



Environmental STUDIES CENTER

Wild **Adventures**

Spring 2022



Mobile County
PUBLIC SCHOOLS



Critter Corner

Meet Maverick

Maverick came to us from a wildlife rehabilitator in Panama City, Florida in 2016. The rehabilitator had received Maverick after she was hit by a car.

Maverick's wing was broken so badly that she was found unreleasable because of her inability to fly. Maverick is now a part of our Raptor Road Show and is on exhibit at the Center when she is not in a program.

Red-tailed hawks are the largest hawks found in south Alabama and they are identified by their red tail that they get when they turn 2 years old. They eat a variety of small rodents, such as mice, rats, and squirrels. They are found across North America and as far south as Panama.

Be sure to visit Maverick on our Bird of Prey Boardwalk. You might even see her enjoying her favorite swing.

Bald Eagle Release

Two bald eagles came to the Environmental Studies Center on December 27, 2021, after being found in Mud Lake stuck in the mud. They had no physical damage, so they were taken to the Wildlife Sanctuary of Northwest Florida for some flight time. The Environmental Studies Center does not have a flight cage large enough to rehabilitate bald eagles.

On January 5, 2022, we picked up the eagles from the Wildlife Sanctuary to bring them back to Mobile for release. We released them at Five Rivers Delta Resource Center on the Causeway. This was the first bald eagle release for the Environmental Studies Center and what made it even more special was that we were able to release two. It was an amazing day!



Wildlife Wish List

Clip-on clamp lamp	1 cc and 3cc syringes	Chicken vegetable baby food
Pine bark mulch	Pine shavings (for cages)	Dried whole corn
Cages	Baled hay	Frozen mixed vegetables
Heating pads	Ziploc freezer bags (gallon & quart)	Fresh fruits and vegetables
Liquid laundry soap	Bleach	Raw peanuts (in shell)
Liquid dishwasher soap	Paper towels	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	Animal crackers	Canned dog and cat food
Wild Birdseed	Scratch Feed	Cheerios
Small frozen fish		

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.

Animal Adoption

Name: _____

Address: _____

City: _____ State: _____

Zip Code: _____ Phone: _____

Email Address: _____

Please choose one: ☐ Raccoon ☐ Deer ☐ Pelican ☐ Seagull ☐ Alligator

☐ Barn Owl ☐ Canada Goose ☐ Black Vulture ☐ Turkey ☐ Coyote

☐ Red-Tail Hawk ☐ Bald Eagle ☐ Brown Pelican ☐ White Pelican ☐ Screech Owl

☐ Barred Owl ☐ Great-Horned Owl ☐ Great Blue Heron ☐ Other: _____



Nurdle: Silly Word, Serious Problem

“What are nurdles?”, you may ask. Nurdles are tiny pellets of plastic less than 5 millimeters in size. We refer to these types of plastic as microplastics, and nurdles themselves are actually primary microplastics. Nurdles are used in industries to manufacture all kinds of plastic products. When nurdles are produced, they are transported across the world by the billions. During each stage of production and transportation, there is a risk of the nurdles being accidentally released into the environment. If these plastic pellets are not cleaned up properly, they can easily enter our water ways and then eventually reach our oceans. Nurdles are tiny, lightweight, and most can float in the water. They can even be easily blown or brushed into drains. When nurdles make their way to our oceans, they can spread widely. Nurdles have been found throughout the world, from the middle of the pacific to the arctic circle.

The problem with nurdles in our oceans is that these plastics take thousands of years to degrade. When these nurdles become smaller and smaller, marine animals can mistake them for food. These plastics not only harm the animals that are directly eating them, but this plastic can be transferred to other animals by ways of the food chain. When marine animals like turtles and birds consume large amounts of nurdles, the plastic builds up in their stomach and they are unable to consume food, this results in death by starvation.

