At A Glance

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Try Our New Voice Mail System!

Richard has a new computer toy to share with the 'Friends' organization. He's purchased a voice mail system and we will set up a series of mail boxes for members to browse for current information on programs, events and Board meetings. The phone number is 210-935-4012. And should be on line by December 5th and available after 6:00 p.m.

Instructions will guide you through the different "mail boxes" for information, to make reservations or leave messages. Later on, we hope to set up a BBS service so you can poll the computer for faxes describing particular events your interested in.

This system also accepts faxes. Send faxes as you normally would and the software will recognize the fax tones and automatically switch to fax mode.

Currently we have several mail boxes set up to describe upcoming events and take reservations. Mail box numbers are listed with articles on the back calendar to speed you through the system. We are still working out the bugs so be patient. Of course your newsletter will be the main source of information and calendar of events.

READ ME: When entering numbers, press the key pad firmly and make each tone long and clear. If the tone is too brief, the system will not "hear" it. Please don't hang-up to exit. Try to use the proper exit sequence and please speak slowly and clearly (that's for me!)

1st Annual Spring Science Day Camp for Kids Announced for May 8 - 13th

Texas Environmental & Wildlife in Danger Interpretive Program. May 8th - 13th. Sponsored by Friends of Guadalupe River/Honey Creek, Guadalupe River State Park and the community. Program will be presented by Thomas Vermersch, Living Jungle Science Programs.

Program is designed for students and schools grade levels 3 through 6 as well as youth groups and individuals.

Monday, May 8th - Friday, May 12th will be reserved for schools.

Classroom rates are $2.00 per child. Saturday, May 13th will be available for youth groups and individuals at a $5.00 per child fee. The day camp will take place at Guadalupe River State Park.

There will be two program sessions presented each day. The first program session is from 9:00 - 11:30 a.m., the afternoon session is from 12:30 - 3:00 p.m. Each session will be limited to 50 kids.

The activity units will include: how people of Texas affect our wildlife, understanding our environment and how we as people fit into it, identification of Texas ecosystems, community and food web, pond and soil, niche, adaptations of wildlife, protection/camouflage coloration, wildlife management, water pollution and organic matter, oil spills, and biodegradable materials.

Students will participate in question-and-answer, hands-on activities with live and preserved insects, spiders, reptiles, amphibians, birds, and mammals. The students will solve real-life related wildlife problems as they role play scenarios involving real-world environmental problems.

An aquatics session will teach about reptiles and amphibians and collect and examine aquatic life found in the algae growth of streams.

Each teacher will be provided with a Texas Environmental & Wildlife in Danger Interpretive Guide Booklet and a Honey Creek Nature/Wildlife Check List and Guide with related program questions for students which will include a glossary of terms used during the program.

Please see page 5 for reservation form and more information.

Fall/Winter Work Days Set for Volunteers!

For the past 14 years, the Rust House Visitor Center has been the trail head for hikes into Honey Creek State Natural Area and an activity area for youth groups and our now famous jelly making weekends. It's a great old house, having survived time (it was built in 1917), weather, a 1992 assault on the west face by a determined woodpecker, as well as mice, squirrels, ants, wasps and this year a large colony of yellow jackets has called the north wall space home. It needs a good cleaning and general maintenance, needless to say, and the area around the house needs to be cleared of invading brush. We've set up some volunteer work days and everyone interested in coming out is encouraged to come and lend a hand. We'll have just as much fun getting to know each other and hearing your ideals for future activities as we will getting this old house ready for another year of use. See page 6, Calendar for dates and more information.
"Pennies for Parks" Program Initiated by Somerset High School Science Club.

Club members, under the direction of science teacher, Cornnie Petruskeovich, are putting conservation into action at Guadalupe River State Park. Students are saving their pennies and taking items to be recycled and donating the proceeds to the Friends of Guadalupe River/Honey Creek, Inc. All donations will be used for special programs and events sponsored by the Friends group.

On Saturday, October 29th, Science Club Members participated in a trail walk along Honey Creek canyon. Afterwards, all joined in for a brief volunteer work session at the Rust House Visitor Center. Thank you Somerset High School Science Club for your commitment and enthusiasm.

