THE BOOMER



Quarterly Newsletter of the Friends of Attwater Prairie Chicken Refuge

Volume 5 issue 1

Message From The President

Dear Friends

We've been both busy and successful in our efforts to assist the refuge. Ron Jones, Past President has shepherded a \$45,000 grant application through the Texas Coastal Program that will allow us to purchase a custom trailer to transport young birds from propagation sites to the refuge. Ron will be handling a lot of the customizing work, himself. In addition, the grant provides funding for a land plane that will allow refuge personnel to prepare selected sites for habitat and food plots, a walk-in freezer that allows the refuge to store a season's worth of vegetables for chicks and enough native prairie seed to plant 100 acres.

Jim Hluchan, head chef, has completed his report for the 2016 Festival and we served a record number of people at a very competitive price. Our thanks to Jim and his

crew for a job well done and appreciated by every visitor.

Mark Sleeper, chair of the art committee, has completed his presentations of awards to winning students. Mark and his committee did an outstanding job from beginning to end. A lot of hard work for a worthwhile cause.

Sumita Prasad, Development chair, reported that we have received final approval for a \$10,000 grant from the National Fish and Wildlife Foundation, which is to be used mostly to develop new videos for educational and outreach. Those videos will be made available on our website either directly or through a link. Our sincere thanks to Sumita for her extra efforts.

Robert Smith has joined our board as of March 2016 to replace Brien McBride, who was transferred to McKinney, Texas. We expect Robert to be as valuable to our organization as Brien. Robert has been approved as Chair of the Audit Committee.

Eliot Tucker, Jane Meldahl and Robert Smith have been working on developing methods and procedures to address items identified in our last audit. A lot of grueling and unsung efforts necessary to maintain a professional organization that is approved by funding agencies.

Cynthia Lurix, Carol Davis and Paul Lurix have been assigned to various committees and have responded to the organization's needs cheerfully and promptly. We appreciate their efforts.

Last, we need your support. Please consider joining the Friends of Attwater Prairie Chicken Refuge or making a donation. Either or both may be accomplished on our website. www.attwater.org.

Thanks

Gary Woods, President



Above: Young native American dance er performs the prairie chicken dance at this year's festival.

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Did you know?

- 1 in 5 Americans can be classified a birder.
- Texas Ranks 48th in birding participation as a percentage of adult population.
- Birders spend about \$40,000,000,000/yr. on travel and equipment to bird.

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

Remembering a Friend

Darrell Peterson

1965-2016

"A man's friendships are one of the best measures of his worth." Charles Darwin

Darrell Lance Peterson, long time refuge employees died tragically in an accident, April 29, 2016. Darrel could have been variously described as a colleague, trainer, mentor, son, brother, father, even jack of all trades, but most who came in contact with Darrell, eventually called him "friend".

Darrell had worked at the refuge for the past 15 years. His official title was maintenance worker but he never failed to lend his help to any aspect of the refuge's mission, when asked, or offer his time, when available. Darrell was a true maintenance professional and had served as heavy equipment instructor for the Fish and Wildlife Service. He was quick to share his knowledge with others, be they other maintenance professionals, biological staff, interns or volunteers. He had an easy East Texas manner and it showed as he patiently taught with a smile. Darrell epitomized the employees of the Fish and Wildlife Service; professional, hardworking and dedicated to the conservation of the wildlife resources that belong to all Americans.

Darrell's willingness to always help others was also reflected in his personal life, both when he served as a volunteer fireman in Grapeland, Texas and his years of involvement with Texas Extreme Off Road Racing where his

greatest pleasure was helping and mentoring young riders, including his sons.

Darrell was a dedicated proponent for the recovery of the Attwater's Prairie-Chicken, always willing to answer visitor's questions and explain about the on-going activities they saw around them at the refuge.

Memorials in Darrell's name can be made to Friends of Attwater Prairie Chicken Refuge.

Darrell's funeral was attended by his many friends, family and colleagues. The Director, Dan Ashe, and the Chief of Refuges, Cynthia Martinez, for the Fish and Wildlife Service presented the family with American flags and the Fish and Wildlife Service's National Honor Guard served as pallbearers.



