

The Brazos Bend Bugle

Brazos Bend State Park Volunteer Organization

Volume 32, Issue 1 March 2020



President's Message

by Wayne Wiegand

The Newsletter is back!



I would like to thank Lisa Sanders for recognizing the need to bring the Newsletter back and agreeing to be the principal editor.

The theme for the Newsletter is to highlight Volunteer activities. Please feel free to send Lisa pictures and information about your activities. Also, if anyone is interested in assisting Lisa, please reach out to her.

There are some exciting developments coming in 2020 for the Park. The most exciting being the remodel of the Nature

Center!

New exhibits and a re-siding of the building will give us a much needed fresh look. The plan calls for construction to be completed by Summer 2020.

The Nature Center remodel coming on the heels of the remodel of the **George Observatory** will certainly create a lot of "buzz" about the Park and will drive park visitation.

Thanks for all you do!

Wayne

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News You Can Use!

Lisa Sanders

Welcome New VIT's



There are some new faces in the BBSPVO! Be sure to extend a warm welcome to our Spring 2020 class of new Volunteers-in-Training. These VIT's are eager to learn from BBSPVO veterans as we conduct programs, guide hikes, aid in the woodyard, and greet guests in the Nature Center and Gift Shop. A hearty thanks to those who participated in the February training class with Montse Canedo.

Congratulations to the following new VIT's: Naomi Brown, Staci Talley, Shannon Westveer, Chris Davis, Kody Gloor- Crawford, Don Feeney, Zoe Rountree, Andrew Wagar, Scott Tufts, Dirlay (Di) Castillo, Robbie Condit, Angela Hundhausen, Valerie Bussell, Laurie Sweet, Jennifer Early, Kathy Relan, Aaron Hernandez and Ryan Chun.



Nature Center Planned for Remodel

The BBSPVO is excited about the major remodeling project of the Nature Center building in 2020. Renovation begins soon this Spring with re-siding of the building exterior. This building formerly served as a hunting cabin for the original land owners and has been a focal point for Park visitors for many years. This year, an exciting new look is planned for the interior including installation of new

exhibits. Volunteers were given a sneak peak of the new layout during conceptual design phases. Optimally the Gift Shop and Front Desk area will remain open during renovation to continue to service Park visitors. Stay tuned for more details from Park staff and BBSPVO meeting minutes as this exciting project gets underway very soon.



photo courtesy of Brazos Bend State Park website <http://www.brazosbend.org>



A Hydrology Study of...

Water Levels in the Brazos River

by Jan van Smirren

The geology, geomorphology, and ecosystems of BBSP are impacted by -more than anything else - the Brazos River. The river has had a significant impact on the historical development of the region, and of course today the river causes the greatest disruption of park activities when it floods.

Fortunately there is a water level recorder operated by the USGS on

the Brazos River near Rosharon.

This data (both current and historical dating back to 1965) can be accessed at the following link:

<https://waterdata.usgs.gov/nwis/uv?08116650>

The graph below shows the incidence of water levels exceeding the 40 ft Action Stage for 5-year periods between 1965 and 2019.



Table 1 source: <https://waterdata.usgs.gov/nwis/uv?08116650>

It is interesting to note that between 2010 and 2014, the action stage was only exceeded once; however, in the last 5 years it has been

exceeded 15 times. In the graph on the next page the raw water level data is presented over the last 20 years.

continued on next page

About the Author... Jan is an oceanographer with expertise in collecting and analyzing oceanographic data and predicting extremes. Jan has lived in Texas for 20 years and is English, not Dutch. A frequent visitor to the park since moving to Texas, Jan became a BBSPVO Volunteer after Hurricane Harvey.



Water Levels in the Brazos River

Water level at Rosharon Water Level Gauge (ft)



Table 2: Raw water level data is presented over the last 20 years.

Some of the key flooding events that have happened are labeled on the graph [above.] Interestingly there was no discernable influence from Hurricane Rita or Ike on river water levels.

I have also added a line representing the 1913 Flood when the Brazos and Colorado rivers became one.

