



THE BOOMER

Quarterly Newsletter of the Friends of Attwater Prairie Chicken Refuge

Volume 3 Issue 1

Message From The President

AmazonSmile There are various ways to support an organization. It could be by volunteering your valuable time or sharing your financial resources. In recent years corporate America has allowed their customers the opportunity to decide how they distribute their charitable contributions. Often it is with the swipe of a card at the register that directs an amount equal to a percentage of your purchase. Recently Amazon.com became one of the latest corporations to allow you to direct funds from their foundation to the 501(c)3 nonprofit of your choice. So how can you help us every time you make a purchase at Amazon? By using **Amazon Smile**. AmazonSmile is a simple and automatic way for you to support your favorite charitable organization every time you shop, at no cost to you. When you shop at smile.amazon.com, you'll find the exact same low prices, vast selection and convenient shopping experience as Amazon.com, with the added bonus that Amazon will donate a portion of the purchase price to your favorite charitable organization. To shop at AmazonSmile simply go to smile.amazon.com from the web browser on your computer or mobile device. You may also want to add a bookmark to AmazonSmile to make it even easier to return and start your shopping at AmazonSmile. *Cont. on Page 4*



The White-tailed Hawk, a reliable Refuge siting

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Another Successful "Booming-N-Blooming"

The 20th annual Attwater's Prairie Chicken Festival was held April 12-13, 2014. This year's event saw an attendance of 272 APC enthusiasts. Anyone wanting to see an APC was so rewarded. Attendees represented at least 12 states and 5 foreign countries. Friends supporters were generous with their donations and merchandise purchases, enjoyed speaker Jon Hayes and viewed this year's student art contest winning works which are hi-lited in this edition of

The Boomer.

Friends of Attwater Prairie Chicken Refuge, P.O. Box 212 Eagle Lake, Texas 77434

Did you know?

- *Founded in 1877, the Texas State Sportsman's Assoc. was the first conservation organization in the state.*
- *The signees of the Migratory Bird Treaty Act of 1918 now include the USA, Canada, Mexico, Japan, and Russia.*
- *In the late 19th century, Texas law declared hunting to be a privilege, not a right.*

Art Contest Expands and Grows

The Friends annual student art contest, "Discover Your Prairie Neighbors" was expanded this year to include all grade levels. Two hundred sixteen entries from grades K-12 were submitted in one of three categories, Coloring (K-5), Poster (6-8), or Logo (9-12). That represents an increase of more than 30% over last year's entries. The goal of the contest is to engage the power of art to help youth feel more connected with nature. Students from seven schools representing the four school districts invited to participate submitted entries. Winners were announced at the 20th annual Booming-N-Blooming Festival held at the Refuge, April 12 and 13.

The contest's top prize went to Brazos High School Junior Christina Jorgenson. Christina's entry in the Logo contest was used on this year's festival Tee shirt. Christina received a plaque, festival tee shirt and a \$100.00 gift card. She plans to pursue an art career when she completes high school.

Top winner in the Poster contest was Hayden Leopold, seventh grade student at Columbus Junior High. Hayden received a plaque and festival tee shirt. Eagle Lake Intermediate fourth grader, Leila Davila was top winner in the Coloring Contest. She also received a plaque and Festival tee shirt.

The *BOOMER* would like to thank the following individuals whose time and efforts contributed to making the art contest a success: Rebecca Chester, refuge biologist, Carol Davis (Blisswood), Mary Lou Jones, friends member, Ron Jones, friends member, Jane Meldahl education comm., Mark Sleeper, education comm., Edith Smith, friends member, Karen Thomas, refuge volunteer, Danny Thomas, refuge volunteer. We would especially like to thank *John Magera* for his efforts working directly with the participating schools and educators.



Above: Christina Jorgenson's winning art work was used on the 20th annual Prairie Chicken Festival tee shirts



Above: Logo Contest winner Christina Jorgenson holds her winning art work and Grand prize plaque

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Above: Haden Leopold's winning art work in the Poster Contest.



Above: Hayden Leopold holds his winning art work and plaque.



Above: Leila Davila's winning art work in the Coloring Contest.



Above: Leila Davila holds her winning art work and plaque.

Art Contest Cont. on Page 4

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Interested in reading back issues? Visit www.attwater.org and you will find them archived on the publications page.

