

THE BOOMER

Quarterly Newsletter of the Friends of Attwater Prairie Chicken Refuge

Volume 1 issue 4

Message From The President

Welcome to the winter edition of **THE BOOMER**. I'll begin this edition with a question. Have you visited our updated and enhanced web site? The Friends board is quite proud of the results, and I encourage everyone to visit www.attwater.org to see what the integration of technology, information and artistic creativity can accomplish.

By visiting the site's various pages you can find information about our organization and about the refuge including, how to get involved, pay membership dues and to make donations on-line. Also, check out the publications page for

archived editions of **THE BOOMER** and for downloadable information on topics of interest, from the Attwaters' Prairie Chicken to prairie-management techniques.

The web site contains a photos page for viewing photographs and videos of the prairie chicken, area wildlife and recovery activities. Visit the Kid Zone and choose from a list of activities, listen to bird songs and calls and review available APPs, chosen especially for junior birders.

Check out the links to partner and supporter sites, as well as sites related to our mission.

Visit the BLOG page and join the conversation. This site allows interaction with the staff and board members. If you are not "from back in the day," you may visit us on Face Book, Twitter or YouTube.

A sophisticated, "user friendly" and attractive web site has been a goal of the board from the beginning of this organization, and I wish to recognize Board Treasurer, Jane Mendahl, and web designer Leslie Learner for all their hard work and dedication that resulted in such an outstanding product. Please take a moment to visit and give us your thoughts – it's easy to do at www.attwater.org.

Ron Jones, Board President



Eastern Meadowlark, above

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Did you know?

- Four more Refuges were added to the System since the spring **BOOMER** was published.
- This was the 113th year for the Christmas Bird Count.
- The Refuge also has a re-vamped website.

http://www.fws.gov/refuge/Attwater_Prairie_Chicken/

"Booming"-N-"Blooming"

The 19th annual Attwaters Prairie Chicken Festival is just around the corner. So put April 13-14, 2013 on your calendar and join us at the refuge. Prairie chicken viewing, walking tours, and van tours, both guided and self-guided. will be offered. This year hear nature photographer and author, Noppadol Paothong presentation on the making of his book, **Save the Last dance-A story of the North American Grassland Grouse**. For more information about this year's event visit, <http://www.fws.gov/uploadedFiles/BoominNBloomin2013.pdf>

A Career Dedicated to the Prairie Chicken

Past editions of *THE BOOMER* have hi-lighted refuge interns and volunteers. This edition we chose a long-time member of the refuge staff and contributor of the *APC Update* that appears each quarter, **Dr. Mike Morrow**. Mike is one of the most dedicated biologist in the Fish and Wildlife Service and was the first biologist ever hired at the Attwater Prairie Chicken NWR. Mike accepted the position of Refuge Biologist in 1990 after completing his PhD at Texas A&M. He has dedicated his career to the prairie chicken and has been one of the main driving forces behind its recovery.

1. Mike, tell us a little about yourself - where you're from, where you went to college, and how you managed to find your way to the refuge.

I was born and raised in eastern Kansas. I grew up in a family that hunted and fished a lot, and that sparked my interest in wildlife. I received a B.S. degree in Fisheries and Wildlife Biology from Kansas State University and an M.S. and Ph.D. in Wildlife Sciences from Texas A&M University. I worked on mourning doves for my M.S. and the APC for my Ph.D. When I first started college, my goal was to become a game warden because that was the only wildlife professional that I had been exposed to previously. Once in college, a whole new world of wildlife ecology was made known to me, and I was hooked. After receiving my Ph.D., I taught a couple of wildlife courses at TAMU (enough to find out that teaching was not what I wanted to do for a career), spent a year at the Corps of Engineers Waterways Experiment Station Environmental Lab, and then served two years as Federal Aid Coordinator with the Kansas Department of Wildlife and Parks. When the biologist position opened here in 1990, I jumped at the chance of moving from wildlife administration back to field biology. And I was intrigued with the challenge of contributing to the recovery of a species that seemed to be hell-bent on extinction.

2. You studied the Attwater's Prairie Chicken in college. What interested you in the APC?

To be honest, I kind of fell into the APC project that became my Ph.D. dissertation. I was finishing up my M.S., and my advisor (Dr. Nova Silvy) indicated that he had a grant to do some APC research on the Attwater Prairie Chicken NWR, and wondered if I might consider staying on to do a Ph.D. I had always wondered if I had what it



took to complete a Ph.D. program, but certainly had no plans to do so. Once I became involved with prairie-chickens, I fell in love with their habits and their prairie habitat. For me, prairie-chickens represent a connection to our not too distant past when times were simpler and mankind had a more robust interaction with God's creation - a time in which Native Americans and early settlers depended on grasslands occupied by prairie-chickens for their livelihood. That dependence fostered a oneness with the environment (grasslands in this case) that unfortunately has been lost in today's supermarket mentality.

