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PRESIDENT’S NOTE

Greetings! Summer heat has arrived. This is the time of year when early risers can enjoy the cool mornings before the baking heat of the sun begins. The spring flowers are now going to seed. You can collect seeds from native plants to share with others. If you can identify the plant, place them into paper envelopes with the name and growing conditions noted. You can also collect an assortment of native plant seeds to share as just Pollinator Plant Seeds. This is one way to earn volunteer hours and help to spread native plants. Mr. Bob, from Bobs Trees suggested distributing native plants by throwing seeds out of the car window. This is like sharing your opinions in a large room. It’s a success if even one seed is planted.

We are now accepting Nominations for positions on the Board. Elections will be in October and the new board will take office in January. What would you like to do to support the SWLA Master Naturalists? Do you have a project you would like to lead? We are always open to suggestions. Reach out to any Committee or Board member. We are always looking for someone with great computer skills to be on the publicity and technology committees.

The 2024 workshops have concluded with eleven new Certified Master Naturalists. It was a great set of workshops. Thank you to everyone who participated in teaching or supporting the workshops. You are making a difference.

I look forward to seeing you at the next event. Please check Track it Forward and/or the Facebook Group Page for upcoming events. See you out there!

Barbara Morris

SLAMN President

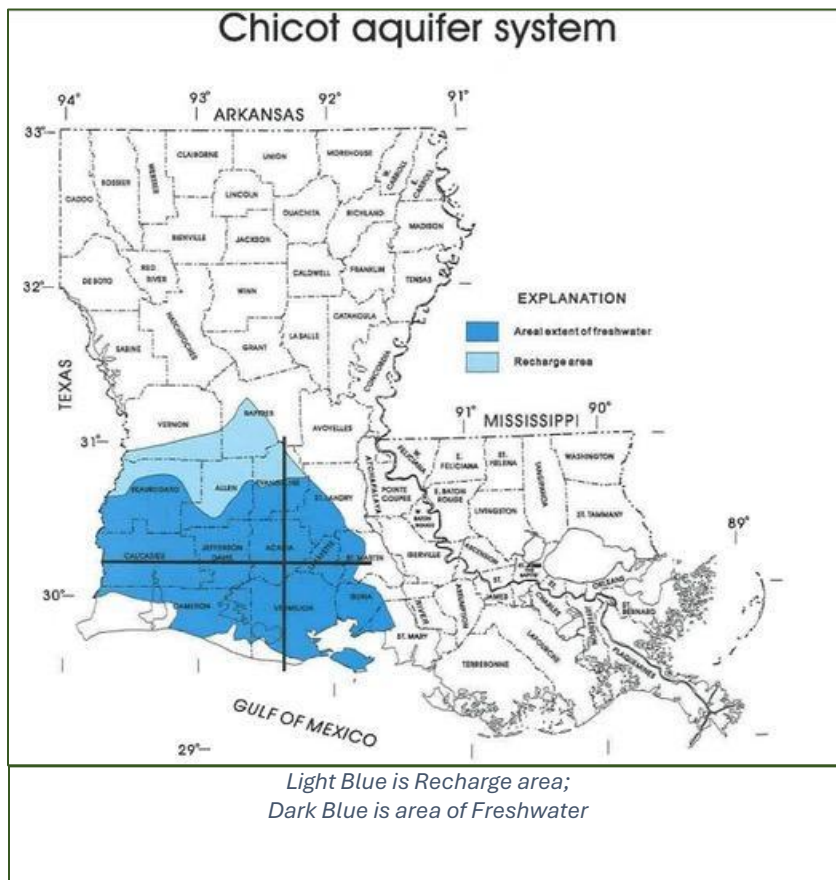
THE CHICOT AQUIFER: A SOURCE OF WATER AND WEALTH

by BURT TIETJE

Natural resources... our air, our land, our sunshine, our water, our mineral resources, form the basis of the natural capital from which all wealth is created in our economy and in our world. As humans recently evolved and burst onto the world scene, they quickly became the dominant species in the world and have used up natural resources at an unprecedented rate. Fresh water is one of the great resources in Southwest Louisiana that appears to be in seemingly unlimited supply but may ultimately prove to be a limit on economic expansion.

Abundant rainfall makes one feel that our fresh water is being constantly renewed, but with our flat topography, there is little chance for significant storage capacity for that rainfall. However, running under our feet is the Chicot Aquifer providing a massive supply of fresh water for not only our drinking water, but also fresh water for agriculture and industry.