President's Message Cont. from Page 1. Tens of millions of products on AmazonSmile are eligible for donations. You will see eligible products marked "Eligible for AmazonSmile donation" on their product detail pages. Recurring Subscribe-and-Save purchases and subscription renewals are not currently eligible. You use the same account on Amazon.com and AmazonSmile. Your shopping cart, Wish List, wedding or baby registry, and other account settings are also the same. On your first visit to AmazonSmile, you need to select a charitable organization to receive donations from eligible purchases before you begin shopping. It will remember your selection, and then every eligible purchase you make on AmazonSmile will result in a donation. The AmazonSmile Foundation will donate 0.5% of the purchase price from your eligible AmazonSmile purchases. The purchase price is the amount paid for the item minus any rebates and excluding shipping & handling, gift-wrapping fees, taxes, or service charges. From time to time, they may offer special, limited time promotions that increase the donation amount on one or more products or services or provide for additional donations to charitable organizations. Special terms and restrictions may apply. Please see the relevant promotion for complete details. You can change your charity any time. Your AmazonSmile purchases after the change count towards your newly selected charity. To change your charity, sign in to smile.amazon.com on your desktop or mobile phone browser and simply select "Change your Charity" in "Your Account."

You can choose from almost one million eligible 501(c)(3) public charitable organizations, but of course we would encourage you to select **Friends of Attwater Prairie Chicken Refuge**. But whether it is us or another organization, of your choosing, we hope you take advantage of this opportunity.

Art Contest Cont. from Page 3

2014 Art Contest Results

Logo:

Grand prize; Christina Jorgenson, grade 11, Brazos HS, teacher Michael Parthum

1st place: Sarahi Juarez, grade 11, Rice HS, teacher Clayton Bowen

2nd place, Charla Spears, grade 9, Rice HS, teacher Clayton Bowen

3rd place, Allen Jefferies, grade 9, Rice HS, teacher Clayton Bowen

Poster:

Grand prize: Hayden Leopold, grade 7, Columbus JH, teacher Deborah Petrosky

1st place, Lauryn Shepard, grade 6, Columbus JH, teacher Deborah Petrosky

2nd place, Amber Sartin, grade 8, Columbus JH, teacher Deborah Petrosky

3rd place tie, Tyrique Hancock, grade 8, Columbus JH, teacher Deborah Petrosky

3rd place tie, Jenna Templeton, grade 8, Columbus JH, teacher Deboeah Petrosky

Coloring:

Grand prize: Leila Davila, grade 4, Eagle Lake Intermediate, teacher Sharon Kearbey

1st place: Rianna Flores, grade 4, Eagle lake intermediate, teacher Melinda Kucherka

2nd place: Donovan Alley, grade 5, Columbus Elementary, teacher Joyce Tempelton

3rd place tie, Justice Alleway, grade 4, Eagle Lake Elementary, teacher Brenda Hemphill

3rd place tie, Savannah McBride, grade 5, Eagle Lake Intermediate, teacher Meredith

The Friends of Attwater Prairie Chicken Refuge would like to thank Carol Davis and Blisswood Bed-Breakfast and Spa for again co-sponsoring the annual **Festival Art Contest**.



STOPPING THE RED MENACE

Dr. Mike Morrow, and Rebecca Chester, Wildlife Biologists
Attwater Prairie Chicken National Wildlife Refuge

In previous editions of *The Boomer*, we have written about the devastating impacts of red imported fire ants (RIFA) on Attwater's prairie-chickens (APC) and other wildlife. We have also indicated that we have treated relatively large areas to suppress RIFA for research and management purposes, and the Friends Group has, and continues to, actively support this effort. However, some may be more than a little concerned about broadcasting another pesticide on the landscape. So in this article, we hope to provide you with more information about the product that we are using to suppress RIFA with the objective of improving the quality of habitat for APCs and other species as well.

The product we have used in recent years is Extinguish® Plus, manufactured by Wellmark International (<http://www.extinguishfireants.com/>). When applied properly, bait-formulated pesticides, such as Extinguish® Plus, are expected to eradicate 90% of RIFA (Drees et al. 2002). While there are several similar products that can be used in residential areas, Extinguish® Plus is the only RIFA control product registered for pasture and rangeland use. It contains both an insecticide (hydramethylnon 0.365%) and an insect growth regulator (s-methoprene 0.250%; used in many dog and cat flea control products and used widely as a mosquito larvicide) delivered in a bait-formulation that specifically targets ants, although Calixto et al. (2007) only observed RIFA foraging on a similar bait product. Indeed, RIFA had removed all bait applied in their study (1.0 lbs/acre) within 100 minutes after application. These investigators attributed dominance of bait products to RIFA's typically overwhelming population numbers and their aggressive foraging behavior. These researchers observed increases in native ant diversity and populations due to reduced competition following RIFA suppression with a similar bait product. Research conducted at APCNWR from 2009-2013 also documented a positive response of native ants and other invertebrates in the months following RIFA suppression with Extinguish® Plus.

