



Friends of Guadalupe River Honey Creek, Inc.

A non-profit organization

Issue #12

3350 Park Rd 31, Spring Branch, TX 78070 ☎ 210-438-2656

April - June 1997

Earth Day 1997!!

Earth Day at Guadalupe River State Park is Saturday, April 19th. The days events will take place at the Rust Visitor Center on the trail head of Honey Creek SNA. Our calendar inside will detail programs and their times. Our corner stone program this year will be by Last Chance Forever, The Bird of Prey Conservancy. LCF is nationally recognized for its dedication to the rehabilitation and release of injured and orphaned birds of prey back into the wild.



Birds of Prey Conservancy raises 90% of its funding for veterinary care, flight recovery facilities, and staff through its high quality, educational, and entertaining presentations. Our program will emphasis the vital role birds of prey and all creatures play in the balance of nature. A variety of birds will be a part of the demonstration including an eagle, owl, hawk, falcon and vulture. These birds will show-off their distinctive identifying features and fascinating natural behaviors, including flying. Last Chance Forever's goal is to inspire its audience to help this Earth not just to survive, but to stay around us in all of its beauty.

Earth Day will begin with a morning hike through Honey Creek Canyon. Our Trail Guide will be Research Geologist Chris Caran of UT of Austin. Chris played an important role in the protection of Honey Creek Ranch by The Texas Nature Conservancy back in the early 1980's and is very familiar with the canyon. Our hike will take us to the mouth of Honey

Creek to view its unique basalt dike and other natural wonders. If your interest or hobby is geology, then this walk is a must do event.

Morning events at the Rust House Visitor Center will also include a Children's Wilderness Survival Course that will teach children what to do if they should ever get lost in a wilderness situation. A fun program and new for this year, it will be taught by Tom Campsey, Park Interpreter.

Join us for a brief ceremony honoring the Amy McNutt Foundation for its generous donations for the repair and painting of the exterior of the Rust House Visitor Center.

Texas Writer, Deborah Douglas and charter member of the "Friends" will be on hand for a book signing. Deborah is the author of *Gone for the Day: Family Fun in Central Texas*. This is a wonderful guide to 18 day-trip destinations in Texas that are kid tested successes. You'll enjoy visiting with Deborah every bit as much as you'll enjoy her book.

Frank Roberts, The Singing Park Ranger will sing old as well as contemporary Cowboy songs for us during the afternoon.

Churchill High School students will lend a hand by providing drinks and snacks for visitors. They'll also help with program activities in the afternoon. This year we have a mock archeology dig where aspiring young archeologist can unearth "thousands of years old secrets" for the first time. The animal track casting area promises to be full of raccoon, deer, turkey, and coyote tracks for youngsters to cast in plaster of Paris and take home. Project Wild games will provide a variety of run and fun games.

Scout Christopher Farmer of Fair Oaks and Boy Scout Troop 271 will be wrapping up an Eagle badge project Earth Day as well. Christopher is in charge of a project to map by GPS, all the Blue Bird next boxes in Guadalupe River SP and Honey Creek SNA. The locations will be included in a master map of Honey Creek and Guadalupe River that the "Friends" are currently working on. The task is made somewhat difficult as we have no ideal where and how many mounted boxes are out there. But that won't be a mystery much longer. New nest boxes will be built and mounted, old will be repaired and readied for nesting. In addition, bird feeders will be constructed and mounted at various locations around the Rust House to complement our Watchable Wildlife program. Visit with Christopher and let him know how much this work is appreciated!

Park Interpreter, Tom Campsey will return to end the day's events with **Yes! It does snow in Texas!!!** a slide program about the "Blizzard of 1985" that swept across South Texas and other natural disturbances that have occurred on the Guadalupe River State Park area.



Superintendent's Corner

-- by Duncan G. Muckelroy

It is with the greatest of enthusiasm that I am able to announce the Friends' first Life Member. It is a surprise to no one that George C. "Tim" Hixon joined our organization at this highest membership level. Mr. Hixon is a former Texas Parks and Wildlife Department Commissioner and has demonstrated a lifelong support of parks and natural areas. I am confident that Mr. Hixon's initiative has set the precedent to be followed by others. "Tim," your generous support will always be remembered.

