HORNED LIZARD CONSERVATION SOCIETY
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Phrynosomatics

The Newsletter of the Horned Lizard Conservation Society

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.

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Ditmars' Horned Lizard, or Rock Horned Lizard: An Historical Update Since Rediscovery in 1970

Wade C. Sherbrooke

Roth's (1997) account of the scientific sleuthing that led to the rediscovery of an almost unknown lizard whets one's appetite for adventure. In 1970, Ditmars' horned lizard, *Phrynosoma ditmarsi* Stejneger 1906, had not been seen alive for seventy-three years. It was known only from three specimens, all lacking good locality data. This precluded careful searching of known localities.

Over the years many in the herpetological community had come to the conclusion that the "species" was either extinct or that the three known specimens were aberrant individuals of the short-horned lizard, *P. douglasi* (note current spelling: Hammerson and Smith 1991; Zamudio 1995a, 1995b). But Reeve (1952) had said that the validity of the species was never in question. Many practicing herpetologists at that time had cut their "herp teeth" reading the various books by Raymond L. Ditmars, including his report of Ditmars' horned lizard (Ditmars 1951). The reporting of the rediscovery of Ditmars' horned lizard (Lowe *et al.* 1971) was a welcome surprise. What has happened since?

As Roth describes so well, by 1970 the sum total of ecological knowledge about the species had been plucked out of its stomachs — two (Roth 1971, 1997). The rest of its habitat requirements were surmised by comparison with a presumed close relative, *P. douglasi*. The nature of that relationship has been of continuing interest to herpetologists (see below). Once the species was recollected in the field there was new information. Its habitat had been identified, the Madrean evergreen woodland (Lowe *et al.* 1971). This might be useful in locating the lizard in other areas. But where? Other mountain ranges in Sonora? In the United States? It had been known from the original specimens that the species occurred near the Mexican-United States border. Therefore, there had always been some hope, expressed by those dreaming of rediscovery, that the species would be discovered living in poorly explored mountains or desert canyons of southern Arizona or New Mexico. To date this has not been the case.

Lowe, Robinson, and Roth (1971) speculated that *P. ditmarsi* would be found in the woodland-grassland ecotone, sympatrically with surrounding populations of *P. douglasi*. The latter species, they felt, was largely restricted to the grassland habitats of northeastern Sonora. They reported the collection of 49 *P. douglasi* within "a dozen or so miles of the Sierra Manzanal." (The distance from their rediscovery locality was not made clear.) Nevertheless, to date, no sympatric populations have been located. Indeed, the most outstanding thing to report 25 years after the rediscovery is that there are now only two additional localities known.

Mr. Paul Geiger was the geologist working in Sonora, in the Sierra Manzanal, who had brought the first specimen of *P. ditmarsi* to Roth. He must have retained his interest in the species, and his eye, for locating it. For when the second locality for the species was reported in 1975, his name appears in the acknowledgments as being the provider of the first specimen from there as well (Lowe and Howard 1975). In the Sierra Baviacora the lizard was

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Of Six Texas Horned Lizards (*Phrynosoma cornutum*)

by Leigh Sanders

Unfortunately, there are still many Texans who don't know that it is illegal to possess a Texas Horned Lizard, which is protected by state law. One of the educational functions of HLCS is to let the public know that Horned Lizards do not live well in captivity. They depend on very specific light, temperature and food requirements to stay alive. Every year, TPWD ends up with Horned Lizards that they have confiscated or have been turned in to them. Sometimes Horned Lizards show up in truck-loads of dirt or gravel that are used for highway construction. Often there is no way of knowing where they came from or else their original habitat is no longer available.

Where do these lizards go? Over the years, many homeless Horned Lizards have been devotedly cared for by Carolyn Todd, acting President of the Texas Chapter of the HLCS. For the last couple of years I have gathered Harvester Ants for some of the lizards she has kept. I knew that her hands were full, so when she asked me to help keep six Horned Lizards that she had just received, I said OK, I would do my best. These six were scheduled to be returned to their homeland, back to the Lubbock area, in a couple months. They were lucky: we had received information about where they came from and a general vicinity where they could be released.