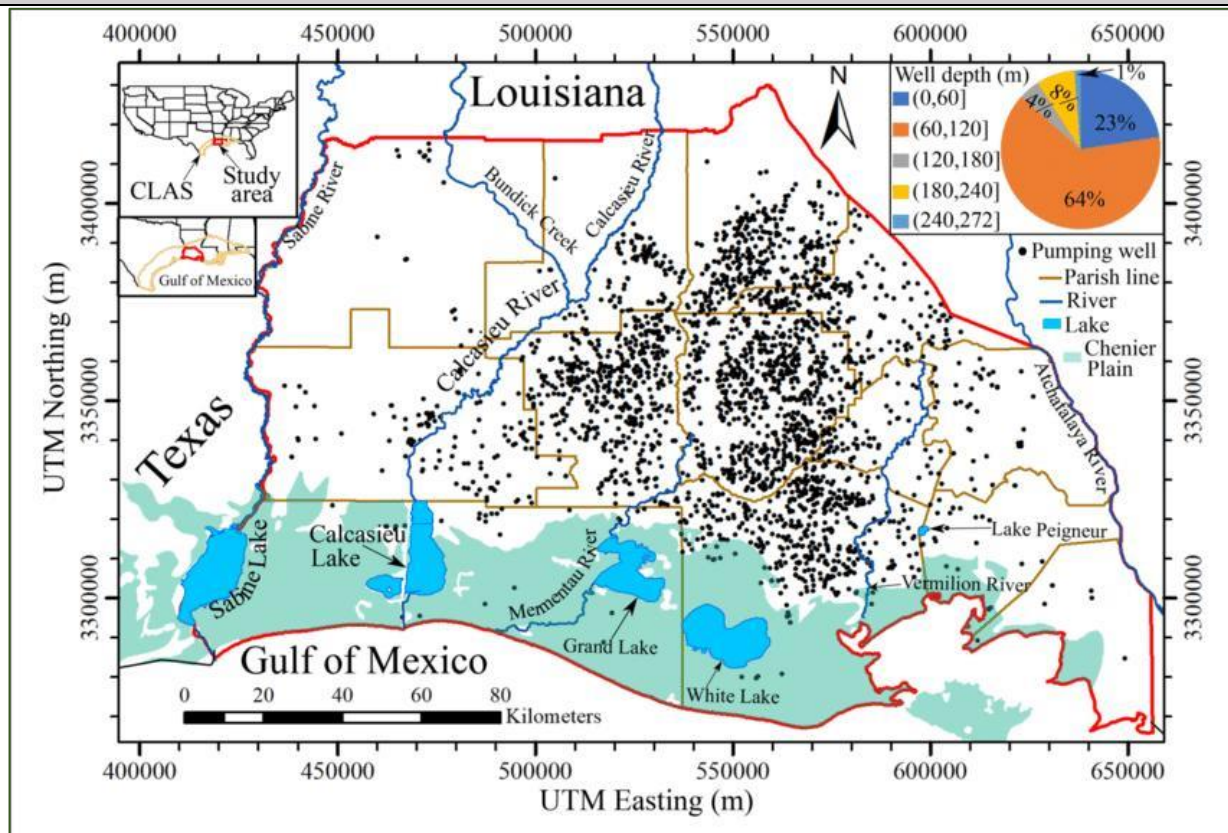
The Chicot Aquifer is a vast underground formation of sand and gravel hundreds of feet thick. It



covers all Southwest Louisiana from the Sabine River to the Atchafalaya Basin and extending from the Gulf of Mexico north to Rapides Parish, an area of some 9,000 square miles. This layer of porous sand and gravel holds and transports our clean water supply which is accessed by thousands of water wells across the region.

This layer of sand and fine gravel that is the aquifer sits atop a dense layer of clay at about 1,000 feet and is capped by another thick layer of clay. Our thin layer of topsoil (8-10") sits atop this upper layer of clay. Rain and surface water cannot penetrate this clay layer to reach the aquifer.

As we look north toward Rapides Parish this upper layer of clay disappears and allows surface water to seep into the aquifer and recharge the system. Though this sounds like a flowing underground river, water can actually take years or decades to work its way through the formation.



Our productive agricultural soil sits atop this upper level of clay. Rice and crawfish are the dominant crops of the region and both use huge volumes of water. Some 2300 wells tap into the aquifer producing from 400 to 600 million gallons a day. Agriculture accounts for 80-85% of the water lifted from the Chicot Aquifer.

Though some 300 million gallons are being returned through rain or natural drainage in the recharge zone, the difference between what is used, and the recharge rate is an unsustainable number. Under state law a farmer owns the water resources under his land and there are no limitations on what he may use. As a result, the water table has lowered over time.

