

## Horned Lizard Field Survey in Mason County, Texas

*By Leslie Nossaman*



Beautiful female Texas Horned Lizard found on Friday.

*Photo by Leslie Nossaman*

HLCS sponsored a fantastic survey at a private ranch in Mason County, Texas on June 15. The purpose of the survey was to reconnaissance locations and numbers of Texas horned lizards on the property before planned ranch improvements in 2020. It all started when Brian Wright, the ranch manager, contacted HLCS in August 2018 asking for assistance in locating the Texas horned lizards on the ranch. The ranch was planning controlled burns and herbicides on parts of the ranch and they wanted to know the effect of these treatments. I contacted San Antonio Zoo, Fort Worth Zoo, Dallas Zoo, TCU, and Texas Parks and Wildlife to see if they would be

interested in participating.

We were quite successful in finding five wonderful Texas horned lizards during the entire weekend. One was on Friday, (the day before the survey), three beautiful Texas horned lizards on the survey day with the group, and one more in the evening of the survey day.

Brian Wright was a wonderful host. He provided a breakfast and lunch for all the attendees and then dinner for those who stayed over. Homemade breakfast tacos and bacon was for breakfast and delicious

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barbeque with all the sides was for lunch. Fourteen people came to the ranch for the survey. In attendance was Shana Fredlake from the Dallas Zoo; Rachel Alenius from Texas Christian University; Ariana Duffy and Kamryn Richard from the San Antonio Zoo; Paul Bunker from Chiron K-9; and Caitlin Bailey from National Geographic. Eight others participated: Leslie Salas, Eileen Salas, Marshall Nay, Bill Brooks, Ruthann Panipinto, and Steve Brockway and two HLCS Board members: Leslie Nossaman, President and Dalton Neuharth, Secretary. The White Ranch also had some interns from Tucson, AZ and from Virginia Tech and many people who are working on the ranch. It was a great group!

Rachel Alenius from TCU took DNA samples for genetic analysis and blood samples for diet analysis at the TCU lab in Fort Worth. Caitlin Bailey from National Geographic videotaped the activities for a horned lizard conservation film she is making. HLCS also hired her to make a survey video for us as well. Paul Bunker was awarded a 2019 grant from HLCS for his program to train dogs to detect horned lizards. He met with Brian Wright about one of his dogs as a possible candidate and the Salas family about one of theirs. He was also there to find horned lizard scat for his detection program and of course, to find horned lizards.

The entire list of attendees was granted a permit for the weekend to handle the Texas horned lizard. To pick one up requires a permit since their status is threatened in Texas and are a state protected species. Thanks to Texas Parks and Wildlife employee Chris Maldonado for allowing this permit.

On Friday evening Marvin from Virginia the ranch to check out and for filming. Right female horned lizard mented frill of spikes She was the fastest ever seen and was very knew how to evade us, We did not find her the and we looked very



Beautiful horns and frills. *Photo by Marlaina Marvin.*

Caitlin, Brian, Marlaina Tech, and I went out on the areas for surveying away we found a large with a spectacular ornamental horns on her head. horned lizard I have difficult to catch. She even when surrounded. next day with the group hard.

Saturday began after breakfast with a presentation on safety for the attendees. Brian had alerted the local emergency responders about all the people that would be on the ranch to have them ready with helicopters in case something happened. Brian also had his interns and ranch workers drive the ATV's with drinks and snacks or if needed to drive someone back to the ranch house or their cars so we were treated like royalty.

Brian did not want lots of people handling the lizards on the property to reduce their stress so the only people who were to hold one were the ones that found a horned lizard or those that were performing tests on the horned lizards. We had thought that we might take one big group photo when we found the first horned lizard but it did not turn out that way as the little critters have their own way of doing things.

After the safety talks Brian went over the plan for the day on a large map. Then we had Rachel Alenius go over her plans for taking DNA samples from cloacal swabs and blood samples with a needle for diet analysis. The samples were to be taken to a lab at TCU.

