



Bayou Foliage

Volume 15 No. 5 May 1997

A publication of the Armand Bayou Nature Center Volunteers

"Interested + Informed + Involved"

MAY CALENDAR

- May 3 Stewardship Sat. (trail, forest & facilities)
Cont. Ed. - Farm Demo/Inter. 9:30-12:00
Fall Festival Comm. 3:00
- 4 Retention Comm. 2:00
Mentor Comm. 3:00
Volunteer Board Meeting 4:00
Cont. Ed.- Spiders 7:00 - 9:00
- 8 Volunteer Meeting 6:30 - 9:00
- 10 Bayou Boll
- 15 Bayou Foliage Inputs Due
- 17 Vol. Board Retreat 9:00
Stewardship Sat. (prairie & marsh)
Cont. Ed. - Outreach 10 - 11
- 24 Cont. Ed. - Mushrooms 9 - 12

MARCH VOLUNTEER OF THE MONTH

The Volunteer of the Month for March is Michael Vu. Michael became an ABNC volunteer in 1993 while still in high school. He currently acts as coordinator of the nature center's very active Outreach Program through which volunteers take ABNC's environmental programs to schools, organizations and local events such as the Houston Home and Garden Show. He also gives weekend nature demonstrations (usually on bats) and helps with stewardship projects and nature center events. Michael says he became a volunteer "to expand my thirst for new experiences. Actually, I wanted to become active in a cause in which I felt I could make an impact. This has also been a great experience and in the process I have been able to give back by sharing what I have learned with the public."

Thanks, Michael. Your work really helps spread the word about ABNC.

PROPOSED BY LAWS CHANGE

We will vote on the proposed change to allow for the position of Outreach Coordinator at the May volunteer meeting. The Outreach Coordinator shall serve as a representative of outreach volunteers on the board and obtain volunteers for outreach presentations.

MAY ABNCV MEETING Thursday May 8

- 6:30 Snacks & Conversation-Get better acquainted
- 7:00 Program: Samra Bufkin - "Nonpoint Source Pollution" (Everyday pollution at our homes & how we can diminish pollution of surface waters
- 8:00 Business Meeting
- 9:00 Adjourn
- Greeters: Joan & Paul Shack
- Think green and bring your own cup

The biggest polluters of Galveston bay are not oil spills or industry, but us at home. The EPA has determined that more than 51% of the pollution going into surface waters is "nonpoint pollution."

This will be an interactive presentation. Bring tarnished silver, brass or copper. (I'm also bringing an apron.) Samra will show us how to use cheaper, safer, non-toxic products under our kitchen sinks. She will also discuss how we are exposed to toxic contaminants around the house and at work, and how to replace them with cheaper and safer products.

MAY BIRTHDAYS

| | | | |
|-----------------|------|----------------|------|
| Emily Egan | 5/03 | Mona Shoup | 5/03 |
| Joe Bryan | 5/06 | Claudia Brown | 5/09 |
| Sanda Bauer | 5/09 | Laura Hendrix | 5/10 |
| Mary Ann Tucker | 5/19 | Grady Skillern | 5/22 |
| Eldine Owens | 5/24 | Keith Doucet | 5/26 |
| Joe Weber | 5/31 | | |

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MINUTES OF THE ABNCV MEETING THURSDAY, APRIL 10, 1997

Vice Chair Becky Brignac called the meeting to order and requested help with preparations for the meetings and assistance for speakers. A card was distributed and will be sent to the family of Laura Smither, whose father Bob Smither is the interpretation coordinator for the Volunteer Board and whose mother Gay is also a volunteer. Next, Becky introduced Pat Ireland, who spoke of her studies - as a University of Houston graduate student - of fire ants.

Chair Helen Burton conducted the business meeting. The minutes of the March meeting were approved as published in the *Bayou Follage*. Carol MacGregor submitted the Treasurer's report: \$589.12 in savings and \$2,581.19 in checking. The proposed 1997 budget was approved by acclamation.

Board of Trustees President Suzy Howe introduced Doug Mathera who is also a trustee and who discussed the importance of planning and budgeting to the long-term success of ABNC and the need for strong volunteer participation. Doug also answered questions.

