

Our purpose is to document and publicize the values and conservation needs of horned lizards, to promote horned lizard conservation projects, and to assist with horned lizard management initiatives throughout their ranges.

Volume 15, Issue No. 2

MAY 2010

Catching Lizards in Zumpango del Rio, Guerrero, Mexico,

An Environmental Summer Course on Horned Lizards

by *Maria Guadalupe Barbosa Rodriguez*

Cerro Tepetlayo is a hill inhabited by two species of horned lizards *Phrynosoma asio* and *P. taurus*. People are currently using the same area, preventing horned lizards permanence at this site and leaving them with no place to move.

If we want these horned lizard populations to survive, all the threats that come with human colonization must receive attention, such as: land burnings, exotic dogs and cats, children that traditionally play killing the animals, and the use of land as a garbage disposal. We believe that both populations of these species are dangerously declining towards extinction; so we decided to do something about it.

On July 2008, I and a group of *Phrynosoma*



Guadalupe Barbosa chatting with children using pictures of horned lizards.

enthusiasts invited parents and children living at Cerro Tepetlayo to a summer course on lizards. We registered 33 children as attendants to this course. Activities lasted for two weekends on August 1st, 2nd, 7th and 8th. The purpose was that children get to know and take care of the horned lizards and their habitat.

We started with a small round table where children's knowledge on horned lizards was shared, as well as their attitudes towards lizards when they find it. As the activities must remain ludicrous, we played our own manufactured bilingual biodiversity lottery, which contains pictures of the flora and the fauna



Playing with the bilingual biodiversity lottery, a game for conservation.

Upcoming Events

Yzaguirre Ranch

Duval County, Texas

May 29 - 30, 2010 (Memorial Day Weekend)

Labor Day Weekend Field Survey

Colorado City, Texas

September 4 - 5, 2010

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of Central Guerrero State. The purpose of this game was to make the audience aware of their knowledge contrasting each point of view to identify myths and legends in reference to the wild fauna.

Topics such as the amphibian and reptile species present in Zumpango, the importance of each species for ecosystems were treated as talks with slides projections. Along with the children we analyzed life history data on horned lizards. We emphasized one very important message: that they are inoffensive and in risk of extinction. We wanted to sensitize the group in relation to the diverse factors of damage and risk we unconsciously impose on these species.

Movies were used to help the audience comprehend that when we humans use some land we alter the habitat that some other wild species use to live. We used this idea as the motor to the activity we called "Cleaning horned lizard's home" in which we divided in several teams to pick up solid waste off Cerro Tepetlayo. With this activity, recommendations were made to avoid future



One of the teams picking up solid waste at Cerro Tepetlayo.

accumulations of garbage and fires in the area, looking for ways of protecting their refuges or even to build some new ones. We took up recreational open-air activities that children can do in an environment-friendly way. Children played a role-game on the life history of horned lizards, and we



Masquerade for the role-games, everybody is a horned lizard.

explored consequences and feelings especially when they got to be hunted by humans only for amusement.

Manufacturing kites using horned lizards as inspiration for design help them apply their



Children manufacturing horned lizard kites.

creativity to common recreation without having to alter the ecosystem.

To measure the success of these strategies is a complex

matter and it requires long term monitoring on wild populations as well as on human perception and attitudes. But even though, by the end of the course we were able to observe a different approach to lizards by children. As a side effect of this project, parents were interested too in the protection and conservation of these species suggesting the need to define an area for the conservation of horned lizards. This new proposal suggested by people is under evaluation and we hope to elaborate on it later on.

Acknowledgments. I would like to recognize the efforts of Elizabeth

Beltrán-Sánchez, Leonardo J. López-Damián, Ariadna I. López-Damián, Rosa I. Méndez-Bahena on the realization and design of the summer course, and the whole group of *Phrynosoma* enthusiasts, mainly Antonio de Jesús, Galia Reyes, Emilio Leyva, and lots of others that helped us at Cerro Tepetlayo.



Horned lizard boy

Horned Lizards of All Types

By Randy and Teri Harrison

We own fifty acres in Jamul, California. Forty acres is kept as open space and has no development on it. In fact it has no drivable road access you have to hike to reach the property. We live on the other ten acres in Jamul which is in the hills (elevation 2000 feet) twenty-five miles east of downtown San Diego. We purchased this land in 1999 to build our home. As construction was going on we saw our first horned lizard on our property. We were so excited to see a creature from our youth. This discovery on our property has rekindled our affection for horned lizards.

We have now collected just about every horned lizard item we have found in our travels. The first statues we found where at our San Diego County Fair where we meet Tom McCain of Horny Toad Connections. We have collected many from Tom including his #6 Bronze and #8 Sterling Silver one pound horned lizard. He was the first to introduce us to the Horned Lizard Conservation Society. Over the years we have collected jewelry, figurines, Indian fetishes vases and pots.