3. You've witnessed a lot of changes at the refuge since you arrived. What are some of the more significant ones?

Probably the biggest change I've observed is a fundamental shift in the management philosophy of the refuge from management of a property that happens to have APC on it, to one in which the APC is THE primary focus.

At left: Dr. Mike Morrow examines a prairie chicken

Cont. page 3.

APC have always been important to this refuge – after all that’s why the refuge was established in the first place. However, over the last 20 years we have watched APC become extirpated from one area after another. At least for now, except for a handful of birds in Goliad County, APC are found nowhere else in the wild except at APCNWR. That realization brings with it a tremendous sense of responsibility. This intense focus on APC recovery has led to increased staff at the refuge, both in terms of permanent staff and temporary interns. It has also led to better facilities (e.g., shop, office) needed to do our jobs. When I first arrived in 1990, I shared an approximately 10 x 10-ft space with another person, and my “desk” was an old door mounted to the wall.

4. Since you’ve been at the refuge what have been your greatest challenges?

The biggest challenge and frustration through the years is pouring our hearts and souls into APC recovery, not observing positive results, and most frustrating of all, not knowing why APC populations were not responding to these intensive efforts. FINALLY, I am confident that we know what the problem is – lack of insects for young broods. It is likely that this problem also contributed to the APC’s final plunge toward extinction. We have a suspicion that fire ants, which invaded most of APC range in the late 1960’s and ‘70’s, have had a huge impact on insect communities. Research is currently underway to evaluate that hypothesis.

5. What do you enjoy most about the work you do?

Working with people who are dedicated, focused, and passionate about solving problems – in this case restoring APC populations to viable levels.

6. What do you feel people should know about the future of the APC?

Many people look at Attwater’s recovery as a lost cause. And, up until the last few years, I was not sure whether those people were right or not. However, even though those that have worked with me through the years know that I am not an overly optimistic person, I am absolutely convinced that APC recovery is within reach. Observations since 2009 conclusively show that if insects are available, pen-reared APC are absolutely capable of rearing young in the wild, and at levels comparable to wild greater and historic APC populations. These wild-produced young survive just as well as wild prairie-chickens. We have just got to solve this insect problem so that these birds are consistently able to rear young in the wild. We don’t know the answer(s) to that problem yet, but identifying the problem is a HUGE step in the right direction.

7. Tell us what the recovery of the APC would mean to you.

APC recovery would be the fulfillment of a career dedicated toward that end in spite of the nay-Sayers who maintain that we should have given up long ago.

8. Finally, what is something most people don’t know about you?

I have been married to my wife Kathy for almost 30 years. We have 4 children – Nicholas (an attorney in Houston), Mark (currently in nursing school), Gracelynn (10th grade), and Jeremy (8th grade).

This article was contributed by John Magera

“To those devoid of imagination a blank place on the map is a useless waste; to others, the most valuable part.”

Aldo Leopold, A Sand County Almanac

Attwater's Prairie-Chicken 2012 – A Year in Review

Dr. Mike Morrow, Wildlife Biologist

In thinking back on the progress made with Attwater's prairie-chicken (APC) recovery, 2012 was a mixed bag. The year started out with a disappointing, but in view of the historic 2011 drought, not unexpected decline in wild populations. Twenty-three males were observed in the wild in March 2012, down 58% from the 55 observed in 2011. The 2011 drought resulted in very poor reproduction, although encouragingly, at least some hens did manage to rear chicks despite the historic dry conditions. Reproduction during 2012 was much better. Fifteen hens (5 and 10 at Goliad County and APCNWR, respectively) successfully hatched young, and 6 (40%) still had chicks at 6+ weeks, when chicks should be capable of independent survival. This brood survival is essentially identical to the 38% for 263 wild Minnesota greater-prairie chicken and 36% for 11 wild APC broods observed approximately 30 years ago (Pratt et al., manuscript in prep.). In fact, brood survival on APCNWR has met or exceeded survival for the aforementioned wild broods in 2 of the last 3 years. This is great news considering that brood survival was frustratingly poor for so many years. Indeed, some had concluded that pen-reared hens were incapable of rearing chicks. Obviously, that is not the case.