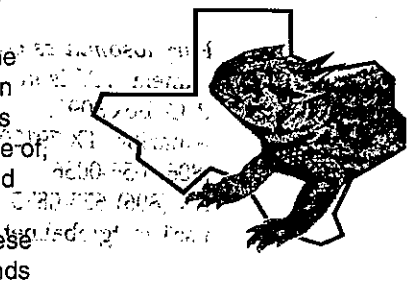
Keeping the two adults fed was fairly easy. They loved the searing July heat and ate plenty of Harvester Ants. One shed its skin.

The four juveniles were a different matter. Two were big enough to eat some Harvester Ants, but also needed a variety of other smaller bugs. Two were so small that they couldn't eat Harvester Ants and needed termites added to their diet of smaller insects. It was a bit odd to consider myself lucky to have a nice healthy supply of bugs readily available from the organic garden, plenty of Harvester Ants nearby and a good supply of termites down at the creek on our property. Even the baby Horned Lizards seemed to be growing and two of the four juveniles also shed their skins. As time went on, I began to wonder how well they would adapt to unknown territory. My willingness to observe the lizards after they were released ultimately landed me the task of taking them back to Lubbock and releasing them this past September. The Horned Lizards needed to return to their native habitat and re-adapt into nature before fall set in and their biological time clocks told them it was time to hibernate.

It is vitally important to the future outcome of such return and release programs to be assured that the potential release area is protected from future development. The staff at Lubbock Lake Landmark State Historical Park (LLLSHP) enthusiastically agreed to help me determine the best reintroduction area. LLLSHP could give these six a sanctuary that would optimize the chances of their return having a long-term positive affect. Maybe they would live, grow, reproduce and sustain a small, but protected population. Now that I knew that there was a good re-location site, I quickly prepared for a trip to Lubbock.

Unable to imagine any heat worse than what we had experienced in Austin as I headed out across the hill country, there really wasn't any sense of dread about heading into the High Plains of west Texas. The first thing I noticed outside Austin were all the black grass-fire patches and trees that had changed color too soon for fall and too late for October's rains. Entire ridges of hill country stretched out arms of iron rust-colored trees expiring in the heat. Empty creeks and ponds offered no relief to thirsty animals. The Llano River was a trickle. The hot sun and granite, with so much brown, burned foliage, gave the Inks Lake/Burnet area a Mars-like feeling and the lake full of water seemed like an alien oasis. On through Brady, Eden, and San Angelo. It was nice to see that the Concho River still flowed. Outside of San Angelo, I began hopelessly looking for playas that usually occupy the low lands of gently sloping fields. Irrigation rigs kept some fields green while rangelands singed. There seemed to be plenty of water flowing in the canals of the town of Big Spring; however, Lake Tahoka and all the playas were dry. The six Horned Lizards travelled across Texas comfortably, with very low airconditioning and partial covers over their boxes so they could choose their own light and temperature. We arrived in Lubbock just before the park closed. The park staff was extremely kind to give me a little time to walk the grounds in search of prime Horned Lizard real estate. Release would have to come tomorrow after I could finish my survey of the areas that the park staff suggested.

The next morning I found that Harvester Ants were abundant in two areas that were suggested. And yet, as I followed the trails, the Harvester Ants also generally stayed on the public walkways and in each case the mounds were in, or on the edge of, a public pathway. I did not find any Horned Lizard scat around these trail areas. The grounds



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The 4th Horned Lizard Symposium:

An Excursion to the Chiricahuas of Southeastern Arizona

by Joseph C. Cepeda

The Physical Setting

We arrived at the portal to the Chiricahuas in the dark of night, although the road ahead was periodically, but only briefly, illuminated by flashes of lightning accompanying the rainstorms which had been with us since turning off Interstate 10 near Lordsburg. The rain had been going on long enough that the low water crossings were beginning to transmit water across the road (as they had been engineered to do). After one or two stops in what we perceived to be the vicinity of Portal to ask for directions we arrived at the Southwestern Field Station of the American Museum of Natural History, about 4 miles up Cave Creek Canyon from the locality called Portal, Arizona.

We had to ford one more creek to get to the cabins, and then in the well-lighted Main Building we found most of the group and were introduced to Wade and Emily Sherbrooke, the hosts of this beautiful facility, who assigned us our sleeping quarters. Wade, the director of the Field Station then gave the assembled group of about 20 individuals a brief history of how the land for the station was acquired in 1955 and the pivotal role that David Rockefeller played in the acquisition and initial support for the station. The station is located at, or near, the juncture between several ecosystems — where the Chihuahuan desert meets the Sonoran and where the Mexican Sierra Madre, to the south, transitions to the Basin and Range and the Rocky Mountains of the American West to the north.