We even have a 750 pound six foot long horned lizard bench. We call him our guard lizard because he looks down our 650 foot driveway making sure only good people come up. The most treasured vase is a Wed-

ding Vase with thirty-six horny toads made by Betty Manygoats who is a Navajo from the Shonto Corner of the Navajo Reservation. We have included pictures of most of our collection including this vase.



Randy and Teri Harrison with their six foot "guard lizard."

So when it came time to design our new gates it only seemed natural for us to include horned

with a color that is Teri's favorite and that Randy likes—so purple they became. We must



Purple gate with horned lizards.

lizards. The gate project was Teri's design. She drew the template for the horned lizards and came up with the bent round bar instead of vertical bars in the gate body. The welders took her ideas and went to work making each thirteen foot gate.

We both wanted the gates to be one of a kind so no black or white paint for us. We went

say they are one-of-a kind gates. They run with solar and look just great.

Even after ten years of owning this property we still get excited every time we come across a horned lizard. We see them in all sizes from adult to as small as a dime. We have included two photos we took this year. The adult was taken on May 30, 2009 by our barn and the baby on July 30, 2009 off the

side of our driveway. We can't tell you how many times we have stopped doing something to run and get the camera to take a picture of our latest discovery.

We have been long time mem-

bers of The Zoological Society of San Diego. So all creatures have been important to us. Our property has been a haven for many creatures along with our horned lizards. We have bobcats, mountain lions, foxes, marble whiptails, alligator liz-

ards, common lizards, trapdoor spiders, rattlesnakes, gopher snakes, red tail hawks, golden eagles, quail, and many other birds both local and visitors on yearly migration. We so enjoy being surrounded by nature.



Small juvenile horned lizard.



Adult horned lizard.



Three photos of the horned lizard collection.



Wedding vase with thirty-six horned lizards.



**TEXAS FIELD SURVEYS
Mark Your Calendars!**

By Lee Ann Linam

Memorial Day weekend (May 29-30) – trip to the Yzaguirre Ranch in southern Duval county, home of Texas horned lizards, box turtles, and many other reptiles! Contact Lee Ann Linam (lalinam@txwinet.com) if interested.

Labor Day weekend (Sept. 4-5) – We're planning another trip—the Native Prairies Association of Texas' Maddin Prairie near Colorado City is a possibility! Look for more info in the next newsletter.



Diet Composition of *Phrynosoma asio* at Cerro Tepetlayo, Guerrero, México

By: Yenileth Granados Calixto and Perla Patricia González Alvarado

The giant horned lizard (*Phrynosoma asio*), is listed in Mexican legislation as subject of special protection (SEMARNAT, 2002). Lizards of this genus have ant specialist diets (Pianka & Parker, 1975). Lemos-Espinal et al. (2004), recorded *P. asio* diet from stomach contents of ten individuals, nine from May to August, and one from January; finding twenty-one preys, of which ants dominate diet, and there is a great contribution of termites. Seasonal differences in environmental conditions have proved to regulate prey availability and diversity (Durtsche, 1995), and therefore to influence changes on the diets of some lizards. With our work we want to describe the whole



Giant Horned Lizard (*Phrynosoma asio*).

diet variation on a year-round basis for a population of this species at Cerro Tepetlayo.

Cerro Tepetlayo is located at Zumpango del Río, Eduardo Neri Municipality in the Mexican State of Guerrero, between 17° 37' 37" and 17° 38' 42"N and 99° 31' 07" and 99° 31'

41"W, approximately 7 km N from Chilpancingo city. Mean annual temperature is less than 22°C and coldest month with 18°C with a mean annual precipitation of 770.33 mm. Vegetation at the site is thorny scrub associated with columnar cacti, and relicts of low deciduous forest.

Fecal analysis offers a wide amount of information avoiding

the unnecessary sacrifice of horned lizards (Fong & Garcés, 2002). Each individual lizard was kept in a specially prepared terrarium, for periods from 1 to 4 days depending on fecal sample obtaining, and later liberated at the collection site. Fecal samples were analyzed under a stereoscopic microscope (Leica Z45L 10-45x). Each fecal pellet is set in a Petri dish and moistened with ethanol, each part is separated using dissection needles, until each part of undigested insects are clearly visible. Frequency of occurrence, relative volume (as an ellipsoidal body), prey prevalence and relative importance by prey are being registered. The Shannon-Wiener index will be used as diet diversity indicator for the statistical analysis (Gadsen-Esparza & Palacios-Orona, 1995).