Paula Kennedy asked that volunteers sign up to work at Bayou Boil, which will be held May 10. Ruby Dilgren - assuming the duties of the interpretation coordinator temporarily - called on those present to sign up to work as greeters and farm interpreters. Helen said that a proposal has been made that the by-laws be changed to make Outreach coordinator a Board position and that a proposal to amend the by-laws will be published in the *Bayou Follage* and voted on at the next meeting.

Mark Kramer gave the staff report and made announcements concerning the upcoming cleanup of the bayou, the new admissions building, the continuing progress of the wetlands mitigation project, and the upcoming broadcast by Channel 11 from ABNC. He also said that stewardship volunteers will assist with Earth Day activities. The stewardship report was given by Jim Hawkins who discussed upcoming projects: continuation of work on the implement shed, the upgrading of trail bridges, the creation of fire break lines, the planting of marsh grass, and the installation of snow fences. Jim reminded everyone that the Stewardship Activity book is in the break room and can be looked at by anyone who is interested.

Herman Burton said that work on lighting for the new boardwalk will be done on April 12. Carol MacGregor gave an update on the Garden Tour, and Helen announced that April 26 is the date for the Volunteer Picnic. Paula asked that everyone with an e-mail address let her know what it is so that she can publish them in a directory she is preparing. Jonathan Perez, who is contributing to the effort to find Laura Smither, updated the on the work being done and provided details of the help that is required. Hilary Gibbs asked for input on the strings in the garden. Becky provided an update on continuing education classes and said that the April speaker will be from the Galveston Bay Foundation.

Respectfully submitted,
Susan Williams, Secretary

CONTINUING EDUCATION

LEARNING FARM DEMONSTRATIONS

Saturday, May 3, 1997

9:30-12:00 Farm Demos/Interpretation

Instructors: Eleanor Stanley, Jane Bingel, Paula Thorson and other volunteers

Timid at first, then ooohhhh's and aaahhh's, smiles, questions, fascination. Kids just love helping make cheese and finding out it can be made at home and that it even tastes good!! They also love making butter and are interested in how things worked in the 1800's. Their parents are also fascinated and pleased that their child had a new, rewarding, enjoyable experience. Other demos include rope making and cooking on the wood burning stove.

Tell about the history of the house, life at the turn of the century, giving some insight into the house and the household items, why and how they are used. These are things that Farm Interpretator would discuss.

SPIDERS

Sunday, May 4, 1997

7:00-9:00 pm Auditorium/Outside

Instructor: Maggie Honig, a science teacher

Bring a flashlight and bug repellent. Once class is over in the auditorium, the building will be locked up (except for the rest rooms.)

Only folks who love their subject are invited because their enthusiasm is infectious, and Maggie is one of those!!!

Curious, but not sure? Come on and check it out. You don't have to touch, just look!! Spider webs will also be discussed.

OUTREACH PROGRAM INSTRUCTION/INFORMATION

Saturday, May 17 10:00 - 11:00

Instructor: Michael Vu

"Outreach" takes educational offerings off-site in order to stimulate students' and adults' interest in biology and history, heighten environmental awareness, and encourage preservation of local habitats and species. Public reaction and interest is greatly rewarding and satisfying.

"Outreach Programs" we have attended:

Local public & private schools for specific nature related talks

Fairs
Bay Day

Seabrook Music Festival
Houston Children's Festival
Earth Day related events
Safety Fairs

If you feel you would like to do this, come check out this class.

MUSHROOMS

Saturday, May 24 9:00-12:00 (Memorial Weekend)
Meet at the Back Porch (outside only; no inside class)

Instructor: Jim Crabb, our own ABNC expert
Limit: 12

Expert he is!! If you're not sure about your interest level, just come and find out about these marvelous living creatures very vital to the earth. Jim will enthusiastically introduce you to some beautiful mushrooms at the nature center.

LEADERS NEEDED

Volunteers are needed to be LEADER at each continuing ed class. They will assist the speaker by setting up, possibly getting them something to drink, taking "attendance," and helping the speaker pack up at the end of the class. Please consider helping out the image of the nature center by contributing in this capacity.