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Brian reviewing the survey plan for the day.  
*Photo by Caitlin Bailey.*

Then we had Paul Bunker talk about his work with how he is training dogs to detect horned lizards in the wild. He let us know that he was looking for any horned lizard scat for the scent and that if we found any we should let him know and not touch it. He did not want us to potentially mix up the scents. He had special jars to use to collect the samples.

Then it was time to go into the field as it was starting to be warm enough for the lizards to start being active. So it was to the ATV's and trucks and we were off to the first survey site.

We started as a wave moving all in one direction and walked and walked and did not see any in the entire first phase of the survey. Then we started in the second phase and walked and walked and still did not see any. So after several hours of walking and heat, it was late for lunch and we decided to give up. So some of us got into an ATV and a truck to go back and get the cars for everyone to ride back in.



Survey in action. From left to right: Dalton Neuharth, Rachel Alenius, Leslie Nossaman, Shana Fredlake, Steve Brockway, Ruthann Panipinto, Leslie Salas.  
*Photo by Paul Bunker.*



Paul being interviewed for the National Geographic film and holding his special collection jar. *Photo by Leslie Nossaman.*

However, in the second phase of the survey someone found a fresh scat near some ant mounds. That gave us hope. Paul Bunker was extra thrilled as a fresh scat is many times better than dried scat for creating materials to train his dogs to detect horned lizards. He put it in one of his special jars.

On the way to retrieve the cars, I saw a horned lizard off the side of the road. We were all over each other trying to get out of the vehicle. While we were looking for it, we got a phone call that the group we left at the end of the second survey path had found two within 30 seconds of each other. The horned lizard we were looking for must have been found within a minute of the other two. And while the other group was just starting to photograph and perform the testing on the first horned lizard, the San Antonio Zoo got a phone call that their horned lizard eggs clutch was hatching. What an excited few minutes!

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Leslie Nossaman with horned lizard number 3.

*Photo by Cuatro King.*

We drove the horned lizard I found back to the area where we had left the rest of the group along with more vehicles for transport. All three horned lizards were photographed on the top and bottom for future identification, were weighed and measured, and their sex determined. Latitude and longitude locations and air and ground temperature were recorded. Each one had blood taken and cloacal swabs done. All were healthy active females. And they tried to stab our fingers with their back horns to get us to let them go. Only three people handled each lizard, the person who found it, Kamryn Richard from the San Antonio Zoo who held the lizard for some of the testing, and Rachel Alenius who did all the testing and measuring.



Eileen Salas with horned lizard number 2 and Paul Bunker with horned lizard number 1. *Photo by Caitlin Bailey.*



Rachel Alenius taking the cloacal swab from horned lizard number 1. *Photo by Ariana Duffy.*



Rachel Alenius weighing horned lizard number 1. *Photo by Ariana Duffy.*



Paul Bunker placing horned lizard number 1 back. *Photo by Ariana Duffy.*

As soon as the testing and measuring was done, each horned lizard was placed exactly back where it was found.

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We did not get that group photo we wanted but got close with one photo of some of the group surrounding Rachel doing the testing. We were just so excited that we finally found three about the same time after basically giving up that we all forgot about the group photo.

From left to right: Wyatt Perkins, Leslie Salas, Marlaina Marvin, Eileen Salas, Ariana Duffy, Cuatro King, Marshall Nay, Brian Wright, Kamryn Richard, Rachel Alenius, Leslie Nossaman, Dalton Neuharth, Cliff Payne, and Caitlin Bailey.

That evening after dinner and most everyone had left, Ruthann, Shana, Rachel, and I went back out along a road where a horned lizard had been seen a few days earlier. Shana spotted a male sitting in the road. We were able to get cloacal swabs from the lizard but he was too small to take any blood samples. We also re-found horned lizard number 1.