What is interesting is that if you consider the extended period droughts from 2010 – 2015 and accept this period as anomalous, then there does seem to be a trend

of increasing frequency of the river reaching the Action Stage. It should be noted that the river has to rise 5 ft above this before it starts to have a big impact on the operation of the park.

So why is this happening?

Floodwaters at Brazos Bend State Park surround Park buildings.

Image Courtesy BBSP Facebook page, taken by Texas Parks & Wildlife staff



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Water Levels in the Brazos River

My thoughts are that while changing weather patterns and climate could have an impact, there are other anthropogenic factors that are much more likely to be responsible. In particular, the frenetic level of urbanization that has occurred on

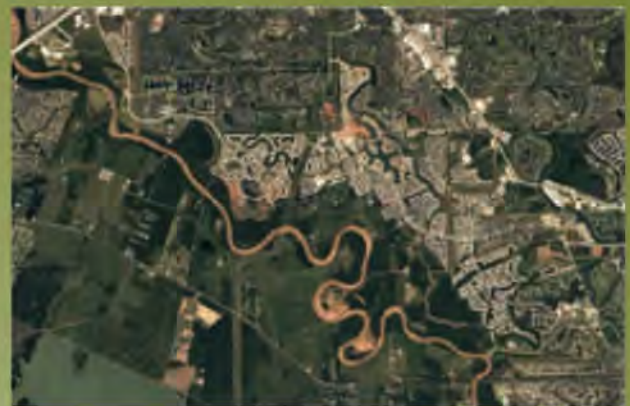
the Brazos River Flood plain and the knock-on requirement for flood management.

For example, the next two Landsat images show the urbanization of Sugarland between 1984 and 2012.

1984



2012



Landsat images of urbanization between 1984 and 2012. For reference, Smithers Lake is in the bottom left of the images. Images accessed by Author

With urban development the first thing that happens is the construction of levees which reduce the size of the flood plain. The second is construction of roads, car parks (parking lots) and buildings, which reduces the open ground which absorbs rainfall. As a result more water runs into catchment lakes which then empty into a network of drainage channels that rapidly release water into the river, with its

constricted flood plain. Much work has been done by building Flood Control (8) and Water Supply (3) Reservoirs on the Brazos River and its tributaries. These are operated by the US Army Corp of Engineers and Brazos River Authority, respectively. When these reservoirs reach their safely level water is released into the Brazos, which may result in flooding of areas not protected by levees, such as Brazos Bend Park.

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Water Levels in the Brazos River

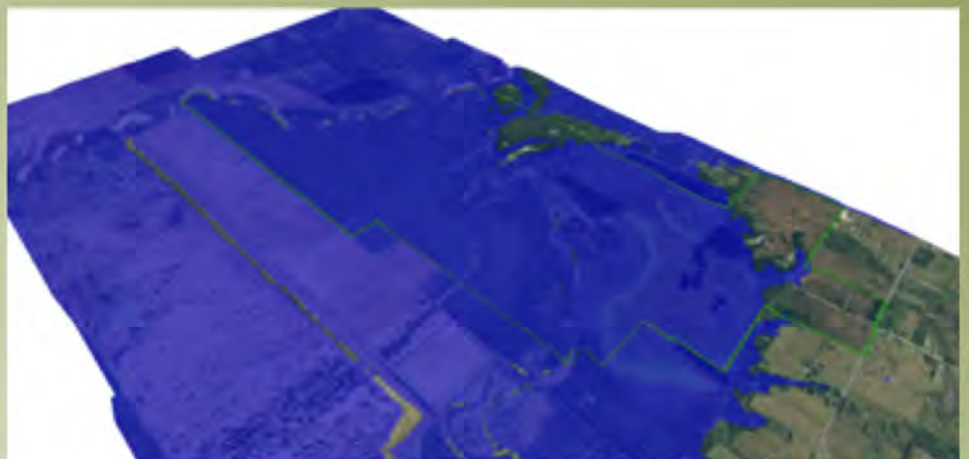


Image courtesy of the Brazos River Authority website <https://brazos.org/> accessed by Author

In summary, we can expect increasing frequency of the Brazos River reaching Action Stage, primarily due the urbanization and constriction of the Brazos River flood plain. The impact of climate change is less easy to predict. The image below shows the 1913 flood overlaid on a digital elevation model of the park. So even in the worst recorded flood, the Nature Center and Maintenance Yards would not have flooded. Interestingly, the highest naturally occurring area of the park is a Native American archeological site which also would not have flooded - so without all our science and technology they still had it all figured out!

