Bayou Foliage

DECEMBER 1999
Vol. 17 No. 12

A PUBLICATION OF THE ARMAND BAYOU NATURE CENTER VOLUNTEERS
"Interested + Involved + Informed"

E-MAIL
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December Calendar

Dec. 4	Stewardship Saturday (Start at 8:30 a.m.)
Dec. 4	YULETIDE (4:00 – 8:00 p.m.)
Dec. 4	Continuing Ed: Fire Ecology Class 10:00 a.m. – 12:00 p.m. (Pole Barn)
Dec. 5	Volunteer Board Meeting (4:00 p.m.)
Dec. 9	Volunteer Meeting (6:30 – 9:00 p.m.)
Dec. 9	*Bayou Foliage* Deadline
Dec. 11	Continuing Ed: Moths and Butterflies 10:00 a.m. – 12:00 p.m. (Auditorium)
Dec. 18	ABNC Christmas Bird Count
Dec. 24	ABNC Closed – MERRY CHRISTMAS
Dec. 25	ABNC Closed – MERRY CHRISTMAS

Abnc Volunteer Holiday Party

THURSDAY, DECEMBER 9, 1999
NATURE CENTER AUDITORIUM

6:30 – Pot luck dinner followed by a brief business meeting, and our gift exchange.

The December volunteer meeting will be our traditional Holiday Party and Pot luck Dinner. This is a wonderful time to visit with everyone, and the gift exchange is always good for some laughs. Please bring a Pot luck Dish - appetizer, side dishes, salad, bread or dessert - enough to feed at least 6 people. The volunteer board will be providing turkey, ham, and, iced tea. Also remember to bring your own plate, utensils, and glass for our dinner and get-together.

Either during or after dinner we will conduct a brief business meeting including the election of officers for 2000. See next column for the nominees.

Then the fun really starts. After dinner we will have our gift exchange. If you wish to participate, please bring a wrapped gift valued at not more than $10. It can be a serious present or gag gift. This event is always a lot of fun. Hope to see you there!

NOMINATIONS FOR THE 2000 VOLUNTEER BOARD OF DIRECTORS

This year's nominating committee - Joan Henderson, Jim Edwards, Marjorie Borey, Stephania Rogers, and Eleanor Stanley - has done a fabulous job in finding people to fill vacant positions on the Volunteer Board in 2000. The nominees for 2000 are listed below with the new board members shown underlined.

Chair	Ed Adams
Vice Chair	Christine Ribeiro
Secretary	Linda Hamlett
Treasurer	Paula Kennedy
Stewardship Coordinator	Ken Russell
Interpretation	Christine Naspinski
Outreach	Jane Bingel
Admissions	Joan Henderson
Weekend Demos Coordinator	Katerina Grundy
Weekend Trails Coordinator	Ruby Dilgren
Weekday Farm Coordinator	Stephania Rogers
Weekday Trail Coordinator	Anne Tincher
Bayou Foliage Editor*	Andrew Hamlett

* To be appointed by new board

COMMENTS FROM THE CHAIR

1999 has been full of surprises for ABNC and for the volunteer organization. We've seen lots of changes, and there has never been a dull moment. I would like to thank those members of the volunteer board who have worked so hard throughout the year – Eric Duran, Linda Hamlett, Georgia Colyer, Ken Russell, Ruby Dilgren, Jane Bingel, Hanna Drago, Polly Swerdlin, Cris Santiago, Ed Adams, and Andrew Hamlett. Special thanks go to Ruby Dilgren for going above and beyond the call of duty numerous times and whenever asked. Not only did Ruby do her usual superlative job in the area of Interpretation, but she stepped in to help out other board members when that became necessary. Last, but never least, Andrew Hamlett has worked very hard at getting the *Bayou Foliage* out each month so that we may all be informed about the volunteer activities. I'm grateful to each of you!

Susan Williams
Volunteer Chiar

MINUTES OF THE VOLUNTEER MEETING: NOVEMBER 11, 1999

Ruby Dilgren opened the business meeting for Susan Williams who had to go out of town. Because our speaker was running late, we held the business meeting first. The minutes of the October meeting were approved. (There was one correction, per Eleanor Stanley, who was unable to attend the November meeting. In the October minutes, the Nominating Committee, at that time was looking for a Weekday Trail Coordinator, not Outreach and Admissions.)