Darrell Peterson, Friend

"I expect to pass through this world but once, any good thing therefore I can do, or any kindness that I can show to any fellow creature, let me do it now, let me not neglect it, for I shall not pass this way again." Stephen Grellet

Visitors from Around the World Attend Festival

This year's Booming-N-Blooming event was another success, with 289 enthusiastic visitors taking the opportunity to view booming prairie chickens and enjoy other aspects of the refuge, listen to the guest speaker, watch American native dancers and enjoy complimentary local cuisine.

Most visitors from Texas lived within 125 miles of the refuge, but attendee included those from 13 other states and international visitors from four countries.



Fourteen Danish visitors enjoyed birding at the festival

Visitors came from all corners of the United States with those most distant travelers making their way from Alaska. By far the most distant travelers, overall, were those from Australia.









We would like to thank **HEB** and **Brookshire Brothers** for their generous support of the Friends food booth at this year's festival

Left: Festival visitors enjoy a performance of the prairie chicken dance

Did you attend this year's festival?

Can you help Friends board member Jim Hluchan? He is looking for two individuals that he met at the Prairie Chicken Festival on April 16, 2016. These two people have proven to him that he has a Guardian Angles looking out for me as he travels through this world. They live in the Galleria area in Houston and the gentleman is a retired Dermatologist. If anyone has any idea who this might be or if the person he is looking for sees this, please contact him at hluchan@industryinet.com.

Thank you for any help you can provide. Editor

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.

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APC UPDATE

ATTWATER'S PRAIRIE-CHICKEN POPULATION - 2016

Mike Morrow, Wildlife Biologist
Attwater Prairie Chicken National Wildlife Refuge, Eagle Lake, Texas

"What you need to do is build a bubble over the refuge." That is the conclusion that many individuals, albeit jokingly, have offered up as a solution to the roadblocks that Mother Nature continues to place with regard to APC recovery. Drought, heavy rain, hurricanes, and catastrophic wild fires are all natural phenomena that Attwater's prairie-chickens have dealt with for eons. The difference is now, APCs balance precariously on the precipice of extinction, trying to avoid being "flicked" over the edge by one of these events. The APC's "strategies" for dealing with adverse weather – strength in numbers which enables populations to weather these proverbial storms, and a high potential reproductive rate to rebuild diminished populations – have been severely handicapped due to habitat loss and introduction of foreign invaders like the red imported fire ant. Couple that with the inherent slow growth of very small populations (see Figure 1 page 5) results in a situation, often described for endangered species like the APC, as being stuck in an "extinction vortex". Our job as conservation biologists is to prevent that vortex from pulling these small populations under before recovery efforts have a chance to work. However, this task is not for the faint of heart. The constant tug toward extinction brings with it many frustrations, heartaches, and disappointments.

It is within this framework that I bring you a recap of the 2016 APC nesting season. We started the season with a count of 63 booming males on and around the refuge, the highest count since 1989. We had a minimum of 42 radioed hens alive as of April 1st, and we were regularly seeing unradioed hens and hens with failed radios. By Friday, April 15, we had found 12 nests and constructed predator-deterrent fences around them. We suspected that several more hens were nesting, but either had not gotten to them yet or we were waiting to make sure they were indeed nesting. Unfortunately forecasts for the upcoming week were ominous, with very heavy rains predicted for our area. Although many times weather forecasts end up being more hype than reality, this time the hype was an understatement. At the refuge, it began raining at approximately 5:00 Saturday afternoon, and continued raining off and on for most of the next week. We received over 5 inches on April 18th alone – tax day. From Saturday through the following Thursday, 7.98 inches fell near the refuge headquarters. However, that was nothing compared to the deluge received up-drainage from us. Industry in Austin County, and near the head waters of the San Bernard River, received 16.31 inches during that period, and 12+ inches on tax day alone. The flat topography of Texas coastal prairie cannot absorb anywhere close to that volume of rain. To classify the flooding that ensued as extensive is an understatement (Figure 2,page 6). Cont. on Page 5

You can help with vital RIFA suppression by supporting our "Fire Ant Control/Brood Survival Fund"