Trail Improvement Project and Seedling planting. Eagle Scout candidate, Andrew Johnson, with the help of Scout Troop 828 from New Braunfels established erosion control and hauled fill to improve the trail from the Electrical camping area to the Walk-in camping area. Improvements will increase safety and walking pleasure for park visitors. In another project, last spring, Troop 828 planted 300 cypress seedlings along the Guadalupe river bank.

Vegetation Survey. Devin Koehler of New Braunfels coordinated a vegetation survey of Guadalupe RSP and Honey Creek SNA this past October as part of a environmental improvement service project. This data is important scientific follow up on changes in burned and unburned areas of the parks. Complete report is expected early next year. Thanks also to Boy Scout Troop 163 of NB, Boerne HS Science, Churchill HS Echo Club, and many others who came out to assist in the survey.

Special nature walks for school groups. This fall has been a busy time for visits by schools as part of their environmental education and also other organizations. Somerset Middle and High School Science Club learned about ethnobotany and completed a service projects. Fifth and sixth graders of Comfort Elementary learned water quality and testing with the help of Charlie Wiedenfield of the Upper Guadalupe River Authority. Northeast Home Educators learned about habitat, with fossils and geodes the favorite with this group. Environmental Law Attorneys and the Hill Country Gardeners also were special guests at Honey Creek SNA!

Making Jelly with Mustang grape and Cactus tunas. This past summer brought 37 participants and dozens of "helpers" to Guadalupe RSP from as far away as Grand Prairie to cook up some of the best fresh jelly anywhere. We took raw fruit and cooked it down, strained it and "put up" 108 pints of Mustang Grape jelly and 98 pints of cactus jelly. We used 150 pounds of sugar! Many thanks to Joe Vanecek, Beihon Peters and Dandie Hisler for stoves and propane tanks. And all the wonderful people who helped clean up. Special thanks to Sue, Cathy-Jo, Carla, and Evelyn who stayed and helped all the end. Allen Perry for being the trail guide to Honey Creek that morning. Welcome Diane Tison and Greg and Jean Gonzales who became new members. Watch for this event next summer!

A thanks to many volunteers who lead trail walks and presented evening programs this year. We appreciate your generosity and sharing of your time and knowledge with us at the park. Scott Odgen, Geology; Patti Martin, children's activities: Bexar Grotto Society, Bob Cowell and Kurt Menking, Bats, caves and Aquifers; Sue Bayley, Biriding: Richard Dobie, Flintknapping; Paul Cox, Tree Identification; Bud Krosshowsky, Aquatics; Bob Gent and The San Antonio Astronomical Asosociate, Astronomy; Allen Furlow, Normkling; Thomas Vernersch, reptiles; Herb Uecker, Archeology; James White, Aquatics; Chris Caran, Geology; David McKevey, Wildlife Lecturer, Rosco Creed, Photography; Allen Perry, Naturalists; Hilmar Bergman, Boerne, Katie Carden, Wesley Blackman, Kuriss Schmidt, Dr. Floyd Waller, Native Grasses; George Veni, Aquifers; Kevin Good, Habitat Restoration, Devn Koehler, Vegetation Survey, Walt Schumann, Interpretative Naturalist.

The "Friends" organization needs your help! Do you enjoy being behind the scenes activities, planning programs, working with kids? We can use your help and your creative ideas in 1995. Please let us know that you'd like to become a volunteer. We want to expand our offering of trail walks for schools into the week as well as expand family activities on the weekends. But we need your help. It's easy to learn an activity and we will train you. Already got a busy schedule? Spend as little or as much time with us as you'd like. We'll make it work around your needs. Every little bit helps and volunteers can be individuals or youth groups fulfilling a service project objective. Call our voice mail, write us or just drop into Honey Creek SNA on any Saturday morning. Penny is there for the nature hike from 8:40 a.m. - 12:00 and will be glad to fill you in. Check us out!
Slit Vision

Our round pupils work just fine for us. Why should cats have slits instead?

The muscles which close a slit pupil are able to do so very tightly. As a result, slit pupils can become so small that they are just pinholes for light to enter. Round pupils can't constrict that much. Animals which have slit pupils are those which combine very sensitive nighttime eyes with activity in bright daylight. Those slits are a cat's way of squinting!