In the Treasurer's Report, the Current Checking Balance is 2193.72 plus the Savings Balance 618.81 equals Current Assets of 2812.53. We received the recycling check for 142.19, which represents a savings of 7.92 cubic yards of landfill space or 2.64 tons of paper.

The CE class of 11-21-99 will be Study Skin Preparation by Dennis Jones; there is a limit of six participants; this skill would help us to clean out our freezer.

Kim Wasserman announced the Volunteer of the Month, Ruby Dilgren.

The Marsh Restoration Grant has been extended through the end of December. The burn season starts December 15; let Mark Kramer know if you can work Mon-Fri on weekday burns. The drought has allowed more tallow clearance. On Saturday, November20, we will relocate prairie plants from behind the admissions building to the Grimes prairie.

There were 873 visitors to Creepy Crawlers. A survey of 5% of the attendees was taken. In the survey, 61% had never been to the event before, 68% were not members, and 55% had no suggestions for improvements.

By way of the October education programs, we reached 1343 students. Let your friends know about upcoming November and December education programs.

Ten new volunteers signed up; orientation will be Jan. 12; training will take place in Feb. 2000.

Ed Naspinski will be on the prairie platform Wed., Nov. 17th until 9pm for volunteers who want to view the meteor shower.

Jim Edwards announced the nominees for the new Volunteer Board, year 2000: Chair: Ed Adams, Vice Chair: Christine Ribeiro, Secretary: Linda Hamlett, Treasurer: Paula Kennedy, Weekend Trail: Ruby Dilgren, Weekday Trail: Ann Tincher, Weekday Farm: Stephania Rogers, *Bayou* Foliage: Andrew Hamlett, Stewardship: Kenneth Russell, Interpretation: Christine Naspinski, Admissions: Joan Henderson, Weekend Demos: Katerina Grundy from Jan – June, and Eleanor Stanley from July – December, and Outreach: Jane Bingel.

George Regmund reviewed last minute Fall Festival plans.

Ruby announced the Christmas party on December 9. The Volunteer fund will supply the turkey and ham. Ice tea will be provided. You should bring your utensils, plate, glass, and enough to serve 6 people or double if you bring your significant other. If you want to participate in the Volunteer gift exchange, spend $10.00 or less.

Thanks to Polly Swerdlin for the refreshments tonight.

Ruby introduced our speaker Linda Shead, Executive Director of the Galveston Bay Foundation. It was formed in 1987 to enhance the Bay. At Marsh Bash, in 2.5 hours, 1500 volunteers planted 57,000 plants in 14.5 acres. Linda presented the *Habitat Conservation Blueprint*, which will be on the web. Galveston Bay is the second most productive bay in the nation; it is about 7th or 8th in size. We hope to restore 24,000 acres by 2010. Support Senate Bill 1222 (Estuary Habitat Restoration Partnership Act). For more information, call GBF at 281-332-3381 or fax 281- 332-3153. Write GBF at 17324-A Hwy 3, Webster, TX 77598. Website: www.galvbay.org.

Respectfully submitted,

Linda Hamlett
Secretary

FOLLOW-UP TO THE OCTOBER VOLUNTEER FORUM

Sometimes we may forget that some at ABNC wear several hats. Three volunteers, who were at the October Volunteer Forum, Hanna Drago, Chuck Snyder, and Lou Wheatcraft, are also members of the Board of Trustees. We do appreciate all that they do for ABNC. Also, it was a nice surprise to have two visitors from the ABNC 1999 Board of Trustees in attendance at the November Volunteer meeting: Lynn Bell-Hampp (Treasurer on the ABNC Executive Board) and Nancy Chen. Be sure to introduce yourself and make visitors feel welcome!

