



# Environmental STUDIES CENTER

## *Wild* **Adventures**

FALL 2020



Mobile County  
PUBLIC SCHOOLS

### *Critter Corner* *Meet Luna*

Luna is a Barn Owl that came to the Environmental Studies Center in 2014. She had been hit by a car, had a broken wing, and head trauma from the impact. After her rehabilitation she was found to be unreleasable, so she became a part of our Raptor Road Show. She is also on display on our Bird of Prey Boardwalk at the Center.

The Barn Owl is easily identified with its heart shaped face. It is one of the most widespread of all land birds because it is found on all of the continents except for Antarctica. Its name is fitting since it commonly lives in barns and old buildings. The primary diet of the Barn Owl is mice and barns tend to have a lot of these. Farmers love the Barn Owl since they are great at controlling these rodents.

The grounds are open at the Center now, so come by and say “Hi” to Luna on the Bird of Prey Boardwalk.



# *Wildlife at the ESC During the Pandemic*

This has been a hard year for everyone, including the Environmental Studies Center. We were closed to the public for almost five months due to the pandemic. Our wildlife rehabilitation program, however, was still accepting injured and orphaned wildlife during this time. People were staying home and spending more time outside and because of this they were finding more injured animals. As a result, we accepted more wildlife than we normally take in. Unfortunately, we were not receiving as many donations since we were closed.

The Environmental Studies Center also houses permanent educational animals year-round. Whether the Center is open or closed they always require food, medical attention, and enrichment. Without admission fees coming in our budget has been hurting.

If you can help, we have a few ways to do that. We have included our Wildlife Wish List and Exhibit Animal Adoption form in this newsletter. The items on the Wish List include items that we use for both the rehabilitation program and the exhibit animals. If you buy things from the Wish List, you can drop them off on our front porch when we are open. Our hours are Monday through Friday, 8:00 am to 4:00 pm. The Center's grounds are open, but the building is closed to the public. If you would like to adopt one of our exhibit animals, that money goes directly to support them. Money is another great way to support the Center! We have also started an Amazon wish list. Be sure to check it out. This is a great way to shop without having to leave your house.

Stay safe and thank you so much for helping us help wildlife!



# 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  Skunk  Turkey Vulture  Screech Owl

Barred Owl  Great-Horned Owl  Great Blue Heron  Other: \_\_\_\_\_



# What's Honey?

Have you ever wondered what honey is and how it's made? It is a complicated and lengthy process for honey bees that begins with flowers. Nectar is produced by flowers that is used for food by many pollinators, including honey bees. Sucrose is the main sugar found in nectar (along with dozen other sugars) and must be converted to their simplest forms known as glucose and fructose. When a forager bee returns to the hive, a hive bee receives the nectar into her honey stomach. It's here that a chemical transformation takes place. She mixes the nectar with the enzyme *sucrase* breaking down sucrose into the two simpler sugars. She regurgitates the now mixed nectar forming a bubble at the mouthparts. Here a physical transformation begins to take place. Water is evaporated from the nectar due to fanning and the temperature in the hive. The process is repeated several times. Once the nectar begins to ripen it's deposited in a cell of the honeycomb where water continues to evaporate until it reaches 17%-19%. It's through this process that nectar becomes honey. At this point, honey is considered ripe and the bees will cap it with a layer of wax and will be used for food for the bee later. This is also when honey is harvested for human consumption. Honey can be stored indefinitely. We have several hives at the ESC in our apiary that are safe to view. We also have an indoor observation hive and bee museum. We sell all of our harvested honey to the public. Come see us to learn more about bees and honey.



# Reflections from the ESC....

The grounds are still. The turtles and fish are no longer patiently waiting for a treat from the little ones who are hoping to catch a glimpse of them from the pier. The trails are tranquil and showing signs that they have been undisturbed for a while. The resident animals are growing skittish without human interaction. There are no teachers here to educate and amuse nor excited declarations by the staff that “the busses are here!” There are no backpacks and lunches littering the pavilions. The classrooms are empty. Such is life at the Environmental Studies Center (ESC) during this time of the COVID-19 pandemic.

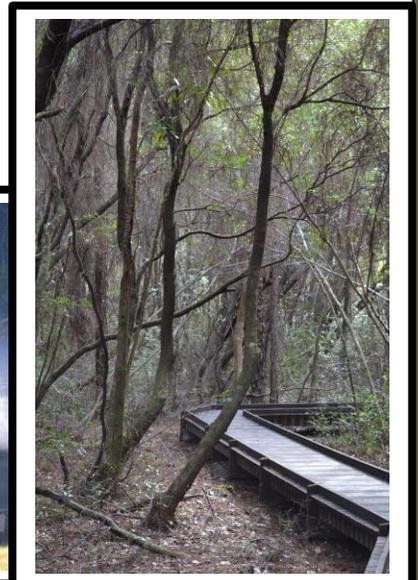
The ESC was officially closed to the public in March 2020 and the Superintendent of Mobile County Public Schools has ordered that there are to be no students at the ESC for the foreseeable future. This has left the ESC, as well as other educational and eco-tourism programs, in a very precarious position. How do we stay relevant in this time of closure? How do we run an educational facility with no one present to educate? How do we enrich virtual lessons without adding any burdens to the classroom teachers? How do we provide virtual content in a way that will still encourage students and the public to come back to visit in person? Perhaps the biggest question is *what’s next?*

The ESC is very grateful to have received additional funding to create our own video studio. Our teachers are hard at work researching current themes in environmental education as well as standards we can leverage to assist classroom teachers. We have also been allocated new technology that will allow us to interact with the classroom teachers virtually. We are working hard to provide quality content to post on our social media and website. We aim to enhance and enrich the required lessons for the teachers as well as be informative to the public. Our goal is to continue to be relevant until the time comes when we can open the doors and welcome children back.