Large pieces of plastic are much easier to remove than nurdles. Currently, there is no practical way to remove nurdles from the ocean. So what can be done to stop this environmental hazard? According to the Ocean Blue Project, we need to shift away from single use plastics. We need to stop consuming and using so much plastic. Many environmental organizations are asking for the production and transportation of nurdles to stop completely. One organization known as the Nurdle Patrol, is on a mission to remove nurdles from our beaches and riverbanks by hand collecting them and documenting their findings. In fact, if you visit their website www.nurdlepatrol.org , you can receive a startup kit for your group or organization to begin surveying local beaches, rivers, and lakes for nurdle pollution, contributing to the overall mission of the Nurdle Patrol to help your own communities stay clean of plastic pollution.

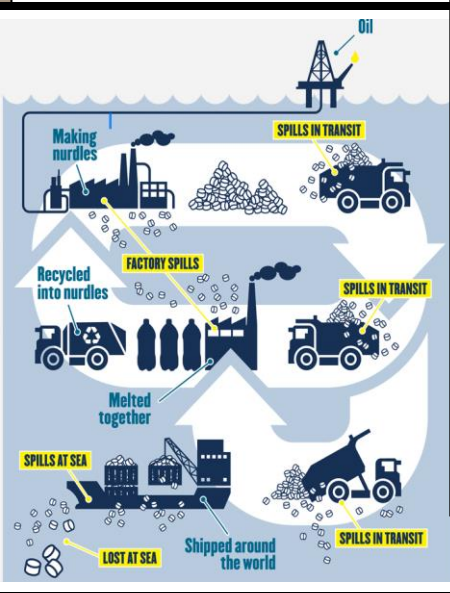
Resources:

<https://nurdlepatrol.org/>

<https://oceanblueproject.org/what-are-nurdles-why-you-need-to-worry-about-them/>

<https://www.nurdlehunt.org.uk/>

<https://www.plasticsoupfoundation.org/en/the-nurdle-file/>



Reflections from the ESC....

Most afternoons when I get home from work, my husband will ask me, "What did you do today?" My standard answer is, "I got to play in the woods." I did not grow up playing sports like many children. I have never been what anyone would call athletic. However, I was never one to be inside. As a child, you could always find me outside exploring and usually near a puddle of water. I consider it a blessing that I can work where I am still able to get outside and reconnect with a puddle of water when I need to find clarity and peace.

Unfortunately, most of the students in K-12 education cannot say the same. According to Richard Louv, author of *Last Child in the Woods: Saving Our Children from Nature Deficit Disorder*, "Never before in human history, or prehistory, have children spent so little time in the natural world and that's where they used to spend most of their developing years. Now, instead, we are spending more and more time indoors in front of computers and doing anything but going outdoors and experiencing nature." Nature Deficit Disorder is a non-medical condition introduced by Louv in *Last Child in the Woods* that suggests that children who are not allowed to spend time outdoors have more cognitive and behavioral issues than their counterparts. As Louv stated in a June 2020 New York Times article, "As young people spend less of their lives in natural surroundings, their senses narrow, both physiologically and psychologically". This could lead children to have issues with stress and anxiety. Certainly, in these times of global pandemic, this condition was made worse by distancing restrictions, quarantines, and an emphasis on online learning. However, even before the pandemic, fewer and fewer children were allowed free roam outside due to parental concerns for safety. This is where the Engagement and Education programs of the Mississippi-Alabama Sea Grant can help rectify Nature Deficit Disorder and have a great influence on the quality of life for our children.

As we celebrate fifty years of the Mississippi-Alabama Sea Grant Consortium, it is a perfect time to recognize the impact our place-based education programs have had on thousands of students across the region. Place-based education seeks to immerse students in the local community, culture, experiences, and opportunities and use it as a foundation in the study of our coastal ecosystems. The goal is to develop educated and engaged citizens who will make better environmental decisions as adults. MASCg education programs are designed to help students learn to take care of our ecosystems by immersing them in nature. We get our students outside. The Dauphin Island Sea Lab Discovery Hall Program, The University of Southern Mississippi Marine Education Center, and The Mobile County Schools Environmental Studies Center have provided thousands of students the means to get out and experience nature as they should. We have provided a place for students to get out from behind their computers and smell fresh air and learn something. As one student at the Environmental Studies Center recently stated, "It is so peaceful out here, it smells so good. I am so glad we came and got to go outside." Our students are craving this interaction with nature and it is our job to provide it.

