nature trails, covered pavilions, live animal exhibits, butterfly garden, and native plant garden. Indoor facilities include an auditorium, gift shop, and classroom containing live reptile exhibits, a saltwater aquarium, and numerous preserved specimens native to Alabama.



The Environmental Studies Center houses a wildlife rehabilitation program that is dedicated to the care and potential release of injured and orphaned native wildlife. The wildlife rehabilitation program receives around 800 wild patients a year. These animals all need food, care, and shelter to survive. The program relies upon donations from people like you for its operation and success.

Environmental Studies Center 6101 Girby Road Mobile, Alabama 36693