Agricultural practices like laser leveling of fields and the development of varieties of rice that use less water have reduced water usage by some 20%, but much more will have to be done on the conservation of this vital natural resource in order to continue creating wealth from agriculture in the future.

Did you know...

Only 9% of plastic ever made has been recycled.

In the history of plastic, we have produced 8.3 billion metric tons of the stuff. 79% of that has gone into landfills or into the environment.

(<https://letstalkscience.ca/educational-resources/backgrounders/plastic-eating-bacteria-natures-recyclers>)

COASTAL PRAIRIE CONSERVANCY NEWS

June 07, 2024 – Houston, Texas –The Coastal Prairie Conservancy (CPC) is delighted to announce the successful completion of a critical conservation easement project on the historic Katy Prairie. Strategically located in Waller County, this property is adjacent to already conserved lands and will be part of the larger Katy Prairie Preserve, now comprised of nearly 19,000 acres. This additional conserved land is integral to CPC's long-term landscape conservation goals, contributing to the health of the region for present and future generations.

Mary Anne Piacentini, President and CEO of Coastal Prairie Conservancy, expressed, "We are pleased to have permanently preserved additional land as part of the Katy Prairie Preserve, ensuring its availability for cattle grazing and grassland bird habitat in perpetuity. In a region that is experiencing significant development pressure, it is deeply gratifying to know that this land will continue to support bobwhite quail, meadowlarks, and other species forever."

Piacentini added, "With this property connected to other protected lands, the Coastal Prairie Conservancy has successfully expanded a contiguous area dedicated to sustaining the coastal prairie ecosystem."

This project was funded through a generous donation from the landowner, as well as philanthropic grants from the Bass Pro Shops and Cabela's Outdoor Fund, the Galveston Bay Estuary Program –



Coastal prairie preservation ensures that critical grasslands are forever conserved for birds like the eastern meadowlark.

Conservation Assistance Program, Texas Farm and Ranch Lands Conservation Program, Texas Land Trust Council, and a competitive grant from the U.S. Fish and Wildlife Service and the National Fish and Wildlife Foundation ConocoPhillips SPIRIT of Conservation Program. The project also received financial assistance from the Natural Resources Conservation Service Agricultural Conservation Easement Program. As CPC celebrates the completion of this project, the organization is extremely grateful for these partnerships and looks forward to continued collaboration, emphasizing the collective effort needed to enhance and secure the long-term conservation of vital lands in southeast Texas.

For more information, visit www.coastalprairieconservancy.org.

ALLIGATORS: KING OF THE MARSH

by SHARON ELLENDER

Alligators are fascinating. They are one of the longest surviving creatures, predating dinosaurs. They prefer to live in marshlands, bayous, and rivers which makes Louisiana the Alligator capital of the world. The alligator population in Louisiana is approximately three million; one million in captivity and two million in the wild.



*Alligator seen at Pintail Drive in
Cameron Parish*

Alligators are not sociable; they are afraid of humans. Most of the time, when you see one, they will freeze and just watch you. They will continue to observe you until they determine if you are a threat to them or not. They are not prone to attack unless it is a mother

protecting her babies. Alligator attacks on humans are very rare, even near the coast. Gators are normally night feeders. They are carnivores and can eat other animals of just about any size because their jaws are designed for crushing. Some people mistake gators for crocodiles but the two look quite different from one another. The crocodile is lighter in color with black spots along the lower sides and their heads are much narrower and V-shaped. Croc's live in salt water, gators are primarily fresh to murky water reptiles. Gators will get in salt water when they are sick, because the salt water will kill the bacteria that's causing their illness.

Alligators mate in May or June. The males who are old enough to mate put on quite a show for the females. This is called "the water dance." They will lift their entire head out of the water and slap it continually to cause splashing in the water, the sound attracts future mates. He will also release scents from his musk glands that attracts the females. Then with his head lifted high out of the water he will bellow as loud and as long as he can, attracting the attention of females within hearing distance. As he bellows, the vibrations under water put off by his body cause a boiling effect on top of the water right behind his head. Female alligators in the area who see and hear him and who are old enough to mate will come to see him "show off." Male gators will mate with all the females in their pod that are old enough. Not only does this gain the attention of the females; but male gators also know what is going on and they show up too. A lot of times, there will be a fight to death with the males to see who gets all the females. Once the fight is over, the winner will revisit the dead alligator every day and rip him apart as his body decomposes and eat him.