In addition, there is a considerable elevation range between the summits of the Chiricahua Range and the surrounding valleys. The monsoon refused to loosen its grip on southern Arizona and it rained most of the night, but the skies cleared before dawn and the regal natural setting of the Field Station became apparent as we exited our cabins. The view from the station is dominated by tall orange cliffs of volcanic rock. In the vicinity of the main building several large and stately sycamore trees provide shade. The few days that we were there they were in autumn color — not only at the station but throughout the canyon.

The Program

After breakfast, ***Scott Henke***, the Symposium Chair, gave the group a brief description of the HLCS, beginning with its establishment in November of 1990. He also described some of the highlights of the organization including the **Adopt-A-Lizard Program** which was established in 1996, the **K-3 Horned Lizard Curriculum Guide**, and the **Flat-Tailed Horned Lizard Lawsuit** initiated in 1998.

The exhibits included various sets of ***Larry Wisdom***'s models of horned lizard species and life cycles.

During a break in the technical program, the participants were introduced to Charlotte "Charly" Herring, a 16-year old student from Austin, Texas, and author of *Saving the Springs the Gray Burn*, a story about Sally and Bart N. Mander, salamanders of the Barton Springs.

The technical program provided a variety of information on horned lizards.

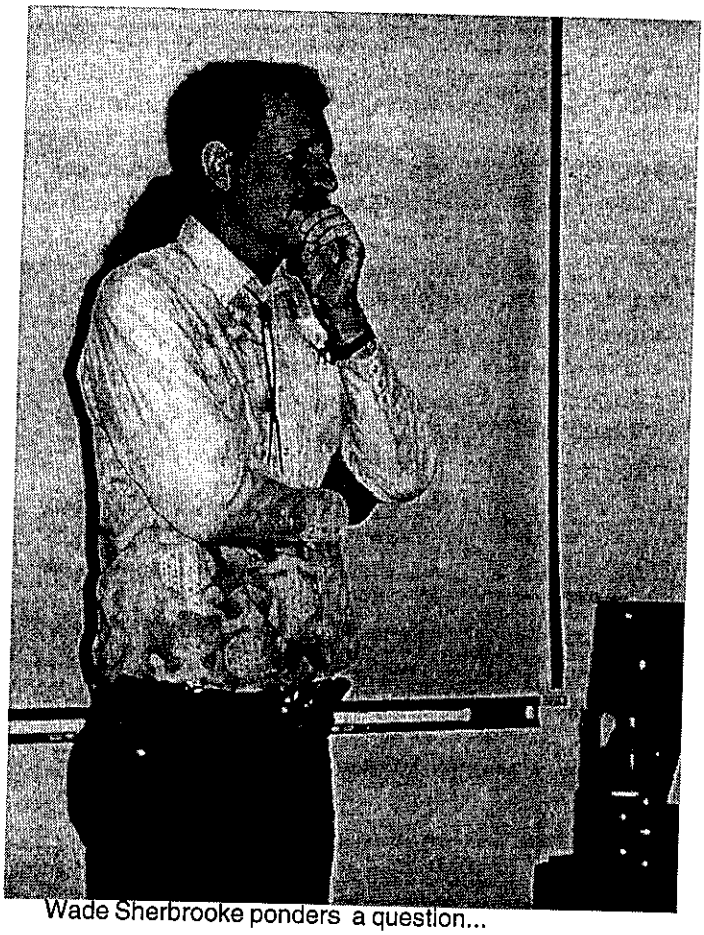
Kevin Young documented the large differences in movements between males and females and from year to year in flat-tailed horned lizards.

Joe Collet described the construction and uses of his outdoor enclosure for horned lizards in Washington County, Utah. He also described, in separate talks, his use of hydration therapy for rehydrating stressed individuals, and alternative methods to mark lizards for subsequent re-identification.

Roger Repp, in describing his field methodology, impressed me with the following facts and figures: In the year 2000(not yet concluded) 144 trips and 714 hours spent in the field. In the last 4 years - 872 trips and 4430 field hours. Wow!