Linda

HAPPY BIRTHDAY

Polly Swerdlin	12/06	Mary Alice Dunn	12/07
Ron Natole	12/08	Justin Owens	12/09
Susan Cunningham	12/09	Ed Roberts	12/10
Jim Edwards	12/12	Judy Huston	12/19
Mary Alice Trumble	12/21	Sue Miller	12/23
Thomas Gean	12/26	Penny Woodward	12/27
Cliff Meinhardt	12/29	Eleanor Stanley	12/30

VOLUNTEER OF THE MONTH

Each month an ABNC Volunteer is recognized for his or her outstanding service to the nature center. This month's special volunteer is Ruby Dilgren. Ruby comes to us with a background in math and chemistry. Can you believe no biology? Her expertise in biology however comes from self-education and continuing ed. classes. She's been with ABNC for 10 years and as you know she loves those animals. I bet natural history is on her resume' now.

Luckily 10 years ago she ran into Mark Kramer at Bay Area Park, and he got her interested in ABNC. Ruby does a number of the education programs, demonstrations, and holds a board position. When asked what she likes most about volunteering at ABNC she replied, "I enjoy contact with the visitors and volunteers and sharing knowledge and experiences with them. Its real rewarding when a visitor or student months later repeats something they've learned from me. I realize I can make a difference." Ruby feels very strongly about conservation through education. She has recognized the fact that ABNC's unique 2500 acres are surrounded by a highly urbanized area, thus the importance for education. Because of Ruby's hard work and dedication our education program is that much more successful.

Congratulations, and thanks Ruby, for your time and hard work.

STARTING NEXT YEAR

Some of you may remember several years ago there used to be an article in the newsletter "almost" every month, entitled "From the Director". Well, a few months ago, after looking through several old newsletters, I really started to like that idea, especially since nothing like that has really been done on a regular basis for a while. So at our last board meeting, I brought up the idea of doing something like that again. I've also talked with several of the staff about it as well.

We came up with the idea of having a different staff person write an article for the *Folaige* each month. That way we'll get to read something different every month about what the staff does, projects being working on, things happening at the nature center, etc. I look forward to seeing this again and think it will be a great addition to the newsletter.

Andrew Hamlett

RECYCLING ADDS UP

Congratulations! Thanks to the efforts of those who recycle, 7.92 cubic yards of land fill space has been saved. Another way of looking at that is that our recycling efforts saved 2.64 TONS of paper. You may now also bring your used print cartridges to the nature center to be recycled. Keep recycling!

Georgia Colver

CONTINUING EDUCATION

FIRE ECOLOGY CLASS
SATURDAY, DECMEMBER 4TH
10:00 a.m. – 12:00 p.m.
ABNC POLE BARN

Join Colin Shackelford of the Texas Agricultural Extension Service as he gives a brief overview of the fire ecology of North American ecosystems. He will discuss fire behavior, impacts on vegetation and ecosystem composition as well as a brief history of humanity's relationship with wildfire. Colin will discuss fire management at ABNC and its role in prairie restoration.

MOTHS AND BUTTERLFIES
SATURDAY, DECEMBER 11TH
10:00 A.M. – 12:00 P.M.
ABNC AUDITORIUM

John Tveten, always a wonderful speaker to have, will speak to us on Moths, Butterflies, and Caterpillars of the Houston area. He also has a new book on moths and butterflies coming out very soon. So don't forget to sign up for this one as it looks to be a very interesting talk.

The Sign-up sheets for all Continuing Education classes can be found in the volunteer office.

Eric Duran

FROM THE VOLUNTEER OFFICE

October was a very busy month. Creepy Crawlers was a success thanks to everyone's help. The total number of visitors for Creepy Crawlers was 873. About 5% of those that attended were surveyed and some of the results were as follows: 61% had not been to the event before, 68% were not members of ABNC and, 55% had no suggestions for improvement. Next month you can look forward to a Fall Festival report.

Something else to report on is the success in the education department. In October 1999 ABNC had 25 school groups, 4 scout troops, 3 birthday parties, and 4 outreach programs. Thanks to the teamwork of volunteers and staff we reached 1,343 kids. Let's give ourselves a hand.

Also, I would like to say feel free to stop by the volunteer office or call to find out about the monthly education programs that are scheduled. No time like the present to observe or buddy with a volunteer so you can teach your own program.