The grounds are open, but the building is not, which limits access to restroom facilities and water fountains; therefore, guests should plan their visits accordingly. Social distancing and masks are currently required. We encourage the public to visit our 350 acres and enjoy the opportunity to connect with family, rest, and be present. There is plenty of space to social distance. Plenty of space to lose yourself and forget your troubles. The virtual classroom cannot replace the traditional classroom. By its very nature, it is not real. That is not to say the learning cannot be real. There is no substitute for being able to use all five senses in learning. There is no substitute for learning the secrets of the forest *in the forest.*

We look forward to the day when the halls and grounds are once again alive with the voices of students. They are genuinely missed.

*Dr. Tracy H. Jay*  
*Academic Supervisor*

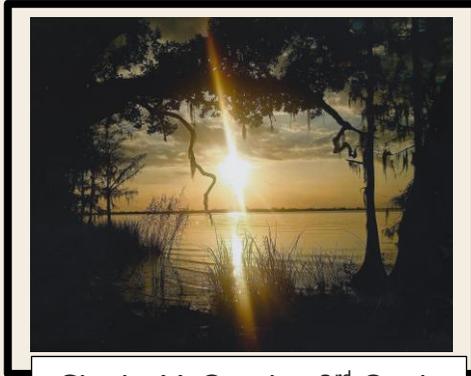


# 2020 Photography Contest

The annual student photography contest winners were announced during the spring semester. Winners are as follows:

## The Sky is the Limit

3<sup>rd</sup> – 5<sup>th</sup> Grade  
Division



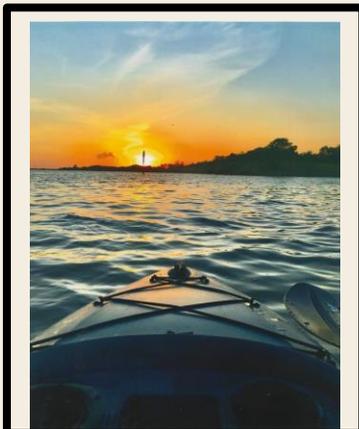
Charlie McGough – 3<sup>rd</sup> Grade  
Collier Elementary

## Ecosystems of Mobile

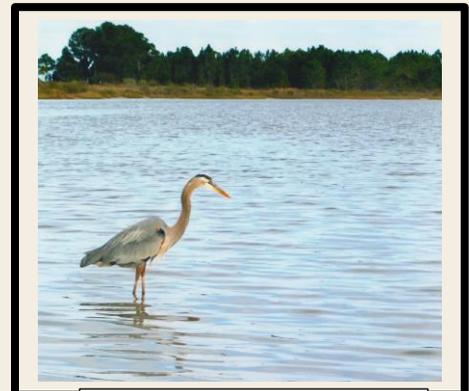


Madelyn Harbison – 5<sup>th</sup> Grade  
Haskew Elementary

6<sup>th</sup> – 8<sup>th</sup> Grade  
Division



Jason Davis – 7<sup>th</sup> Grade  
Denton Magnet School



Jason Davis – 7<sup>th</sup> Grade  
Denton Magnet School

9<sup>th</sup> – 12<sup>th</sup> Grade  
Division



Hailey Clifton – 12<sup>th</sup> Grade  
First Baptist Church of  
Satsuma (Homeschool)



Alyssa Reynolds – 12<sup>th</sup> Grade  
Baker High School

# *Recent Eagle Scout Projects*



We want to thank the following Boy Scouts for carrying out their Eagle Scout service projects at the Environmental Studies Center this year:

Earny Keene built a new shelter over the lower pond of our turtle habitat to provide shade and to help control the algae build up in the water.



Dow Terell built a new shelter over the upper pond of our turtle habitat to provide shade and to help control the algae build up in the water.

Spencer Purdy built a shelter with a concrete slab in Macy's pen. She is our educational pelican. The concrete slab is for Macy's pool and the shelter is to provide shade for her.