What a wonderful survey it was! I went back to the ranch in September and Brian said that they are finding more of the horned lizards than ever before with lots of babies around. He has invited us back to survey again in other areas that he is treating for controlled burns and herbicides to check on the effects on the horned lizards. So I am already looking forward to going back!



## Announcement - Horned Lizard Conservation Conference!

HLCS would like to announce a conference dedicated to horned lizard conservation that HLCS is hosting. It will be held at the Phoenix Zoo in Phoenix, Arizona on June 6, 2020. The sharing of your research, knowledge, and expertise are what help others plan and direct their own work. This is also the first call for papers and posters. HLCS would like to invite you to submit your abstracts that relate to horned lizard conservation.

Submit your abstracts to Mason Lee at [masonmlee3@gmail.com](mailto:masonmlee3@gmail.com). Mason is also the main coordinator for the meeting so any questions can be sent to her. We look forward to hearing about your innovations, ideas, and experiences at this important conference. More details on the conference will be sent in the future.



# Witnessing Restoration - Horned Lizards at Mason Mountain WMA, Texas

*by Lynn Seman*

As a board member for Horned Lizard Conservation Society (HLCS), I was thrilled to learn from our President, Leslie Nossaman, that representatives from the Dallas Zoo and Fort Worth Zoo were bringing a fresh clutch of raised baby horned lizards to release back into the wild. The release would take place in an area that historically had a population of horned lizards, but were extirpated over time - Mason Mountain Wildlife Management Area (MMWMA). Their goal is to bring back native horned lizards. In a valuable partnership, the Texas Parks and Wildlife staff of MMWMA, Kerr WMA, Dallas Zoo, and Fort Worth Zoo all came together for this special occasion, which I was fortunate enough to get a front row seat.

After leaving my house at 3:40am on September 5th, I drove to the heart of Texas to witness this release of 108 tiny Texas state reptiles, and it was well worth the drive! When I arrived, two staff experts, Diane Barber, and Jaimie Peltier from the Ft. Worth Zoo were carefully attaching tiny tracking devices on the backs of each reptile with an entourage of curious onlookers. The tracking device will allow the researchers to monitor progress and hopefully survival for a limited period of time. When they finished preparing the devices, Diane shared information about the technology used to track these lizards. These strip tags will reflect a signal back to the handheld transmitter/detector which converts it to a sound signal. As each young lizard was prepared, the TPWD Wildlife Biologist, Jim Gallagher, photographed the underside of the lizard. Each one has a unique “spot” pattern on their bellies that might be important with identification at a later date.



Fort Worth Zoo Jamie Peltier and Diane Barber prepare the tracking devices on the horned lizards. *Photo by Lynn Seman.*



MMWMA Jim Gallagher with lizard after photographing the underside. *Photo by Lynn Seman.*



Diane Barber demonstrating the tracking detector. *Photo by Lynn Seman.*



Tagged hatchlings. *Photo by Lynn Seman.*

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When the Dallas Zoo crew including Reptile Supervisor Bradley Lawrence and Supervisor Assistant Amber Faasen arrived, their quarter-sized hatchlings were also prepared and then combined with the others for a total of four groups to be released at four separate locations. Not all of the little critters got a tag, only 24 were donned with trendy tracking apparel due to limited resources.

Next in the adventure, the horned lizards were snugly placed in a big box marked 'PERISHABLE – HANDLE WITH CARE' for the short trip to their new home on Mason Mountain. TPWD Devin Erxleben and Nathan Rains both explained how important it is to keep them safe, cool, and "stress-free" in this release. If they get too hot or over excited, it can cause unnecessary stress which would be detrimental to the mission of this project.



Container for hatchlings. *Photo by Lynn Seman.*



Great view! *Photo by Lynn Seman.*

The lizards' box was carefully loaded into the air-conditioned Ft. Worth Zoo van and the rest of us filled in on the open-air rangers for the trek. I climbed up in the back high seat on a ranger next to Kerr Wildlife Management Area Biologist Deanna Pfeffer, and chuckled after ducking a few oak tree branches as we rumbled down the sandy road. When we arrived at the location, we dismounted the vehicles, grabbed our cameras, and walked to the release locations.