The next volunteer orientation will be Wednesday, January 12, 2000, from 7p.m. – 9 p.m. Training will take place in the month of February.

STEWARDSHIP NEWS

In the October newsletter, I reported that the fringe marsh part of the marsh restoration project was completed September 4, with a final planting of 1200 smooth cordgrass plants. Guess what, I was wrong! Since that time the project was granted an extension, with funding, until the end of December. As a result a fifth site was established on the upper part of the bayou near the mouth of Horsepen Bayou. On November 6, volunteers (including several of our newest volunteers) planted approximately 1000 smooth cord grass plants completing the site. The project has ended up establishing about 3 acres of smooth cordgrass (*Spartina alterniflora*) and California bullrush (*Juncus californicus*) on five fringe marsh sites.

We have an interesting stewardship opportunity for anyone with a few hours to spare, particularly during the week. In mid- October we planted a significant amount of prairie grass (approximately 80 – 90 plants) in various spots on the eastside prairie. With the extremely long dry spell we are suffering from, these plantings won't survive without watering until we get some rain with regularity. I am looking for anyone interested in helping out in this area. It is basically a one-person job, which needs to be done once a week, and takes about 4 to 5 hours. It only requires that you operate the mule and water cart. It is desirable to do it on Tuesday through Friday or possibly on a non-stewardship Saturday. You will have to do a dry run to find out where all the plantings are. Let me know if you are interested.

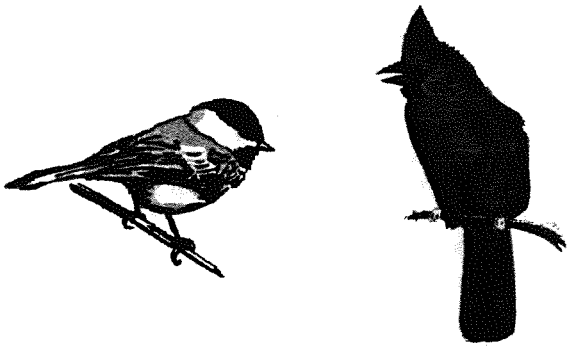
Ken Russell

THANK YOU

Thanks to generous donations by PetsMart in Webster and Kroger's in Seabrook, we now have 250lbs. of wild bird seed for our ABNC feeders. Let's say thank you to these merchants when we shop at their stores.

Also, if anyone has tube type bird feeders and or thistle and sunflower seed they would like to donate, please call me, Judy Sharp at 281- 488-2762.

Judy Sharp



THANKS EVERYONE

A special thank you to all the terrific admissions volunteers! You have kept the front desk running smoothly through many changes. It has been a pleasure to call on such a dedicated and dependable group these past two years

My sincere gratitude to the following: Jane Bingel, Shirley Bishop, Ann Brinly, Helen Burton, Cindy Eppelheimer, Dottie Evans, Pat Grimes, Keely Hartsfield, Joan Henderson, Paula Kennedy, Carol MacGregor, Dewanna Norris, Jonathan Perez, Christine Ribeiro, Cris Santiago, Joan Shack, Anne Tincher, Mary Ann Tucker, Michael Vu, and Mary Yurkovich.

Hanna Drago

FROM THE EDITOR

I would just like to say thanks to everyone who has submitted things and written articles for the *Bayou Foliage* in 1999, we could not have had the newsletter without you.

I would also like to ask that when and if possible, please try to send your submissions to the newsletter via e-mail at: BayouFoliage@aol.com. It just makes it a little easier that way and saves on paper as well. Now this is not to say, if you don't have a computer you can't submit things, certainly not. If it's easier for you to just drop a note by the newsletter mail box or you would just prefer to write something out, please feel free, that's perfectly ok. I just ask this because it may make things easier for both of us. Thanks.

Andrew Hamlett

THE WORLD WE LIVE IN

BY JONATHAN PEREZ

What is an adaptation? Depending on whom you ask or what you read, you are likely to get many different definitions. But if you think about what the purpose of an adaptation is, you can begin to come up with a definition of your own to help you explain this vitally important trait. Whenever you think about adaptations, you must also think about why a particular species has adapted a new characteristic. Arguably, the reason behind most, if not all adaptations is to increase reproductive success. If a species cannot pass on its genes, it will go extinct, so reproductive success is the foundation for adaptations.