When I got stuck on this blog post, I simply got up from my desk and wandered outside and sat by the lake a minute. It was not long before thoughts started flowing again. Since the days of "be home when the street lights come on" are seemingly over, we must continue to be a place of refuge where our students can get outside and explore nature in a safe, fun, and educational manner. If not, as Louv advises, our children will suffer. In fact, our planet will suffer as well. How can our children learn to value our planet and care for local ecosystems if they have never experienced it? As philosopher Khalil Gibran tells us, "And forget not that the earth delights to feel your bare feet and the winds long to play with your hair". I say we indulge her and go outside.

<http://richardlouv.com/books/last-child/>

Dr. Tracy H. Jay
Academic Supervisor



Art Contest

The annual student art contest winners were announced during the fall semester.



Director's Choice
Meagan Peisinger
Barton Academy

K ~ 3rd Grade
Division



1st Place
Maddilyn Payne
Haskew Elementary



2nd Place
Ashlynn Haney
Austin Elementary

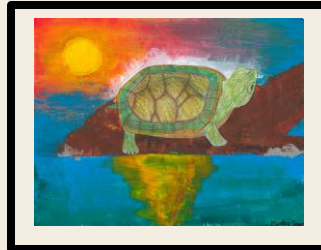


3rd Place
Sawyer Calderone
Austin Elementary

4th ~ 5th Grade
Division



1st Place
Jayda Bailey
Meadowlake Elementary



2nd Place
Marley Conner
Old Shell Rd Magnet

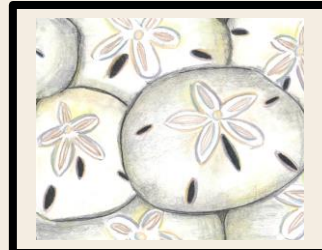


3rd Place
Aiva Agato
Old Shell Rd Magnet

6th ~ 8th Grade
Division



1st Place
Jackson Lindman
Barton Academy

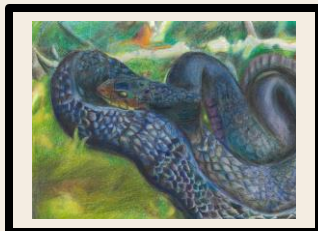


2nd Place
Annah Murray
Barton Academy

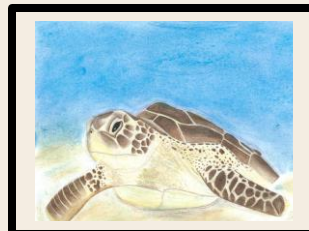


3rd Place
Juliahana Schlosser
Barton Academy

9th ~ 12th Grade
Division



1st Place
Trinity Purser
Bryant High



2nd Place
Jessica French
Barton Academy



3rd Place
Sarah Lewis
Murphy High

Recent Eagle Scout Projects



We would like to thank Joseph Smee and Wyatt Pauline for choosing the Environmental Center to carry out their Eagle Scout service projects. Joseph Smee replaced the perimeter fencing around the water bird and deer exhibits and replaced the fencing along our driveway and next to the owl exhibits. Wyatt Pauline replaced the outdoor entry cage going into the water bird cage. We appreciate both Eagle Scouts for the time and work it took to complete these projects.



Opossums, Opossums Everywhere



It is no secret that here at the ESC, one of our favorite animals is the opossum. They are the only marsupial in the United States and so worth our care.