However, in the unlikely event that a small amount of product is left unconsumed by RIFA, the half-life of Extinguish® Plus is quite short. In a terrestrial environment with exposure to sunlight, the half-life of methoprene is less than 10 hours, from 10-40 hours in water, and about 10 days in soil (USEPA 1982). The half-life of hydramethylnon in soil is 18 hrs-28 days, 10-33 days in water, and binds strongly to soil so is not a groundwater contamination concern (USEPA 1992). Therefore, the low percentage of active ingredients in the very small amount of bait that might be left behind by RIFA on the soil surface will break down quickly and should pose no further threat. Hydramethylnon is listed as practically nontoxic to birds and nontoxic to bees (U.S. National Library of Medicine 1995). The product is a granule-bound oil, not a powder or spray; therefore, non-target invertebrates are unlikely to come into contact with the bait. The bait, which we apply in the fall, is not likely attractive to most adult, foraging bees and wasps since they prefer nectar during that time of year.

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Red Menace Cont. from Page 5 Although this product has potential for impacting aquatic organisms, application to water is prohibited by label restrictions. Because of the rapid retrieval by RIFA, the short half-life of the active ingredients in sunlight, and because they bind strongly to soil, runoff into water is not likely unless the product is applied just before a rain (**NOT** a best management practice!). The amount of ingested product considered to be toxic to terrestrial animals is practically unachievable at the application rate of 1.5 lbs/acre (approximately 7 granules/ft²). Therefore, when applied properly (adhering to label restrictions and guidance, using best management practices), **there is little risk of pesticide exposure to non-target species**, and even less risk of adverse consequences to non-target species. Given the devastating impacts of RIFA on ecosystems they have invaded, the very small risk to non-target species to substantially reduce RIFA abundance is a trade-off well worth taking. Adverse impacts of RIFA to native fauna besides prairie-chickens are well documented and include insects, bobwhites, white-tailed deer, colonial waterbirds, loggerhead shrikes, Houston toads, and many other species.

The only down side is that because RIFA are now ubiquitous on the landscape, recolonization after treatment is inevitable. The expected longevity of treatment effects is unknown for large scale projects like ours (last fall we treated approximately 3,700 acres), but they have lasted 12-18 months on smaller scale projects (B. Drees, Texas AgriLife Extension Entomology retired, personal communication). It is possible that on larger areas, suppression will last longer than 12-18 months since recolonization from the edge to interior will be less likely. The next phase of our research will focus on optimizing the re-treatment interval to ensure ecosystem benefits are maximized while keeping treatment costs as low as possible.

Note: references cited in this and previous articles by refuge biologists are available at www.attwater.org in the publication

BROOD SURVIVAL OF ATTWATER'S PRAIRIE-CHICKEN (TX)

You can help with this vital RIFA suppression by supporting the ~~Brood Fund~~

That was the banner promoting the Brood Fund in the winter BOOMER, but after discussion with supporters at the 20th Annual Prairie Chicken Festival, the Friends board decided a new moniker was in order. We are striking through the old name. The new name may not roll off the tongue but everyone understands how bad red imported fire ants can be and the little red devils have few fans. If you send in a donation directed to the Brood Fund we will still use it to suppress RIFAs, but so everyone knows the "plan", you can now help :

By donating to the Friends of Attwater Prairie Chicken Refuge

"Fire Ant Control/Brood Survival Fund"

and spreading the word

" It is our task in our time and in our generation to hand down undiminished to those who come after us, as was handed down to us by those who went before, the natural wealth and beauty which is ours. "

President John F. Kennedy

Recovery Partners: The Caldwell Zoo

This is the fourth in our series of articles to highlight the Texas organizations working hand-in-hand to recover the APC.

The Caldwell Zoo is located in Tyler, Texas. It joined the recovery program in 2001, receiving its first Attwater's Prairie Chickens in 2002. Curator of Birds and Reptiles, Yvonne Stainback, oversees a bird staff of one supervisor, five keepers, and two interns. All are involved in some aspect of the APC program. As seems to be typical with our captive breeding recovery partners, the zoo has no separate budget for its APC work. Funding is part of the overall bird department budget. Funds are generated from zoo visitation as well as the generosity of the Caldwell Foundation.