Four nests were known to have been flooded when we were finally able to get out and assess the status of nests. One of these hens had separated her eggs into two groups; approximately half of her clutch was in the original nest bowl, and the other half were approximately 6–12 inches away. I can only assume that she was trying to move her eggs to a drier spot before she gave up completely. Three hens stayed with their nests, but ultimately abandoned over the next 1–2 weeks. We continued to get intermittent small amounts of rain every few days through the end of May. Perhaps the already saturated soils reached a point where these hens "decided" their nests were no longer viable. An additional three hens stayed with their nests through incubation, but after being long overdue for hatch, we determined their eggs were not viable. Several eggs under one of these hens had exploded. Undoubtedly, water had flooded these nests for long enough to ruin the eggs. Finally, two nests located on a mima mound were destroyed by a raccoon soon after the flood. Since lower lying areas were flooded, nests (and birds) on higher areas were concentrated on remaining dry areas, likely making them easier to find by predators. Our nests were known to have been flooded when we were finally able to get out and assess the status of nests.

We ultimately found a total of 23 nests, not including three nests that were not found until we found the hens dead nearby. Of these, only 2 were likely renesting attempts after the tax day flood. At least 10, and possibly 12 if you include the 2 that were destroyed by the probable raccoon, were directly or indirectly lost to the extremely wet conditions. To add insult to injury, we did not find nests for 24% of the 42 hens that were alive at the beginning of the nesting season. These hens most likely attempted nests that were flooded or destroyed by predators before they began incubation. The remaining 11 (48%) nests hatched, but the wet

conditions were even harder on broods. Only 2 (18%) broods had chicks at two weeks posthatch. Based on greater prairie-chicken research by recovery team member Dr. John Toepfer, two-week brood survival should average around 69%.

While disappointing, it is remarkable that any chicks were produced given the season, and continues to provide evidence that these birds are tougher than we sometimes give them credit for. The frustrating thing is that this is the third year in succession that near catastrophic rains have occurred during APC nesting and early brood rearing. Heavy rains during these three years have foiled our attempts to increase brood survival by reducing fire ants. Now we have to wait another year in hopes that Mother Nature will give the APCs a break. Maybe that bubble-over-the-refuge idea is not such a bad one after all....

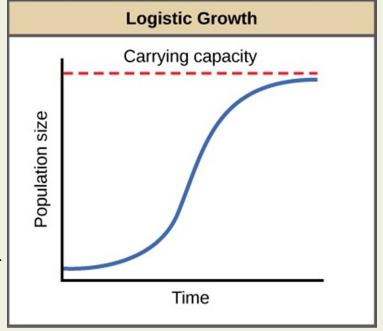


Figure 1. Typical growth curve for populations of living organisms. Note lag time for small populations

Cont. on page 6



Figure 2. Photo of refuge entrance at FM 3013 on April 18, 2016.

Photo credit: John Magera, Attwater Prairie Chicken NWR.



Above: View of Tax Day flood from visitors center. San Bernard river usually flows on the other side of the tree line in the far background.

Photo Credit: John Magera

After the Flood

The picture at right was taken from approximately the same photo point, as figure 2 above, on June 28, 2016. This may give readers a better understanding of the severity of the worst of the flooding event. Understand of course that this was not the condition throughout the refuge.

Editor



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with I want the Boomer in the subject line and we will add you to the mailing list.

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Visit www.attwater.org and you will find them archived on the publications page.

Student Festival Art Contest Winners Announced

Winners of the 22nd Annual Attwater's Prairie Chicken Festival's 2016 Art Contest were announced on April 9. There were a total of 536 entries in three categories, Coloring, Art and Art and Essay. Students were invited to participate from schools in the Brazos, Columbus, Bellville and Sealy ISDs and Rice CISD. Students in grades K-12 were eligible to enter.

The contest's Grand Prize was awarded to Iren Kim, a 12th grade art student at Brazos High School. Iren will receive a scholarship for \$250.00, upon enrollment in college or technical school. She was also awarded a plaque and a festival tee shirt that is emblazoned with her winning art work. The shirts were available to the public during the festival.

First, second and third places were also awarded in each category. All first place winners received a plaque and \$50.00 prize. Second place winners received a ribbon and \$25.00 prize and third place received a ribbon and \$10.00 prize.

This, the 5th annual Student Festival Art Contest was sponsored by the Friends of Attwater Prairie Chicken Refuge in partnership with *Blisswood Bed and Breakfast* .