So the obvious question is "Why has brood survival improved?" The short answer is probably for several reasons. Our research continues to show that large numbers of insects are critically important to broods, especially those less than 2 weeks old. We suspect that fire ants have played a huge role in limiting availability of insects, and research sponsored by the National Fish and Wildlife Foundation is currently being completed to answer that question. Second, it is a numbers game. Because prairie-chickens are near the bottom of the food chain, it is critical that a large enough core population exists to be able to withstand losses of adults, nests and young to predators. Research has also shown that adult hens are more successful at rearing broods than 1st year hens. But, in order to have more adult hens, we have to start off with more young hens. So to address this numbers game issue, the Recovery Team has recommended that all birds released from captivity be concentrated in one location. Last year, of the 200 individuals released from captivity into the wild, 191 were released at APCNWR. The other 9 were released in Goliad County to help evaluate efficacy of supplementing wild broods with chicks from captivity. In addition, after years of hard work by a number of individuals, funding was secured to build a new APC propagation facility at the Sutton Avian Research Center near Bartlesville, OK. Projections are that this funding, both from the Fish and Wildlife Service and from a private foundation, will result in an approximately 100% increase in the number of breeding APC in captivity. So, while numbers in the wild still do not show significant progress toward recovery, there are several VERY positive things happening that suggest wild APC populations are on the verge of significant progress. Hold on to your hats!



Above: In past years, volunteers and staff collected insects with a hand nets to provide that critical food source for APC broods

Volunteers Needed on the Refuge

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

Membership

Interested in becoming a member or want to renew your membership ?

Remember it is now easy to do either, on-line at

www.attwater.org

The new Friends reusable shopping bags will be available at this year's festival. Be sure to pick some up and support your organization



Three birds you might see when visiting the refuge and observed during the Christmas Bird Count are (from left) Sandhill Crane, White-tailed Hawk and Northern Harrier. Maybe you will see one on your next visit.

Prairie Species Spotlight: The Crawfish Frog

Contributed by

Rachel Rommel, Amphibian Ark Community Education Officer

What is the one of the most exciting thing about the New Year for some Texans? Crawfish sucking season will soon be upon us. In the coming months, thousands (if not millions), of people will adorn bibs, stain their fingers and pucker their lips to feast on the juicy tails of "mudbugs". However we are not alone when it comes to consuming this crustacean delicacy. Many birds, fish, reptiles, mammals and amphibians rely on plentiful, wild crayfish stocks as a food source.

One such species that relies on crayfish, is the unique and elusive Crawfish frog (*Lithobates areolatus*), who actually lives in crayfish burrows! For this frog, crayfish burrows provide an important source of water, a retreat from predators, and an escape from prairie fires. Some research to track this species has shown that Crawfish frogs can live for up to seven years and will actually inhabit the same burrow, year after year, with high fidelity to their muddy little homes. They have what is known as a "feeding platform" next to their burrow which allows them to feed opportunistically on small invertebrates that cross their path, and are rarely without being within hopping distance of the protection of their home. Although little is known about populations of Crawfish frogs in Texas, they are believed to be in decline across their range in the United States. Why? Crawfish frogs depend on grasslands, ephemeral prairie wetlands and crayfish burrows to survive, all of which are in decline too due to habitat loss, fragmentation, and land conversion. Plowing, in particular, can be incredibly harmful to this species because their burrows are dug up in the process.

The Attwater's Prairie Chicken National Wildlife Refuge, providing critical habitat for so many grassland species, seems to also have become a safe haven for the Crawfish frog too. In the spring of 2011, staff and interns from the refuge, in collaboration with amphibian biologists from the Houston Zoo detected the presence of chorusing male Crawfish frogs in prairie potholes at the refuge. Several nights were spent trying to get their hands on these secretive little frogs. The male Crawfish frogs will float in the water while calling, and have two vocal sacs that inflate on the sides of their head, rather than the one vocal sac like many other species of frog. Consequently, they can be masters at throwing their voice, and are sometimes located in the opposite direction of where you think their call is coming from, making them incredibly difficult to capture! You can watch really neat video of a Crawfish frog calling by visiting the following link: <http://www.youtube.com/watch?v=1jRfqIU6lb4>.