WANT TO VISIT WITH THE GUEST SPEAKER?

If you would like to have a discussion with the guest speaker and time does not allow for this in the general presentation, feel free to go into the foyer. Arrangements are made prior to the meeting for the speaker to be in the foyer to talk with you.

Please remember that the general meeting will be starting at 8:00 or immediately following the guest speaker.

Thank You, Becky Brignac

CONTINUING EDUCATION SIGN-UP

Don't forget that you must sign up for ALL continuing education classes in advance. This is necessary so if the class has to be canceled you can be notified and not make an unnecessary trip to the nature center and also so we have an idea of the type of setup and preparations to make. Equally important is that you call and cancel when you can't make it. We recently had three no-shows from six sign-ups for Dr. Harper's Marine Biology class on April 13th. It probably wasn't

worth his time to come out for three people. Please help us in this endeavor.

Mary Alice

TEACHER CELEBRATION

All volunteer teachers who have taught or buddied this past school year, please mark Thursday, May 29th on your calendar. This is our annual end-of-the-year celebration to get together, have lunch, and discuss what has happened with "Eco Adventures" this year. This "working lunch" will be from 11 am - 1 pm. Please bring a sack lunch. We will furnish iced tea and dessert. Call Mary Alice, Alan or Jane to RSVP by May 25th.

THANKS TO THE STUFFERS

Many thanks to those volunteers and staff members who helped stuff registration pages in 18,000 EcoCamp brochures and count them out into stacks of 25: Fukiko Matsubara, Kathy Appleby, Pat Grimes, Mary Ann Tucker, Jean Kruse, Larry Kruse, Eleanor Stanley, Martha Hood, Ann Brinly, Marsha Allen, Lorenzo Gallardo and Patrick Hayes. Many hands make short work. I thought for sure we'd be working on into the evening on Wednesday, March 19, but with all this help we were finished by 4 p.m. Thanks!

Paula Kennedy

ECO-CAMP DELIVERY

Thanks to Kristen Knoedler, Ann Brinly, and Jane Bingel for delivering 14,000 EcoCamp flyers to the elementary schools in CCISD and Becky Brignac for delivering to schools in PISD. It is already paying off with a steady stream of EcoCamp registrations.

Mary Alice

"We Couldn't Have Done It Without You"

ABNC volunteers played a big part in the success of the donor recognition/dedication ceremony for the new Kaneka Entry Pavilion. A ceremony was held in honor of the financial donors to the project which included the unveiling of a "donor window." The project supporters were etched on plexiglass which replaced window panes on an antique country house window. The last panel on the permanent donor window was dedicated to the ABNC volunteers who provided more than 800 construction hours for this project.

This donor window concept could not have been completed without the able assistance of Tom Scarsella and his able assistant Hilary Gibbs. After Helen Burton helped us pick out the antique windows, Tom picked them up, took them home and began the painstaking

work of stripping and refinishing them with designer paint to make them look like antique crackled white paint (and Hilary helped.) He then mounted the etched plexiglass into the window pane spaces and returned the finished product to us for mounting on the wood wall in the new entry pavilion where we unveiled it during the ceremony. Ann Brinly added a special touch by making her famous stuffed jalapenos for the event and Hanna Drago documented the event with her outstanding photography. Ann Brinly, Stephanla and Paul Rogers made themselves available after the ceremony as tour guides.

And once again, we could never have completed such a major project without the support of all the volunteers who did hard labor such as digging and laying lines and other related work. Herman Burton once again acted as Construction Manager for the project and made certain that everything stayed on track. Herman deserves the "Patience of a Saint" award for his dedication and efforts.

Thank you for your contributions.

Lynn Shigekawa
Development Director

WE GOOFED, YOU HELPED

On Wednesday, April 9 we had a bus load of students show up for a Hands-On-History class and no volunteers. This is something that rarely happens, but we're all aware of Murphy's Law. Anyway, Cherre House came running out bringing milk and lemons, Carl Cognata offered to lead farm tours instead of helping with the insects class and luckily I was available to teach cheese. Cherre taught rope-making, and when Ann Brinly finished with her insects class she gave Cherre a hand. Somehow we all managed to pull it off, and the teacher even said she liked it better than the way we normally do the class. Who'd believe? Many, many thanks to Cherre, Ann and Carl for jumping in and saving the day. You all deserve a gold star!