Four visits were made to Cerro



Google Earth image of the study site.

Tepetlayo the year 2009 to create a reference collection of arthropods as an aid for prey identification. At least ten individuals of each different prey have been collected using a Castro sucking tube. Two more visits are planned by first months of 2010, in which pit fall traps are planned as main



Reference prey collection at Cerro Tepetlayo.

collection method. Prey determination is realized by comparison with pictures and diagnostic characters described in identification keys (Fernández, 2003; Thriplehorn & Johnson, 2007). This project counts with help of Dr. Gabriela Castaño, ant expert, as consultant in identification corroboration.

The list of potential preys at the



Head of "Isoptera B" found in the fecal samples.

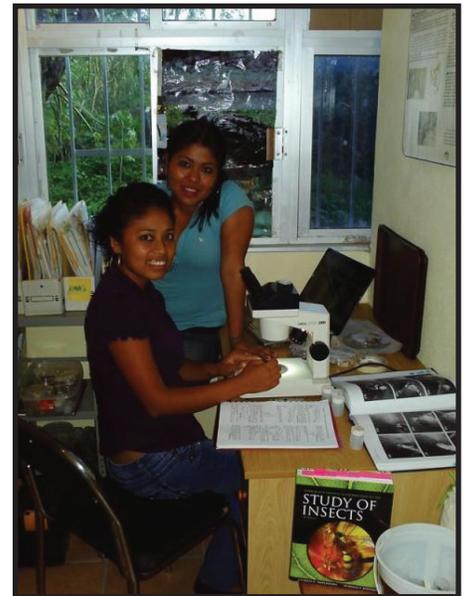
area comprises at least eighteen ant genera belonging to seven distinct subfamilies; two different termite species, four coleopteran species, and three hemipterans. We obtained 51 fecal samples (29 male, 22 female) from living organisms captured from February to September of 2004. All

samples are analyzed 50, but only 26 are yet loaded into an Excel table. Data from these 26 samples shows a list of 38 different prey consumed by *P. asio*, 29 of which are hymenopterans (Formicidae), three are isopterans, four are coleopterans and two are hemipterans. Calculated values suggest

five major preys identified as: 1- *Pogonomyrmex* sp. (Formicidae), 2- Isoptera B, 3- *Tenuirostritermes* sp. (Isoptera), 4- Formicidae A and 5- Formicidae B. Defining this horned lizard's prey and feeding behavior will be of great help in the process of decision making for conservation; mainly by taking into account the way in which most important prey of *P. asio* depend on, are being affected by the actual land cover



Heads of *Tenuirostritermes* sp. found in the fecal samples.



Yenileth and Patricia determining samples at microscope.

change at this site.

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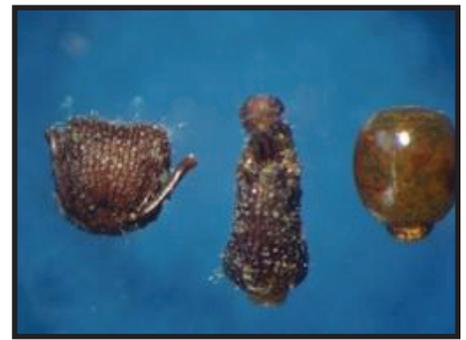
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Body parts of *Pogonomyrmex* sp. found in the fecal samples.



Body parts of "Formicidae A" sp. found in the fecal samples.



Body parts of "Formicidae B" sp. found in the fecal samples.

PRESIDENT'S MESSAGE

By Joyce Gibson Roach

What Horned Lizards Have To Teach Us? Returning once again to the image of dropping a stone into the water and not knowing how far the ripples spread, I offer yet another example. In this newsletter you will notice articles from Mexico and Canada. Important work is being done from the north to the south of us.

I'm living proof that we all live by our own assumptions, at least when it comes to matters of the horned lizard. For some time now, in fact since I became a member several years ago, I knew horned lizards had habitats beyond Texas; even saw some in New Mexico and Arizona. Thought surely it

was rumor that some thrived in Colorado and other climes. Because of new memberships from several states, scientific scholarship, as well as popular interest in icons for entrances and signs, photos from everywhere, it keeps coming as a surprise to me that HLCS is climbing to the top as a zestful, inquiring, popular organization.

Unlike so many special interest groups that attract only scientists, HLCS appeals to young and old, PhDs, certified naturalists, biologists, environmental scientists, but many lay folks—writers, artists, photographers, folklorists, families. You'll get a taste of it all in this issue of *Phrynosomatics*, as the publication gets better and better in a new on-line format, one we hope the membership is enjoying. 

