



Bayou Foliage

Volume 17 No. 1 January 1999

A publication of the Armand Bayou Nature Center Volunteers
"Interested + Informed + Involved"

January Calendar

- | | |
|----|--|
| 2 | Stewardship Saturday (Trail, forest, facilities) |
| 3 | Volunteer Board Meeting, 4:00 |
| 14 | Volunteer Meeting |
| 14 | Bayou Foliage Inputs Due |
| 16 | Stewardship (Prairie and marsh) |

ABNCV MEETING

6:00 p.m., Thursday, January 14, 1999

ABNC Auditorium

Our meeting this month is the annual volunteer appreciation dinner. It is provided and served by the ABNC staff for all volunteers to show their appreciation for all that you do during the year for the Nature Center. Please remember to bring your own plates, cups, silverware, and napkins. Coffee and tea will be provided, but if you prefer some other liquid refreshment, feel free to bring it. The Volunteer of the Year will be announced at the dinner.

Please remember to RSVP (281-474-2551) to a staff member if you are planning to attend.

**PRINTING COMPLIMENTS
OF CELANESE**

CONTINUING EDUCATION

MEDICINAL HERBS!

10:00 am, Saturday, January 9th

ABNC Auditorium

If you are interested in medicinal herbs, this program is for you. Lana Sims of "Herbs & Such" of Pasadena will give a presentation entitled "The History of Medicinal Herbs". She will explain what they were used for many years ago and how they are used today. She will also provide handouts to those attending.

PRAIRIE MONITORING WORKSHOP!

9:00 am, Saturday, February 13th

Outdoors at ABNC

Join Clean Water for Armand Bayou as we hold our second training at ABNC on Saturday, February 13th from 9 a.m. to 12 Noon. Dr. Barron Rector of Texas A&M University will be training volunteers in hands-on techniques for monitoring the tall grass prairies of Armand Bayou Nature Center. Dr. Rector is an enthusiastic instructor with an intimate knowledge of prairie history and ecology. This training will be part of Clean Water for Armand Bayou's long term monitoring project on the prairies of ABNC.

If you've never been to one of our training sessions, now is the time to join us! No plant identification experience is needed. We are asking that people who attend this training make a commitment to assist Clean Water for Armand Bayou personnel with monitoring work at least once a quarter (four times a year). This is an opportunity to participate in real science. All are welcome. This class will be held outside, so please dress for the weather and bring boots.

Call Colin Shackelford at (281) 291-0551 if you are interested in attending.

FIRST AID AND CPR TRAINING!

Sunday, February 14th and Sunday, February 21st

12:00 - 5:00 p.m., ABNC Auditorium

This class teaches basic first aid and CPR for adults, children, and infants. Upon successful completion of the two sessions, the participants will get cards indicating they are First Aid and CPR certified. The First Aid certificate is good for three years; CPR certification is good for one year. A nominal fee, \$12.00, to cover the rental cost of the equipment will be charged. Books are supplied by ABNC, but are available for purchase if you want your own.

The sign-up sheets for these programs can be found in the breakroom.

Jean Kruse

MINUTES OF THE ABNCV MEETING
Thursday, December 10, 1998

Happy Birthday!

A brief business was held following the annual Christmas Potluck Dinner. The minutes of the November meeting were approved as published in *The Bayou Foliage*. In the Treasurer's report, Georgia Colyer announced that there is \$2,426.66 in the checking account and 609.63 in savings for a total of \$3,036.29. Next, elections were held for the 1999 Volunteer Board. The slate presented by the Nominating Committee was approved by acclamation. The 1999 Board members will be: Susan Williams, Chair; Jean Kruse, Vice Chair, Linda Hamlett, Secretary; Georgia Colyer, Treasurer; Ken Russell, Stewardship Coordinator; Ruby Dilgren, Interpretation Coordinator; Jane Bingel, Outreach Coordinator; Hanna Drago, Admissions Coordinator; Polly Swerdlin, Weekend Demonstration Coordinator; Cris Santiago, Weekend Trail Coordinator; Carolyn Sue Manley, Weekday Farm Coordinator; Ed Adams, Weekday Trail Coordinator. Helen Burton announced that the 1998 Board had appointed Andrew Hamlett to be the 1999 editor of the *Bayou Foliage*. Helen also presented Andrew with a 'press pass' and a hat, in recognition of his new position.

In his Staff Report, George Regmund announced that there are four candidates for the Administrative Director's position and that ABNC will be closed December 25 and January 1. He then thanked the volunteers for their work in 1998. Mary Alice Trumble announced that the Volunteer of the Month is Norman Wong.