Mary Alice

STEWARDSHIP NEWS

Stewardship reorganization is progressing very well considering the amount of rain the area has been getting. Hopefully the weather will be dryer in the coming weeks so that some of the prairie and farm work, we have put off can be scheduled. I have been keeping an unofficial record of stewardship hours contributed on Stewardship Saturdays. During the month of March stewards contributed over 125 hours. It's this continued display of effort and dedication that will help make Armand Bayou the top nature center in the area. Thanks to all those who have contributed - lets keep it up. If you haven't participated in stewardship, try it, you might be surprised. You may even like it.

Mark announced at the volunteer meeting that we need to separate our stewardship hours into two categories, regular and capital. The reason is that there is a tax advantage we can apply toward hours that are donated to capital improvements, such as the Kaneka building (new entrance pavilion). To facilitate this change I have made a new form for logging your volunteer hours. I would like for you to use the project number or numbers when filling in the activity description. This will help connect your hours to a specific project (regular or capital). Remember the project numbers are found in the project book. Activity description example: 96-009 - Build Kaneka boardwalk. It is important to the Nature Center's welfare that we leverage every volunteered hour to its best possible advantage. Hopefully this new form will allow us to take advantage of these types of opportunities. I have this form in MS EXCEL-5.0. If you would like a copy, give me a blank disk or an EMAIL address and I'll see that you get one.

I also announced at the volunteer meeting that the nature center really needs a small engine mechanic. We have several Briggs & Stratton and Tecumseh engines that need some repairs. If you would like to volunteer please call Mark or myself.

The May Stewardship Saturday activities will focus on the following:

Forest / Trail - Farm / Facilities

- 5/3 Finish first implement shed extension
Start the second implement shed extension
Tallow control
Start selected trail bridge overhaul

Special

- 5/10 Bayou Boil Setup - 8AM Start

Prairie - Wetlands / Bayou

- 5/17 Burn black lines (fire breaks) on the prairie
Tallow control
Cyclone fence repair
Planting marsh grasses

The June stewardship Saturday activities will focus on the following:

Forest / Trail - Farm / Facilities

- 6/7 Continue rebuilding trail bridges
Add limestone to trails
General facility maintenance
Electrical Panels / Transformer pads

Prairie - Wetlands / Bayou

- 6/21 Burn black lines (fire breaks) on the prairie.
Tallow control
Cyclone fence repair

Fence line clearing
Planting marsh grasses
Installing snow fence

Questions, comments or suggestions are always welcome.

Let's talk, Jim Hawkins

IT'S THAT TIME AGAIN!

Yes, boys and girls, it's time to get busy planning the 1997 Fall Festival. Chris LaChance and I have already been visiting other sites, festivals, cook-offs, etc. to recruit new craftspeople and exhibitors. Now we need to get the planning committee together and start the gears turning. We will be checking the interest inventories and calling those of you who expressed an interest. Anyone else who wants to serve on the planning committee for the next six months please call us or plan to attend the first meeting on May 3rd at 3 pm. For the first few months we will be meeting monthly, then when the festival gets closer we will meet more often. It is a big job, but a lot of fun and very rewarding in the end. We hope to see many of you there.

Mary Alice

OUR MOMENT OF CONTEMPLATION

by Jonathan Perez

There are five planets in the outer solar system: Jupiter, Saturn, Uranus, Neptune, and Pluto. The first four of these planets are commonly referred to as the jovial planets while Pluto is the smallest planet, most similar to the jovial satellites. Because Pluto is so different, it will be discussed later in this article. Jupiter and Saturn are so large that, despite their great distance, they appear as bright as the brightest stars. They were both known to ancient people while Uranus and Neptune were discovered after the invention of the telescope. Each of the giant planets has a system of orbiting satellites and rings. Saturn probably has the most extensive system consisting of large and complex rings and 19 known satellites. Jupiter has 16 known satellites but a very faint ring structure. Uranus has an intricate system of narrow, dark rings and 15 known satellites while Neptune has faint rings and only 8 known satellites.