HLCS Biennial Meeting Announcement

By J. Jill Heatley

The Horned Lizard Conservation Society Biennial meeting will be held on the 1st weekend in May (April 30th, May 1st & 2nd) at the college of Veterinary Medicine and Biomedical Sciences in College Station, Texas. The meeting will be held in conjunction with the Conservation Horizons seminar series, sponsored annually by the International (IVSA), Green Vets and Zoo Exotic and Wildlife (ZEW) veterinary student organizations. An informal reception is planned for Friday night, talks are scheduled throughout Saturday and a field trip is planned for Sunday. For more information, please contact jheatley@cvm.tamu.edu. 

Researcher Wants to Tip the Scales for Northern Lizard

By Bev Betkowski

The greater short-horned lizard gives birth to live young.

Armed with eyelash glue, a walking stick and a faithful horse, University of Alberta researcher Krista Fink is hoping to help Canada's most northern lizard get off the species-at-risk list.

With the help of a \$68,000 grant from Parks Canada, Fink, under the supervision of renewable resources professor Scott Nielsen and adjunct professor Shelley Pruss, is spending two years exploring the barren grassland habitat of the greater short-horned lizard, a mouse-sized, scaly specimen that is found in parts of Alberta and Saskatchewan and could number as little as 2,500.

While the lizard is also found in Mexico and parts of the western United States, there is a concern that they could die out in Canada, so were listed as a species at risk in 2007 under the federal government's Species at Risk Act.

"Most people may not realize that we have lizards this far north, but the greater short-horned specimen is able to withstand our harsh winters because it hibernates," Fink said. The lizard, which resembles a miniature dinosaur, is also unique because, unlike most other species of its kind that hatch, it gives birth to live young.

Fink, a master's student in the



The greater short-horned lizard has a transmitter on its back to track its movement.

Faculty of Agricultural, Life and Environmental Sciences, is swinging a leg over her horse, Buck, and taking to the remote barren hills of Grasslands National Park in Saskatchewan to observe the lizard in its natural habitat.

Aiming to find ways to preserve their delicate ecosystems, Fink has started videotaping the lizards and using eyelash glue to attach transmitters to their backs to track their movements. "This will help us better understand their habitat needs."

To find the animals, she'll also probe the ground with her walking stick, hoping to catch a glimpse of the creatures, which blend into their gray and brown surroundings to the point of invisibility.

"It helps me spot the lizards when they move," Fink said, then added: "I hope I don't hit any rattlesnakes in the process."

By recording their movements,

Fink wants to find out where they are choosing to live, and why.

"This will help identify their critical habitat needs and document their population sizes to better manage their population recovery."

Fink and Nielsen hypothesize that energy development, road construction and certain livestock grazing practices could be possible threats to the lizards' habitat. Because they are living in such small, fragmented populations, they are especially vulnerable to any kind of change, Nielsen noted. "The smaller the population, the bigger the impact. To lose these lizards would be especially disturbing, because they are so rare in Canada."

At the end of the study, which began last summer, Fink hopes to have some recommendations for Parks Canada on how to protect and preserve home ground for the lizards, which have recently become a tourist attraction in the Grasslands National Park.

"They are quite charismatic," added Fink, who has gotten to know the lizards well over the course of her project. "Each lizard has a distinct expression; some look like they are frowning, others look as if they are grinning. It adds a lot of imagined personality to the species."

Provided by University of Alberta. Reprinted with permission of PhysOrg.com.
<http://www.physorg.com/news177614057.html>



Member Spotlight: Scott Henke

By Scott Henke



I grew up in a small town in northern Indiana; too far north to know what a “horny toad” was. In fact my first experience with a horned lizard did not occur until much later in my life, sometime when I was between 25 and 30 years old! I was living in Lubbock, Texas at the time near the campus of Texas Tech University. While taking the trash to the dumpster located in the alley behind my house I noticed a spiky, flat lizard scurry under my feet. I quickly got rid of my trash and began to track down my quarry.

It turned out that capturing this horned beast was not that easy. It was a lot faster than it looked. Its “run quickly and stop” method of escape took me three or four attempts before I finally caught it! I had seen photos of horned lizards before but I never saw one

up close and personal before this day. It really did look like a miniature dinosaur from old, B-rated horror movies. After acting like a geek showing all my neighbors, who actually had seen 100’s of horned lizards before because they grew up in Texas, I released it where I found it in the back alley by the dumpster. During the next few years while I was obtaining my PhD, I saw a few more horned lizards from time to time but I tried not to act like such a nerd around my neighbors.

Upon graduation in 1992 I accepted a faculty position with the Caesar Kleberg Wildlife Research Institute at Texas A&M University-Kingsville. As a new professor in the wildlife department I was expected to begin a research program. The existing faculty at the time were guarded and territorial of their own research programs so it was difficult to start a program when many of the “cool” species had been claimed, or so I thought.