Helen said that there are a few aloe vera plants still for sale and that they can be purchased for \$5.00. The Audit Committee has been formed, and its members are Helen Burton, Georgia Colyer, and Susan Williams. Helen also reminded everyone that they MUST log their 1998 hours by January 7, 1999. Jean Kruse said that she had put out sign-up sheets for upcoming continuing education classes and information on growing amaryllis plants. She also discussed the February workshop, which will be on prairie monitoring, and classes, which will be held on medicinal herbs, farm tools, and first aid. Paula Kennedy said that the Christmas Bird Count will be held on December 19 and that anyone who would like to participate should contact her. Hanna Drago distributed some pictures she had taken to staff and volunteers. Mary Ann Tucker said that the winner of the drawing for the quilt was Patricia Sheffield, an ABNC member. The business meeting was adjourned, and the volunteer gift exchange began.

Respectfully submitted,
Susan Williams (for Patsy Cashion)

Patsy Baukman	1/1	Claudine Hailey	1/2
Hilary Gibbs	1/9	Jennifer Pelletier	1/10
Marilyn Collings	1/13	Barbara Hill	1/16
Brad Hallmark	1/22	Susan Waggoner	1/22
Jean Ashmore Block	1/26	Roland Borey	1/27
Stanley Krauhs, Jr.	1/28	Betsy Pennington	1/31

VOLUNTEER OPPORTUNITIES

GIRL SCOUT WATER WONDERS BADGE WORKSHOPS

January 23	9:45-3:00 p.m.
March 6	9:45-3:00 p.m.

Four volunteers are needed.

Please call Mary Alice Trumble to volunteer your help or if you have any questions about what is involved. It is not difficult and we really need your help.

VOLUNTEER OF THE MONTH NORMAN WONG

Each month an ABNC volunteer is recognized for his or her outstanding service to the nature center. The Volunteer of the Month for November is Norman Wong. Norman became a volunteer in February 1996 and since that time has been a steady contributor to our stewardship program. He has participated in all areas of preservation and restoration as well as construction, which he says is his favorite. He also enjoys working at many of our large events. Norman is a citizen of the United Kingdom and has been in this country only a few years working for Amoco. In fact, he decided to register for training very shortly after moving here from London. He was looking for a place to meet other people as well as a chance to volunteer his time at a place where he could work outdoors. Norman does get home to London two or three times a year for a visit, but we are hoping his stay in Houston will be for a long time. Thank you, Norman for being such a valuable volunteer.

COMMENTS FROM THE CHAIR

Attention 1998 ABNC Trainees!

The annual Volunteer Appreciation Dinner will be January 14 at 6:00 p.m., and I hope that all of you who went through volunteer training in 1998 will be able to attend. It is great fun and an opportunity to get to know other volunteers and the ABNC staff. Please join us!

Thanks Helen!

Helen Burton has just completed her second term as Chair of the Volunteer Board, and I would like to thank her for all her hard work the last two years. Helen is very committed to seeing that the ABNC volunteer organization is the best it can be. Her graciousness, intelligence, and humor have made working with her a pleasure and greatly benefited all the volunteers and ABNC.

Susan Williams

SCHEDULE REMINDER

Just a reminder that ABNC is closed on Mondays and Tuesdays. If volunteers find that they need to be here on either of those days they need to clear it ahead of time with Lynn Shigekawa. Lynn is usually here on Mondays and Tuesdays but needs to know if volunteers are on the premises so they won't get locked in or out if she has to be some place else. Additionally, there could also be a liability problem if someone is on the grounds and becomes injured and no one knows they are here. Thanks for your cooperation in this matter.

Mary Alice Trumble

VOLUNTEER APPRECIATION DINNER

Volunteers, please plan to attend the January volunteer meeting so we may let you know in some small way how much you are appreciated for all you do for ABNC. We will recognize the contributions you have made during 1998, so please be sure your hours are up to date before the meeting. The staff will prepare dinner for you and, to highlight the evening, we will announce the Volunteer of the Year.

Please RSVP by January 10 if you plan to attend. We hope to see you there.

CONTRACT TEACHER NEEDED

We are looking for someone to teach the "General Ecology" Alpha class on Wednesdays at the nature center. Alpha is the Gifted and Talented Program in the Clear Creek Independent School District. The same students come to the nature center from 10 - 1 every Wednesday for the entire semester. This is a paid position. Teaching experience is necessary. Please contact Mary Alice Trumble if you are interested.