When asked about their success in the program, Yvonne responded, "Success can be defined in many different ways. Each year, we look at three factors: fertility of the eggs, hatchability and survivability of each chick. The Attwater's Prairie Chickens can be difficult to raise and there are some years that are better than others in terms of chicks that are hatched or the number that survive to be released. We see success each year when males start booming, when the first egg is laid and when the first chick hatches. Often success is when chicks live past day 10 or to 8 weeks of age. If we can raise and release one Attwater's Prairie Chicken in any given breeding season, sometimes that is all I need to feel successful".

Their facility consists of 8 adult prairie chicken pens, 4 small indoor chick pens with attached outdoor runs and 2 larger outdoor-only chick pens. They also have an Attwater's Prairie Chicken exhibit that is used to showcase APCs. It can double as a breeding area if an extra pen is needed. They recently completed an expansion of their chick rearing area, giving them some much needed indoor chick pens. Due to the location of their pens, they don't anticipate adding onto the existing space. Their APC production varies but a strengthening program produced 17 healthy chicks at the end of the 2013 season. ***Cont. on page 8***



Above: The APC breeding facility at the Caldwell Zoo in Tyler, Texas.

Photographs for this article were provided by The Caldwell Zoo.

Recovery Partners Cont. from Page 7

Producing APCs is much the same at all of the breeding facilities using methodologies worked out over two decades by the effort of many dedicated individuals. At the Caldwell Zoo, captive birds are separated into breeding pairs at the beginning of February using pairings made from the studbook. Eggs at their facility are generally laid around the beginning of April, though this has been seen to vary between facilities. They collect the eggs from each nest and replace them with “dummy” eggs. Eggs are then either put under “broody” hens – surrogate silky chickens that will sit on the prairie chicken eggs, or they are put in an incubator.

Eggs under broody hens will remain there for at least 10 – 14 days and then are usually moved into an incubator to finish the process. Once hatched, they are moved to the chick raising building where they are initially kept in brooder boxes and then moved to progressively larger cages until they are ready to be outside.

The Caldwell Zoo prescribes to a diet for APC that has been developed over time and is manufactured by Mazuri Feed which specializes in nutrition for exotic animals. Adult prairie chickens are fed a special pellet diet that Mazuri makes specifically for Prairie Chickens. They then add some chopped leafy greens, other vegetables and mealworms. The chicks receive their own specially formulated pellet made by Mazuri. Their diet is supplemented with a salad mix and some insects, such as mealworms or live crickets.

Yvonne reminds us that, "The step-by-step process of raising Attwater's Prairie Chickens is well defined and at first glance seems simple. But when you are actually dealing with the little chicks, it can get complicated pretty quickly. Each chick is different and we have to respond to this accordingly. This can be challenging, even for those of us that have been doing it for several years. Staff from all of the APC breeding facilities are very dedicated to the care and raising of Attwater's Prairie Chickens. Surprisingly it takes a lot more time and effort to raise these birds than most people think".

She adds that the public can help, "By supporting the Attwater's Prairie Chicken National Wildlife Refuge - whether through donations, volunteering, or simply visiting the refuge, the public can ensure that there is a place for this remarkable grouse to call home."

To learn more about the Caldwell Zoo in Tyler Texas, visit

www.caldwellzoo.org



Photo above: Silky chickens like this are often used as surrogate hens on APC eggs at the Caldwell zoo

Membership

Interested in becoming a member or want to renew your annual membership ? It is now easy to do ,on-line at

www.attwater.org

We are happy to remind everyone that we are now a 501(c)3 nonprofit organization.

Any donations you may make are tax deductible to the extent allowed by law and tax code.

Donors should consult with their tax advisor.

Please consider Friends of Attwater Prairie Chicken Refuge in your charitable giving.



Conservation Striketeam Attacks Invasives

During the first two weeks of February of this year, an eight-member American Youth Works/Texas Conservation Corps from Austin, TX worked as an invasive plant "striketeam" at the refuge. They cut and treated invasive brush in prairie habitat, which is critical for prairie-dependent wildlife including the endangered Attwater's prairie-chicken. Their efforts greatly improved 422 acres of grassland habitat by cutting invasive brush and treating the stumps to prevent regrowth.