Beyond about 4 AU from the Sun, water ice was able to condense and thus become available as a raw material. Silicates and metals are also present in the outer solar system. Jupiter and Saturn are very similar to each other in the sense that they are composed of similar chemical elements, helium and hydrogen. During the formation of these two planets, the developing cores grew so large that they were able to attract and hold the hydrogen and helium from space. Uranus and Neptune captured much less hydrogen and helium, this is why

they are smaller in size and different in composition from Jupiter and Saturn.

The median distance of Jupiter from the Sun is 778 million km or 5.2 AU (5.2 times that of the Earth.) Its period of revolution is just under 11.9 years. Saturn is about twice as far away as Jupiter, at an average distance from the Sun of 1427 million km or 9.6 AU. Saturn's period of revolution is about 29.5 years. Uranus orbits at 19.2 AU with a period of 84.1 years, and Neptune orbits at 30.1 AU with a period of 164.8 years. Not until 2010 will a full Neptune "year" have passed since its discovery in 1845.

Jupiter is 318 times as massive as the Earth, about 1/1000 the mass of the Sun! Its diameter is about 11 times the Earth's and about 1/10 the diameter of the Sun. The mass of Saturn is 95 times that of the Earth and its density is only 0.7 g/cm³ - the lowest of any planet and less than that of water! Uranus and Neptune are substantially smaller, with masses of 14 and 17, than that of the Earth's. Their densities are 1.2 and 1.6 g/cm³, much higher than that of Saturn in spite of their smaller mass and weak internal compression. This is probably due to the difference in composition. The rotation of the jovial planets are as follows: Jupiter (9^h 56^m), Saturn (10^h 40^m), Uranus (17^h 14^m), Neptune (16^h 6^m). Jupiter has the shortest "day" of any planet.

If you recall in the previous article, a tilt in a planet's axis gives rise to seasons. The Earth's axis is tilted at a 23.5° angle. Usually a tilt greater than 10-20 degrees will cause noticeable seasons to occur on a planet. The axis of rotation of Jupiter is tilted by only 3°, so there are no seasons to speak of. Saturn does, however, have seasons since its axis is inclined at 27°, perpendicular to its orbit. Neptune has a 29° tilt, so it experiences seasons similar to those found on Saturn. The strangest planet of all is Uranus. Its axis of rotation is tilted 98° with respect to the north direction. This very unusual tilt creates very strange seasons, with each pole alternately tipped toward the Sun for about 40 years at a time.

Most of the satellites in the outer solar system are direct or regular orbits. In other words, they revolve around the parent planet in an east-to-west direction and very nearly in the plane of the planet's equator. The ring systems of the jovial planets are also in direct revolution in the planet's equatorial plane. As stated earlier, Jupiter has 16 satellites and a faint ring. These 16 satellites include the four large Galilean satellites, discovered in 1610 by Galileo: Callisto, Ganymede, Europa, and Io. Europa and Io are by far the smallest, being about the size of our Moon while Ganymede (the largest satellite in our solar system at 5280 km in diameter!) and Callisto (the third largest at 4820 km in diameter) are about the size of Mercury!

Of the 19 Saturnian satellites, Titan is the largest, being about 5150 km in diameter, making it the second largest satellite in the solar system. Titan is also the only satellite in the Saturnian system with a substantial atmosphere. The rings of Saturn are broad and magnificent. Individual ring particles are composed of water ice and are typically the size of a tennis ball, but can range in size from as small as a golf ball or as large

as a Volkswagen! Uranus has 15 regular satellites and 11 rings. The rings are narrow ribbons of material with broad gaps between them. Neptune has 8 satellites, one of them named Triton. Triton has an atmosphere, is volcanically active and was discovered in 1989 by the Voyager flyby.