The Zoo experts who cared for the babies and Mason Mountain Wildlife Biologist were given the honor of setting the little critters free for their first venture into the wild. Everyone readied their cell phones and cameras to catch the moment. One by one, the babies moved off on their own. It was difficult to see the little guys because of the cryptic coloring as they scooted along the ground. All the observers had to stay still and watch every step taken to



On your mark, get set, go! *Photo by Lynn Seman.*

avoid stepping on a hiding lizard. Within a couple of minutes of their new found freedom, they were eating! Yes, that was the first priority of their new adventure, which was a good sign. According to Jaimie Peltier, young hatchlings eat about 30 termites a day at the zoo. In captivity, the termites cost about 14 cents each for every lizard, but in the wild when horned lizards grow larger, they begin a diet of red harvester ants, their food of choice.



MMWMA Biologist Jim Gallagher. *Photo by Lynn Seman.*

After the first release, we moved on to three more sights and repeated the process. I couldn't help but laugh out loud when Biologist Jim Gallagher started humming "William Tell's Overture" as they scurried off in all directions - the perfect selection of background music for a frenzied release.



Bradley Lawrence, Reptile Supervisor and his famous tattoo. *Photo by Lynn Seman.*

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Dallas Zoo Amber Faasen and Bradley Lawrence (holding a release container)  
*Photo by Lynn Seman.*

As we watched the last of the little critters head off into the unknown, I couldn't help but think about the significance of the moment. In a world full of news of burning Amazon rainforests, extreme weather catastrophes, climate concerns for the future, it felt so good to witness something positive happening in our world. Through the hard work, dedication, and genuine concern for conserving the critters that make up our Texas ecosystems, the valuable people of Texas Parks and Wildlife and the passionate staff of the Dallas and Ft. Worth Zoos were making a difference, one little lizard at a time, to restore the existence of one of the most loved reptiles in our state, the Texas Horned Lizard.



HLCS President, Leslie Nossaman.  
*Photo by Lynn Seman.*



Hatchlings in their new home. *Photo by Lynn Seman.*

The HLCS President, Leslie, and I lingered as long as possible watching for one last glimpse before it was time for us to go. Leslie pointed out to me a young hatchling standing in his instinctive and iconic "grand defiant stance" – the phrase coined by the late HLCS member, Alex Cochran. How appropriate! It was almost like he was saying, I'm a tough little guy and will stand my ground to whatever is to come! Hopefully, that will be a future where Texas Horned Lizards scamper around again at Mason Mountain, wild and free once again.



"the grand defiant stance" Texas Horned Lizard. *Photo by Lynn Seman.*



## Lady Bird Wildflower Center Nature Night

*by Bill Brooks*

Long time member, Bill Davis, and TX Master Naturalist volunteer, Steve Moredock manned the HLCS booth with me at the Lady Bird Wildflower Center in Austin June 27. One thousand three hundred and four guests attend the night's celebration. As always our horned lizard masks were a great hit with the kids.



Bill Davis and Steve Moredock work the booth.  
*Photo by Bill Brooks.*



# HLCS Booth-sitting at the Whiteside Museum

*by Bill Brooks*



Bill (on the left) and Keith DeGrow (in the black HLCS t-shirt) work the booth.



Kids wearing the horned lizard masks in the museum.

Google said it would take me 5 hours to drive from Austin, TX north to Seymour, TX (an hour west of Fort Worth). Of course, Google doesn't have to stop for gasoline, food, and make pit stops. On Friday June 7th, it took me 7 hours to get there.

In November of 2018, Lynn Seman told me about the 5th Anniversary Celebration of the Whiteside Museum of Natural History and invited me to bring up our displays and information materials for a Horned Lizard Conservation Society booth.