Ty Gardner described the use of barrier fences to prevent road mortality in the flat-tailed horned lizard on the Barry Goldwater Aerial Gunnery Range near Yuma, Arizona. Perhaps a few decades into the future we will have not only barrier fences but also pathways beneath highways to prevent the mortality of all types of wildlife on our roadways. I have been impressed with this mortality because I walk 2 miles of rural highway on a near-daily basis. I have been keeping a log of the incredible amount of roadkill on this short stretch of highway. However, thus far, only one horned lizard is recorded as a casualty in one and one-half years of monitoring.

Wendy Hodges, in a slide show tour of Mexico described her travels from Rancho La Palma in northern Mexico to Isla Cedros through the



Wade Sherbrooke ponders a question...

states of Leon and Guanajuato in central Mexico and described her technique for testing for blood squirting (with the help of *Canis familiaris*). She also described several unexpected behaviors of Mexican horned lizards regarding their activity periods and refuge areas.

Wade Sherbrooke described his techniques for observing live horned lizards (and the occasional flattened one) on paved road surfaces. He has documented that from mid-May to mid-June the lizards on the roads are mostly (86%) males. Two months later they are mostly females. His theory is that during the mating season the males search out open spaces where their field of view is increased. Unfortunately, roads seem to provide a similar open field of view to a horned lizard as does a desert wash.

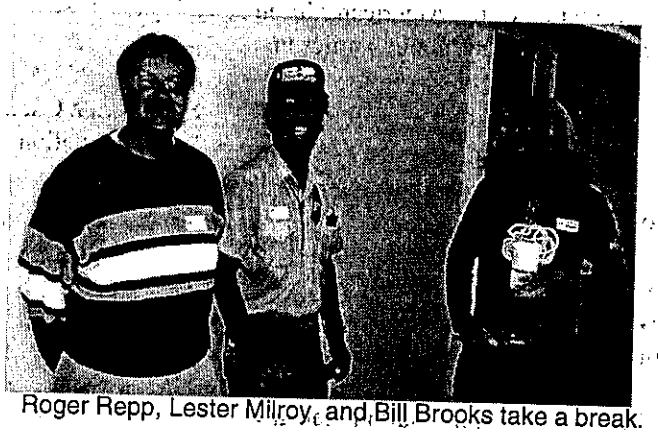
Wendy Hodges and Clare Freeman discuss digital cameras.

After an excellent lunch served in the main building, and with selections to whet the appetite of both carnivores and vegetarians, the technical program resumed.

Lee Ann Linam presented the preliminary results of the Texas Horned Lizard Watch, a program initiated by the Texas Parks and Wildlife Department in 1997.

Lester Milroy of Apple Valley, California, provided data on the numbers of horned lizards collected for the pet trade. He made a passionate plea for the members of the society to work toward the elimination of the trade in lizards for pets.

Scott Henke gave a state by state account of the status of horned lizards, and the laws that govern their collection, sale and transportation. This presentation generated a lively question and answer session.



Roger Repp, Lester Milroy, and Bill Brooks take a break.

Bryan Morrill described management actions on the Barry Goldwater Range to preclude listing of the Flat-tailed Horned Lizard.

On Saturday evening, ***Dave Hardy*** presented a program on the Black-tailed Rattlesnake. His beautifully illustrated talk detailed the results of his multi-year study of this snake in the field study area between Portal and Paradise. His presentation provided insights into the hunting, feeding, nurturing and seasonal behaviors of this species. However, when I went back to the cabin that evening, I looked under the bed — just to make sure!

The narrative of the technical session was compiled from notes taken, in part, in the dark, and supplemented by my own recollections and the program distributed at the meeting. I apologize if I neglected to mention a presentation.

located in Madrean oak woodland, in rocky habitats. The dominant species of oaks were different from the locality in the Sierra Manzanal. The new locality, at an elevation of 1,425 m (4,700 feet) was approximately 130 airline kms southeast of the Sierra Manzanal locality (Lowe and Howard 1975). Both localities are in the drainage of the Rio Sonora.

Lowe and Howard (1975) now proposed a new common name for the lizard, the "rock horned lizard." At both localities they had been found in rocky habitats, and indeed the lizards were rock-like in form and appearance. The earlier report (Lowe *et al.* 1971) had noted that the recently collected specimens were spinose, in contrast to the three earlier known specimens that were smooth and "hornless." This condition seems to have been a result of captivity and/or long preservation. Therefore, at this time, the common name of "hornless horned lizard" (Smith 1946) seems inappropriate.

