

# LEOH Trip

## September 22, 2021

# The Meadows Center for Water and the Environment San Marcos, Texas





Trip Coordinator Ann and Precinct 3 bus driver Minh ensured we had a fun and safe adventure.



What is a LEOH trip without a Buc-ee's stop? This one was in Luling, en route to San Marcos, after a *really, really* early start to our day!



**The Meadows Center for Water and the Environment** was originally a hotel. The Meadows Foundation gave a generous donation to Texas State University for renovation. The Center was completed in 2012, and is part of the university.

The Center's mission: "Inspiring research, innovation and leadership that ensures clean, abundant water for the environment and all humanity". Ongoing research encompasses climate change, STEM education, water conservation, and watershed management and planning.

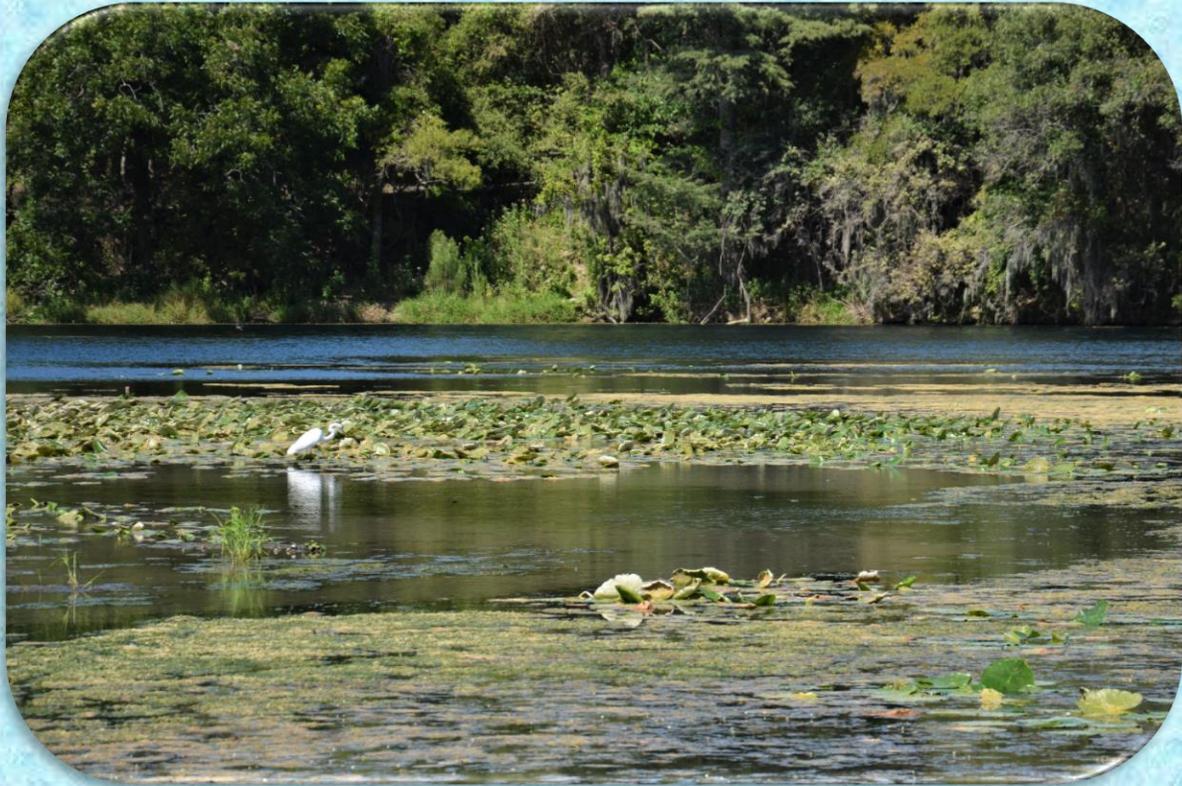
The San Marcos river emerges from the Edwards Aquifer. At the headwaters of the river, more than 200 artesian springs bubble up to form Spring Lake, which sits along the Balcones Fault zone. The river flows southward to join the Blanco River and then the Guadalupe River.