There is an excellent detailed summary of the January 2019 Brazos River flooding by NOAA Senior Hydrologist & Meteorologist Katie Landry-Guyton of the National Weather Service. Her presentation is available on YouTube if the reader is interested.

1913 flood plain
superimposed over
elevation model of
BBSP. Image courtesy
of author.



The Spillway Bridge Repair Project



And Tribute to an Inspirational Park Host

by Jason Castle, Assistant Park Superintendent

The Spillway Bridge is a popular feature in Brazos Bend State Park. It is the major component connecting park visitors between 40 Acre Lake and Elm Lake. It's also a very popular spot for the number one resident, the American Alligator.

Time and weather have taken a toll on the condition of the

bridge and has been on the radar for an upgrade for a few years now. This was one of the top park projects for Lead Ranger Richard Taylor, if the logistics were able to be worked out. Richard was the spark to initiate this project, but the real key players came from the assistance of the volunteers.



Materials were generously funded by the **BBSPVO** and the scope of the project was organized by **Volunteer Camp Host, Steve Hyman**.

Additionally, Lynn Hyman, Leo and Rilla Arial, Mike and Marva Figliulo, Marylin Martin, Jim and Jaqueline North, Mike Day, Bob and Pam Nothnagel, Sheryl and Harold Travis, Marvin Pollock, Rick Neuhaus, park staff Jeff Orsak, JT Kalina, Robert Gamble, Daniel Lleverino, Bobby Mitchell and Richard Taylor played major roles through the completion of this bridge.

The Spillway Bridge Repair Project And Tribute to an Inspirational Park Host



To no surprise, the expected timeframe for this project was three months, but with the talents of the Volunteer Maintenance team, Volunteer Hosts and paid park staff, this project was completed in about a month.



The hard-working crew is all smiles as they stand on the new Spillway Bridge. The project was completed in record time, a few short but intense weeks of work.



The Spillway Bridge Repair Project And Tribute to an Inspirational Park Host



The pride and joy from this beautiful new bridge was also followed by unspeakable grief. On Saturday February 8th, tragedy struck home. Volunteer Host Steve Hyman was involved in a fatal car accident not too far from the park. His loss will be tough to overcome, but his memory will forever live on in his passion and love for the park.

There have been so many talented people involved with Brazos Bend State Park since the beginning. When we look at projects like the Spillway Bridge we'll always remember the people who contributed. These projects are the results from amazing people who love the park and leave their footprints for the future generations to enjoy.



In Memory of Steve Hyman, Volunteer Park Host
Brazos Bend State Park



January Guided Bird Hike

by Janey Woodley

Snowy Egret, photo by Janey Woodley

I led a birding hike on Sunday, 1/26/20. It was a dreary day but I had 13 intrepid attendees: 11 adults and 2 kids. That's the most I've ever had on a birding hike!

The kids were more experienced birders than most of the adults. Two of the visitors

were new birders and very enthusiastic. As usual, the Vermillion Flycatcher at Elm Lake was the star of the show.

One of the visitors had a new camera. Some of his photos are recorded here. Photo credits go to park visitor Rick Corrigan.



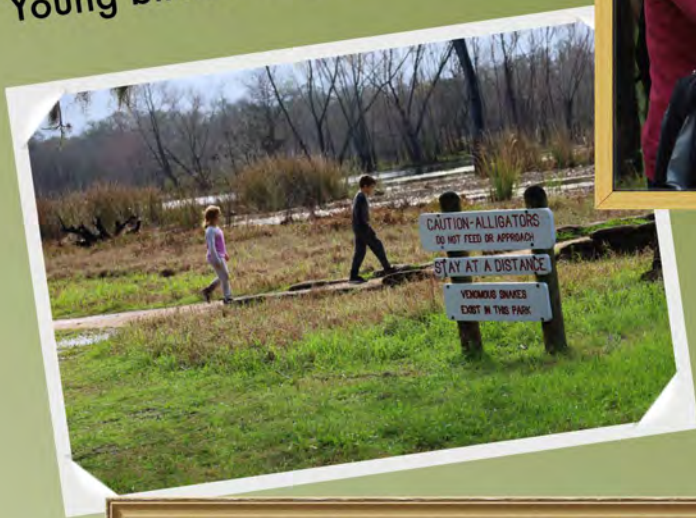
Birding enthusiasts join Volunteer Janey Woodley on a chilly January morning. Photo credit to Rick Corrigan