The winning art work is on display in the visitor's center at Attwater Prairie Chicken National Wildlife





Grand prize winning artist Iren Kim (center) receives her plaque and scholarship certificate from Refuge Manager, Terry Rossignol (left) and Friends board member and Art Committee chair Mark Sleeper. Iren is holding her winning artwork

Art contest winners cont. on page 8

Art contest winners cont. from page 6

Grand prize winning artwork and essay of Iren Kim



Attwater Prairie Chicken Essay

The apathy that our modern society displays towards preserving nature and protecting biodiversity is concerning, to say the least. High school students, in particular, are distressingly detached from and ignorant to nature and the havoc our daily pursuits of comfort and pleasure cause upon the environment. Our indifference to the fate of nature has led, partially, to the increasing extinction of several varieties of invaluable animals. One such animal is the Attwater Prairie Chicken. As a high school student who sincerely treasures the beauty of Mother Nature and wishes to protect her and all of her wonders for generations to enjoy, I strongly believe the Attwater Prairie Chicken should be preserved so that it may thrive in harmony with its natural ecosystem and thus promote biodiversity.

The Attwater Prairie Chicken is a marvelous specimen of fowl and remarkable animal who lives at home in a coastal prairie ecosystem. Using watercolors, I painted a Prairie Chicken in its natural state. Its head feathers (which can be raised in an ear-like fashion to attract a mate) lie flat on its head in a relaxed position and the rest of its body feathers lie smooth and unruffled in a natural way. A snippet of its vibrant orange-yellow air sac (which can also be filled with air to make sounds to attract a mate) can be seen as it turns its head to the side. It stands next to a wooden post on the edge of its reservation, a peaceful coastal prairie environment.

See more art contest winner on page 9

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 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.



"Only in the last moment of human history has the delusion arisen that people can flourish apart from the rest of the living world." E.O. Wilson

Art contest cont. from page 8



First place coloring contest winner Jordyn Templeton with Mr. Rossignol and Mr. Sleeper



First place art contest winner Elyssa Dillard with Mr. Rossignol and Mr. Sleeper



First place art and essay contest winner Sterling Nilsson with Mr. Rossignol and Mr. Sleeper

Art and Essay winners 9th-12th

1st place, Sterling Nilsson, grade 11, Brazos HS.

Michael Parthum, teacher

2nd place, Elizabeth Patrick, grade 11, Brazos HS.

Michael Parthum, teacher

3rd place Ray Midgett, grade 12, Brazos HS.

Michael Parthum, teacher

Hon. Mention, Mayra Tavera, grade 11, Brazos HS.

Michael Parthum, teacher

Art Contest 6th-8th

1st place, Elyssa Dillard, grade 7, Columbus JH.

Deborah Petrosky teacher

2nd place, Lillie Tilley, grade 6, Columbus JH.

Deborah Petrosky teacher

3rd place, Audrey Thomson, grade 6, Columbus JH.

Deborah Petrosky teacher

Hon. Mention, Andrea Mejia, grade 8, Columbus HS.

Deborah Petrosky teacher

Hon. Mention, Reese Erich Neisner, grade 7, Columbus JH.

Deborah Petrosky teacher

Coloring Contest K-5th

1st place, Jordyn Templeton, grade 5, Columbus Elementary

Joyce Templeton teacher

2nd place, De'Yon Batistc, grade 4, Rice CISD

Julliette Martinez-Cruz teacher

3rd place, Laura Lozano, grade 4, Rice CISD

Jennifer Prause teacher

Hon. Mention, Joushua Vasquez, grade 4, Rice CISD

Juilliette Martinez-Cruz teacher

Hon. Mention, Isacc Garcia, grade 5, Columbus Elementary

Joyce Templeton teacher

Hon. Mention, Alejandra Samaniego, grade 4, Rice CISD

Julliette Martinez-Cruz teacher



Species Spotlight Chinaberry Tree

Rebecca Chester, Wildlife Biologist, Attwater Prairie Chicken NWR

Chinaberry (*Melia azedarach*), also referred to as Persian Lilac or Texas Umbrella Tree, is a non-native tree that occurs in the southern United States. On the refuge, these trees occur mainly along the creek and low, wet spots that don't burn well. Chinaberry contain meliatoxins present in the bark, leaves, and flowers, but the berries are most toxic to a variety of domestic animals and wildlife. Most symptoms are gastric problems such as diarrhea, vomiting, colic, and abdominal pain but convulsions, weakness, and incoordination are also reported. Death is a possible outcome from extreme, untreated cases of this poisoning. The Texas A&M extension service reports many species including cattle, sheep, dogs, rabbits, pigs, poultry and even humans have been poisoned, usually from ingesting berries found on the ground.