The aquifer is one of the most prolific artesian springs in the world. It serves the diverse agricultural, industrial, recreational, and residential needs of over 2 million users. There is growing concern about the increased demand for water, due to the rapid growth of San Marcos and nearby San Antonio.



Upon arriving at the Meadows Center, our guide led us on a nature walk.

The weather was perfect for the walk! We noted beautiful, large cypress trees, some over 400 years old, according to the guide. Sycamore trees were spectacular, as well, notably those with bone white branches that had shed their bark naturally.



We enjoyed seeing a variety of flora and fauna on our walk, such as this white egret, and this bloom, complete with bee, on a yellow pond lily. A couple of snakes sunning on the Wetlands Boardwalk were also spotted; however, they departed when they saw us coming.



This beaver dam was quite impressive. Naturally, we wanted to see a beaver, but our guide reminded us that beavers were nocturnal.





The lake and surrounding wetland area are habitat to many animal species, including the snapping turtle, big claw river shrimp, crawfish, spotted gar, opossum, beaver, bee, red-eared slider, dragonfly, and numerous birds, including a migratory osprey.

Exotic species are defined as plants/animals that live outside their natural geographic range. Most are accidentally introduced.

Invasive exotics are species that are out of control and can wreak havoc on wetlands.

Aquatic plants were introduced to the area by the commercial aquarium trade, with the goal of harvesting and selling the plants. As a result, about 25% of these wetland plant species are exotic. Hydrilla is one such example.

Nutria, tilapia, swans, and geese were introduced to Spring Lake, and have thrived.

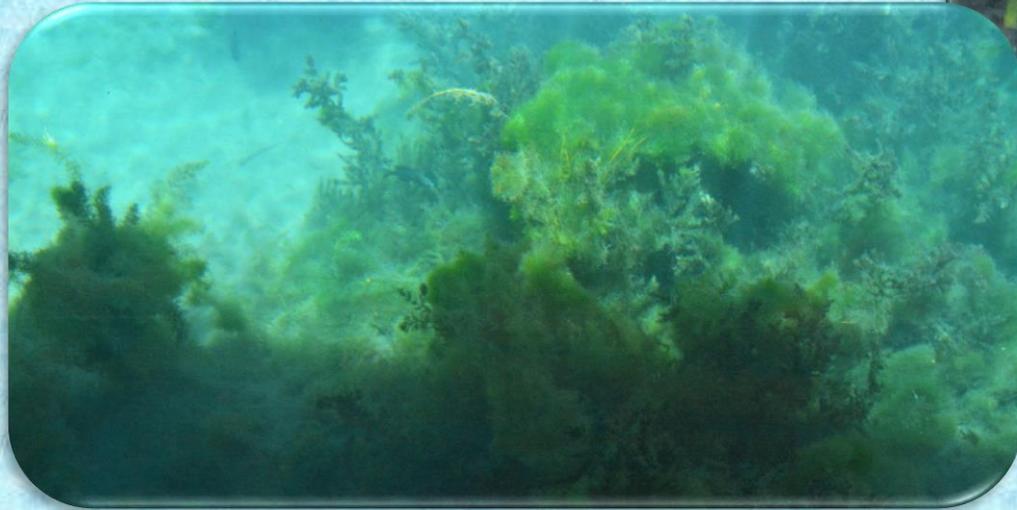
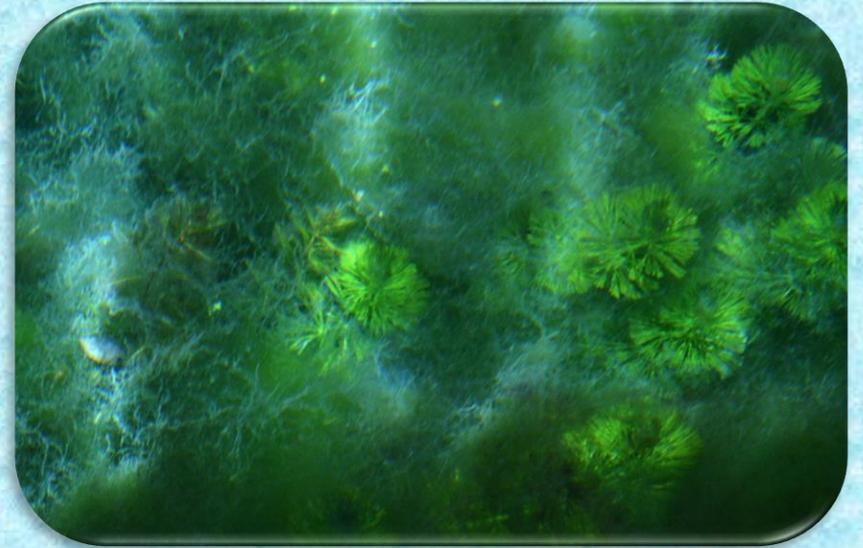
## *All aboard!*