Many new behavioral abilities probably come about because of a genetic mutation causing a different characteristic or behavior to arise, although there are a few other possibilities or explanations. According to natural selection, those behaviors or traits that do not provide an advantage in a particular environment will be weeded out while those that do provide an advantage are passed onto future generations. Whether or not the new trait is passed on depends on the reproductive success of the species. In other words, if a new trait reduces reproductive success, then it will become

scarcer over time until it is totally gone. In contrast, if the new trait does promote reproductive success, it will be passed onto subsequent generations and over time, it will become more common in the genetic pool of the species.

Knowing that a trait causes a specific adaptation and that the reproductive success of a species is essential in passing on the trait, a definition can be deduced from this; the form of a trait that gives an individual a gene-transmitting advantage over other individuals with hereditarily different alternative forms of that trait can be called an adaptation (Alcock 1993). Adaptive traits are better than other alternatives that exist or have existed because they are better at helping the individual pass on their genes by reproducing. In other words, a trait caused by a chance mutation is an adaptation if it advances the reproductive success of the mutant individual (remember that genes had to have genetically mutated to allow the trait to arise).

Now, knowing all of this wordy garbage is essential in understanding one of the fundamental phenomenon's in nature, the purpose of adaptations. There are many different types of adaptations, but all of them are tied together by promoting the continuation of the species. I'm sure everyone can think of many different types of adaptations, like why vultures have baldheads, why some lizards (and even some snakes) can voluntarily lose and then regrow their tail (caudal or tail autotomy) or why some fish can breathe atmospheric oxygen. But what do all of these adaptations have in common? They all promote reproductive success.

Using all of the information that you have gathered so far, how do adaptations come into play when making certain decisions? Most animals need to make at least four very important decisions that promote reproductive success: where to live, how to gather food, how to avoid predators, and what tactics to use to reproduce. A look at how these decisions are adaptively significant to a particular species will follow.

Habitat Selection

All of you know that if you wanted to see a particular animal, say an osprey, you would go to only a certain type of habitat that is generally reliable in having these animals. In other words, you would not go to the prairie to look for ospreys nor would you go to the bayou to look for kites. This shows that as a rule, certain species are found only in particular habitats, suggesting that they selectively choose an area to settle in while ignoring or actively avoiding others. It is true that you may see a wandering osprey fly overhead while in a prairie or see some kites drinking from the bayou, but these places are not their habitat. The importance of these adaptive preferences for certain kinds of living space is that if the individual satisfies their preferences, they should then experience higher fitness than those unable to settle in the preferred habitat.

Some behavior may be contradictory to the thought that individuals will do things that promote fitness or reproductive success. For example, some individuals will abandon suitable locations, such as the place they were born, to search for other places even though they will have to deal with dangerous and unfamiliar terrain, and some will actively and aggressively defend the living space from intruders even though this territoriality has high demands on the individual that exhibits it. There are many hypotheses that attempt to explain these observations and all of them suggest that the reasons behind them is to maintain reproductive success (a recurring theme in this article), either by moving to new areas to avoid inbreeding or to fight and defend a limited number of breeding sites, just to name a few reasons.

Adaptive Feeding Behavior

Food is a necessity when it comes to the fitness of something living. It is known that the healthier the parent, the healthier the progeny will be, further ensuring the continuation of the species. But some things work against a predator when trying to find a prey. Almost everything of biological origin serves as a food source for some other animal or organism. When an animal forages for food, it is faced with many things that stand between the hunter and the tasty morsel of food.

First of all, the forager has to find a food item, which may be a living prey that is skillfully hiding away from predators. Second, upon finding the food item, it has to decide whether an attack is likely to yield benefits in excess of the costs of the attempt. Third, in having launched an attack, it has to capture the meal in which the prey may very well have another outcome in mind. Finally, even after a prey item is caught, there may still be difficulties to overcome with respect to consuming the food, whose useful calories and nutrients may be hard to extract.