Biologists are surprised more animals haven't evolved the very effective vertically slit pupil. In fact, one must look hard to find animals which have acquired this useful feature. The slit pupil, although an adaptation for a nocturnal life style, has nothing to do with seeing in dim light. Many nocturnal animals do not have slit pupils and see very well with their round pupils because they are content to stay out of bright light. The slit pupil, however, makes it possible for an animal with highly light-sensitive eyes to see well in bright light by reducing incoming light in bright situations. Animals which see well and are active at night, but are also active and/or exposed during the day, need some way of protecting the retina from daylight glare. The animals with slit pupils include primarily: most of the world's cats (fully closeable in only the smaller cats); the Black Skimmer, an unusual tern-like bird; almost all nocturnal snakes; alligators and crocodiles and certain sharks, rays and skates (found only in species which frequent shallow or surface water). Foxes may appear to have vertical pupils, but theirrs are more elliptical and are not fully closable. To admit maximum light, the vertical slit pupils open to round pupils, just like their round counterparts, when fully dilated in dim surroundings.

The most common pupil aperture is a circle, but the most common variation of that is the slit pupil - usually vertically oriented in land animals. When the eye opens to admit more light, encircling muscles relax. But when they contract to close the pupil, they eventually "get in their own way", limiting the possible decrease in aperture size. The minimum diameter in humans is nearly an eighth of an inch. Our pupils, then, even when fully constricted, are not small enough to prevent blinding from too much light (and remember, our eyes are not all that light sensitive!). On the other hand, the arrangement of the iris muscles around a slit pupil makes it easy for the slit to be closed (entirely in some cases) to such a small aperture that it does an excellent job of keeping pace with very bright situations.

Some humans make use of artificial "slit vision." The Eskimos, and later polar explorers, often made goggles with thin horizontal (not vertical) slits to reduce the glare of snow and ice and minimize the chance of "snow blindness."

Why would an animal be active in both bright and dark situations? The answer varies with the species involved. Although cats are active mainly at night, they do bask in the sun frequently and the slit allows adequate vision at that time. The vertical slit provides good vision in two "worlds" rather than being restricted to one.

If I wait long enough, I can see pretty well in the dark. Don't humans have night vision also? Yes. Humans can see better in the dark after a period of adjustment, but they cannot see nearly as well as nocturnal animals can. A cat's eye, for instance, is able to catch 50% more light than ours can, yet needs only 1/6 of the light we need in order to see! What we see at night is poor compared to a cat's vision.

Information from John Wiessinger, Right Before Your Eyes, 1986

Camp Bananas

Saw this recipe while watching one of those Saturday afternoon cooking shows. If you like bananas, you will love this recipe. Would be great on a camping trip.

Using firm, ripe bananas, slit open the skin and stuff with sugar, cinnamon and nutmeg. Mix these ingredients to suit your taste. Mix about 1/4 cup of this mixture per banana. Then spoon in two to three tablespoons of butter or margarine.

Wrap each banana in foil and throw on the grill. It takes only about 10 minutes on moderately hot grill. This can also be done in the oven at about 300 degrees.
What is that plant?

Frostweed - Verbesina Virginica

Native Plants of the Hill Country and their cultural uses by Penny Solis

Soon, we will enjoy our first frost of this holiday season and the frostweed plant heralds its arrival by bursting into beautiful ice sculptures. From distance it looks like someone got their yard papered on a wet night. But step up closer and realize delicate creations of spun ice in curling sheets or long ribbon-like strands.

Only a few species of plants are capable of producing these icy creations, Verbesina virginica is one of them. Look for them growing under large trees and in the moist, shaded soil of river or creek bottoms. They are have erect unbranched stems usually 3' but sometimes up to 6' tall. If you've been on one of the Honey Creek walks you also know that Frostweed is a valuable and abundant food source for fall migrating butterflies like the Monarch as they pass through our area.

Another name for Frostweed is Indian tobacco as the leaves were once used by Indians as tobacco and as an ingredient in their pipes. It was and still is also an important ingredient in funeral incense. Roots of the plant were often dug, chopped up and added to livestock feed by ranchers, if the animals had digestive problems. Being a composite, the plant was sometimes used in a bath for relief of arthritis.