Lowe and Howard (1975) reported that in 1974 a large (snout-vent length 90 mm) female gave birth to nine young in captivity (an earlier collection at this locality was made in 1972). They verified their suspicion that the species was viviparous, and again suggested a close relationship to *P. douglasi*, which is also viviparous. The birth date July 23 (ten days after capture) combined with information from other specimens, led them to suggest that the timing of male and female reproductive cycles in *P. ditmarsi* allows for coincidence of parturition with the onset of the summer monsoons. Some information about the natural history of the species was beginning to come to scientific light.

The discovery of the third locality did not happen until 1983, more than ten years later. Perhaps it was more fortuitous even than the first two discovered. This time the discoverer was a botanist at the Arizona-Sonora Desert Museum (ASDM), Robert H. Perrill (1983). The single subadult animal was photographed and released (Perrill had no collecting permits for reptiles in Mexico). The fact that the lizard was recognized and reported by a naturalist whose orientation was botany is probably attributable to the role the ASDM had played, and was playing in 1983 (see below), in the pursuit of Ditmars' horned lizard. Also, Perrill had an interest in reptiles. Earlier the ASDM had given support to Dr. Charles H. Lowe, at the University of Arizona, for work on the amphibians and reptiles of Sonora. Also, it was the ASDM that had given a grant to Michael D. Robinson, Lowe's Ph.D. graduate student at the time, to try to use historical documents to trace Carl Lumholtz's expedition trail through Sonora in an attempt to locate the origin of the single specimen collected by F. Robinette in 1897. (Lumholtz, whose expedition goals were anthropological, did note the details of one horned lizard, a design discovered on an archaeological ceramic jar [illustration Plate 1, c, p. 95, Vol. 1 in Lumholtz 1902].)

Perrill's reported observation (1983) gave new insight into the biogeography of the lizard. He had found it in a different drainage, in the Rio Yaqui, approximately 150 airline kms south-southeast of the nearest known location (Sierra Baviacora). The substrata seemed familiar, "The lizard was found on a steep, south-facing slope with widely scattered rocky outcrops" (Perrill, 1983). But the Madrean evergreen woodlands were not to be found at this locality. The lizard was living in Sinaloan Deciduous Forest with Mexican tree ocotillos and kapok trees. Our earlier concept of the habitat requirements of this species, based on two localities, needed to be altered. Where else might it be found? That question remains today.

As Perrill's report suggests, study of this lizard in Mexico was somewhat thwarted by the difficulties in obtaining scientific collecting permits. But in 1983, Howard E. Lawler (ASDM) obtained a permit to collect live *P. ditmarsi*. A collaboration was arranged with Dr. Richard R. Montanucci, of Clemson University, to establish a breeding colony for study in South Carolina. Montanucci invited me to join him and his student, Tom Mann, on the collecting expedition August 2-6. Dr. Lowe, with whom I had studied at the University of Arizona, sketched a map of the Rancho La Palma locality in the Sierra Baviacora for me.

Once there, we spent a full day and a half combing one slope intensively without seeing a horned lizard of any species. Weather conditions were ideal for collecting. Before leaving the United States we had contacted Vince Roth concerning our plans. He had indicated that he might meet us in the field. On the second day, around noon, he arrived with his wife, Barbara, and a group from the Southwestern Research Station. We had no lizards to show him, and spirits were low. Late that afternoon, around 4:30, I took off by myself and changed search strategy to focus on a different slope, one that was close both to where we had searched and to our camp-

site. At 6:05 I found my first *P. ditmarsi*, an adult, and was thrilled. When I returned to camp and pulled it out of my collecting bag everyone was joyful. But it was too late to mount a search party until the following morning. Then, after breakfast, seven of us ascended the slope where I had been successful. By late morning we had two more adults and three juveniles. Then time ran out, and we departed for the trip home.