These living organisms provide stimuli as by-products of their existence that can potentially be detected if a foraging animal is sensitive to the appropriate cues. How predators are adapted to detect these stimuli depends on the animal in question. For example, one adaptation that can be either learned or innate is that some predators can better locate a well-concealed but profitable prey by scanning for the particular cues associated or specific to a particular species. This is just one example of the many techniques used and available to predators. Other techniques include; detecting prey by attending to companions (in other words, paying attention to others for changes in behavior, such as when a white-tailed deer flashes it's tail to alert other deer, listening for a variety of calls or noises, etc.) and finding prey by deceiving victims into revealing their location (only certain social predators have this luxury but some solitary predators can make an "illegitimate" signal that is used to cause prey to reveal their location).

It is very important that a predator only attacks prey that would yield a meal. This selectivity is obvious in many respects, such as avoiding poisonous animals or plants (and even those that mimic poisonous ones, see past article on mimicry) that cause illness or death, animals that are too large to attack and/or be eaten or passing up food items for a preferable item. Upon catching the prey, many of them have defense mechanisms to avoid being eaten or to escape from the predator. For example, many animals can inflate themselves with air to make themselves look bigger and more intimidating, some can hiss or make loud noises to scare away or warn predators and some are venomous or have bright warning colors to ward off the predator.

After the prey has been located and caught, it still has to try and consume it. It is important to keep in mind that prey capture does not equal prey consumption. Some things do work against the predator after it has expended all of that energy in locating and catching the prey. Some examples include scavengers who try to chase away the predator to feed on their catch and certain other behavioral adaptations certain animals use to consume prey, such as northwestern

crows who catch shellfish and must drop them onto hard surfaces to break them open (in which they often do not break or the meat is lost to other animals or the sea). However, because of the importance of calories to carry on the long process of mating, reproduction and the development of the young, these "chances" are taken.

Coping With Predators Adaptively

As previously stated, predators that locate, attack, catch, and then consume prey items are deemed successful, but the prey was not so lucky. Using what we know about adaptations, we expect that the prey species has evolved certain antipredator adaptations to avoid being located, attacked, caught, and then consumed. One example is the noctuid moth's response to an ultrasound-producing bat. Because the moth is extremely sensitive to these sounds, it is sometimes able to avoid detection by flying away from the bat even before the bat detects the moth. Even if the bat does detect the moth, it has adapted certain flight patterns made up of dives and loops, all used to avoid predators and making its capture extremely challenging.

Usually, the more difficulty a predator has in detecting a prey item, the better the prey is for the predator. Camouflage is the best way to avoid predators because the organism does not expend any energy. Some prey camouflage with their environment while some will mimic inanimate objects like the bark of trees or even bird droppings. Another important thing that is adaptively chosen is where to rest. Again, if they exhibit mimicry or camouflage then this job is relatively easy. However, if they do not, then selecting a safe resting area becomes more critical and consequently, more labor intensive.

Other things that animals have done to adaptively cope with predators or to make capture less likely include; removing telltale evidence (for example, predators can find caterpillars if they search for leaves that have been chewed on and damaged. It has been shown that some birds will search for and go to trees or bushes with damaged leaves caused by caterpillars. To combat this, a few species of moth caterpillars (such as *Catocala*) will chew through the petiole, dropping the damaged leaf to the ground, therefore removing evidence of their presence), making an attack less likely by using a variety of techniques such as chemicals like toxins, venoms, poisons, musks, and other sprays and excretions, etc., using warning coloration's and mimicry, and a number of other adaptations.

Male and Female Reproductive Tactics

However skillful an animal is in defending territories Foraging efficiently or repelling predators, these abilities have evolutionary consequences only if the individual succeeds in passing on its genes. Reproductive behavior is the central focus of natural selection. In sexually reproducing species, there are males and females, whose reproductive behavior is often so different that at times, it is hard to believe the two sexes really belong to the same species. Males behave radically different from females and vice versa, the interesting question is why they differ so much. One of the reasons behind this question can arguably be related to parental investment.