Lynn is a volunteer for the museum. This new museum has some mounted mammal exhibits and some live reptiles but featured many of the fossils taken from the famous "red fossil beds" nearby. These fossil beds are well known and in the 1870s, Edward Drinker Cope found and named the first *Dimetrodon* here.

Through the years, fossils found around Seymour were displayed at the University of Chicago, the American Museum of Natural History, the Smithsonian, and the Houston Museum of Natural History. In 2014, local philanthropist, the late Judge Clyde Whiteside decided the city should stop displaying their fossils all over the U.S. and keep them in Seymour. He donated the building for the Whiteside Museum of Natural History. It now joins the Baylor County History Museum, the Sound Park, and the Tom Lea post office mural as attractions in the little town of Seymour, Texas.

Over 500 people walked through the doors of the museum June 8th. A band played. Lynn's daughter, Stephanie Seman came to help. The local Rolling Plains Chapter of the Texas Master Naturalists had a booth as did a bird rescue group, and kids activities joined in the celebration. The attendees were free with their compliments on our horned lizard exhibits. HLCS member Keith DeGrow drove over from Fort Worth to help with the booth, which was much appreciated. Safe to say, we had a great time with the friendly people of Seymour but my adventure was not over.

Lynn got me an invitation to visit the red fossil beds the next day. On Sunday the friendly director of the museum, Chris Flis, led a small group out to explore one of the fossil hills with noted paleontologist and author Robert Bakker. (Author of "Dinosaur Heresies", "Raptor Red" and "Tyrannosaurus Sue".) We found small bones, teeth, and scales. It was a great way to end a wonderful booth-sitting weekend and I discovered why experienced paleontologists wear kneepads.



# Horned Lizard Research Grant 2020 Applications

The Horned Lizard Conservation Society is dedicated to protecting horned lizards by documenting and publicizing the values and conservation needs of horned lizards, promoting horned lizard conservation projects, and assisting with horned lizard management initiatives. Towards those ends, the HLCS annually sponsors research that has direct conservation applications. To learn more about the society and past grants, go to <http://www.hornedlizards.org/>.

We will be offering grants again in 2020. In the past, priority has been given to projects that have direct conservation implications, including public education.

To apply, send a proposal detailing the goal of the study, the rationale for it including relevance to conservation of horned lizards, and how your work would benefit from this opportunity. The proposal may not exceed 1000 words. Also include a preliminary budget with any other funding sources available or received for your project. In addition, send a short resume or CV (up to 3 pages) for the lead applicant and have a single letter of reference sent to George Perry: Gbperry10101@gmail.com. The deadline is January 1, 2020. The decision will be announced by January 31, 2020.



## President's Message *by Leslie Nossaman*

HLCS has continued to grow and expand even more and continues to improve our processes. We currently have members in 29 U.S. states and Washington, D.C., three Mexican states, and 1 Canadian province. This is the greatest number of U.S. and Mexican states HLCS has ever had! And HLCS has continued to make incredible Facebook posts on our public page and our private member page with ever increasing different U.S. state and country Likes and Follows. We are currently at 1548 Likes and 1582 Follows for our public Facebook page. And our private group page and Instagram page members still continue to grow.

Recently we helped two people who had accidentally took baby horned lizards from their habitat and did not know what to do with them. One was in southern Kansas and the other was in west Texas. HLCS helped them with areas best to take them and were able to help rescue them.

We also want to thank Bill Brooks for his 18 years of handling the sales for HLCS. He has been wanting to step down for over a year and we finally found some people to help. This has been an important job for HLCS and Bill handled it admirably. We wish him well!

We have also recently had questions from horned lizard researchers in New Mexico and Canada asking questions about various aspects of horned lizard conservation and looking for assistance. We are currently working with them to find answers.

Check out the article announcing the Horned Lizard Conservation Meeting hosted by HLCS. HLCS is excited to be able to bring you this opportunity to share your horned lizard conservation experiences.

We have more exciting announcements we are working on so look forward to those in the future!





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Families: \$25 for the first person and \$10 for each additional member

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