Due to the financial "frost" throughout the state park system, our staff is frozen at its present level at a time when spring break new hires and rehires are normally occurring. Although it is very difficult for our staff to continue to provide excellent customer services with this limitation, they are meeting this challenge most admirably. Hopefully, we will see some seasonal worker hires by May.

The main reason our limited staff is able to cope with the current hiring freeze is due to the tremendous support of our present park hosts. We now have seven sites occupied by these fourteen volunteers. These fourteen people assist us in the office, in cleaning restrooms and park grounds, obtaining "campsite counts," and those with craft skills assist us on "special projects." For example, one is a master electrician and his wife provides customer service in the office. The couple at each site is responsible for providing the park with a minimum of thirty-two (32) volunteer hours per week. Seven (7) sites multiplied by thirty-two (32) hours equals a total of 224 hours per week, or approximately 5.6 "full time equivalent" employees!! These are excellent support people and all of them far exceed the minimal number of hours each and every week. My only worry is that understandably they will begin to leave us as the weather begins to increasingly grow warm/hot. Most are familiar faces and hopefully all will return when the cooler time of year evolves!

Of all the numerous interpretive/educational activities supported by the Friends, none is more exciting or important than the Educational Outreach Program scheduled this May at Honey Creek State Natural Area. Funded by a \$15,065 grant awarded by the Texas Parks and Wildlife Department, this pilot program will "reach out" and bring every sixth grader in the Comal Independent School District to Honey Creek. This science/outdoor environmental "classroom" will provide these 750 students an appreciation for their ecology and enable them to realize the difference between a protected area (Honey Creek State Natural Area) compared to a non protected area. The Amy McNutt Foundation continues to support the Friends by generously awarding this "science camp" project a \$3,000 grant as seed money.

Notes From The President.

As I reported to membership last quarter, the educational committee had submitted a grant proposal for our childrens science spring camp. I am pleased to announce that we were granted \$15,065 by TPWD.

On February 2, 1997 the TPWD task force to formulate long term goals to improve public access and use of both Honey Creek SNA and Guadalupe RSP was completed and forwarded to Laird Fowler, Region V Director. Our unanimous recommendations were to continue using Honey Creek SNA for educational and scientific research purposes and that Guadalupe River SP would be considered for possible new trails for equestrian and mountain bike enthusiasts.

On February 15 and 16th the Volksmarch walk was a complete success, over 700 of the nicest people from around the state came to enjoy Honey Creek SNA. This event also netted \$2300 for the "Friends" group. Perri Wickham, graduate student who is doing a hiking impact study is collecting and evaluating post data on the impact to Honey Creek SNA. George Kegley, TPWD Cultural Resources, retraced the routes of the trails and "no evidence of adverse impact to natural or cultural resources along the route."

Please mark your calendars for Saturday, April 19, 1997 as we honor the work this past year on restoration of the Rust House Visitor Center and celebrate the best Earth Day yet at the park.



Watchable Wildlife. The Honey Creek Diner, alias Sweeney scatter feeder is bringing them in. Them being raccoons, raccoons, and more raccoons. Being the ingenious creatures they are, a varmint guard had to be installed on the bottom of the feeder. The critters were gobbling up about 100 lbs of food a week. We wanted Watchable wildlife, not the fattest wildlife in the county. Volunteers are needed to help facilitate some evening viewing schedules. Anyone with a motion-sensing camera who would like to capture some after dark antics - you have to share, contact me, Charlene Simmons at 210-614-8453.

News Flash!!! Noon, March 5, 1997 - Repairs to the windmill adjacent to the Rust House were completed and after many years of sitting idle, the windmill is pumping water again. Many thanks to Spring Branch Repair for a fine job in completing this wonderful project.

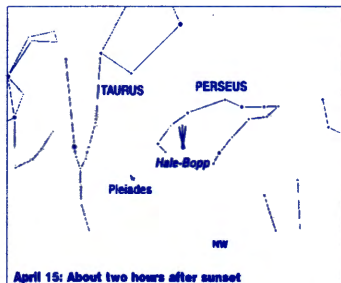
That beautiful sound - the creak of the wheel and the ruffle of the curved blades turning in the wind, now add the trickle of water. Dependable water-pumping windmills - first available in the 1860s made homesteading and development of the West possible. Generations of Texans have watched the spinning mills convert prairie winds into the energy that thrust pump rods deep into the earth's reservoirs to lift cool water to hot, thirsty surface-dwellers. Small wonder that Texans cherish fond memories of such an important element of their landscape and their lives. It is the goal of the Friends to develop this cherished memorial into an interpretive display. Used to teach children and adults alike the importance of the history of the windmill.