Pluto is neither a jovial planet nor a terrestrial planet. Because it is so much smaller than the other planets, many scientists have suggested that Pluto should be classified as a minor planet or asteroid. Its median distance from the Sun is 40 AU or 5.9 billion km. Pluto's orbit runs into Neptune's and is currently in Neptune's orbit (since 1989,) and will remain in it until 1999. It completes its orbital revolution in a period of 248.6 years. Charon is Pluto's only satellite.

Comets are members of the solar system and can be described as "dirty snowballs." They have three main parts to them, the nucleus, tail and head or coma. The nucleus is the most important part of any comet. It is solid and rarely seen. When we look at a comet, we see a light atmosphere of gas and dust, illuminated by sunlight. Because the escape velocity is so low for such a small body, the atmosphere is rapidly escaping. The source of this atmosphere is coming from the nucleus. The coma is formed due to the gas released by the nucleus mixed with the dust and other solid material being carried along with it. The diameter of the comet's head is usually as large as Jupiter. The tail of a comet is simply an extension of its atmosphere, consisting of the same gas and dust that make up the head. There are usually two different tails, the plasma tail, trailing the head in a straight line, and the dust tail, which is usually broader and more curved.

SUPER VOLUNTEERS

In the first three months of 1997 we had 113 volunteers log 2315 hours! Are your hours being counted?

THANKS FOR THE HELP

Thank you to Ruby Dilgren and Mary Ann Tucker for calling and offering to help get Greeters and Farm Interpreters. That sort of involvement and caring is what makes working with the ABNC volunteers so wonderful. Ruby will schedule for May and June, then we'll see what needs to be done.

BAYOU BOIL IS BEGINNING TO BUBBLE

Many of you were involved in Bayou Boil last year (our annual fund-raiser) and contributed a great deal to the success of the event. We are working to improve the evening by repeating the successful aspects and changing those that could use improvement.

Several of the volunteers created or offered special items for the silent auction and they were very well received. We had wonderful contributions from you such as a canoe trip, bird houses, painted watering cans and many other wonderful things that were very well received. Please call me if you would like to contribute something to the auction and we can talk about your unique creation.

Another way that volunteers have contributed is by working the evening event. We are looking for people who like to interact with the public and encourage them to spend their money at the auction (you may feel more comfortable working in teams and this will be fine for some of the jobs.) When we get closer to the event, I will have better job descriptions, but I would be happy to talk with you on the phone about your interests. You can call me direct Monday through Friday at 474-3748.

Thank you for your very special support!

Lynn Shigekawa
Development Director

Environmental Notebook

Introduction to Clean Air by Lou Wheatcraft

Both the atmosphere (air) and hydrosphere (water) of our planet make life as we know it possible. Management of this entrainment so as to maintain and enhance the quality of life is one of the most important concerns of our time. It has become evident that major reforms and much stricter standards are required if we are to preserve the quality of life in the world. As a voting citizen you will be called on to elect officials with varying views concerning the or to help decide bond issues and environment referenda that may have an impact to your health as well as your economic security. Even our simple decisions as consumers require us to weigh the costs versus the benefits of our actions. Unfortunately, the environmental impacts of our decisions are often hidden from our view.

I am sure that during the last several months you all have read about the Environmental Protection Agency (EPA) proposing different standards for ground level ozone and particles in our air. Because of this there has been a lot of speculation on how that would effect each of us personally. You all have also read about other problems with our air: ozone depletion, too much ozone, acid rain, global warming, green house effect, smog, pollution, etc. These are all important topics to each of us - they have a direct impact on our health and our pocket books. The better we understand some of the basic principles that underlie environmental issues, the better our chances of forming sound judgments on economic and political matters that affect our environment. In my next Environmental Notebook series, I will be addressing the various major issues concerning the air we breath - not only just what the issues are but how our current laws address each of these issues.

There is a very strong connection between life forms on Earth and the nature of Earth's climate, which determines its suitability for life. As proposed by James Lovelock, a British chemist, this forms the basis of the Gaia hypothesis, which contends that the atmospheric ratio between oxygen (O₂) and carbon dioxide (CO₂) balance established and maintained by organisms determines and maintains Earth's climate and other environmental conditions.