I had spent the day with one faculty member who was conducting quail research in south Texas and during the course of that day I came across several Texas horned lizards. The light bulb went off in my head! This was a cool species and there was not a lot of research done on horned lizards. So I wrote a grant, luckily got funding, and advertised for my very first graduate student. The student, Scott Fair, was quite a find.

He did an incredible job and published five research articles from his Master’s thesis, quite an accomplishment for any graduate student.

Since that initial study, I have had numerous students and projects that involved Texas horned lizards. My research projects have included habitat management techniques beneficial to Texas horned lizards, survival studies, mortality studies, habitat use studies, capture techniques, population trends, and activity periods. In my quest to find a research niche I truly found an exceptional creature worthy of study.

Around the same time of my initial horned lizard project, other horned lizard enthusiasts were holding the first conference concerning horned lizards in Austin, Texas. I thought this was the perfect outlet to present Scott Fair’s research. It was at this conference where I met such folks like Carolyn Todd, Clare Freeman, Lester Milroy, and Bill Brooks; many of the pioneers of the Horned Lizard Conservation Society. From that conference on, I was hooked. Horned lizards would always be a part of my research program!

In fact, horned lizards became a big part of my career as a wildlife biologist. I was elected as the fourth president of the Horned Lizard Conservation Society. As president I was

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A Listing of Articles from *Phrynosomatics* Newsletters from 2000 – 2009

By Bill Brooks and Leslie Nossaman

HLCS is planning a 20th anniversary celebration edition to our newsletter. It will have a selected set of articles from all the issues from the past 10 years. In 2000 the Society published a 10th anniversary special edition with great success and we would like to do this again. In order to create the Horned Lizard Conservation Society's 20th anniversary edition, we have created a list of articles for our members to choose from. We would like to see the members have a say in what articles make the special edition which is scheduled to be released in November 2010. Please review the list below, check your past issues for more article details, and send your votes to Bill Brooks at bg-brooks@mail.utexas.edu.

April 2000

"The Pet Trade and Nevada" by Kevin Emmerich (with a picture of a handful of platyrhinos)
Texas Chapter News/ "Snaketales, A Snake-Friendly Fest at Fossil Rim Wildlife Center" by Bill Brooks.

August 2000

"News from California...it's really about education" by Lester G. Milroy III.
"The Y2k Tie-Breaker!!!" By Bette Armstrong.
"Old Rip & the pine box derby" by Bette Armstrong.
"Texas Chapter News/ Earth Day" (University of North Texas in Denton) by Larry Wisdom.
"Texas Chapter News/ Kenedy Texas – HL Capital of Texas" by Carolyn Todd.

November 2000

"Ditmars' Horned Lizard, or Rock Horned Lizard: An Historical Update Since Rediscovery in 1970" by Wade C. Sherbrooke
"Return and Release/ Of Six Texas Horned Lizards (*Phrynosoma cornutum*)" by Leigh Sanders
"The 4th Horned Lizard Symposium" by Joseph C. Cepeda.
"To you, just a lizard, but to her a treasure" by Jon McConal.

December 2000

10th Anniversary Issue

May 2001

"The Flat-tailed Horned Lizard Case: Oral Argument Heard by the U. S. Court of Appeals" by Wendy Hodges.
"A Hoppin' Good Time in Austin, Texas" by Bill Brooks. (Regarding the Kenedy and Eastland Resolutions.)

September 2001

"Little Lizard Wins, Court of Appeals Decides in Favor of Flat-tails" by Wendy Hodges
"Chapter Update – Sunny California" by Lester Milroy III, President.
"Chapter Update – Utah, The Desert Wildlife Festival at St. George" by Joseph Collet.
"Chapter Update – Texas: An Essay by Rachel Cook, The future of Horned Lizards"

December 2001

"For the Love of a Horned Lizard" by Gary Lantz.
"FWS Reinstates 1993 Proposed Listing of the Flat-tailed Horned Lizard" by Wendy Hodges.
"Old Rip Fest 2001 – Eastland, Texas, Horny Toads, Horned Toads, and Horned Lizards!" by Bette Armstrong.
"Eastland's Old Rip Festival" by Wendy Hodges.
"Graduate's Honors" by Sandra G. Holland.
"Texas Parks and Wildlife's Expo 2001" by Bill Brooks.
"A Regal Horned Lizard (*Phrynosoma solare*) with only two occipitals" by Bertrand E. Baur.