Anyone wishing to donate some time and talent to constructing a display that will show how a windmill works and how the rods pump the water up - contact me, Charlene at 210-614-8453.



Stargazing in the Park Sky Almanac through June

No equipment needed for stargazing and everyone can do it! Lay back in a comfortable lawn chair or throw a blanket on the ground under a clear night sky. Meteors can be seen any clear evening. After the spectacular performance of Comet Hyakutake last spring, Comet Hale-Bopp has provided a similar showing this year.



On March 22, Hale-Bopp will pass just over 120 million miles from Earth -- about a third farther than the distance between Earth and the Sun. But the comet stands so near the Sun in our sky that we won't be able to see it. It should charge back into view in a few weeks, when it will appear in early evening in April in the constellation Perseus. In an odd astronomical coincidence, that's right where Hyakutake appeared exactly one year earlier. As the comet draws closer, it also gets brighter. Right now, it's bright enough to see with the unaided eye. There are two reasons the comet is getting brighter. One is just that it's closer to us. The other is that, as an icy comet nears the Sun, some of its ice vaporizes. Like all comets, Hale-Bopp is a ball of frozen gas with bits of rock and metal mixed in. Hale-Bopp is probably bigger than most, but no more than a couple of dozen miles across. As it heats up, some of its ice vaporizes. The ice, rock, and metal all

spew into space, forming a bright cloud that can span hundreds of thousands of miles. Although there's not much material in this cloud, its solid particles reflect a lot of sunlight, and some of its gas glows like a neon bulb. The Sun pushes some of the material away from the comet to form a glowing tail.

April

1st - 1 Comet Hale-Bopp reaches its closest point to the Sun, at a distance of 85 million miles.

3rd - Jupiter and the Moon stand side by side in the early morning sky. Jupiter looks like a very bright star just to the right of the waning crescent Moon. They rise around 3 a.m. and are fairly high in the southeast at sunrise.

5th - Mercury puts in its best "evening-star" appearance of the year over the next few days. Today it is at greatest eastern elongation, so it stands farthest from the Sun in the evening sky. It looks like a moderately bright star, and is low in the west as darkness falls.

6th - Daylight Saving Time begins at 2 a.m.

8th - Mercury and the Moon appear side by side in the western evening sky. Mercury looks like a moderately bright star just to the right of the Moon. This is a good opportunity to find Mercury, which is seldom seen. It's at its highest above the western horizon for the entire year.

21st The Lyrid meteor shower peaks today. But the Moon will overpower all but the very brightest meteors.

22nd - Full Moon, called the Egg Moon or Grass Moon.

29th - Mars stands stationary against the background of stars in the constellation Leo. It forms a bright, flattened triangle with Leo's brightest stars, Regulus (west of Mars) and Denebola (east of Mars)

May

4th - Saturn and the crescent Moon stand just a finger-width apart as they rise just before dawn. The Eta Aquarid meteor shower reaches its peak. The Moon is almost new, and doesn't rise until almost dawn, so it won't interfere with the shooting stars. Eta Aquarids are bits of debris from Comet Halley. They appear to "rain" into Earth's atmosphere from the constellation Aquarius.

15th - Mars stands left of the gibbous Moon, high in the south at sunset. Tomorrow, the Moon will have moved just past Mars, and be even closer than they are tonight.

22nd - Full Moon, the Milk Moon or Planting Moon.

28th - Jupiter and the Moon pose side by side as they rise around 1:30 a.m. Jupiter looks like a very bright

cream-colored star just to the Moon's right. They scoot low across the southern sky during the pre-dawn hours, and appear fairly low in the south at sunrise.

31st Saturn is just below and to the left of the waning crescent Moon in the pre-dawn sky. Saturn rises around 3:30 a.m., shortly after the Moon. By tomorrow morning, the Moon will have moved to the other side of Saturn, but will be much closer to the bright planet.

