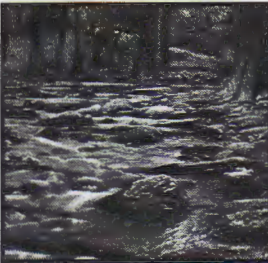


*Friends of Guadalupe River, Honey Creek, Inc.*

A non-profit organization



**Along the Trail**

by Tom Anderson

**Board of Directors**

This issue I have chosen to give some interesting tidbits of information about the 9-banded Armadillo, also know as the Texas Road Bump. Its scientific name is *Dasypus novemcinctus*. It has several other nicknames such as; Texas Turkey, and Possum on the half shell. Its range is from Northern Argentina to South East U.S. and has been expanding northward. They are biologically classified as edentates, meaning toothless, but this is erroneous. Armadillos do have about 30 small teeth. The body temperature of these creatures is 32 degrees Celsius. They have a litter size of 4 identical offspring. They are produced from one fertilized egg and they share the same placenta.

Because of their unique double-twinning, nine-banded armadillos are studied to learn more about multiple births and other reproductive issues. Some researchers have also explored the possibility of using armadillos in AIDS studies. In the past, the nine-banded armadillo has been used for skin and organ transplant experiments, tests of cancer-causing agents, and experiments on drug metabolism. The fact that one animal produces four identical young has been very helpful to scientists, because no experiment is acceptable without proper controls. An identical animal means that any differences seen between an experimental animal and the control animal are a result of the treatment, and not due to different genetic makeup. Armadillos like to swim, and they are very good at it. They have a strong dog paddle, and can even go quite a distance underwater, walking along the bottom of streams and ponds. They can hold their breath for four to six minutes at a time. When they need to cross larger bodies of water, they swim across. Because their heavy shell makes it hard for them to float, they gulp air into their intestines to make them more buoyant. One way that armadillos conserve energy is through *reta mirabilia* (Latin for "miraculous net") — a system of veins and arteries in their legs.



**President and Director of Sat. Programs**  
Nancy Gray  
830-229-5376

**Vice President/Ed. Programs**  
Holly Camero  
210-490-4882  
CHCamero@aol.com

**Secretary/Newsletter**  
Terry Urbanczyk  
830-980-2311  
rturban5@gmail.com

**Treasurer**  
J.W. Pieper  
830-336-3241  
jwp1@gvtc.com

**Director/ Web Master**  
Dan Freeman  
830-899-5539  
alyseskia@yahoo.com

**Director/Maintenance**  
Dave Kibler  
830-336-3718  
djkiib@gvtc.com

**Director/Historian**  
Bryden Moon  
830-336-3375  
Bemoonjr@aol.com

**Director/Past President**  
Wilt Shaw  
830-230-5008  
wshawjr888@aol.com

**Along the Trail** (continued)

by Tom Anderson

Hot blood going out through arteries is cooled by cold blood coming in through veins, and vice versa. This means that not much heat actually goes out into the legs, keeping it in the body. This also means they will get frostbitten very easily, since they have no way to warm their extremities through blood flow. Marine mammals, like whales, use a similar net of veins and arteries to stop the loss of body heat through the fins.

Virgin births? Some female research armadillos have been known to give birth as much as 2 years after capture. The female has the ability to delay implantation of the fertilized egg during time of stress. This helps explain how scientists thought that they might be able to self conceive and have been able to colonize new areas.

**Leprosy Research**

Armadillos are used in research because their body temperature is low enough for them to contract the most virulent form of this disease (lepromatous leprosy). Because the bacillus (*Mycobacterium leprae*) only tends to grow in cooler parts of the body, such as feet, nose and ears, large amounts of bacteria could not be grown (attempts to grow in vitro have not been successful). Because of the armadillo, scientists have been able to develop a vaccine against leprosy.

In conclusion, the nickname Texas Road Bump comes from the Armadillos reaction when frightened. It has a tendency to freeze and then jump straight up many times hitting the bottom of the on coming vehicle.

**Honey Creek Trail Maintenance**

by Dave Kibler

**Guadalupe River Cleanup held 19 April 2008**

On Saturday, 19 April, an enthusiastic group of volunteers worked a total of 220 hours in removing trash and debris from a section of the Guadalupe River between the bridge at FM 3351 downstream to the eastern boundary of Guadalupe River State Park/Honey Creek State Natural Area, a distance of about eight miles. Although the flow rate of the river was very low, these fine folks gathered over 250 pounds of debris of all types.