January Guided Bird Hike



Snowy Egret, photo by Janey Woodley

Young birders enjoying the trail



Excitement builds as patience pays off with a sighting of a Vermillion Flycatcher at Elm Lake



Another beautiful winter day at the Park

Photos credit to Rick Corrigan

January Guided Bird Hike

by Janey Woodley



Vermillion Flycatcher, Elm Lake, photo by Janey Woodley

The Vermillion Flycatchers that come to our area are only here in winter. In spring they will migrate to west Texas and Southern New Mexico to breed. Many live year-round in Mexico and Central America.

Cornell University's *All About Birds* Website has great info on this flycatcher and other birds at <https://www.allaboutbirds.org/news/>

An excerpt from All About Birds, Cornell University website:

BASIC DESCRIPTION

*A spectacular and distinctive flycatcher, the bright red **Vermilion Flycatcher** inhabits riparian areas and scrub in the southwestern United States and southward. It perches conspicuously, making periodic flights to nab insect prey.*

Cool Fact

The male Vermilion Flycatcher often seeks to initiate copulation by delivering a butterfly or other showy insect to the female.

Tall Tails, Pioneer Heroes, and Other Texas Legends

Editor's Comment

There is a vast amount of hidden talent among the BBSPVO Volunteer team. Every time I come to the Park I learn new things about the people who share a passion for the outdoors and our State Parks. There are historians and actors out there, colorful characters and gifted storytellers who wear the BBSPVO patch with

pride. Each edition I hope to share your knowledge of Texas Lore, Texian history, and intriguing legends - as a good yarn about Tall Texans is always a treat around a campfire. And who knows? Sometimes fact is stranger than fiction, and we all know everything is bigger in Texas.



vector graphics.com, Pinterest

Texas was a troubled land in early March of 1836. The Alamo had fallen, and Mexican General Santa Anna had declared that his army would burn and destroy every farm, ranch, and town they came across. Upon hearing this, all but a few of the Anglo settlers panicked, packed up, and lit out toward the east. General Sam Houston's army also ran, with the Mexican army

The Legend of Capitan Gancho

by Mike Fisher

close behind. When Santa Anna arrived at the Brazos River, he decided he would have a better chance of catching the Texians if he had a smaller army. So, he took only his best soldiers with him, and he left the remainder on the banks of the Brazos to await his triumphant return after he defeated Houston's army and captured the provisional Texas government.

continued next page

The Legend of Capitan Gancho *continued*

One of the soldiers left behind was an officer, Capitan Jaime Gancho. Capitan Gancho was a rather ordinary officer who had a special fondness for wine. One day in April, Capitan Gancho decided to go fishing in Big Creek to try to catch some fresh fish to eat. It was a rare warm day for that rather cold Spring, so as he fished, he removed his boots and soaked his feet in the water. As time passed on that pleasant day, Capitan Gancho didn't catch many fish, and he became a little frustrated. He thought his luck might change if he waded into the creek where he imagined the fish lurked.

Now, anyone familiar with these parts knows you don't go wading in Big Creek. Capitan Gancho's luck changed, all right - for the worse. He did not see the big alligator in the creek's murky waters and stepped on it. Naturally, the gator didn't take too kindly to that and bit Capitan Gancho's left leg off at the knee.

The gator swam away with his lower leg, and Capitan Gancho made his way to the bank of the creek, hoping that someone could get him to an army surgeon to patch him up.

Some of the soldiers under his command found him and took him to the regimental surgeon, Pedro Ollo, who was also a curandero. Anyone familiar with the culture of the southwest knows that a curandero is a healer and is able to work some magic. Some have stronger magic than others, and Pedro Ollo was pretty average.