Recently, an interesting story was related to me by a concerned 95 year old gentleman from East Bernard. He had known a WWI veteran in their small, prairie town that told him a story from his turn-of-the-century childhood involving both Chinaberry and prairie chickens. George Whitbread grew up on the very edge of town, where a mix of prairie and crop fields were all you could see in the distance. They had one Chinaberry tree in their yard. In the fall, after frost, the boys would be happy they didn't have to hunt anymore. You see, the bounty had come to them. Prairie chickens had been attracted to the lone tree on the edge of the prairie that produced these tempting but toxic berries. After eating them, they were rendered sick, and somewhat immobile in the yard and became easy pickings for several family meals to follow. He told me he remembered that story every time he thought of prairie chickens since.

He called the refuge to relay that information to us after reading a bit about our efforts to control other invasives such as Macartney rose and Chinese tallow so that we might consider that in our invasives management. Luckily, we don't have much Chinaberry present at the refuge and it is usually in places the prairie-chickens don't hang out, but we do target that species. We cut them down and stump cut treat with herbicide. I appreciate him taking the time and initiative to call and relay that information I was not aware of. Now we have even more reason to dislike the Chinaberry and its negative impacts on wildlife. If you have Chinaberry in your yard or area, please be aware of the potential danger.



Left: Blooms, leaves, and bark of the chinaberry

Right: the berries in question of the Chinaberry.



Is ROI Measured Only in Dollars and Cents?

By Cynthia Martinez Chief, National Wildlife Refuge System



Certainly the 2013 *Banking on Nature* report gives hard numbers: \$4.87 returned for every \$1 appropriated in fiscal year 2011, and \$2.4 billion pumped into the economy that year.

What can't be measured as easily in dollars and cents are the personal and health reasons that make wildlife refuges so valuable. We haven't been able to quantify the value of wildlife refuges' contributions to the nation's clean air and clean water. We haven't come up with a calibration on how wildlife refuges benefit kids in their personal well-being and even in their schoolwork.

How can we measure the importance of giving families a chance to find free and easy-to-reach recreation? How do we quantify the pleasure of a walk in the woods not only to see wildlife but also to talk to kids in a way you can do only when you're surrounded by nature? What is the dollar-and-cents equation of a chance to see the beauty of wilderness or the opportunity to be alone with your thoughts? What metrics can calculate the adrenaline rush when people living in big cities get to see an eagle soar or an elk and its calf?

What's the return on investment for giving happiness?

We might not be able to measure every return on investment in national wildlife refuges, but visitors know a bargain when they see one. That's why we've had an 8 percent increase in visitation since fiscal year 2010, even as our budgets have gone in the opposite direction. Some of the increases in participation have been astounding: 52 percent uptick in photography, 45 percent growth in attendance at interpretive programs and talks, and a 14 percent increase in people driving auto tour routes.

It may seem contradictory that I, a wildlife biologist, find no greater excitement than seeing youngsters light up when they hold a lizard for the first time or learn the name of a bird they never noticed before. I love wildlife biology – I love restoring habitat, conducting a wildlife survey or helping an endangered species get one step closer to recovery. But when I can pass my amazement about wildlife to a new generation of would-be biologists, I know that I am ensuring that whooping cranes, Moapa dace and thousands of other wildlife species will be around in a hundred years to inspire children.

What's the return on investment for ensuring that the natural wealth of our nation will enrich generation after generation? Maybe some economists can measure that. In the meantime, we can be assured that national wildlife refuges are enriching our nation in ways that people can appreciate, even if they can't fully appraise them.

Note: ROI = Return on Investment



Land Plane

Ever wonder what a land plane was? Pictured at left is the 16 ft. X 30 Ft. land plane recently obtained by the Friends group for use on the refuge. Originally designed to level rice fields to reduce water use, this one will be used to regrade fallow rice fields by knocking down field levees so that water no longer stands. It is the first step in preparing the field for replanting to native grass and ultimately restoring it to native coastal prairie.

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