At an ever accelerating pace during the last 200 years, humankind has engaged in a number of activities that are altering the atmosphere profoundly. These include: industrial activities, burning large quantities of fossil fuel, transportation practices, alteration of land surfaces (including deforestation), burning of biomass and vegetation, and agricultural practices which produce methane. These kinds of human activities have significantly altered the atmosphere, particularly in regard to its composition of minor constituents and trace gases. Major effects include: increased acidity in the atmosphere (acid rain), production of pollutant oxidants in localized areas of the lower atmosphere (smog), elevated levels of infrared-absorbing gases (global warming/greenhouse gases), threats to the ultraviolet-filtering ozone layer in the stratosphere, increase corrosion of materials induced by atmospheric pollutants, and increase in amount of particulate matter released into the atmosphere. Ozone depletion and greenhouse effect problems arise from the release of substances that are not in and of themselves harmful to human health. The problem lies not so much with the nature of the substances themselves (many are naturally occurring), but with the ecological imbalances caused by excessive releases of them.

In 1957 photochemical smog was only beginning to be recognized as a serious problem, acid rain and the greenhouse effect were scientific curiosities, and the ozone-destroying potential of chlorofluorocarbons (CFCs) had not even been imagined. In that year, Revelle and Suess prophetically referred to human perturbations of the Earth and its climate as a massive "geophysical experiment."

Before this, long before the era of modern environmental legislation, industrial societies were intimately acquainted with the hazards of air pollution. Residents of industrialized urban areas have long suffered the health effects and unpleasant living conditions associated with emissions from smokestacks and tailpipes. The industrial revolution saw the rise of new occupational hazards in mining, textile production, chemical production, and other industries. Prior to comprehensive public regulation, citizens seeking relief from air pollution had few options. Some of them invoked the law of public nuisance in attempting to abate nearby sources of air pollution, but they were generally unsuccessful. The Anglo-American court system traditionally favored economic principles and protected the health of the polluting industries, rather than that of the environment or of the public. Furthermore, people who lived in the vicinity of polluting industries were economically dependent upon them. Although comprehensive legislation has now been enacted to alleviate the most noticeable hazards associated with air pollution in our country, concerns

for human health and the environment and economic concerns are frequently at odds.

In spite of this there have been some successes: phase out of leaded gasoline, reduction of particulate matter, and the elimination of DDT. However, we are losing more ground than is being gained in this area. Even with more stricter laws, the continuing growth in population and corresponding increase in consumption of products that add to air pollution aggravates the task of reigning it in. In the last two decades the US population increased by over 45 million persons, a significant 22% increase. In that period our economy grew at almost three times as fast as the population, with explosive growth in automobiles which are a prime generator of air pollution. As of 1989, 110 urban areas of the country did not meet the national ozone standard (LA is first, Houston is second!)

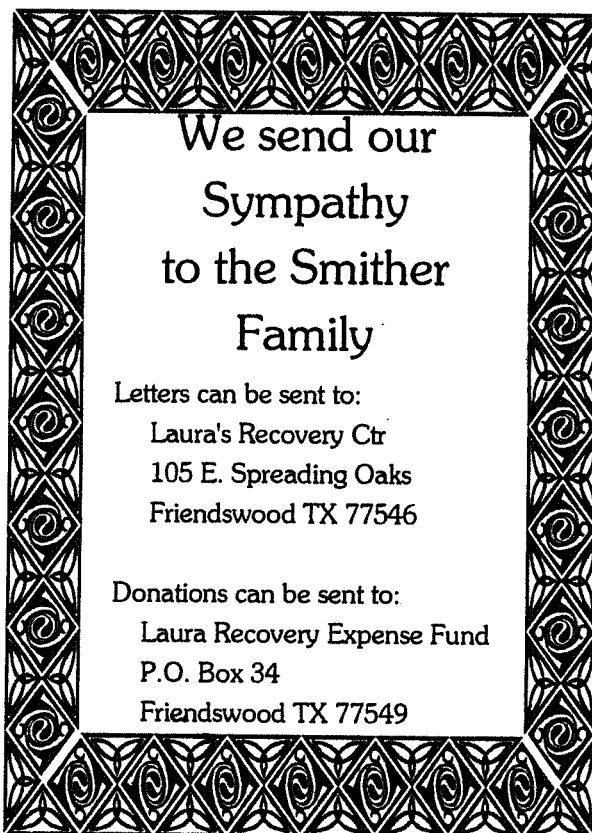
Sources: "Introduction to Environmental Law and Policy - Protecting the Environment Through Law", by C. M. Valente and W. D. Valente, West Publishing Company, 1995; "Environmental Chemistry", sixth edition, by Stanley E. Manahan, Lewis Publishers, 1994, and "Chemistry, the Central Science", fifth edition, Brown, LeMay, and Bursten, Prentice Hall, 1991.