June

6th - Venus stands well right of the thin crescent Moon at sunset. Both are at the feet of Gemini, the Twins.

12th Mars and the Moon hover near each other for the next two evenings. Tonight, it's just to the left of the Moon; tomorrow, it will stand to the Moon's right, a bit closer. Look fairly high in the south-southwest at sunset.

20th Full Moon, called the Flower Moon, Rose Moon, or Strawberry Moon.

21st Summer solstice occurs at 3:20 a.m. CDT, when the Sun appears farthest north in Earth's sky. The solstice marks the beginning of summer in the northern hemisphere.

23rd As Jupiter rises around 11:30 p.m., it stands just below the gibbous Moon. The Moon moves eastward during the night, so it will draw ever closer to the bright planet. At their closest, around dawn, Jupiter and the Moon will stand about three degrees apart.

28th Saturn and the Moon stage a close encounter in the predawn sky. As they rise, around 1 to 2 a.m., Saturn stands just below and to the left of the Moon. But the Moon's orbital motion carries it eastward through our sky - toward the bright golden planet. Closest approach is around 6 a.m. CDT. Most skywatchers in the United States will see the Moon pass a fraction of a degree south of the planet.

Information for this article is from the January/February 1997 issue of StarDate Magazine published monthly by McDonald Observatory and on the internet at stardate.utexas.edu

1997 Spring Activities at Guadalupe River S.P. & Honey Creek SNA

Readme! Activity fees for Saturday hikes into Honey Creek Canyon are \$2 per person (members of "Friends" are free). Evening amphitheater programs are \$2 per person. Other program fees/reservations as noted. If you are not a TCP pass holder, be aware that park entrance fees are extra. Park phone # is 210-438-2656.

March 29th:

Honey Creek Canyon Walk 9 - 11 a.m.. Join us for a leisurely two mile hike along Honey Creek Canyon with interpretation of the environmental and cultural history of the Edwards Plateau and the Texas hill country. Lead by Penny Solis. Meet at Rust House.

Monarch Watch Survey. 9 - 12 p.m.. You can participate in a nationwide scientific program tracing migration patterns of the Monarch butterfly as they begin their spring migration north. Our observations will help expand what is known about the Monarch's Texas migration. If you cannot come to the scheduled event, it is still possible to help by counting flybys. Survey forms and instructions will be available in park headquarters. Meet at Rust House



Yes! It does snow in Texas!! 8 - 9:00 p.m. A slide show of photographs taken during the "Blizzard of 1985" that swept across South Texas, along with other natural disturbances that have had an influence on the Guadalupe River State Park area. Other events that will be highlighted include the 1978 and 1989 floods of the Guadalupe River. Presented at Park Amphitheater by Tom Campsey, Park Interpreter. \$2 per person

April 5th:

Archeology Walk 9- 11 a.m.

Interpretive hike to learn about historical uses of natural resources by Native Americans plants for food, and shelter. Easy one mile hike along Honey Creek Canyon. Lead by Archeologist Herb Uecker. Meet at Rust House

Monarch Watch Survey.

9 - 12 p.m. See March 29th for details.

April 12th:

Native Plant Identification Walk. 9 - 11 a.m. Walk will be lead by Val Roesseling who lend his expertise on native plants and uses and care in home landscaping. Easy 1 mile walk along Honey Creek Canyon. Meet at Rust House

Monarch Watch Survey.

9 - 12 p.m. See March 29th for details.

Landscapes of the Hill Country. 8 - 9:00 p.m. A slide program that captures the varied landscapes of the Texas Hill Country and explores the way nature and man have had a hand in shaping such landscapes. Presented at Amphitheater by Tom Campsey, Park Interpreter. \$2 per person

Earth Day Programs April 19, 1997

All Earth Day Programs will take place at the Rust Visitor Center except evening slide program. **Bring your lawn chair or beach towel for seating.** Please, no pets.

Geology Walk. 9 - 11 a.m. Hike along Honey Creek Canyon with interpretation of unique geologic features by Geologist Chris

Caran.

Monarch Watch Survey.

9 - 12 p.m. See March 29th for details.