Following our nature walk, we boarded a glass-bottom boat for a tour of Spring Lake.

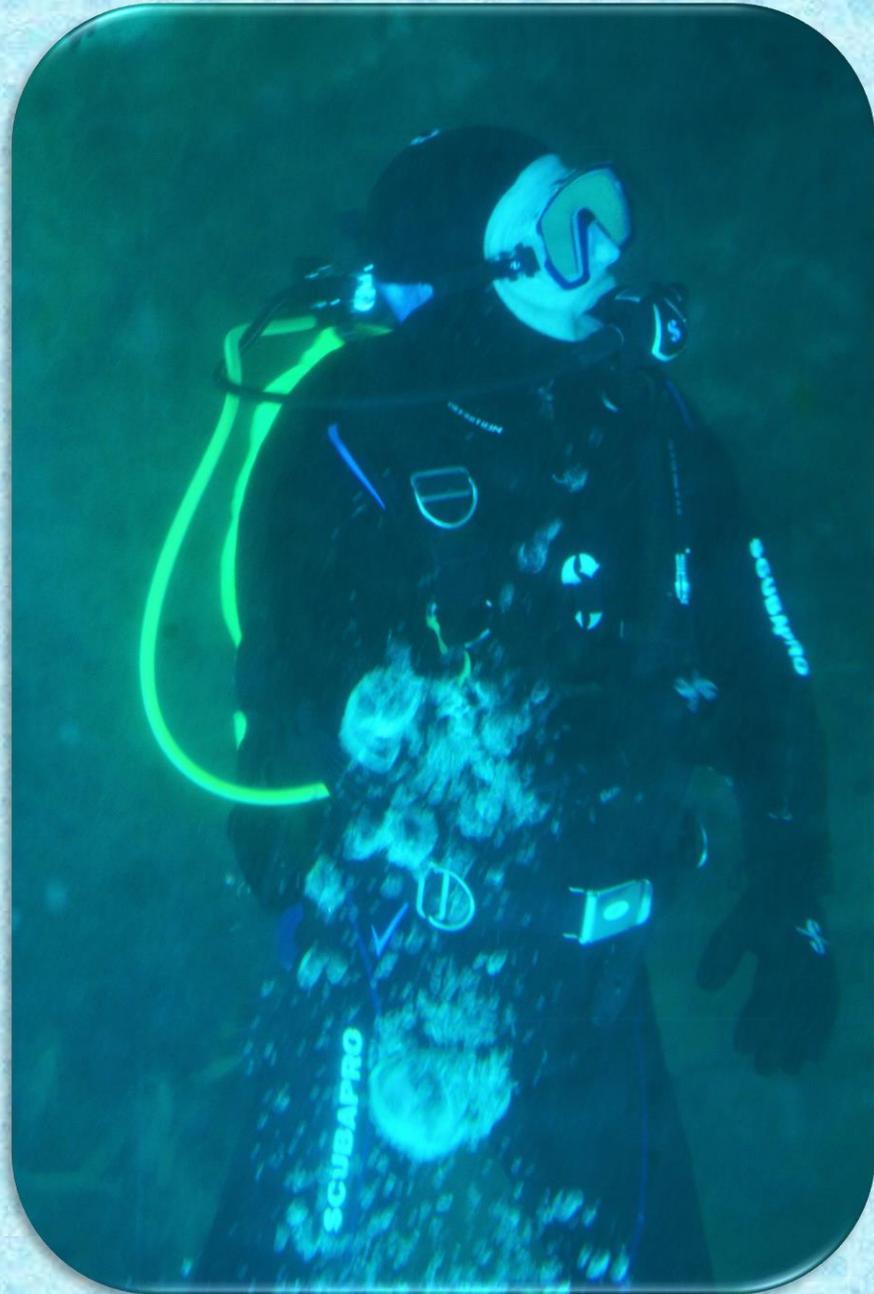
This was not like the former Aquarena Springs glass-bottom boat experience of many years ago. There were no “mermaids” and no swimming pigs!