The opossum is a cat-sized mammal that resembles a large rat, with its naked ears, long scaly tail, and silver-tipped fur. The face of the opossum is almost pure white, with four rows of whiskers, a little pink nose, and eyes like black buttons. The average adult is 24 to 26 inches long, including the tail, and usually weighs between 6 to 12 pounds. The opossum is a passive animal but can make himself look ferocious when it displays all 50 teeth, drools, and hisses. When it gets scared it will emit a noxious odor and act as if it is dead to ward off predators giving rise to the term “playing possum”.

Opossums are nocturnal animals, but they can often be seen during the day when their natural habitat has been destroyed, when they are searching for food, or when young and inexperienced youngsters are looking for food. They are opportunistic feeders and will eat anything they can including under bird feeders or pet food that has been left out.

The young of marsupials are born very tiny and prematurely. They then make their way to the mother’s pouch or marsupium where she will nurture them until they are weaned. Most infants are born between February and June and they can have 1-3 litters per year. Once they are weaned, they travel around on mom’s back learning the ropes, so to speak, before they venture out on their own.

Unfortunately, if mom is startled, she may bolt and leave a baby behind. In addition, they are very slow-moving animals making the mother’s and babies prone to predators and cars. As a result, we are inundated with baby opossums to finish raising. Here at the ESC, we will raise well over 100 babies in a given season. Recently, we put out that we were in dire need as the formula these babies use had gotten insanely expensive. We would like to formally give our sincere gratitude for the tremendous response. Our supporters are simply invaluable. Every dime donated went to the care of the animals here at the ESC.

Opossums are excellent at rodent and insect control, and being carrion eaters, they help keep roadways and neighborhoods clean. Opossums are also helpful in the fact their favorite food is ticks which help keep humans safe from tick born diseases. They do not carry rabies and offer no concerns for humans. We appreciate our opossums and hope you will as well. Thank you again for your support. We appreciate you!

2021 Patients

BIRDS

Common Name	Total # Rec'd
Bald Eagle	3
American Coot	1
American Crow	3
American Goldfinch	2
American Kestrel	3
American Robin	3
Barn Owl	2
Barn Swallow	2
Barred Owl	14
Black-bellied Plover	1
Black-bellied Whistling Duck	1
Blue Jay	11
Broad-winged Hawk	4
Brown Noddy	1
Brown Pelican	13
Brown Thrasher	12
Carolina Chickadee	2
Carolina Wren	18
Cattle Egret	2
Cedar Waxwing	4
Chimney Swift	25
Chuck-will's-widow	2
Common Loon	2
Common Yellowthroat	1
Cooper's Hawk	5
Double-crested Cormorant	1
Downy Woodpecker	2
Eastern Bluebird	6
Eastern Screech Owl	7
Great Blue Heron	4
Great Crested Flycatcher	1
Great Egret	1
Great Horned Owl	2
Greater White-fronted Goose	1
Herring Gull	2
House Finch	16
House Wren	1
Laughing Gull	20
Magnificent Frigatebird	1
Mallard	1
Mississippi Kite	2
Mourning Dove	14
Northern Cardinal	25

Common Name	Total # Rec'd
Northern Gannet	3
Northern Mockingbird	12
Osprey	2
Ovenbird	1
Pine Siskin	1
Prothonotary Warbler	2
Purple Gallinule	1
Red-bellied Woodpecker	2
Red-eyed Vireo	1
Red-headed Woodpecker	2
Red-tailed Hawk	4
Red-winged Blackbird	1
Ring-billed Gull	2
Royal Tern	6
Ruby-throated Hummingbird	9
Sanderling	1
Sandwich Tern	1
Sharp-shinned Hawk	2
Sooty Tern	1
Swallow-tailed Kite	1
White-winged Dove	1
Wild Turkey	1
Wood Duck	4
Wood Thrush	2
Worm-eating Warbler	1
Yellow-billed Cuckoo	1
Yellow-crowned Night Heron	1
Yellow-rumped Warbler	2
Non-Migratory Birds	15
Bird Total	318