Next: An overview of our atmosphere and the greenhouse effect.

ROSTER CHANGES

Cliff Meinhardt
5104 Clarence Dr
League City, TX 77573

Eldine Owens
755 Seamaster Dr.
Houston, TX 77062



May 1997

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|--|-----|-----|-----|----------------------------------|-----|---|
| 4 Retention Comm. 2:00 Mentor Comm. 3:00 Vol. Board Mtg 4:00 Spiders Cont. Ed. 7:00-9:00 | 5 | 6 | 7 | 8 Volunteer Meeting 6:30-9:00 | 9 | 10 Bayou Boil |
| 11 | 12 | 13 | 14 | 15 Bayou Foliage Inputs Due | 16 | 17 Vol. Board Retreat 9:00 Stewardship Sat. Outreach Cont. Ed. 10-11 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 Mushrooms Cont. Ed. 9-12 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |

VOLUNTEER DUTY SCHEDULE

In an attempt to take some of the load off of the Coordinators, and to help cut down on our "no show" rate, a list of the persons who have volunteered for various assignments will be printed in the Bayou Foliage each month. If you are scheduled for a particular duty and you are unable to attend, please use this schedule to try to find your own substitute. You may be able to trade weekends, or swap a Saturday for a Sunday with someone who has the same duty another time during the month. If you do trade, please be sure to call the appropriate coordinator and the ABNC desk to inform them.

| DATE | 11:00 TRAIL | 2:00 TRAIL | INFO. SERVICES | FARM DEMO | NAT. HIST. DEMO | FARM INTERP. |
|-----------|-------------|-----------------|-----------------|-----------------------------------|---------------------------------|----------------------------|
| Sat. 5/3 | James Crabb | Judy Bouma | Cris Santiago | Larry Veale Indian Crafts | Ruby Dilgren Snakes | Tom Scarsella |
| Sun. 5/4 | | Susan Hesley | Joan Shack | Mary Ann Tucker Basket weaving | Anne Tincher Gulf Sea Shells | Penny Woodward |
| Sat. 5/10 | | Joe Bryan | Kathy Appleby | Emily Egan Weaving | Hillary Gibbs Study Skins | Stephania & Paul Rogers |
| Sun. 5/11 | | | Mary Ann Tucker | Ann Brinly Bobbin Lace | Mary Barton Bird Adapt. | |
| Sat. 5/17 | Louise Peck | Mary Barton | Jean Kruse | | Zel Arbuckle Snakes | Ruby Dilgren |
| Sun. 5/18 | | Patty Gill | Joe Bryan | Chris Bingham Cheese | Eleanor Stanley Reptiles | Jane Bingel |
| Sat. 5/24 | Jane Bingel | Ray Parker | Patsy Cashion | Irene Ward Butter | Marilyn Clark Humming Birds | Fran & Carl Cognata |
| Sun. 5/25 | | Melanie Weisman | Merle Bunde | Paul & Stephanina Rogers | | Jane Bingel |
| Sat. 5/31 | | | Marsha Galvan | Rope Making | Pat Grimes Snakes | |

VOLUNTEER BOARD FOR 1997

| | Home | Office |
|-----------------|-----------------|--|
| Helen Burton | 281-474-7133 | |
| Becky Brignac | 713-947-0216 | |
| Susan Williams | 281-487-3033 | |
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| | Georgia Colyer | |
| | Weekend Demos | |
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