Kids' Wilderness Survival Course 9:30 - 11:30 a.m. A two hour



class that teaches children between the ages of 4 to 15 years old what to do if they ever were to get lost in a wilderness situation. There is also information presented that may interest parents. Presented by Tom Campsey, Park Interpreter, and includes a survival kit that the participants can take home with them. Reservations needed. Call 210-438-2656 or check at park headquarters.

Book signing, 1 - 3:00 p.m., with Texas Writer, Deborah Douglas author of *Gone for the Day: Family Fun in Central Texas*. You'll love her book which is filled with interesting stories and history about 18 day-trip destinations in Texas that are kid tested successes.

Ceremony 1:15 p.m. Rust House Visitor Center dedication.

John Karger's Birds of Prey Raptor demonstration. 2 - 3:00 p.m. There will be a hawk, eagle, falcon, owl and vulture featured in this exciting program which will

teach us about these powerful birds. After the program handlers will answer questions and even let you take your picture with one of the birds. No pets or food will be allowed in the program area. Bring your lawn chair or beach towel for seating on the ground.

Youth activities 3 - 4:30. After the raptor demonstration join in on a variety of fun activities from Cowboy songs with Frank Roberts, The Singin' Park Ranger, to excavating a mock Archeology dig, casting animal tracks, Sun prints, sundials, Project Wild games and more!! Fun for all ages.

Native Plants Program 8 - 9:00 p.m.. This program helps beginning naturalists learn how to identify many of the plants



commonly encountered in the Hill Country area. There will be an emphasis placed on edible and poisonous plants. There will also be a discussion on how certain plants were used by native peoples, early settlers, and many of their modern uses. Program hosted by Tom Campsey, Park Interpreter. Meet at Amphitheater.

April 26:

Honey Creek Canyon Walk.

9 - 11:00 a.m. (See March 29th)

Monarch Watch Survey.

9 - 12 p.m. See March 29th for details.

Sticks, Onions and Mud.

11 - 12:30 p.m. A fun cooking demonstration featuring clever ways to cook without kitchen utensils over a campfire. Hosted by Bill and Beverly Brummel. Reservations required 210-438-2656 or check in at park headquarters. \$1 per adult activity fee.

May 3 -Ethnobotany Walk. 9 -

11:00 a.m. Hike along beautiful Honey Creek Canyon with Janis Merritt of the San Antonio Botanical Society and learn about plants and their uses for food, medicines, dyes and fibers. Meet at Rust House.

May 4, Map & Compass Techniques.

Sunday, 12 noon. Learn how to navigate with simple Learn how to find and follow a bearing, interpret map symbols, read a map scale for measuring distances, calculate elevation from contour lines, and triangulate your current position with only a few tools. You will need to bring a compass, a ruler with standard and metric scales, and a protractor. Several compasses, such as the Silva Ranger, have rulers and protractors built in. Map and compass packets are also available at the park store. Presented by Tom Campsey, Park Interpreter. Reservations required, call 210-438-2656.

May 10:

Tree Identification Walk. 9 -

11:00 a.m. with Paul Cox of the San

Antonio Botanical Center and co-author of "A Friendly Guide to Texas Trees". Bring your copy for autographing. Meet at Rust House.

Landscapes of the Hill Country

8 p.m. Meet at park amphitheater. (See April 12th for details)

May 11 - Operation Kidfish.

Sunday. 10 a.m. This is an activity aimed at getting kids involved in the outdoors, and introducing them to the great sport of fishing. The program will start with some valuable fishing information, and some fun facts about Texas' fish.

Afterwards, we will head out to try some fishing. Participants are encouraged to bring their own fishing equipment, but some poles will be available. Presented by Tom Campsey, Park Interpreter. Bait and tackle will be provided. \$5 activity fee and reservations needed.



May 17

Ethnobotany and Plant

Identification 9 - 11:00 a.m. with Patty Pastzor. Spend a beautiful morning along Honey Creek Canyon learning about native plants and folklore. Co-Author of "A Friendly Guide to Texas Trees". Bring your copy for autographing. Meet at Rust House.

Native Plants slide program

8 p.m. (see April 19th for details) Meet at park amphitheater.

May 24

Honey Creek Canyon Walk 9 - 11:00 a.m. (see March 29th)

White-tailed Deer Program and Watchable Wildlife.