1998 QUILT UPDATE

The winning ticket was drawn at 5:45 p.m. at the end of the Yuletide Market, and Patricia Sheffield won the quilt. She lives in Bay Forest, and is very excited about her good fortune. She said she came into the Kaneka Building one day and found the ladies there working on the quilt. She thinks she bought \$20.00 worth of tickets.

According to Christine Barrett, ABNC's accountant, we earned \$1,475.00 on quilt raffle ticket sales. This is the most ever earned on this event. Our expenses were \$157.00.

Thank you to all of you who helped sell tickets. Some of you took the quilt to meetings and that helped promote the sales. Also, some of you got out in front of stores in the area and in Galveston and displayed the quilt and sold tickets. The quilt was 'on the move.'

A very special thank you to everyone who worked on the quilt. It was a big project that paid off. We did good!

Mary Ann Tucker

YULETIDE THANKS

Many thanks go to the volunteers who helped with the Yuletide Gathering at the Martyn Farm on December 5. It wasn't a 'normal' December evening, but rather a balmy one that felt more like spring. However, the approximately 300 attendees didn't seem to mind and many compliments were heard about the quality of the program and the beautifully decorated farmhouse. Thanks to volunteers Judy Huston, Paula Kennedy, Kristen Knoedler, C.J. Jennings, Hilary Gibbs, Tom Scarsella, Bill Howe, Chris LaChance, Melissa LaChance, Ann Brinly, and Eleanor Haskew and to staffers George, Mark and Patrick for helping make the evening so pleasant.

Mary Alice Trumble

ENVIRONMENTAL NOTEBOOK

Industrial Ecology, Part 2

By Lou Wheatcraft

The vision of industrial ecology is an interconnected industrial system in which new products evolve out of, or consume, available waste streams, and where processes are, in turn, developed to produce "waste" usable by other processes within the industrial system. In such a system the only real waste is defined as by-products that have no useful application within the entire industrial system rather than, as now, simply the discarded by-products or emissions from individual products, processes, or service operations.

Industrial Ecology (IE) seeks to optimize the total industrial materials cycle from virgin material to finished product to the ultimate disposal of wastes. Factors to be optimized include resources, energy, and capital. Of primary concern are the industrial impacts on the environment and the means by which industrial processes can be adjusted to lessen these impacts through waste minimization and recycling. IE is a systems-oriented approach where industrial design and manufacturing processes are not performed in isolation from their surroundings, but rather are influenced by them and, in turn, influence them.

This idea is not new, nor is it contrary to business practice. The model for IE is nature - modeled after ecosystems made up of living systems "powered" by the sun and interconnected by a "food web" where one living system's waste is food for another living system and all materials are recycled or reused. Thus, for the ecosystem as a unit, there is no waste. In nature the majority of ecological systems can be classified into three broad types. Type I, referred to as a linear system, is an ecological system where resources are plentiful and the flow of materials from one stage to another is largely independent of other resource flows. Type I systems operate as if there are unlimited resources and an unlimited ability of the surrounding environment to absorb waste. The primary concern of Type 1 systems is growth. This is the way most of the industries in the world have operated in the past and how many are still operating today. Type I systems ignore their impacts, and therefore the external costs imposed, on the surrounding environment and they can not be sustained indefinitely.

An example of type 1 behavior in nature is when a stable ecosystem is disturbed, like when a large tree blows over, creating a hole in the forest canopy. The sunlight hitting the forest floor allows various plant species to grow, competing for the energy from the sun. With time, one or more species will grow faster and fill the hole in the canopy and stability will be reached. When this happens, the rapid growth stops. Rather than to keep growing will a goal of continued growth and maximization, nature tends to favor a goal of optimization.

Type II ecological systems, also referred to as quasi-cyclic, occur when resources are limited and put more pressure on

the materials cycle. In a Type II system individual components of the system do not operate separately but rather are interlinked together. Individual components include the materials extractor or grower, the materials processor or manufacturer, the consumer, and the waste processor. There may be multiple individual entities of each of these components. The "waste" from one process or company is used as input to other processes or companies. These "wastes" are recycled and reused. The flows of materials within the system can be large but the flows of materials into and out of the system are small. It is important to note that in this system the consumer is also an integral part of the cycle, rather than just being the end point for the delivery of goods and services. Consumers use products and material resources, then return them to the industrial ecosystem for reprocessing and reuse.