Although there has been extensive research of Crawfish frogs in some sites in states such as Indiana, very little is known about the natural history and behavior of this species in Texas. Staff at the APCNWR are interested in learning more about the activity of this curious little frog, and biologists from Texas A&M University are currently developing a research plan to learn more about the population of this species on the prairie



Photo of a female Crawfish frog that was taken in the fall of 2011 when found crossing a road in Austin County just outside of the refuge. Only a handful of Crawfish frog photos in Texas exist. Photo taken by Rachel Rommel.

Did You Know ?

We sure know they taste good, but did you also know we have over 350 species of wild, colorful crayfish in North America? A great resource for learning about our native crayfish is www.texasrawdads.com. Some crayfish are actually listed under the Endangered Species Act, as populations are thought to be in decline throughout much of their range. The major culprit for their decline, like so many species, is habitat loss.

Christmas Bird Count Big Success

Contributed by Sumita Prasad

The Attwater Christmas Bird Count was held on Wednesday, December 19, 2012. Despite the overcast, windy day, 46 enthusiastic birders participated in the event, which is hailed as being one of the highest inland Christmas Bird Counts for bird diversity in the US. The 15-mile diameter CBC circle includes The Attwater Prairie Chicken National Wildlife Refuge, which is surveyed annually as part of this effort. Refuge management graciously provides CBC participants special authorization to access areas of the refuge that are normally closed to the public. The unofficial species total (all lists are reviewed through a regional editing process) for the entire count is 165. Eighteen participants in five parties censused the Refuge and observed over 12,000 individual birds of 101 species. Below is the compiled list of the Refuge:

Greater White-fronted Goose 1364
Snow Goose 1581
Ross's Goose 90
Cackling Goose 6
Canada Goose 3
Gadwall 20
American Wigeon 2
Mallard 17
Mottled Duck 1
Northern Shoveler 75
Northern Pintail 201
Green-winged Teal 367
Ring-necked Duck 8
Attwater's Greater Prairie-Chicken 34
Northern Bobwhite 28
Pied-billed Grebe 3
Anhinga 1
American Bittern 1
Great Blue Heron 5
Great Egret 8
Snowy Egret 2
White Ibis 12
White-faced Ibis 1
Black Vulture 24
Turkey Vulture 154
White-tailed Kite 7
Northern Harrier 43
Sharp-shinned Hawk 3
Red-shouldered Hawk 1
White-tailed Hawk 15
Red-tailed Hawk 19
Ferruginous Hawk 1
Crested Caracara 44

Merlin 5
Prairie Falcon 2
American Coot 50
Sandhill Crane 555
Killdeer 50
Long-billed Curlew 1
Wilson's Snipe 1
Mourning Dove 103
Greater Roadrunner 1
Barn Owl 1
Short-eared Owl 2
Belted Kingfisher 1
Red-bellied Woodpecker 18
Yellow-bellied Sapsucker 1
Downy Woodpecker 4
Northern (Yellow-shafted) Flicker 2
Pileated Woodpecker 2
Eastern Phoebe 51
Loggerhead Shrike 8
White-eyed Vireo 3
Blue-headed Vireo 3
Blue Jay 5
American Crow 14
Tree Swallow 1
Cave Swallow 8
Carolina Chickadee 12
Tufted Titmouse 6
Red-breasted Nuthatch 1
Carolina Wren 7
House Wren 15
Sedge Wren 30
Marsh Wren 2
Golden-crowned Kinglet 3
Ruby-crowned Kinglet 23

Ruby-crowned Kinglet 23
Blue-gray Gnatcatcher 1
Hermit Thrush 3
American Robin 203
Northern Mockingbird 39
Brown Thrasher 1
European Starling 1
American Pipit 15
Sprague's Pipit 16
Cedar Waxwing 3
Orange-crowned Warbler 8
Yellow-rumped (Myrtle) Warbler 122
Common Yellowthroat 15
Spotted Towhee 2
Field Sparrow 27
Vesper Sparrow 244
Savannah Sparrow 2783
Grasshopper Sparrow 41
Le Conte's Sparrow 104
Fox Sparrow 2
Song Sparrow 5
Lincoln's Sparrow 86
Swamp Sparrow 30
White-throated Sparrow 27
Harris's Sparrow 2
White-crowned Sparrow 101
longspur sp. 2
Northern Cardinal 72
Red-winged Blackbird 2469
Eastern Meadowlark 146
Brewer's Blackbird 9
Common Grackle 1
Brown-headed Cowbird 315
American Goldfinch 45

The next Attwater CBC will be held on Wednesday, December 18, 2013 this year. If you are interested in participating, please contact Attwater CBC Compiler, Sumita Prasad at sumita@alumni.utexas.net.