Refuge staff were quite impressed with the quality and amount of work they accomplished during their stay. Everyone found them to be very responsible, professional, and a complete pleasure to work with. They were knowledgeable and learned quickly the plants to treat and those to avoid. They understood the need for treating these plants and took a genuine interest in making sure the work was done correctly and with care. Their hard-working and pleasant attitudes were maintained through some of the worst winter weather conditions the refuge has experienced in at least 20-30 years. Much of their time in the field was spent in damp (or wet), cold, windy conditions. Even through these very trying conditions, they remained dedicated to the tasks at hand and completed them with a positive and professional work ethic. The Refuge couldn't have asked for their work here to have gone much better and looks forward to having them back this summer or fall, pending available funds.

Despite on and off light rain conditions during part of this project, it is expected that the majority of the brush will have been killed by the herbicide application, and just as important, the standing structures (that can provide unnatural perches for predators out in the prairie) were immediately eliminated. The striketeam was extremely useful for accomplishing part of the Refuge's ongoing invasive species control projects. The ability to have 8 people focusing on a single task for a solid week or more greatly increases the acres enhanced above and beyond what available staff could accomplish during the same time. Of course, there are many more acres that would benefit greatly from such intensive invasive work and refuge staff, with help from long-term volunteers, will continue working on those throughout the year.

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Striketeam members above, back row from left, Erica Keller (crew leader), Nick Johns, Heather McCollough, Parker Stevenson (crew leader). Front row from left, Caity Veraar, Austin Buckingham, Ben Stebbins. Not in the photo, Jim Nichols

Striketeam Cont. from page 9.

The team consisted of recent college graduates and young professionals just starting their working careers. They were provided an opportunity to learn on-the-job conservation skills and also experience new habitats in Texas, since most are from out-of-state. Not only did they accomplish important goals for the refuge, but from their exposure to the refuge mission, they gained an appreciation and fondness for prairie and prairie-chickens.



Striketeam members using brush cutters and herbicide, attack yaupon holly invading the refuge prairie and enjoy great satisfaction knowing their team's hard work has enhanced the prairie and may make a difference in recovering the Attwater's Prairie Chicken.

WANT TO HELP REBECCA ON HER MISSION?

Ever wanted to get revenge on Macartney rose? Or wanted instant gratification helping clean up precious prairie? Are you looking for projects to fulfill your Master Naturalist volunteer hours requirement?

The Invasive Species program at the refuge is seeking volunteers to help control and monitor invasive species such as Macartney rose, deep-rooted sedge, johnsongrass, and tallowtree. As part of the invasives treatment project, we offer plant identification and pesticide application training as well as ATV/UTV certification. Volunteers willing to spend at least a couple days per month are highly desirable, but we do have some projects where progress can be made in just one day. Come join the refuge staff as we work to improve the habitat, and enjoy the beautiful prairie and wildlife while you're at it. **If you want to help please contact Rebecca Chester, Refuge Biologist, at :**

rebecca_chester@fws.gov, office:979-234-3021 x230 cell:979-472-0660

To learn more about invasive species in Texas visit www.invasivespecies.org

Our Mission The mission of the Friends of Attwater Prairie Chicken Refuge is to support the purpose and objectives of Attwater Prairie Chicken NWR and promote the recovery of the Attwater's prairie chicken and the Texas native coastal prairie ecosystem for this and future generations.

Henry Attwater, Pioneer Conservationist

The following article on Henry Philemon Attwater appeared in the *Houston Post-Dispatch* on September 26, 1931 – Editor.

ATTWATER, HENRY PHILEMON (1854–1931). Henry Attwater, naturalist and conservationist, the son of Thomas G. and Rose Ellen (Woolbit) Attwater, was born in Brighton, England, on April 28, 1854. He was educated at St. Nicholas Episcopal College at Shoreham, Sussex, and in 1873 immigrated to Ontario, Canada, where he engaged in farming and beekeeping. Attwater soon became interested in natural history, and during 1883 he and John A. Morden prepared and exhibited natural history specimens. During 1884 the two men collected specimens in Bexar County, Texas, where Attwater made the acquaintance of Gustave Toudouze, a naturalist and taxidermist from Losoya. During the latter part of 1884 and early 1885 Attwater and Toudouze were employed to prepare and exhibit natural history specimens in the Texas pavilion at the New Orleans World's Fair.