A Type II system is much more efficient than a Type I system, but is still not sustainable over the very long term because the overall flow of materials is still one-way - the system can still "run down" as unrenewable resources are depleted. To be ultimately sustainable, biological ecosystems have evolved to be almost completely cyclic when sufficiently long time scales are considered. (From a materials standpoint.) The totality of the ecosystem is sustainable over the long term, although individual components of the system may undergo transitory periods of expansion or decay. Type III, the cyclic ecology, is the ideal ecology. In this ecology, in the interest of long-term survival, all resources must be conserved. "Resources" and "waste" are undefined, since waste to one component of the system represents resources to another.

These three types of systems should not be considered as distinct but rather as representing a spectrum with Type I at one end, Type II in the middle and Type III at the other end. It may not be practical nor possible for all industries to achieve a fully Type III mode of operation, but Type III should be a goal in the long run. Type II modes of operation are attainable to various degrees as companies take steps to move from Type I towards Type III. Several factors must be considered when companies consider what type of processes to implement. Are their input materials unrenewable or renewable? What can be done with existing equipment and processes? How much capital is available and what will be the payback period? Is the industry of a service nature whose products (cars, stereos, etc.) can be reused or recycled or are the products designed for consumption (food, fuels, etc.) which can't be reused or recycled? What can be done to make products more environmentally friendly (less impact), reusable, or recyclable?

A fundamental part of the IE concept is Product Life Cycle approach to environmental management which refers to the "systematic approach for examining the environmental and health consequences of a product at each stage of its life cycle and addressing such consequences in an integrated, cross functional decision-making process." [7] This results in products that are environmentally sound.

In next month's article I will focus on Product Life Cycle Assessment in more detail.

VOLUNTEER DUTY SCHEDULE - JANUARY 1999

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 INTER.	FARM DEMO	NAT. HISTORY DEMO
Sat. 1/2	Martha Hood	Patty Pennington	Katerina Grundy	Susan Williams	Jane Bingel (Cheese)	Ruby Dilgren (Fuzzy Critters)
Sun 1/3	--	Cris Santiago	Ken Russell	Penny Woodward	Larry Veale (Indian Crafts)	Eleanor Stanley (Gators)
Sat. 1/9	Jane Bingel	--	Joan Shaack	Jane Bingel	Susan Hesley (Yarn Dolls)	Ann Tincher (Pond Life)
Sun 1/10	--	Helen Powell	Merte Bunde	Polly Swerdlin	Ann Brinley (Weaving)	Barb Hill (Whales)
Sat. 1/16	Louise Peck	Ray Parker	Joyce Roberts	Christine Ribeiro	Chris Bingham (Cheese)	Ann Tincher (Pond Life)
Sun. 1/17	--	Ann Tincher	Paul Brunkow	Stephania Rogers	Ed Adams (Reptiles)	Polly Swerdlin (Turtles)
Sat. 1/23	Jim Crabb	Carol MacGregor	Danny Yancey	Janet Miller	Irene Ward (Wood Stove)	Laura & Bob Hendrix (Front Porch Birding)
Sun. 1/24	--	Merle Bunde	Geri Ross	Eleanor Haskew	Zel Arbuckle (Wood Stove)	Christine Ribeiro (Adaptations)
Sun. 1/30	Susan Hesley	--	Joan Henderson	Marjorie Borey	Stephania Rogers (Rope Making)	Christine Ribeiro (Adaptations)
Sun. 1/31	--	Melanie Weisman	Jean Kruse	Larry Kruse	Emily Egan (Weaving or Spinning)	Cathy Searcy (Snakes)

1999 VOLUNTEER BOARD

	Home	Office
Susan Williams	281-487-3033	713-743-8863
Jean Kruse	281-486-0787	Hanna Drago
Linda Hamlett	281-487-1268	Polly Swerdlin
Georgia Colyer	281-996-7888	Cris Santiago
Ken Russell	281-488-0390	Carolyn Sue Manley
Ruby Dilgren	281-488-1727	Ed Adams
Jane Bingel	281-554-5069	Andrew Hamlett
		Newsletter
		Admissions
		Weekend Demos
		Weekend Trail
		Weekday Farm
		Weekday Trail
		Home
		Office
	281-326-4149	281-488-8193
	281-471-0979	281-283-8430
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	281-487-1268	

email: bachwblh@aol.com

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ARMAND BAYOU NATURE CENTER
8500 Bay Area Blvd.
P.O. Box 58828
Houston, TX 77258
(281) 474-2551