The curandero went to work and gave Capitan Gancho some wine to help kill the pain, but Capitan Gancho, a man who liked his wine, kept demanding more and more. The curandero didn't have very much wine, but he did his best and fashioned a peg leg for Capitan Gancho - who still wanted more wine - and sent him on his way.

continued next page



The Legend of Capitan Gancho *continued*

Although the curandero did all he could, Capitan Gancho's wound became infected, and before long everyone knew Capitan Gancho would soon go to meet his maker.

Appreciating that, Capitan Gancho talked to three of his soldiers and asked them to bury him in a seated position with a jug of wine by his side. He didn't want to go thirsty in the afterlife, you see.

Sure enough, Capitan Gancho soon went to meet his maker, and per his request the three soldiers buried him in a seated position with his peg leg in his lap. They decided they could use the wine more than he could, though, so they requisitioned it. They passed the jug around, which came from Rooster Vineyards in Laredo, and celebrated their good fortune in having such a wine for the first time since they left Mexico.

Anyone who knows anything about the military knows that the army runs on paper, and the three soldiers had not filled out the proper forms - in triplicate, naturally - to requisition the wine for themselves. Because of that,

the curandero, who believed strongly in doing things the army way, used a small bell to lay a curse on the three soldiers. And now, sometimes on a dark and moonless night, you might hear the bell and see three ghostly lights, followed by a fourth ghostly light moving around among the trees along the banks of Big Creek, the Brazos River, and the lakes of Brazos Bend. Those lights would be the spirits of the three soldiers carrying the requisitioned bottle of wine, followed by the spirit of Capitan Gancho, trying to get his wine back from them.

As for the alligator who took Capitan Gancho's leg, he lived a long and happy alligator life, but he too had to come to an end eventually. Because the curandero had a sense of humor, on really, really dark nights, you might see yet another ghostly light following the first four. That's the spirit of the alligator, trailing behind the spirit of Capitan Gancho, in hopes of taking Capitan Gancho's right leg. Because, you see, Capitans' legs taste like chicken.



About the Author



Mike Fisher

Mike Fisher spent nearly thirty-five years programming computers for NASA at Johnson Space Center, first on the Mission Operations Computer that the ground-based flight controllers use, then on the Backup Flight System that would control the space shuttle's flight in case of a failure of the primary flight software system. He retired at the end of the space shuttle program in 2011. Finding himself with a need to do something, he hit upon volunteering at Brazos Bend and went through training starting in February, 2012.

He has bachelor's and master's degrees in physics, with a B.S. from Texas A&M and an M.S. from Baylor. He grew up in Rising Star, Texas (just head west on FM 1462 until you hit Highway 36, turn right, and go about 320 miles. You'll see it) where he played on the basketball team (he's not very good) the tennis team (he's not very good) and in the marching and stage bands. He continues to perform occasionally by acting in plays and has appeared in a couple of movies, mostly as a face in the crowd, but he did have a substantial speaking role in a satire of teenage slasher movies called *Fun With Hackley - Axe Murderer*. It's available for viewing on YouTube. He also enjoys photography and has won a couple of minor awards.



Remembering Park History: April 27, 1984

by Marianne Feeney

With the original opening being delayed by Hurricane Alicia, Brazos Bend State Park welcomed its first visitors on April 27, 1984. The entry fee was \$2 a car. In the first four days 17,000 persons visited the Park. Five months later that number rose to over 300,000.

Park Superintendent, Laird Fowler, was quoted in a newspaper article as "being pleased with the first season." He added "only three snake bites were reported along with minor traffic accidents but no serious problems."



Opening Day at Brazos Bend State Park

Photo courtesy of Craig Van Baarle, first assistant manager of the Park

The first brochure for the Park in 1984. There were eleven miles of trails.



Opening Day at Brazos Bend State Park

The Park

Less than 50 miles from downtown Houston, Brazos Bend State Park has a quiet natural setting and a variety and abundance of wildlife that contribute to its proximity to the nation's fifth largest city. Located on the southeast border of Fort Bend County on the east Texas-Texas Angle-enclosure, the park was purchased by the state in 1976-77 and covers 6,897 acres with an eastern boundary of 2.2 miles fronting on the Brazos River.