March 2002

"Frog Defined" by Joyce Roach.
"Ralph Nader's Democracy Rising Convention: Political Activism and Horned Toads!" by Bill Brooks.
"A stunning Discovery! Abominable Snow Lizard of the East?" by Tricia Saenger.
"Argentine Ants Threaten Horned Lizards" by Cat Lazaroff

Continued on page 12

June 2002

- "Lizard Finds Home" by Jamie Cameron. (Horned Toads in N. Carolina)
- "Frog of Ages" by Nancy Bartosek (TCU & the Horned Toad)
- "Miss (Horned Lizard) Liberty – July 4, 2001 Rodeo, New Mexico" by Wade Sherbrooke.
- "Old Rip Commemoration" from the Eastland Telegram.
- "Horned Lizards in History" by Leonhard Stejneger. (First published report of blood squirting.)

September 2002

- "The HLCS 5th National Conference, June 2002, A Hot Time in a Cool Location" by Roger Repp.
- "Experimental Reintroduction of *Phrynosoma cornutum*, the Texas Horned Lizard, to Central Texas" by Wendy Hodges.
- "Old Rip at Six Flags Over Texas" from the Eastland Telegram.

December 2002

- "Memories of Horned Lizards in Comal County" by Sarah Petta. (TPWD Horned Toad Essay Contest)
- "Hard Times for Horny Toads" by Levi Posey (2nd place.)
- "Kenedy, Old Rep Festival, and Texas Wildlife Expo" by Bill Brooks.

March 2003

- "US Fish and Wildlife Service Denies Protection of Flat-Tailed Horned Lizard" by Daniel Patterson. (On Jan. 3, the Bush administration denied endangered species act protection.)
- "Southern California Update" by Lester Milroy III.

September 2003

- "Where Did It Go" by D. North and E. Cameron. – Team Winners, grades 9-12, TPWD's Hometown Horned Toads Essay Contest 2003. (Research as to what happened to the horned lizards of Calvert, TX.)
- "Horned Lizard Quest" by Don Thomson. (Quest to catch and release all species of horned lizards in the U.S.)
- "Book Review : Horned Toad Canyon" by Wendy Hodges. (Book review of the book written by Joyce Roach.)
- "Bette's Traveling Horny Toad Racer" by Tom

- McCain. (Tom takes Bette's remote controlled racer to the Horned Toad Derby in Coalinga, California, May 24-27, 2003.)
- "Horned Toad Survey on the Lamshead Ranch 2003" by Bill Brooks. (Survey trip to the historic Lamshead ranch near Albany, TX where no horned lizards were found. Fourteen members attended.)
- "Book Review: Introduction to Horned Lizards of North America" by Pam Allison. –(Review of Wade Sherbrooke's wonderful field guide.)

December 2003

- "Remnant Habitat in the Coachella Valley Provides Home to a Unique Population of Flat-tailed Horned Lizards" by Cameron Barrows. (The story of 590 marked Flat-tails in the Thousand Palms Preserve in California.)
- "Morphin' Lizards" by Mike Gannis. – (Originally published by NPACI and SDSC Communications. Research by Hodges and Reyes on the evolution of the family of horned lizards.)
- "Pentagon Now Defends Creatures Big and Small: Military is looking out for endangered wildlife at taxpayer expense" by Michelle Rushlo . – (Reprinted from 2000 Associated Press article. Looking out for flat-tailed horned lizards in the Berry Goldwater Range, AZ.)

June 2004

- "Bette Armstrong Honored With State of Texas House Resolution" by Rep. Jim Keffer. (H.R. No. 1175 was adopted by the Texas House of Representatives to commend Bette for her many good works on behalf of Old Rip and Eastland County)
- "How the Horned Lizard Got Its Horns" by Kevin Young (et.al.) (Reprinted from Science 304:65/2004). (Loggerhead Shrikes appear to prefer horned lizards with longer horns)
- "Attwater's Prairie Chicken Festival Trip Report" by Bill Brooks (A booth sitting & talk report from the festival in SE Texas)

March 2005

- "The Hunt for the Texas Horned Lizard" by Leslie Nossaman, Eva Thomas, and Vivian Thomas
- "Patronyms of the Pioneer West" by Edward O. Moll

May 2005

"A Little Horned Lizard Takes a Long Trip" by Anthony C. Hotopp

"Born Survivors – A Look at Survival Strategies and other Behaviors of North American Horned Lizards" by Wade Sherbrooke

August 2005

"Texas Horned Lizards on Tinker Air Force Base in Oklahoma?" By Ray Moody

"The *Phrynosoma coronatum* of Table Mountain" by Jackson Shedd

November 2005

"Reintroducing the Horned Lizard at the Attwater Prairie Chicken National Wildlife Refuge" by Vivian Thomas