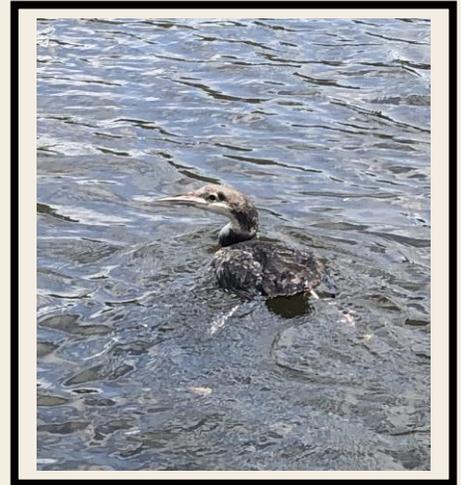


We are so thankful for Eagle Scout projects. They provide the Center with many things that we might not be able to afford to build or have the time to do. We would like to invite other Boy Scouts to keep the Center in mind when it is time for their Eagle Scout projects to be done.

# *Recent Patients*

## **Common Loon**

The Center received the common loon in March following a storm. It was found beached on Dauphin Island. Loons are not able to walk at all because of the placement of their legs on their body. They are built for diving. After an examination, it was found to have no injuries. It was kept for a couple of days for observation and then released.



## **Black Skimmer**

The black skimmer was found on the beach acting lethargic. It was brought to the Center in June. After examination, it was found to be very thin. Unfortunately, it passed away overnight.

## **Barred Owl**

The barred owl came to the Center in early June. It had been hit by a car and stunned. It had no physical injuries except for some head trauma. After a few days inside we were able to move it to our flight cage for a couple of weeks. We were able to release it in mid-June.



# *Recent Patients*



**Band-rumped Storm Petrel**



**Sooty Tern**

The sooty tern and band-rumped storm petrel came to the Center after Tropical Storm Cristobal hit in June. They were both exhausted and emaciated. These are two birds that we do not see very often at the Center because they spend most of their time at sea. They are pelagic birds that only come to land to nest. Unfortunately, neither bird survived the night at the Center. They were both in bad shape.



**Baby Opossums**

These opossum babies came to the Center when their mom was found dead in the road. She had been hit by a car. The babies were about two months old when they came to the Center and they were healthy. They are three months old in the picture and were released a couple of weeks after the picture was taken.

# *Meet Mrs. Calderone*

I am so excited to start my new journey as a resource teacher here at the Environmental Studies Center. During my time as a middle school science teacher I always loved visiting the ESC. It is like a dream come true to be working here now. Being surrounded by nature and getting to interact with the animals on a daily basis is any science teachers dream.

For the past 13 years I have been teaching both 7<sup>th</sup> and 8<sup>th</sup> grade science at Semmes Middle School. I graduated from the University of South Alabama in 2006 with a degree in Meteorology. I soon decided that I wanted to pursue a career in education and returned to USA to obtain a Masters in Secondary Science in 2011 and an Educational Specialist degree in Teacher Leadership in 2014. I also completed Educational Leadership certification in 2019. My role at the ESC will mainly be working with high school students in project SEA ICE (Student Enrichment Activities in Coastal Ecology). I can't wait to get my first group of students.

*Sincerely,*

*Sommer Calderone*



# We challenge your family to GO WILD!

## 30 DAYS OF OUTDOOR ACTIVITIES

# Rewilding Challenge

by OutdoorFamiliesOnline.com

Start a nature journal. Record your Rewilding Challenge experiences.	1	Go outside with your wildings and practice forest bathing. Just sit and listen.	2	Take off your shoes and feel the ground under your feet.	3	Lay down on the earth and focus all your energy on the sky above.	4	Take your meal outside.	5	Gather treasures in nature, like acorns, leaves, rocks, and build a mandala.	6	Lay on your belly and look down. Focus on the tiniest of details of the ground.	7
Write a nature haiku.	8	Learn new ways to get out. Ask a friend what their favorite outdoor activity is.	9	Combine stewardship & nature. Go on a litter clean-up walk.	10	Find a seed pod and examine it.	11	Lift up a rock and see what is living underneath.	12	Make a meal together and connect to your food.	13	Gather nature items from the ground and make a self-portrait.	14
Prepare a warm drink and enjoy it outside together.	15	Help a neighbor by performing an outdoor chore for them.	16	Make a nature weaving with sticks, string, and some nature treasures.	17	Go birding. See how many feathered friends you can count.	18	Go outside and notice how many different trees you can find and identify.	19	Discover a new outdoor place.	20	Make a bird feeder from simple home materials.	21
Make a sound map.	22	Get your hands dirty by doing some seed starting with soil and potting.	23	Grab your gear and go for a hike or nature walk.	24	Lay a blanket down and look up at the night sky.	25	Sit next to a tree and truly contemplate its aliveness.	26	Make a mud pie.	27	Climb a tree.	28
Grab some paper and crayons and make a tree or leaf rubbing.	29	In your nature journal, write an outdoor intention and watch it manifest!	30	<p>JOIN NEW REWILDING CHALLENGES MONTHLY AT:  <a href="https://www.facebook.com/groups/RewildingOutdoorFamilies">facebook.com/groups/RewildingOutdoorFamilies</a></p> <p>FIND MORE OUTDOOR ACTIVITIES AT:  <a href="http://OutdoorFamiliesOnline.com">OutdoorFamiliesOnline.com</a></p>									

**Outdoor Families**  
MAGAZINE



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**  
STUDIES CENTER

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**Sea Grant**  
Mississippi-Alabama