MAMMALS

Common Name	Total # Rec'd
Armadillo	1
Cottontail Rabbit	20
Opossum	169
Mammal Total	190

REPTILES

Common Name	Total # Rec'd
Aquatic Turtles	14
Box Turtle	79
Reptile Total	93

GRAND TOTAL 601

There's an App for That

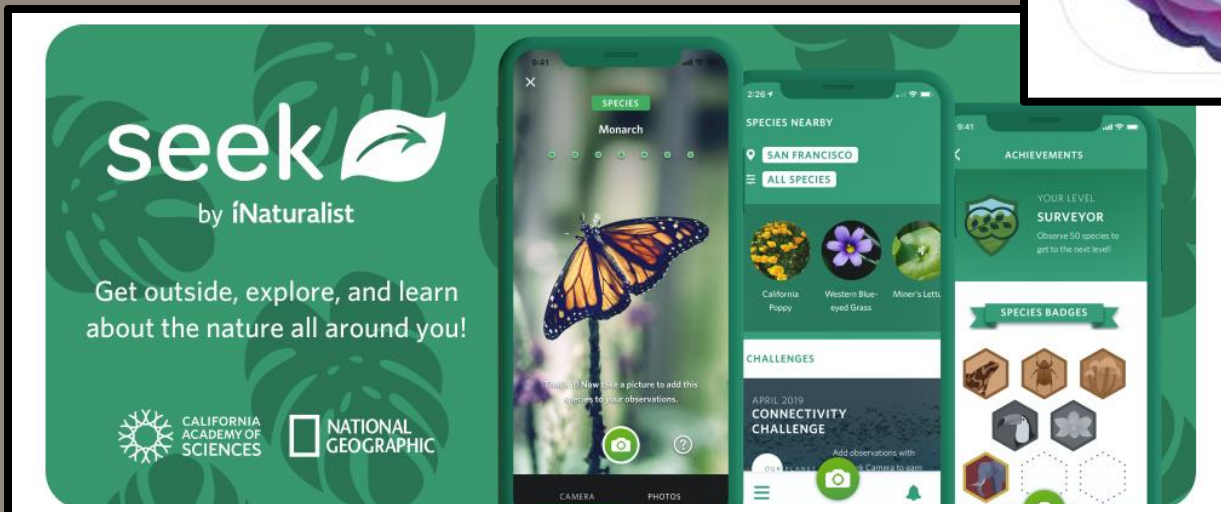
Have you ever worked in your yard or walked a trail and spotted a flower and have no idea what it is? What about a mushroom or a tree that piques your interest? Well, wonder no more because there is an app for that. Actually, there are two apps for that. I'm sure there are several apps you can use to help identify things in nature but the SEEK app and ALABAMA WILDFLOWERS app does a great job helping you with identification.

The Alabama Wildflowers app works much in the same way you would use a dichotomous key. Choose the plant type and then start selecting color, size, leaf arrangement, and so on until the choices are narrowed down to a single plant.

If you'd like a second opinion or just prefer one app over the other, then the Seek app is for you. It identifies plants, animals of all kind, and fungi. Simply click on the app to access your camera. Move your phone around until Seek makes a positive identification.

This is a great way to combine technology with nature but also to get young and old outdoors and be more observant and appreciative of the diversity Alabama has to offer.

So, go ahead and download those apps and start exploring.



Rabies Clinic



Benefiting the Environmental Studies Center's
wildlife rehabilitation program.

Saturday, June 4
1:00 – 5:00

Griggs Elementary School
6001 Three Notch Kroner Road

\$10.00 per rabies shot

\$5.00 for toenail trimming

For more information call: 221-5000



Contact us at 251-221-5000
www.mcpsesc.com

Come Visit Us...

Open Monday-Friday 8:00 am – 4:00 pm

Individual admission: \$3 per person

Group Tours: Reservations required – Call 251-221-5000 for pricing and availability



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
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Mobile, Alabama 36693