Attwater was married on December 31, 1885, in Chatham, Ontario, to Lucy Mary Watts, a widow with two children. No children were born to Henry and Lucy Attwater. In 1886 the Attwater family moved to London, Ontario, where he opened a small museum at the Mechanics' Institute. This enterprise did not prove successful, and the museum was closed in the summer of 1887.

In 1889 the family moved to Sherman, Texas, where Attwater briefly engaged in the bee industry before moving to San Antonio. During the 1890s he collected throughout the state as well as lecturing and

writing on natural history and agricultural subjects. He was also employed at various times to prepare exhibits of Texas natural products and wildlife at fairs and expositions. In 1900 Attwater moved from San Antonio to Houston to become the agricultural and industrial agent for the Southern Pacific Railroad. In this position he continued to expand his collections and to promote the agricultural and business interests of the state, in addition to assisting the work of commercial clubs, fairs, and farmers' organizations.

Attwater's major contributions to natural history were in the areas of ornithology and conservation. His three ornithological papers deal with the nesting habits of fifty species of birds in Bexar County, Texas, the occurrence of 242 species of birds in the vicinity of San Antonio, and the deaths of thousands of warblers during a blue norther in March 1892. Attwater also contributed specimens to the Smithsonian Institution, collected birds for George B. Sennett, and provided notes for W. W. Cooke's *Bird Migration in the Mississippi Valley* (1888) and the mammal section of Vernon Bailey's *Biological Survey of Texas* (1905). *Cont. on Page 12*



Henry Philemon Attwater, pioneer naturalist, conservationist and advocate.

Henry Attwater Cont. from Page 11

Attwater was elected a director of the National Audubon Society about 1900 and was reelected for a five-year term in 1905. Through his influence with farmers, the Texas Audubon Society had by 1910 gained affiliation with the Texas Farmers' Congress, the Texas Cotton Growers' Association, and the Texas Corn Growers' Association. In April 1910 Attwater and Mervyn Bathurst Davis, secretary of the Texas Audubon Society, secured the endorsement of the Conservation Congress, which met in Fort Worth.

Attwater worked diligently for passage of the 1903 Model Game Law and, following its passage, arranged for warning notices from the National Audubon Society to be distributed in railroad facilities throughout the state. In 1907 he served on the game-law committee that recommended not only that the 1903 Model Law be reenacted, but also that a license be required for both resident and nonresident hunters and that revenue from licenses and fines be used solely for game protection and propagation. Attwater was also active in the promotion of legislation to protect the mourning dove, which was rapidly declining during the early 1900s. His most important conservation works include *Boll Weevils and Birds* (1903), *Use and Value of Wild Birds to Texas Farmers and Stockmen and Fruit and Truck Growers* (1914), and *The Disappearance of Wild Life* (1917).

In 1913 Attwater retired as industrial agent with the Southern Pacific to devote his entire time to the study of natural history. During the 1920s he sold his collection to the Witte Museum in San Antonio, and after his death his papers were deposited in the Houston Public Library. Attwater's greater prairie chicken (*Tympanuchus cupido attwateri*), Attwater's white-footed mouse (*Peromyscus attwateri*), Attwater's wood rat (*Neotoma floridana attwateri*), Attwater's pocket gopher (*Geomys bursarius attwateri*), and Attwater's swamp rabbit (*Lepus aquaticus attwateri*) are named in his honor, in recognition of his major contributions as a scientist and conservationist.

H. P. Attwater joined the American Ornithologists' Union as an associate in 1891 and became a member in 1901. He was also a member of the Texas State Horticultural Society, the Scientific Society of San Antonio, the Order of the Eastern Star, and Holland Lodge, A.F. and A.M. He died on September 25, 1931, and is buried in Hollywood Cemetery, Houston.

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Houston Post-Dispatch, September 26, 1931. T. S. Palmer, *Biographies of Members of the American Ornithologists' Union* (Washington, 1954). Bess Carroll Woolford and Ellen Schulz Quillin, *The Story of the Witte Memorial Museum* (San Antonio Museum Association, 1966).

At right: *Peromyscus attwateri*, named in honor of Henry Attwater and now known as the Texas Deer Mouse or Texas Mouse and is commonly found from central Texas, north through Oklahoma, into Arkansas, Missouri and Kansas.



THE BOOMER wishes to thank Friends Vice-president, Gary Woods for his very able assistance in reviewing and editing articles for this issue of the newsletter and to all contributors, especially Refuge staff. that help to make this publication a success..