Frost "flowers" develop when air temperatures are freezing but the ground still is warm enough for the plant's root system to be active. Plant juices flow from these roots up into the stem, where the cold air freezes them. As the moisture in the plant freezes the ice crystals push out through the stem. As long as the juices flow, air temperatures remain low, and the plant is shaded from the sun, these ice crystals continue to form.

To enjoy and photograph nature's own ice blossoms, be sure to get out early as the warming rays of the sun quickly melt the delicate creations and they have usually disappeared by nine a.m.

Cemeteries are for the Living --

I was in Fredricksburg one day last summer and came across a book by author Terry Jordan, Texas Graveyards. It was published some time ago, but this was the first time I had seen it. Maybe the subject had caused it to be overlooked in our public library collection and that's too bad as it is another great book by the author. Mr. Jordan has written several excellent books on Texas and is a cultural geographer. His name on the cover was all that was needed to reel me into a purchase.

The book examines the combined influence of European, African and Amerindian on the traditional southern cemetery. There are significant traces of all three cultures with European the strongest and itself drawing from the Germanic-Celtic influences. For three hundred years these groups have exchanged ideas and genes, creating the culture. These traditional graveyards are not merely repositories for the dead, but important museums full of reminders from our ancient past and distant, diverse ancestral homelands. Many fine examples of pagan customs and artifacts are displayed, perpetuating millennia old practices. The original symbolic meaning very often is unknown to the people maintaining these rural

graveyards. Perhaps surviving time because we are superstitious about death and the dead. Time-tested techniques for laying the dead to rest and calming the spirits of the deceased tend to persist for centuries and the practitioners are reluctant to tamper with them.

The Texas Germans, for example, very quickly acculturated to southern Anglo-American concept of private, unsanctified family cemeteries. Isolated German family cemeteries are very common, particularly in the Hill Country. Even when church-related cemeteries became available the practice continued - a radical departure from Central European custom.

In southern Anglo-American and Mexican graveyards the wife is traditionally buried to the left and feet-to-east. Many German graves are aligned with adjacent roads or streets and husbands are buried to the left. Instead of family plots, Texas Germans typically buried only husband and wife side by side. Children often have separate rows or sections. Thus, each burial is an entity unto itself and may have individual curbing to distinguish it visually.

In New Braunfels an unusual funerary art form developed. Marine bivalve shells carefully selected for unflawed appearance and uniformity of size and shape, were pressed into wet concrete, forming perfect, straight rows that produce a visually striking effect. It is difficult to tell from where the practice originated, but shells are a powerful symbol of an ancient Mediterranean female deity, Magna Mater. As paganism gave way to Christianity, she was replaced by the Virgin Mary in south European Christianity. Many of Magna Mater's consorts became associated with the Virgin Mary. The shell, rose, dove, and snake. The rose and dove are common symbols adorning head stones yet today.

To place a shell on or in a grave was to intercede with the hereafter on behalf of the deceased. "Let them be reborn," it begs.

German grave sites are distinguished in many other ways. Markers may be adorned with sun wheels, teutonic hearts, Drudenfuss pentacles to ward off the Devil, "speaking dead" epitaphs, and often beautiful craftsmanship of headstones.

So grab a copy of Mr. Jordan's book and visit a traditional cemetery. Or if you'd like, I've enjoyed visiting many of the sites in New Braunfels and would invite you to join me on a Saturday afternoon to visit a few. But, go soon, as the culture and crafts of the Alien, the "old ones," are rapidly disappearing. See calendar on page 6 for dates of cemetery visits.

Penny Solis---

Information here taken from Mr. Jordan's book, Texas Graveyards.
**Friends of Guadalupe River/Honey Creek, Inc.**

**Membership Application**

**Annual Membership Dues and categories:**
- $5.00 Classroom: students or youth organizations ages up to 18.
- $5.00 Student: Age 13 to 18
- $8.00 Individual: Adult over 18
- $12.00 Family
- $50.00 Sustaining
- $100.00 Contributing
- $500.00 Corporate
- $1,000.00 Life

Make check payable to: Friends of GR/HC, Inc. 3350 Park Rd. 31, Spring Branch, TX 78070

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I would like to donate $_________________ beyond membership dues in support of educational programs at the park.