Back at Clemson University, Richard Montanucci established a breeding colony. Over the years this captive colony was the source of the only subsequent data on the behavior of the species. In particular, Montanucci (1989a) published on diel activity, locomotion, aggressive interactions, and sleeping sites. He also published (Montanucci 1989b) on the reproductive behaviors of adults, mating, non-receptive behavior in females, parturition, and the grown of juveniles. Although his conclusions from his captive colony suggested an agreement with Lowe and Howard (1975) on birth coinciding with the summer monsoons, he found a discrepancy with the time of mating (spring) suggested by Lowe and Howard (1975). Apparently, Lowe and Howard (1975) had based part of their reasoning on a comparison with *P. douglasi* in Arizona, a study by Goldberg (1971). Montanucci (1989b) concluded that mating takes place from August through December, not in the spring like in *P. douglasi.* He suggested that in females either (1) embryogenesis is halted during the winter, or (2) sperm is stored. The discrepancy in these two views of mating time in the species remains unresolved.

When Leonhard Stejneger at the Smithsonian Institution described *P. ditmarsi* in 1906 he noted the following: "It is difficult to say to which of the former known *Phrynosomas* the present species is most nearly related. It has no special affinity to any of them." By 1952, in his review of the genus, Reeve said: "The absence of the spines, the enormous development of the lower jaw, the extreme notched condition of the occipital area and other cranial features would seem to indicate that the nearest relative of *P. ditmarsi* is *douglassii.*" And in an osteological review of the genus in 1969, Presch said: "It apparently represents a hightly localized derivative of *douglassii.*" Lowe *et al.* (1971) and Lowe and Howard (1975) concurred with this view. In 1987 Montanucci published a phylogenetic study of the genus based on skeletal and external morphology. It incorporated cladistical analysis of character states. A striking conclusion of that study was that *P. ditmarsi* and *P. douglasi* are not closely related but fall in two different lineages within the genus. Recently, Zamudio (1996) presented a cladogram, based on her work and on unpublished molecular and morphological studies by Tod Reeder, that suggests that *P. ditmarsi* is most closely related to one segment of the polytypic species *P. douglasi.* Currently the former *P. douglasi* is recognized as two species (Zamudio *et al.* 1997), *P. douglasi* and *P. hernandezi*, the latter of which seems to be the closest relative of *P. ditmarsi.* This throws the relationship of *P. ditmarsi* back with the *P. douglasi* evolutionary line, at least for the present.

Ditmars' horned lizard was first collected nearly 107 years ago, then again 100 years ago, then rediscovered 25 years ago. Today it is known from only three localities in Sonora, Mexico. It has never been the subject of a field investigation. Still today, very little is known about this curious lizard.

I wonder, what more will we know 25 years from now?

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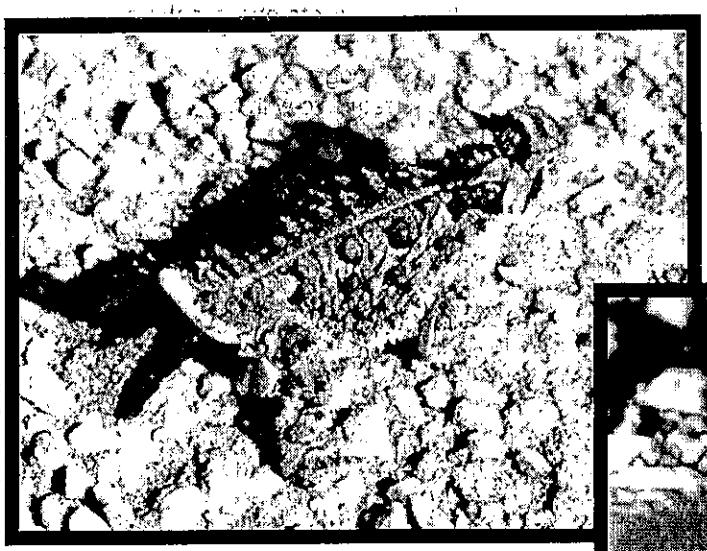

Large male Horned Lizard with his nubbed tail .

HLCS
Matagorda Island
Texas
Labor Day Weekend

Young male Horned Lizard encountered on the first day of the field trip.

Photos by Bill Brooks

Between Horned Lizard sightings, the field trip group observed Tern eggs.