The park may be reached by traveling approximately 20 miles southeast of Richmond on Farm Road 761, or by traveling south from Houston on State Highway 288 to Baytown, then west on Farm Road 1402.

History

Archaeological materials show that prehistoric peoples visited this area, possibly as early as 400 B.C. In early historical times, the Capote band of the Karankawa Indians roamed between the mouth of the Brazos River and Galveston Bay and may have traveled inland as far as Brazos Bend.

In the early 19th century, this area of Texas was the site of Stephen F. Austin's first colonial land grant from Mexico, and present parkland was included in a grant to Moses Austin and a partner named William Barrett in 1827. Most of the land grant was sold shortly after the Texas Revolution, and records show that in 1863 part of the park and 1,400 acres of river frontage were in the hands of various heirs who lived in Spanish. In character, the Brazos River area was one of the principal routes of commerce, and it may be that the heirs were here used the area for one of their riverbank landings.

In recent times the land on which the park is located was used for cattle grazing, game harvesting and as a private hunting preserve.

Natural Features

Brazos Bend is on the comparatively flat Texas Gulf Coastal Plain and falls within the Coastal



Prairie Vegetational Region. Most of the park land is in the Brazos River floodplain but there are areas of flat uplands typical of the coastal prairie.

The Brazos River floodplain and portions of Big Creek support a mixed hardwood vegetation community which includes water oak, pine and elm. Blumard oak, live oak and numerous species of shrubs and vines. Gallery forests along the river and creek banks and bays are dominated by sweet gum, cypress and black willow. The soil moisture environment of the Brazos River is characterized by magnificent moss forested and vine draped live oak woodlands. The flat uplands support tall grass prairie and the numerous swales and depressions become prairie wetlands during periods of heavy rainfall.

In addition to the Brazos River, the park's major watercourse is Big Creek which meanders

diagonally across the park and is associated with sloughs, bays and small marshes and oxbow lakes. Two of three meanders have natural oxbow lakes and three other oxbow lakes have been caused by channelization of Big Creek. Other lakes have been created by levees on Plant Lake is a natural shallow freshwater marsh which was enlarged by levee construction.

Flora is diverse and abundant. The white-tailed deer is the largest of 11 mammal species mammals which also include bobcats, raccoons, opossums, gray foxes and several species of weasels as well as fox, traps and Russian hares. There are one species of reptiles and amphibians have been recorded, and the smaller turtles, frogs, snakes and lizards are overabundant in general except by the American alligator which is present in large numbers in some areas of the park. Birds of life species have been reported and the aquatic habitat is a haven for migratory waterfowl and variety of shorebirds and wading birds.

The first brochure for the Park in 1984. There were eleven miles of trails.

Editor's Note: Marianne is working on preserving precious BBSPVO documents with assistance from veteran members. The BBSPVO began in 1989 with Ranger Dennis Jones. BBSPVO Volunteer Anna Dell Williamson and husband Bruce were in the very first Volunteer Training class held in April of 1989. There were 2 classes that year, and Volunteer Beth Debenport and husband Ken were in the September 1989 class. Anna Dell and Beth continue to visit the Park as they are able and are now Emeritus members.

Chilly 'Gators and a Warm Den

by Rick Dashnau

This morning [January 19th] I found the mother alligator in her spot in 40 Acre lake. I could see a cloud of silt suspended in the water around her. Over the previous weeks, I'd guessed that she was digging in that spot – either making a hole, or a den. When I looked at her position near the bank, I realized that I'd been right. She had been digging a burrow! In pictures shared here, it's obvious that her body is in a burrow *under* the bank, with her head coming out of the opening.



©2020 Richard Dashnau

Rick on the trail, doing what he does best. Rick is often found hiking and observing wildlife along the lake trails. As a highly respected and veteran Volunteer, he is often surrounded by Park visitors eager to hear his observations of the day. Photo by Janey Woodley

I was able to find a few of the babies hidden in the plants just behind her head [picture 4.]

picture 4 - hatchlings well hidden near a mother alligator. Can you spot them?