"*Phrynosoma* Ruling Reptile - Judge gives Flat-tail Horned Lizard another chance at legal protection, Fish and Wildlife erred in taking it off potential endangered list" by Benjamin Spillman

"New Children's CD Includes a Pair of Horned Lizard Songs" By Monty Harper

"My New 18 Inch Horned Toad Racer 2005" By Bette Armstrong (picture of racer)

February 2006

"Old Rip" by Eva Thomas (with scanned images of the original newspaper articles)

"Let's Help the Horned Toads!" By 10-year-old Kimberly Robinson of Krum, Texas (Hometown Horned Toad essay contest winner in the 3rd-5th grade category)

"Flat-tailed Horned Lizard Back for More Protection" by Wendy L. Hodges

May 2006

"The First Ever Horny Toad Artfest, A Success!" By Bill Brooks (with lots of pictures)

August 2006

"Cross Plains Kids Endure Wildfires and Rally to Win Horned Lizard Essay Contest" by Mariah Mathys

"Horned Lizard Survey at the Shumla School Grounds Near Comstock, Texas" by Eva Thomas

November 2006

"The Horned Lizard at the Ft. Worth Zoo" by Eva Thomas

"Mosquito Fest '06; or The Horned Lizard Survey at Matagorda Island Survey Summary" by Bill Brooks, Rollo Newsom, and Lee Ann Linam

"When Fish Jumped for a Sea of Stars" by Trey Roach (Survey Article #2)

"Some Part of Myself" by Joyce Roach (Survey Article #3)

February 2007

"Horned Lizard Conservation Society Representation at the Texas Parks and Wildlife Department Wildlife Expo" by Rollo Newsom and Bill Brooks

"Neither Wind Nor Rain", Poem by Allan W. Eckert

"The Horned Lizard Working Group Meeting at Windmill Ranch" by Wendy Hodges

"Old Rip Fest in Eastland, Texas" by Vivian Thomas and Leslie Nossaman

May 2007

"July 2007 Horned Lizard Conservation Meeting in Fort Worth, Texas Announcement" by Joyce Roach

"Does the Roundtail Horned Lizard Still Occur in Oklahoma?" By Richard Stark

August 2007

"The HLCS Biennial Meeting" by Clare Freeman (is a summary of the 2007 biennial meeting)

"2007 HLCS Conservation Grants Awarded" by Gad Perry

"Student Awards at the Fort Worth Biennial Meeting" by Wendy Hodges

"Two Winning Research Award Abstracts from students" (no author)

"Results of the Horned Lizard in Movies, Cartoons, Music, and Literature Contest" by Leslie Nossaman

November 2007

"The *Phrynosoma coronatum* of Table Mountain (Part II)" by Jackson Shedd

"The Australian Thorny Devil" by Wade Sherbrooke

"HLCS Reaches Out at TPWD Wildlife Expo" by Lee Ann Linam

February 2008

"Citizen Science Program Passes a Milestone" by Lee Ann Linam. (2006 marked the 10th

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year of the volunteer TPWD program gathering data on the TX Horned Lizard.)

“2008 HLCS Conservation Grants” by Lee Ann Linam. (The HLCS is soliciting grant proposals.)

May 2008

“Marching on Washington on Behalf of the Horned Lizard” by Joyce Roach. (The story of Joyce’s March 25-27 trip to Washing DC for Teaming With Wildlife to visit congress representatives to ask for support for State Wildlife Grants.)

“Texas Horned Lizard License Plate Pays Conservation Dividends” by Lee Ann Linam. (In 2008-2009 the TX Legislature donated \$900,000- to TPWD to fund 14 research projects.)

“Book Review” by Lee Ann Linam. (A review of Pamela Allison’s, “Emerald’s Journal- A Summer with Hatchlings.”)

“Seeking Horned Lizard Samplers” by Lee Ann Linam. (TPWD is looking for volunteers to assist with a genetics study.)

“HLCS to Co-Sponsor Regional Herptile Meeting” by Lee Ann Linam. (The HLCS will co-sponsor the Southwest Partners in Amphibian and Reptile Conservation to be held in Austin, TX, June 5-8.)

“Proposed Amendment By-Laws of the Horned Lizard Conservation Society”. (No author listed.)

August 2008

“The Longhorn: Texas Horned Lizard” by Don Swann, Kevin Bonine, and Roger Repp. (The natural history of the TX Horned Lizard in SW Arizona.)

“Horned Lizard Survey in Midland and Odessa” by Joyce Roach. (Announcing a survey for horned lizards in west Texas near the Sibley Nature Center and the Barr Ranch, August 9-10.)

“Notes from the HLCS Business Meeting June 6, 2008” by Lee Ann Linam. (The meeting was held at the UT Pickle Campus.)