4:30 p.m. This program explores the white-tailed deer population in South Texas. Topics will include vegetative preferences, feeding programs, benefits of hunting, the effects of exotic animals and will be complemented by the



Watchable Wildlife Program. This is a program aimed to educate people on how deer populations interact in the wild. A feeding program has been started near the Rust House Visitor Center. We will be able to observe deer and raccoons during feeding times. Interpretive displays and staff member(s) will be available to quench your thirst for knowledge. This program will be held at the Rust House. \$2 per person.

May 31:

Honey Creek Canyon Walk. 9 -

11:00 a.m. (See March 29th)

Watchable Wildlife Program.

5:00 p.m. This is a program aimed to educate people on how deer populations interact in the wild. A feeding program has been started in the area around the Rust House. Visitors are welcome to come and quietly observe the deer during feeding times. Interpretive displays and staff member(s) will be available to quench your thirst for knowledge. \$2 per person.



June 7:

Honey Creek Canyon Walk. 9 -

11 a.m. (See March 29th for details).

Outdoor

Dutch Oven Cookin'.

12 - 3 p.m.

Reservations required, \$25 per person.

Members of "Friends"

\$15 per person. Pot Wrangler, Charlene Simmons will teach the basics of using the Dutch oven on a campfire. Plus tin turtle ideals. Participants will enjoy the prepared meal!! **Reservations required, call 210-438-2656.**



June 13, 20, 27

Honey Creek Canyon Walk 9 -

11:00 a.m. (see March 29th)

What Plant is That?

by Penny Solis

Horehound (*Marrubium Vulgare*) In Spanish - Marrubio

A native of Europe, this plant of the mint family has readily spread all over North America. The scientific name *Marrubium vulgare*, originates from the Hebrew "marrob", meaning "a bitter juice". The entire plant is clothed in white, downy hairs, giving it a hoary appearance or as it reminds me, covered in cob-webs.



Described as a Resolvent or "all around cure", horehound has been used as a stimulant, tonic, expectorant, diuretic, laxative, a footbath for chilblains and frostbite and as a mild disinfectant. Perhaps it is still best known for relief of coughs and sore throats and asthma attacks brought on by allergies.

For coughs and sore throats a simple tea is recommended. However, Horehound isn't everyone's cup of tea because of its bitter taste. The Germans also

made a horehound candy. The herb now grows wild and is found along roadsides as well as near old farm and ranch houses. Candy stores often carry horehound candy or you can make it yourself as a family activity.

Horehound candy and tea is easy to do and it really soothes sore throats. Plants will be abundant by March and throughout most of the year. For candy collect about 2 cups of leaves to which is added 2 cups of water. Cook at a simmer for 15- 20 minutes. Strain and add 1 cup of sugar to 1 cup of tea. Boil the concoction until a teaspoon of it forms a hard ball when dropped into cold water (about 300 degrees). Pour the candy onto waxed paper and let it sit until hard. Cut or break into small pieces.

For tea: Put a rounded tablespoon of the herb either in a tea ball or loosely in a cup. Pour a cup of boiling water over the herb, steep for 15 minutes and remove the tea ball and strain. Add honey to tame the bitter herb. Drink ½ cup 4 times daily.

As with any medicine do not over use. Prolonged use of horehound can lead to high blood pressure.

Sources for article: *Los Remedios* by Michael Moore, *A Practical Guide to Edible & Useful Plants* by Delene Tull. (Illustration also)

Monarch Watch

The Monarch Watch is a collaborative network of students, teachers, volunteers and researchers dedicated to the study of the biology of the Monarch Butterfly, *Danaus plexippus*. The Texas Monarch Watch is a nonprofit enterprise with a twofold mission: 1) to learn as much about the biology of the monarch butterfly as possible using volunteers to extend the range of observation throughout the whole of Texas, and 2) to use the monarch butterfly to teach basic concepts of ecology, reproductive and migration biology. Along the way, the Texas Monarch Watch hopes to instill in those who meet this beautiful creature an appreciation of science, and especially of nature. There are two "watches" per year, one corresponds with the return of migrants to Texas in the spring from their Mexican overwintering grounds. The second, fall watch, corresponds with the main migration through Texas from northern breeding grounds to the overwintering sites in Mexico. We will participate this year in both migrations by keeping a weekly calendar of the presence and abundance of monarchs in the Guadalupe RSP area and tag them with tags that the Monarch Watch supplies, and release them with the hope that someone down the line will find them and report the tag. If we are lucky, we will find a tagged Monarch and be able to report that information as well. These activities will help trace the movements of migrants through Texas and help determine what effect the weather has on migration.