©2020 Richard Dashnau

Chilly 'Gators and a Warm Den

by Rick Dashnau

A closer look shows that her snout has mud smeared on it, another indication that she'd been digging [picture 5.] Alligators dig burrows with their jaws and probably widen them with the claws on their feet.

About an hour later the baby alligators started showing themselves. I left mom for a while as I searched for other animals such as otters. I did catch a brief glimpse of one crossing the Spillway Trail East of the bridge.



picture 5 - mud evidence on mother's head indicates recent burrowing

When I returned after an hour (about 10am) the baby alligators had started getting out of the water, including this one below on mom's head. By 10:35am there was a pile of baby alligators on the bank [see next page.] From this time, I remained near them and would point them out to visitors passing by. The air was still cool (high 40's F) and I would catch visitors' attention by asking if they were looking for gators. Then I'd tell them that I could see at **least** 15.



picture 7
hatchling seen
on mama's head

Chilly 'Gators and a Warm Den

by Rick Dashnau

Meanwhile, where was mom? Mother alligator was sometimes visible, with her head at the surface as before, but then she'd submerge... and move back into her burrow. So, sometimes she'd be visible when visitors came by, and sometimes she wasn't.

Rick captures a close up photo of several hatchling alligators huddled together in a group along the bank.

Mother alligator remains nearby, occasionally submerged in the water beneath them. Rick determines that mama is burrowing a den and keeps a close eye, monitoring her dives and explaining her actions to visitors as they pass by.



The mother alligator resurfaces from her burrow along the bank. The hatchlings are also seen at the water's edge. Rick has the opportunity to show hikers on the trail and explain the mother's behavior and process of burrowing.

Chilly 'Gators and a Warm Den

by Rick Dashnau

With all of this going on I spent a lot of time doing running commentary, so I didn't get a chance to take many pictures. But I was alone one of the times she submerged and I was able to mark the time: 11:25 am. She moved out of sight underwater. So, there was this pile of baby alligators on the bank, apparently unprotected, and with no mom gator in sight. She was just a foot or two away, but UNDER them. About 25 minutes later (11:50 am) mom's snout appeared but she did NOT surface. She remained under water, and went back into the burrow. After 14 more minutes, mom finally surfaced. She'd been under for 40 minutes!



Mother alligator goes back under water while hatchlings remain on the bank. Volunteer Rick Dashnau keeps close tabs on the mother's behavior and length of time she stays submerged each dive.



After that, when someone asked how long an alligator could stay under water, I could point to the mom alligator (or, where I knew she was) and say "I know **that** one can do it for 40 minutes."

I had to leave at about 12:30pm to help with the pond life program. I returned at about 3 pm, and spent another 30 minutes with the group of gators. The babies were still there, and I lost count at 20, since they were tangled together and moving around. But, mother was still nearby. That was my day, but it's not the end of the story.

Chilly 'Gators and a Warm Den

by Rick Dashnau

There was a lot going on here, some of which I was able to share with the park visitors. First, there was the burrow. Alligators are burrowing animals (although they don't all burrow all the time). Whatever that hole is, at this time, it's long enough to hide most of a six-foot-long alligator. From what I've read alligator dens have a common design. There's an opening passage (which is under water) that's about 3 feet long. Then, a turn to the right or left, and a longer section, about the length of the alligator making the burrow (and of course close to the thickness of the alligator). Finally it should open into a "chamber" that will allow the alligator inside to turn around. The entire construction could be about 12 feet long. [see more at <http://www.rickubis.com/rick/gatr8.html>]



©2020 Richard Dashnau

"There's a lot going on here!"

