



## Calhoun County 2022 Environmental STEM Summer Program

Elementary age students and teens is a crucial stage in the development of a person's behavior, social awareness and selflessness. At school we learn values and behaviors that will stay with us throughout our adulthood and define who we are. In our summer camp we are trying to fill the education gap and void that occurs during the summer months. That is what makes it so important to spark an interest in caring for and protecting the environment while children are still young.

The objectives of teaching children environmental education is for them to make caring for nature part of their everyday lives, as opposed to just studying it out of a book. The idea behind our STEM summer camp is for young people to develop a firm mindset and use it to overcome today's environmental challenges with a proactive attitude and a strong commitment to our environment. Environmental education also has other positive effects on young people. We are seeing more young people care about the area in which we live in. They are aware of their surroundings and how many things they do can affect our environment.

The Calhoun County YMCA just completed our third, Environmental STEM Summer Program. What a huge success. Thank you to everyone involved and all that have continued to support our program. This summer most all of the COVID-19 restrictions were lifted. We had over 185 youth from Calhoun County that we served. We served children from 3 years to the age of 14. We continue to have an "open door" policy where we are able to offer program scholarships to the youth of Calhoun County that need it. We were able to provide 96 scholarships in June, 143 in July and in the month of August we were able to provide 129 scholarships. These scholarships were funded by the Matagorda Bay Mitigation Trust. Through the monies received from the Trust we are able to provide free transportation to all field trips, all of our environmental field trips are at no cost to the parents and help offset some of the fees in other field trips.

In our Environmental STEM summer camp, the kids are able to study so many activities hands on, where as if they were in school, they would be taught in a larger group lecture idea. The kids have dug like archeologists, they have seined in the local bays, and they have gone fishing in the bay and the local lakes. They have been able to study the difference between fresh water species and salt water plants, animals, habitats and along with so many other things that many do not think about. Our program has been able to continue to evolve from year to year. They continue to learn more things every year.

Some of the field trip highlights for this year was the Texas A&M Marine Science Institute, where the children were able to learn about rehabilitation of marine animals. They also had the chance to create their own orthopedic turtle limb. The kids could produce this out of so many different items. They could actual see if they worked or not. The kids were so lucky to be able to work with scientist who could walk them through the entire process of how to rehab an animal. Other field trips that made a huge impact on the kids was Kids, Cows and More Farm. This was a live working farm that allowed the kids to see farm life cycles. They learned about how important bees are to our environment. They had many hands-on activities for the kids and we took the entire camp on this field trip. We also went to Rockport Bay Education Center, this has a huge weather sphere in it the kids could actually watch and be walked through how hurricane Harvey came to life and come right over our area and made such a huge impact on our communities. Natural Bridge Caverns was also a new trip this year that the kids went on. During this trip the kids learned about underground



environments and how the aquifer systems work. They learned about when it rains the ground filters the water and the water goes underground and is held in pools. They learned about caves and caverns that are underground and different rock formations that grow underground also. These are just a few of the field trips the kids went on during this summer. We did all of the trips we have done in the past along with working with local marine agents to take the kids fishing, kayaking and so many other activities on the local bays. Many of these trips would not be possible without the support of the Trust.

In the STEM classroom the kids learned about fossils, dinosaurs, how energy works, they learned about inertia, and so many areas of science. The kids this last summer started to learn about drones and the use of drones. We are having the kids starting to use these drones to create their own videos. So many of the kids' love all of the hands on activities that they get to do in the classroom. We did things like phases of the moon, with Oreo cookies. We made star constellations with toothpicks and marshmallows. The more they can do hands on, we see the more they understand and grasp the understanding of what we are teaching them. Our certified teachers work directly with our kids in small groups to make sure what we are doing is impactful and meaningful.

We are anticipating our program to grow again this next summer. We did expand our license number this last summer, allowing additional kids. We see having to do the same thing this next summer. We are trying to avoid a waiting list like we have had in previous years. The Calhoun County YMCA along with the Calhoun County Extension office and Sea Grant were only able to provide this extensive program for our community through the Matagorda Bay Mitigation Trust Fund. We are looking forward to our 4<sup>th</sup> summer of STEM programs as we hope to continue this successful program and watch our students learn, grow and thrive in these unique educational experiences. Great appreciation to all involved!