Results of each migration are announced in newsletters each spring and fall. Results can also be read on the internet at monarch.bio.ukans.edu80 and their email address is monarch@falcon.cc.ukans.edu. Anyone can volunteer by joining the Texas Monarch Watch, sponsored by the Nongame and Urban Wildlife Program of Texas Parks and Wildlife Department, 4200 Smith School Rd, Austin, TX 78744. Annual membership is \$10 and more information is available by calling Bill Calvert at 1-800-468-9719. Or join us this spring, each Saturday in April as we count, wrangle and tag these little critters.





Texas Watch Report

by Tom Anderson of Churchill High School

With this issue of the newsletter, I will start a series of articles explaining the biomonitoring of Honey Creek. Biological monitoring is important because macroinvertebrates are sensitive indicators of an ecosystem's health. They provide a measure of the effect of pollutants rather than just indicate the presence of certain chemicals. Definitions of several key terms are:

Benthic-bottom dwellers. Macroinvertebrates- multicellular animals without backbones that can be seen without the aid of a microscope. In addition, Benthic macroinvertebrates may also be divided into groups based on their food gathering techniques. This method of classification can help identify water quality problems in a stream. For example, increased numbers of scrapers may indicate a nutrient runoff, but increased numbers of collectors may indicate organic enrichment. Below are the six major groups divided by food gathering techniques

Scrapers graze on algae attached to sticks, stones, or other surfaces. Many of these creatures have flattened bodies which enable them to hold onto surfaces as they feed.

Collectors can be subdivided into gatherers and filterers. They feed on particulate organic matter and organic debris such as bacteria and waste products from other organisms.

Predators feed directly on prey organisms. **Shredders** feed on coarse particulate organic materials such as rooted plants and leaf material from trees in the surrounding watershed. They are important because they break down materials to a size that other organisms can use as food.

Parasites feed either internally or externally on living animal tissue.

Piercers feed on the fluids from living vascular plants and tissue fluids of filamentous algae.

In the next newsletter, I will give examples of these six benthic macroinvertebrate groups.

Boerne High School Working Hard for the Community

Environmental Science students and National Honor students from Boerne High School have been essential volunteers for the "Friends" this school year. Each month since last October students have put in long hours shining up the Rust House inside and out, spreading mulch, created a gravel entrance and prepared the area for our mock archeology dig and April's Earth Day.

A special thanks are in order for the many students that participated in the hiking impact study during the February Volksmarch. They collected data at research plots along the trail and worked up to 7 hours each day for the study.

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

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

- \$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

Name Renewal New Membership

Street, City, State & Zip

Phone: home, e-mail. Optional: work, fax

Call for Volunteers

The Board Members of Friends of Guadalupe River/Honey Creek, Inc. Directors and Officers

Richard Solis	President
Joe Vanecek	Vice-President
Jeanne Manry	Treasurer
Leon Manry	Parliamentarian
Charlene Simmons	Secretary
Betty Baker	Director
Dan Baker	Director
Linda Sutton	Director
Henry Wagner	Director
Janet Wagner	Director
Courtney Walker	Director

Guadalupe River SP

Duncan Muckelroy	Park Manager
Deirdre Hisler	Volunteer Liaison

Associate Directors

Chuck Janzow	Allen Perry
Patti Martin	Wayne Rahe
Lois Newton	Ken Sutton

Join us at the Rust Visitor Center for an April 12th work day before Earth Day.

Volunteers to help with Earth Day, Saturday April 19th are still needed. Contact Penny at 210-935-4730.

Science camp helpers needed - contact Terry Urbanczyk at 210-980-2311 if you can work at least two days a week during the Month of May!

Do you have a truck or trailer and could haul mulch from the recycling center near Blossom Athletic Center to the Rust House? Call and leave a message for Penny or Charlene at 210-438-2656.

Join us at the Rust Visitor Center any Saturday to learn how you can help with interpretive programs and work projects.

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