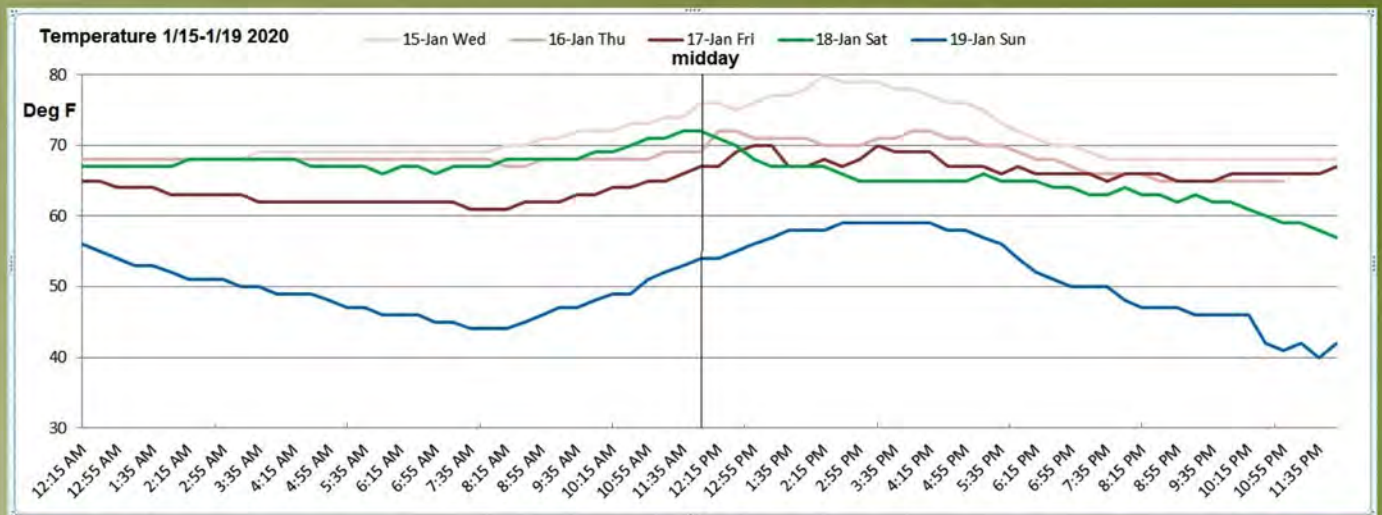
Volunteer Rick Dashnau times the dives of a mother alligator as she surfaces then retreats into a probable burrow near a group of hatchlings. He carefully documents her behavior and explains what is going on as visitors pass by on the trail.

Second, the babies gathered on the bank. Why? To warm themselves in the sun because they cannot generate their own heat. But, for the entire day, the mother never left the water to get into the sun. The air was cool (a cold front had just come through) but it hadn't been cold for very long. The water was probably warmer than the air. The mom gator was quite a bit larger than the babies. The babies warm up and cool down much faster than the mother. But the mother would *cool* much slower. With the difference in water temperature, and her greater mass, and the way she can control heat loss through blood flow (which could have helped conserve oxygen) mom may have been comfortable where she was.

Chilly 'Gators and a Warm Den

by Rick Dashnau

Below is one of the charts I made from temperature data I got from Weather Underground for Rosharon, Texas. Note how the temperature had been around 70F, and that it had only dropped the night before.



While reptiles can't put on or shed a winter coat, they can alter their blood chemistry and metabolism so they can function more efficiently at seasonal temperature. Studies of alligators have shown that they can adapt to a large drop in temperature and still perform normal bodily functions. I've made reference to this on my website at [<http://www.rickubis.com/rick/gatr4f.html>]

" There are worse ways to spend a day than hanging around with about 20 live alligators at their natural home."

- Rick Dashnau

Be sure to visit Rick's website for more detail about acclimitization and his findings about alligator dens. Visit <http://www.rickubis.com>.

BBSPVO Officers

2019-2020 Officers

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Special Thanks to this issue's Contributors:

- Jan van Smirren, BBSPVO Volunteer
- Janey Woodley, BBSPVO Volunteer
- Mike Fisher, BBSPVO Volunteer
- Jason Castle, Assistant Superintendent
- Marianne Feeney, BBSPVO Volunteer
- Rick Dashnau, BBSPVO Volunteer

Technical Support and Park History

- Anne Shelton
- Anna Dell Williamson
- Marianne Feeney

BBSP Park Staff:

- Montse Canedo, Park Ranger I / Volunteer Coordinator

Coming up Next issue:

- Part 1 of a series on Geomorphology by Jan van Smirren
- Coverage of Spring Break week and Renovation updates

If you would like to be a contributor please contact Lisa Sanders with ideas, photos and content for articles.

See you around the 'Bend!