“Thanks and Welcome” by Leslie Nossaman. (Article about the out going president, Lee Ann Linam and the new president, Joyce Roach.)

November 2008

“Horned Lizard Survey in West Texas” by Vivian Thomas. (A personal account of the survey at the Sibley Nature Center and the Barr Ranch Aug. 9-10, 2008.)

“The Sibley Nature Center” by Joyce Roach. (Survey Article #2 on the Aug. 9-10, 2008 trip to the Sibley Nature Center.)

“My Discovery” by Lenee Weldon. (Survey Article #3 on Lenee’s first horned lizard hunt at the Sibley Nature Center.)

“Survey at the Balcones Canyonlands National Wildlife Refuge” by Carolyn Todd. (A report on the Peaceful Springs Nature Preserve survey, held Aug. 16th.)

“Publications and Film Productions” by Wade Sherbrooke. (A report on 3 articles Wade wrote and an Attenborough film he consulted on.)

“Member Spotlight: Lester Milroy” by Lester Milroy. All about Lester and his work with the HLCS.

“Citizen Scientists and University Scientists Join Hands in Genetics Study” by Lee Ann Linam. (Dean Williams and Amanda Hale of TCU get volunteers to help with collecting genetic material from the TX Horned Lizard.)

“Horned Lizard Research Grant 2008 Recipients” by Lee Ann Linam. (Introducing the 3 recipients of HLCS grants: Emily Henry, Gala Reyes, and Maria Rodriguez.)

“Horned Lizard Research Grant 2009 Applications” by Gad Perry. (The HLCS is offering two \$500 grants this year.)

“President’s Message” by Joyce Gibson Roach. (A little bio about our new president, Joyce.)

February 2009

“Translocation of Texas Horned Lizard: A Viable Conservation Option” By Vic Bogosian III (Research indicates that the chance of successfully translocating horned lizards is low and often fail within the first decade of movement. Methods for successfully translocating horned lizards are being analyzed.)

“Use of Ground Penetrating Radar in Wildlife Research: a novel, non-invasive technique for estimating the depth of hibernating horned lizards beneath the ground surface” By Daniel J. Martin, T. A. Scott Newbold, Brianne Hamm, and Gary R. Olhoft (Horned lizards were

radio-tracked to find their over-wintering sites. Depths of their burial were measured with the radar and then checked with careful digging and backfilling.)

May 2009

“A Survey of Remaining Coast Horned Lizard Populations within the Sierra Nevada and Central Valley of California” By Jackson Shedd (The Coast Horned Lizard is on the decline in California and is a State listed Species of Special Concern. The reasons for decline and sightings are discussed.)

“HLCS Board Members ‘Go to School’” on Horned Lizard Genetics By Lee Ann Linam (HLCS members who were attending a board meeting got to visit the genetics lab at TCU which received a grant to conduct a genetics survey on horned lizards in Texas.)

August 2009

“West Texas Horned Lizard Survey May 21-25, 2009” By Bill Brooks with assistance from

Tanya Phillips and Carolyn Todd (Round-tail horned lizards and short horned lizards were found along with many other animals. Surveys were conducted at Tanya Phillips and Chuck Reburn’s land in the Chihuahuan Desert.)

“Horned Lizards Migrate to Pastures New” By Jane Manaster (The horned lizard’s history of migration, decline and survival are discussed.)

November 2009

“El Paso Zoo Receives Three Horned Lizards” By David Wojnowski and Carolyn Todd (Three horned lizards were transported to the El Paso Zoo from Austin. The lizards had been rescued by Carolyn Todd.)

“HLCS Volunteers Answer the Call at Fort Hood” By Lee Ann Linam (Volunteers survey the Fort Hood Texas Army Reservation to find horned lizards. Harvester ants, Western Ribbon Snakes, Blanchard’s cricket frogs, young Gulf Coast toads, Rio Grande leopard frogs, six-lined racerunners, and slimy salamanders were found.)



Member Highlight - continued from page 9
successful in initiating several new state charters into the Society. I often am asked to testify in court concerning Texas horned lizard biology or called by newspaper reporters to offer quotes concerning Texas horned lizards. Also, I am a lifetime member of the Horned Lizard Conservation Society.

My most recent career path has led me to mid-administration where I am Regents Professor and Chair of the Animal, Rangeland and Wildlife Sciences Department at Texas A&M University-Kingsville. Unfortunately this path keeps me behind a desk more than I would like, but happily I think back on my days of following

radio-collared horned lizards through the brush wondering where they are going. I still enjoy reading scientific studies concerning horned lizards. So I encourage all young biologists to get out in the field and study horned lizards, knowing that old guys like me are eagerly awaiting to read about your findings!



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