The boat was operated by an electric motor; therefore, any noise and potential pollution from the boat were eliminated.



We enjoyed seeing a variety of plants, turtles, and fish through the glass bottom. Water clarity and light depended on the depth of the part of the lake we were touring. Bubbles coming from the lakebed indicated some of the over 200 springs.



A surprise creature appeared below the boat – a scuba diver! Recreational swimming and diving are not permitted in the lake. This diver is one of several authorized to scour the lake daily to remove invasive plants and any other items that do not belong in the lake.

The spring-fed lake is a pleasant and constant 72 degrees year-round.

Above, the floats indicate the lake area in which divers were currently working.

Following the boat tour, we made our way to the Meadows Center Aquarium and Discovery Hall, where we enjoyed live and interactive exhibits.



Stuck  
salamanders?  
Nope!

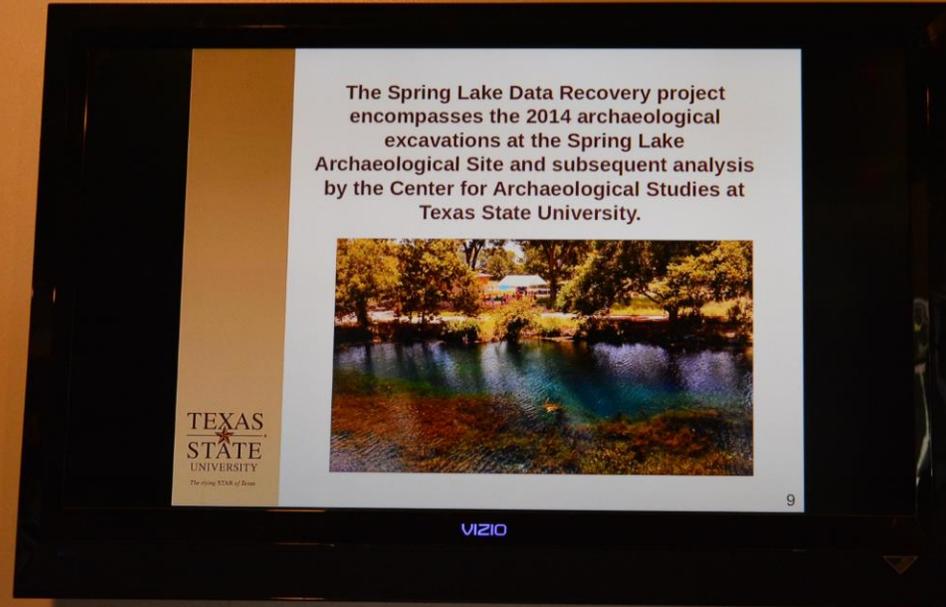


Alligator Gar



Texas River Cooter

# SPRING LAKE ARCHAEOLOGY



There were many interesting artifacts (some hundreds of years old) on display in Discovery Hall, as a result of the 2014 excavations. Above, note a large arrowhead; to the right, several decorative beads. The area is eligible for inclusion in the National Register of Historic Places and as a State Antiquities Landmark. To learn more, go to [cas.anthropology.txstate.edu](http://cas.anthropology.txstate.edu)

Our last activity at the Center was finding and identifying  
small water creatures in containers of lake water.

All were tiny, but numerous dragonfly nymphs and shrimp were found.

(All creatures were returned safely to the lake by our guide.)

After looking for water creatures, some members enjoyed nature and conversation.



Find out more about  
the Center at  
[meadowscenter.txstate.edu](http://meadowscenter.txstate.edu)

And find out more about  
the university at  
[txstate.edu](http://txstate.edu)



We enjoyed lunch at **Grins** restaurant, near the university.  
No, Donna is not dancing! She was “trapped” between the wall and table, so found another way to exit and return – through a handy “window” that led to the other part of the restaurant!  
Following lunch, we made our way back to Houston.