Parental investment is whatever the parent does to increase the probability that an existing offspring will survive to reproduce at the cost of the parent's ability to generate additional offspring. There are many ways to make parental investments in an offspring, such as laying a large egg that increases successful hatching, caring for the young until they're ready to venture out on their own, risking one's own life in protecting the young, etc. All of these parental investments attempt to increase the chance that the offspring will mature and reproduce, thus passing on its parent's genes. However, before a parent can invest time, energy and effort in its offspring, they must first compete for copulation's.

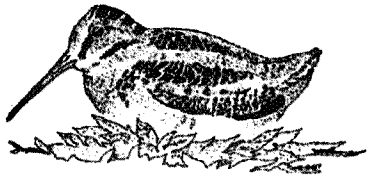
In the "typical" sex role, males compete with other males for the chance to copulate with a female. In many species, males compete for high social status and this is correlated with copulatory success. Being the "top dog" of a group assumes that it was equipped with certain traits the other members in the group did not have. Again, the "stronger" traits are passed onto future offspring because, as previously stated, dominance (and thus fighting ability) leads to reproductive success. The relationship between a large body size and superior fighting ability (and consequently reproductive success) holds true for everything from tiny insects to snakes to seals (note that only animals that exhibit this type of sex role will this hold true). There are other types of mating behaviors that, due to lack of room, will not be discussed here.

What Does This All Mean?

The recurring theme in this particular article is the importance of reproduction in which its sole purpose is passing on the parent's genes. Adaptations allow an animal or plant better compete with others of the same species when trying to procreate. The underlying argument is that all adaptations arise because those that are not weeded out will help the organism successfully reproduce. Now, there are many debates and arguments in this world that offer alternative explanations or views. The purpose of this article is to touch upon this particular view and let you decide and explore alternatives on your own.

VOLUNTEER DUTY SCHEDULE – DECEMBER 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 EXHIBIT
Sat. 12/4	John Siptak	Ramon McKinney	Christine Naspinski	Carl & Fran Cognata	Susan Hesley (Yarn Dolls)	
Sun. 12/5	--	Martha Hood	Ken Russell	Stephania Rogers	Mary Ann Tucker (Basket Weaving)	Anne Tincher (Pond Life)
Sat. 12/11	Jim Crabb	Stan Krauhs	Doug Barfoot	Chris Bingham	Stephania Rogers (Butter)	Pat Doerr (Owls)
Sun. 12/12		Ray Parker	Martha Hood	Polly Swerdlin	Dan & Jen Pelletier (Rope Making)	Eleanor Stanley (Alligators)
Sat. 12/18	Louise Peck	Melanie Weisman	Katerina Grundy	Eleanor Stanley	Chris Bingham (Stereoscope)	Marilyn Clark (Squirrel)
Sun. 12/19	--	Michael & Eldine Owens	Paul Brunkow	Cathy Searcy Jett	Emily Egan (Spin Weave)	Marianne & Brain Phillips (Snakes)
Sat. 12/25	**ABNC CLOSED**					
Sun. 12/26	--	Stan Krauhs	Georgia Colyer	Ruby Dilgren	Ed Adams (Rope Making)	

IF YOU CAN FILL IN ANY OF THE BLANK SPOTS, PLEASE CALL THE APPROPRIATE COORDINATOR. THANKS!

1999 VOLUNTEER BOARD

		Home	Office			Home	Office
Susan Williams	Chair	281-487-3033	713-743-8863	Hanna Drago	Admissions	281-326-4149	
Eric Duran	Vice Chair	281-286-6764		Polly Swerdlin	Weekend Demos	281-488-8193	281-283-8430
Linda Hamlett	Secretary	281-487-1268		Cris Santiago	Weekend Trail	281-471-0979	
Georgia Colyer	Treasurer	281-996-7888		--Vacant--	Weekday Farm		
Ken Russell	Stewardship	281-488-0390		Ed Adams	Weekday Trail	713-946-2754	
Ruby Dilgren	Interpretation	281-488-1727		Andrew Hamlett	Newsletter	281-487-1268	281- 998-7317/Fax
Jane Bingel	Outreach	281-554-5069		email: BayouFoliage@aol.com			

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