September 1-3, 2000

Return and Release, continued from page 3

surrounding the park buildings as well as the picnic areas were teaming with Harvester Ants. The ants seemed to prefer the nicely mowed grass and concrete sidewalks to the prairie. The staff reported seeing Horned Lizards all around these public walkway areas including inside the entrance foyers to the buildings. In the spring, baby Horned Lizards frequently hatched out from holes in the flowerbeds next to the buildings. These observations were consistent with what I have seen in other survey areas. Harvester Ants and Horned Lizards seem to be more plentiful in nicely mowed, easily crossable terrain. They also seem to like big tufts of grass where there is flat ground in between the plants.

Outside the mowed areas and walkways of LLLSHP the grass is quite dense and even in the places where there is bare ground, the Harvester Ants were absent unless that bare ground was a pathway. The LLLSHP population seemed to be plentiful and healthy, though restricted to a small section of the 366 - acre park. The park itself borders an athletic complex and is completed surrounded by development. Though the native Horned Lizard population here is doing well, it doesn't need the extra competition for food and space that these six might offer. Finally, I settled on a strip of land approximately 1½ acres wide by 6 acres long, that served as boundary between the athletic complex and the exit road of the park. It had Harvester Ants and was not used by the public. The park kept the area mowed and assured me that no pesticides were used now or in the future, nor would this land be sold or developed. It was about 10:00 a.m. by this time and I had promised the six little guys they would be free by noon.

I felt really happy to be letting them go their own way. From what I could tell, this was a good place for them. The two smallest Horned Lizards were still in bed (in the sand) with just their little heads poking out when I took them out of the box. Nestled beneath the big leaves of a buffalo gourd, I covered them back up with sand except for their faces, which were in direct, warming sunlight. The two bigger babies were already awake but not moving much. The adults had been actively trying to escape their boxes all morning. All four were placed in direct sunlight about 4 feet from an active Harvester Ant mound and next to different Harvester Ant trails. I then went back to the truck to observe them.

Surprise #1: The Horned Lizards blended in with their surroundings so well, that even though I could spot Harvester Ants with the binoculars from the road, the Horned Lizards just disappeared. I had to return to within 30 feet to observe them.

Surprise #2: I never saw Lizard #4 again. I was doing good to keep an eye on all the others. Within 30 minutes all three of the other older lizards had eaten and were on their way, following ant trails and lopping up ants. Very good. The two babies gradually wiggled out of the sand and warmed themselves in the sun.

As I sat on the ground with binoculars focused on a Harvester Ant mound, I realized that I was beginning to attract attention. Several cars and trucks had passed by slowly and were obviously curious about what I was watching. As one truck pulled up behind mine, I decided it was time to walk away. As I walked away, the truck pulled out and left. I didn't want people coming up and messing up the Horned Lizard's re-adaptation process. Instead of staying all day, I decided I had better stop and let them have their freedom and their privacy. I am optimistic for their long-range survival and hope to go back to this site in the near future and see if I can find evidence that these six are still here.

On the way to Lubbock and back, I tried to notice Harvester Ant mounds along the shoulders of the road. I do not recommend this to anyone. But as the primary Harvester Ant harvester for the Texas chapter of the HLCS, I have done plenty of hunting for public ant sites. So, I kind of have a talent for it. The mounds were plentiful and sighting them was not that difficult since there was little vegetation. There was a lot of cotton farming and some peanut farming as I headed south from Lubbock.

It was surprising to note that Harvester Ants did quite well on the edges of cotton fields. They were just out of reach of the tractor tracks, between the fields and the road I was on as well as in the shoulder areas. The drought didn't appear to be affecting them much. I was also somewhat surprised to see how prevalent the mounds were all the way up to the outskirts of Austin. There are certainly Harvester Ants east of Austin, but they definitely dominate the western region. Apparently also, these ants are not as susceptible to the effects of pesticides as their predators, the Horned Lizards. Do Harvester Ants prefer mowed areas? Does this mound site preference place Horned Lizards at risk? Could queens of Harvester Ants queens prefer placing mound sites on road shoulders when habitat has been eliminated by urban development? Could this preference put Horned Lizards at increased risks such as greater exposure to traffic and to hawks hunting from power lines?

Those involved in science continue to gather facts and formulate hypotheses to try and explain declining Horned Lizard populations in Texas.

I'm just someone trying to help in small ways, noting what I see, making speculations, and asking questions. I hope my two cents does a little good.

Up and Coming HLCS chapter and national officers and researchers...