Boy Scout Troop 285, sponsored by Coker Methodist church in San Antonio, has adopted a semi-annual river clean-up as its primary troop service project, and 45 of the 55 workers came from that fine group. The Saturday Paddlers canoeing group provided an additional 10 eager volunteers. All were served a great grilled lunch at the park riverfront picnic area at noon. The Friends of GRSP/HCSNA provided the food that was prepared.

This clean-up occurred under the sponsorship of the Keep Texas Beautiful wing of the Texas Commission on Environmental Quality, which promotes river and coastal cleanups all over the state of Texas. A repeat performance of the clean-up on the river is planned for October 2008.

Workshops

by Craig Hensley

Friends of GRSP & HCSNA Training: Butterflies of Guadalupe River and Honey Creek

Saturday, June 21, 1-5 p.m. Meet at the Interpretive Center at GRSP

A plethora of gossamer-winged wonders can be found throughout the park and natural area. Led by Park Interpreter Craig Hensley, participants will gain an in-depth understanding of butterfly ecology from basic life history to their many adaptations. We'll then head outdoors in search of them, learning identification tips in preparation for the 1st annual NABA butterfly count to take place in July in and around the park and natural area (see below).

Guadalupe River/Honey Creek Butterfly Count

Saturday, July 12, 8 a.m.-5 p.m. Meet at the Interpretive Center at GRSP

Join us for our first annual butterfly count! We'll meet at the state park and survey the 4,000+ acres and surrounding area to count butterflies as part of a nation-wide effort to monitor populations of these environmentally sensitive creatures. A brief identification primer will begin the day and then we'll break into teams and take to the trails.

Whether you are a novice or expert, we need you! To sign up for this day of great fun and learning, call 830.438.7653 or cmail craig.hensley@tpwd.state.tx.us.

Each participant will need to pay the \$6 park entry fee (children under 12 are free) plus a \$3 fee for participation in the count – this goes to the North American Butterfly Association for publishing the results.

Interpretive Guide Training

by Tom Anderson

The Friends of Guadalupe river State Park/Honey Creek are in need of additional Interpretive Guides for Honey Creek SNA. On Saturday June 14th at 8:30 am we will conduct a training session. This training will be from 8:30 AM-4:00 PM at GRSP/HCSNA. Individuals interested in participating should contact Tom Anderson. (Checks payable to Friends of GRSP/HCSNA, Inc.)

It will consist of:

- An Introduction To Interpretation
- History of Interpretation
- How to Interpret Honey Creek State Natural Area
- An Interpretative Walk
- State Parks' role in Interpretative Walk Program
- Friends of GRSP/HCSNA role in providing walks
- Expectations of participants after training

What participants will receive:

- Training to become an Interpretative Guide for HCSNA
- Handouts for Training Session
- Membership to Friends of GRSP/HCSNA, Inc.
- Interpretative Guide Patch once training is complete
- Snacks and drinks. Participants should bring a lunch.

Cost: \$30.00 if received prior to date of training. Training limited to the first 30 individuals enrolled.

For registration and/or more information, contact:  
Tom Anderson  
Email- tanderson46@satx.rr.com  
Phone- 210 241-1916

If registering by mail, send to:  
Friends of GRSP/HCSNA, Inc.  
3350 Park Road 31  
Spring Branch, Tx. 78070

## Trails to the Past / Seeds to the Past

by Bryden Moon

As we gather in GRSP and enjoy all it has to offer, it is easy to forget that these accumulated lands were all part of large ranches and farms, with an agrarian lifestyle that was the prevailing norm for all the settlers, outside the major towns in the hill country. It is with this backdrop, over the past fall and spring seasons, that we have had a couple of visits from our friends at the Agricultural Museum in Boerne, with a specific mission in mind: to identify the few pieces of old farm equipment that were left behind – rusting implements from the past that are scattered about the park.



Before we get too far along today, I would like you to think about what might be cradled in the palm of this German farmer's hand? Any guesses as to what is being held? It's fairly tiny... you might be surprised with the results. While you think about it, I'll report back on the findings of our guests.

During the late fall excursion, Kristy Watson and Malcolm Homeier, graciously came to look first hand at a singular device located in a remote part of the park, north of the Guadalupe River. The hiking in & out took far longer than the analysis. While we poked and dusted and removed mud from various sections, both admitted that while most of the parts looked familiar, they had not seen anything quite like our device. Here are some of their thoughts:

*While the equipment wasn't ancient, it could have been pulled by either an animal or an early tractor, possibly putting it in operation as early as the 1920's and definitely by the 1930's. As assembled, with two downward chisels, it probably served to grub or loosen rocks from the earth or to break through roots in the ground. If pulled by a tractor, it would have been a two man operation: a driver of the locomotion and a rider to ensure that appropriate pressure was made to bear into the soil. The rider's seat was missing, as well as the two metal wheels. Interestingly, the missing wheels only served to allow the device to get to the work site (a smoother ride and the ability to turn and maneuver). Once at the field, in preparation for work, the metal wheels would have been lifted off the ground to apply maximum pressure and drag onto the two prongs (and thereafter straight line work). There were foot pedals for the rider. Bailing wire was also in evidence, a necessary accessory, sometimes to repair and sometimes to tweak the mechanics to a special, specific movement. Due to the hike in and out, we ran out of time, but agreed to rendezvous later and take a look at other equipment.*

Many months passed and then on a crisp blue-skied spring morning, the Agricultural Museum members caravanned to our sole destination – the Rust House. On this trip the contingent got bigger: Kristy brought her parents (her father is an agricultural teacher) and Malcolm his wife, along with Lars Nielsen and Clifton Frantzen and their wives. The objects of this group's affections were items that active Friends members have probably walked by many times, maybe even hundreds of times without



giving them a second glance. You see stabled by the Rust House are two sturdy, but heavily rusted farm implements: two pieces of old farm equipment that were retired, right next to the old home, many years ago.

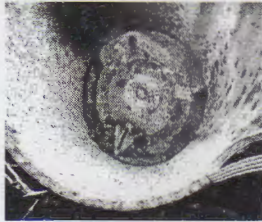
As the group approached, both objects were immediately identified as planters. The larger piece was not a device that anyone had ever seen before. But as the group probed and stared, names and numbers and analysis of how the mecha-

nisms worked came pouring forward:

1930's tractor-pulled International Harvester unit (model number 7503 AR) that was modified at the factory to put two individual units together (as singular units, it is possible that they were originally horse or oxen pulled). The purpose it was designed for – the planting of potatoes. In one continuous motion, the device would till the earth; the hopper would chop up the potato and deposit the eyes into the ground, finally closing up the same row that it had plowed with a final push of dirt over the diced potato droppings.



Then their focus was on a smaller device and again there was no shortage of ideas:



Earlier vintage than the larger unit (not motored by a tractor) - probably horse or oxen pulled. Tilling to a shallower depth, it was used for planting smaller seeds (with the ability to modify the apparatus for dispensing seeds of varying dimensions).

Ok, so back to the first photo – yes – if you guessed seeds you would be correct. They were either pumpkin or squash seeds. But that is not what is surprising. It's where they came from that is surprising. As Malcolm peered into one of the seed holding cylinders mounted to the smaller farm piece, he noticed that there were seeds still in the tank. So he dipped his hand in and pulled out vintage seeds. Imagine that - left over from its last day of work on the farm...before it was put out to pasture. When that was - one can only imagine. So when you make your next trip to a Honey Creek hike or visit the Rust House for a monthly Friends meeting – take a side trip and visit this gear. After all, they really do hold seeds to the past.

There are more stories to be told!

**Friends of Guadalupe River/Honey Creek, Inc. Membership**

**(Membership Renewal date is January 1st)**

Name(s): \_\_\_\_\_ Date \_\_\_\_\_

Address: \_\_\_\_\_ City, State, Zip: \_\_\_\_\_

Email \_\_\_\_\_ Phone: \_\_\_\_\_

**Membership Type:**     New Member     Renewal     Change of Address

**Level of Membership:**     \$5 Education or Youth Organization     \$50 Sustaining Member  
     \$5 Student (under 18)     \$100 Contributing Member  
     \$10 Individual (over 18)     \$500 Corporate Partner  
     \$15 Family     \$1000 Life Membership

**I would like to help the Friends by volunteering for:**

Interpretive hikes                       Outdoor Ed. Programs                       Trail Maintenance  
 Historical Drama                       Evening Programs                       South Island Beautification  
 Trail Ride Event                       Fundraising                       Other \_\_\_\_\_

Send checks payable to "Friends of GR/HC, Inc. Mail to: 3350 Park Road 31, Spring Branch, TX 78070  
 Friends of Guadalupe River/Honey Creek, Inc. is a 501(c)3 organization. All donations are tax deductible.

Please make checks payable to "Friends of GR/HC, Inc." Mail your check and this form to 3350 Park Road 31, Spring Branch, TX 78070

**Friends of Guadalupe River  
and Honey Creek, Inc.**

3350 Park Road 31  
Spring Branch, Texas 78070

We're on the web!  
[www.honeycreekfriends.com](http://www.honeycreekfriends.com)

*The Friends of Guadalupe River and  
Honey Creek, Inc. is a non-profit  
organization working with Guadalupe  
River State Park and Honey Creek  
State Natural Area.*