Once the male has zeroed in on one female, the short-lived courtship will start. The rubbing and pressing of their snouts and backs begins. The male shows his strength to prove he is the best suitor. This courtship usually lasts several hours, while the act itself is short lived, lasting only about thirty seconds. Once females have mated several times, they build a nest of mud, sticks and plants. The nest is usually about three feet high and about six feet across. Alligators lay between twenty to ninety eggs. The hard eggs will then be watched over after covering them in the nest to protect them. Mothers incubate these eggs for about sixty-five days. Air temperature during the incubation time will determine the sex of the baby alligators. If the temperature is cool, between 82-86 degrees, they will be females. If the temperature is 82-90 degrees, they will be gender mixed. If the temperature is 90-94 degrees, they will be males.

Hatching begins in June and July. The babies begin to squeak and peep when they are ready to hatch. The mother hears them and digs out the one she hears. She then helps it out of the shell and brings it to the water with the other hatchlings. She is fiercely protective of her babies for the next year. Never attempt to touch baby gators, their mothers are not far away and will come to help them. Once hatched, the babies can call out to their mothers if they need them. She teaches them how to hide from predators along with what and how they should eat. She helps them protect themselves until the following mating season. The babies stay close to their mother. The older they get, the further they will start to venture away from her.



Mother Gator carrying Baby to water

Baby alligators will join a pod when they become juveniles and can stay there for about three years. Staying in the “group” or pod helps provide protection against other predators. Large fish, birds, raccoons and even other larger male alligators target them as prey. Mothers will help them until they average 4 feet in length. Once they reach that length they need only to worry about larger gators and humans. They will even eat other alligators from their own pod at this point. Alligators are considered mature enough to mate once they reach about 6 feet.

Females do not grow longer than 9-10 feet, while male gators can grow up to 14 feet or larger. You can estimate the size of a gator by averaging the inches from snout to behind the eyes. Each inch represents a foot on average. Alligators have long ridge like bumps along their back from behind their eyes to the end of their tails, these are called scutes (osteoderms). There are 15 rows of large plates per row and another 5 rows of 3 smaller plates near the posterior. They act as solar panels. They send messages to the brain that tells the body to circulate blood to warm the body so that they can move around.



Alligator Scutes

Alligators are born with 72 teeth but can go through 2000 teeth in a lifetime. They have a two-compartment stomach with a gizzard like a bird and then the rest of the stomach. They have the most acidic stomachs of all reptiles which is why they can digest bones, hair, hard shells etc. However, being reptiles, they cannot digest food when they are cold or survive above the ground when the temperatures drop below around 50 degrees. This is when they bury themselves in the mud (bromate) until the temperatures get warmer. They love to come out and sunbathe when it's warm, making them easier to spot on bright sun-shiny days.

Remember these creatures may seem slow and clumsy but they can run up to 20 MPH in short bursts. You should always use caution when around alligators in the wild. For your own safety, when observing these fascinating creatures, always keep your distance, and never feed, prod, tease or provoke them!

KAYAKS AT RIVERSIDE

JUST IMAGINE SWLA

The much-anticipated Kayak launch at Riverside will be installed next month, providing a new recreational opportunity for outdoor enthusiasts. We are planning a special event at the end of July to celebrate this exciting addition, so stay tuned to our social media channels for updates and details.



Riverside Park is located at 1701 Fitzenreiter Rd, Lake Charles, LA 70601.

Join us as we commemorate this enhancement to our community's outdoor amenities! Additionally, the National Park Service will be here for meetings and events as they wrap up their work in SWLA. We will announce those dates on Just Imagine SWLA social media pages.

UPCOMING EVENTS

General meeting Wednesday, July 10, 2024 at the LSU AgCenter, 7101 Gulf Hwy. Social at 5:30, meeting at 6:00. Our speaker will be L.J. Delcambre from Abbeville on Native Plants.

Nature in Focus at Tuten Park, Saturday August 17, 2024. The focus will be Bugs! An opportunity to get volunteer hours.

July 20-28 Annual *Mothmania* at Allen Acres during National Moth week. Dr. Allen will have 15 sheets with 20 watt mercury vapor lights for nightly and day time viewing on 26 acres of natural forests. The age range for the event is 0 to 120 years, so everyone is invited!

See https://clicks.aweber.com/y/ct/?l=XZ2Dpn&m=gJzBatuBDYy8NBn&b=ymaewbu5r9m.2_rXwHDVwA

Did you know...

Louisiana climate is ideal for breeding mushrooms, and the state is home to seven common mushroom varieties.

Some of the most sought-after mushrooms in Louisiana include chanterelle, chicken of the woods, oyster, shaggy mane, morel, puffball, and turkey tail mushrooms.

It's important to properly identify and cook mushrooms before consuming them to avoid gastrointestinal distress.

(<https://www.woodsmanreport.com/mushrooms-in-louisiana/>)