The Horned Lizard Tattoos (alias, stamps) were a hit at Eastland's Old Rip Festival on September 16, 2000 *photo by Bill Brooks*

Bill Brooks, the Toad Lady Bette Armstrong, and Clare Freeman toad the booth at Eastland.

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To you, just a lizard, but to her, treasure

by Jon McConal

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this article originally published August 28, 2000, in the Fort Worth Star-Telegram

Want to know something about the famed Texas horned toad? Then visit the Toad Lady. The Toad Lady is Bette Armstrong, and she's crazy about the little lizards whose numbers have declined so much that they are now listed as protected.

During a recent visit, Armstrong beamed as if she had just found treasure. She hadn't. She had found a horned toad near the town of Carbon.

"We took our grandson, Forest John Waine — he's our first — to see this one," Armstrong said. "That was his first horned toad to see."

Forest is getting very, very, very early lessons in conservation — he is 1 month old.

Just talking about horned toads makes Armstrong's blue eyes flash like neon signs. She pays homage to the horned toad at home. She has a silver horned toad necklace, a horned toad toothpick holder, and a horned toad lamp.

A sign on her pickup says, "Caution, I brake for Horned Toads."

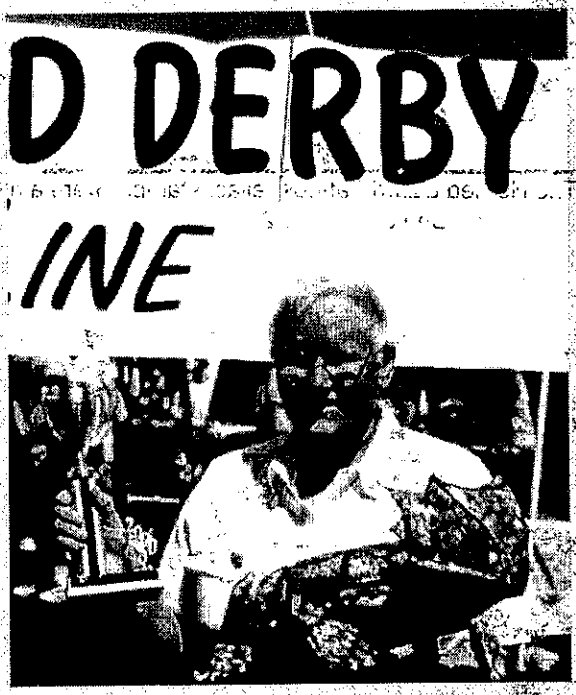
Armstrong probably is one of the few people — maybe the only one — who makes stuffed horned toads. She spends three hours on each one of these 18-inch long models, which sell for $25 each.

If you've got questions about Old Rip — the horned toad that made this city (Eastland) famous in 1928 when workers opened a cornerstone and reportedly discovered Old Rip still alive after 30 years — Armstrong is the person to see.

"We will have seven people here at our annual Old Ripfest who were here and actually witnessed the unentombment of old Old Rip," she said.

That event will begin at 8 a.m. Sept. 16. Old Ripfest is filled with horned toad activities.

"We will have our annual horned toad derby," she said.



Bette Armstrong at Eastland's Old Rip Festival, September 2000

"We race horned toads — not live ones, but models. Here's my entry."

Her offering is a 25-inch long model that will sit on a remote-controlled car during the race. When she paused for a moment, I asked her how in the world she had become so wrapped up in horned toads.

It started when she was a youngster in Lubbock and found them everywhere, she replied.

"And I have loved bugs, snakes and lizards all of my life," she said.

When Armstrong and her husband, Jim, moved here in October 1993, the local newspaper bemoaned the fact that no one had ever made a stuffed horned toad to honor Old Rip. The Toad Lady went into action.

"Jim and I worked four months designing and building the first stuffed horned toad," she said. "And that is how I became known as the Toad Lady. I have made hundreds since then, and I have even made a costume that I wear to schools and in parades. Here it is."

A photograph exhibits a costumed Toad Lady, who, truth be known, looks like the creature from the black lagoon. However, children hug her legs and say, "Oh, I love you, Horned Toad Lady."

That makes her about as happy as finding a horned toad. When she finds one, Armstrong said, she acts the way she did when she was 5 years old and found one.

"I am walking along, and then I see one on the ground, and I can't believe it, and I go kind of crazy," she said.

As if she's found unentombed treasure.

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