Friends of Guadalupe River/Honey Creek, Inc. is recognized by the IRS as a tax exempt, non-profit organization. All donations to the FGRIHC, Inc. are greatly appreciated and tax deductible.

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### Science Camp Reservation Form

**Camp Dates May 8th - 13th, 1995**

Use this application to reserve your child or your classroom for our 1st annual Science Camp. As space is limited you may wish to fax your reservation in to reserve your dates. Classroom rate per child will not exceed $2.00. Rate per child on Saturday sessions will not exceed $5.00. Friends of Guadalupe River/Honey Creek is seeking sponsors for financial support of this event and will cancel or reduce all camp fees if successful. Donations to support this event are tax deductible. Fax/Voice message line is 210-935-4012, (leave voice messages at mail box #14).

**May 8 - May 12, 1995**

These dates are classroom only sessions. Each session accommodates 50 children. Please indicate date and time you are reserving.

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School Name/Address:
Teacher:
Grade Level:
Phone Number:

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**May 13, 1995 - Saturday**

**Open Enrollment Science Camp**

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Parent's Name:
Child's name:
Address:
Phone Number:
Winter Activities at the Park -- Welcome Canadian Visitors!

Some activities at Guadalupe River SP (GRSP) and Honey Creek SNA (HCSNA) may require a Texas Conservation Passport (TCP) but are open to non-TCP holders for a small donation.

Call our voice mail line at 210-935-4012 - after 6:00 p.m., to make reservations for limited attendance events, to find out the latest information on an event, or to let us know your coming.

Every Saturday morning Lower Edwards Plateau Ecosystem Tour. 9 - 11 a.m. (TCP) HCSNA, Take a leisurely walk along beautiful Honey Creek canyon with interpretation of the cultural and environmental history of the hill country as well a little geology and botany. Walk is moderately strenuous and covers about 2 miles.

Dec - Jan- Feb. Volunteer Work Day at Rust Visitor Center, Saturday, Dec 3, 17; Jan 7, 28; and Feb 4, 11. GRSP - HCSNA, Day will begin at 9:00 a.m. with a hike through Honey Creek Canyon. Afterwards we will have lunch back at the Rust Visitor Center and spend the afternoon doing minor touch-up in and around the Rust House, and clearing away invading brush. Call and let us know you are coming (Voice Mail box 13#), but reservations are not required. Camping reservations are available through Guadalupe RSP by calling 210-438-2656. Please, pets are not allowed on the HC trail and must be leashed at all other times.

Jan 14 - Flintknapping workshop for the interested beginner. There are no reservations available for this event -- however, if weather permits, we will be outdoors at the amphitheater and there will be plenty of viewing area for interested, quiet observers. If the day is miserable we will be indoors and unable to accommodate visitors. To find out if you can come out to watch, call our voice mail system and enter mailbox 15# to check. Tentative location GRSP amphitheater, 1:00 - 4:00 p.m. Instructor Allen Bettis, Archeology Graduate Student back from Alaska!

February 25 - Predator - Prey Relationships. Honey Creek SNA, 9:00 - 11:30 a.m. Make plans to join us on this morning's nature walk. We have a special guest, Walt Schumann, who will talk about predator - prey relationships and the food chain. Afterwards, Walt will introduce us to a couple of reptile friends back at the Rust House. Walk is moderately strenuous and covers about 2 miles.

February 25, New Braunfels, 2:30 p.m. Necrogeography - regionality of burial practices. The traditional cemeteries of Texas provide one of the best insights as to the cultural diversity of the state. New Braunfels Old Town Cemetery and Comal Cemetery has some of the best remaining examples of archaic customs and practices. Join Penny Solis in New Braunfels to spend a few hours looking back at the culture and history of our forefathers. We'll meet at New Braunfels Old Town Cemetery on the south end of New Braunfels. The cemetery is on the west side of IH 35, across from the National Guard Armory at intersection of Peach Street and Elliot Knox. If you are South bound on IH 35 exit at Walnut Ave and continue on the access roadway, south, to the cemetery. If you are North bound on IH 35 exit at FM 1044 and go left, then right as soon as you pass under the expressway. We have to park on Elliot Knox road (nearest IH-35). We will end up at historic Gruene for early dinner. Please let me know you are planning to come by calling the Friends Voice Mail, box #16.

Best wishes for the Holiday Season!!