



# THE BOOMER

Quarterly Newsletter of the Friends of Attwater Prairie Chicken Refuge

Volume 3 issue 4



## Message From The President

Even though you may note that this is the winter edition of **THE BOOMER**..... spring is here. Of course with spring comes the annual Attwater's Prairie Chicken Festival, **Booming and Blooming**. This 21<sup>st</sup> annual event will include the ever popular prairie chicken viewing tours especially suited for the "early birds" that will be attending. This is that rare opportunity to view North America's rarest bird in its native habitat. Also being offered are Refuge Van Tours, Bird Walking Tours and Native Plant Walking Tours. Biologists with the Refuge and Texas Parks and Wildlife will offer presentations on the unique diversity and value of the native plants of Refuge's prairie. You can view the winning art work from this year's **Student Festival Art Contest**. The Friends will welcome you to our booth where friendly conversa-

tion, information and event merchandise will be available. We will also have a selection of limited edition waterfowl art prints available at a bargain price.

This year, to show our appreciation, the Friends group will provide **complimentary** breakfast and lunch during both days of the festival. Fruit will be available from 8am-1pm. Lunch items are Italian or beef sausage with bread or tortilla and condiments. Lunch will be available from 10am-1pm. Bottled water will be available from 8am-1pm. We want to thank **Brookshire Brothers Food & Pharmacy** and **HEB Grocery Stores** for partnering with us in this endeavor.

The Festival is the culminating event of the second annual **Prairie Chicken Week** with activities beginning at the Johnson Space Center and the Houston

Zoo. Information on all of the activities for the week are available in the event notice on page 4 of this issue of **THE BOOMER**. Check out the free activities. Some require registration and have limited space.

On-going with Prairie Chicken week are a couple of fund raising events with proceeds to benefit our **Fire Ant Control/Brood Survival Fund**. On April 4-5, zoo attendees will be able to do some **Putting for Prairie Chickens** with all ages able to participate.

**Kill A Fire Ant-Save A Prairie Chicken** is a crowdfunding event running on CROWDRISE <https://www.crowdrise.com/saveourchickens/fundraiser/PrairiePartner>. I encourage you to attend some or all of the events available and I hope to see you at the Refuge.

Ron Jones, President



Monarch butterflies wintering in Mexico

### Inside this issue:

President's Message	1
APC Update	2
Save the Monarch	3
Prairie Chicken Week	4
Changes Are Coming	7

### Did you know?

- Monarch butterflies east of the Rockies migrate up to 3000 mile to their wintering area in Mexico. It is a place they have never seen and a trip they have never made.
- Texas is in the core of the flyway for the eastern monarch population.
- The loss of milkweed in agricultural fields is a major cause in the decline of monarchs.
- Texas is crucial for the first generation of monarchs migrating from Mexico in the spring.

# More Than Just Prairie Chickens

## The Prairie as a Natural Laboratory

Mike Morrow, Wildlife Biologist

Attwater Prairie Chicken National Wildlife Refuge, Eagle Lake, Texas

My previous articles have all been focused on Attwater's prairie-chicken (APC) management or research in which the refuge has been an active partner. However, the refuge has provided research opportunities for a number of external groups. While considerable research has been conducted by external partners on prairie-chickens through the years which has provided critical information to guide APC recovery, other studies have nothing to do with prairie-chickens. So I thought you might like to "take a break" from all things APC, and hear about research on other species currently underway, or recently completed, at the refuge. Following is a brief synopsis of those projects.

**Status and breeding biology of the crayfish frog (*Lithobates areolatus*).** This study was initiated in 2013 and is being conducted under the direction of Dr. Dan Saenz (U.S. Forest Service) and Dr. Toby Hibbits (Texas A&M University Department of Wildlife and Fisheries). Specific objectives of the study are to: (1) determine current state-wide distribution of crayfish frogs, (2) determine association between crayfish frog calling activity and exogenous factors (rainfall, ambient temperature, relative humidity, wind speed, barometric pressure, water temperature, and water depth), (3) determine crayfish frog breeding season, and (4) determine crayfish frog daily calling activity. Field work for objectives 2–4 were primarily conducted on APCNWR. Field work continues for this project, and has been expanded this year to include collection of radio telemetry data on movements of these frogs. Crayfish frogs, as suggested by their name, use abandoned crayfish burrows, and are typically associated with prairie grasslands. While some research has been

conducted on this species in remnant midwestern prairies, little is known about them in southern prairies.



Crayfish Frog (Photo Credit: Saenz and Hibbits)

**Interactions among red imported fire ants, small mammals, ticks and tick-borne pathogens.** This pilot study, initiated in summer of 2013, was conducted under the direction of Drs. Sarah Hamer, and Jessica Light of Texas A&M University's Departments of Veterinary Integrative Biosciences and Wildlife and Fisheries Sciences, respectively. Specific objectives of this study were to: (1) assess the degree to which small mammal and tick species diversity and density varied in sites with and without fire ant suppression, and (2) determine prevalence of tick-borne pathogen infection in small mammals and ticks collected in sites with and without fire ant suppression.

Cont. on Page 5

# Campaign to Save Beleaguered Monarch Butterfly



The U.S. Fish and Wildlife Service launched a major campaign aimed at saving the declining monarch butterfly.

The Service signed a cooperative agreement with the National Wildlife Federation (NWF), announced a major new funding initiative with the National Fish and Wildlife Foundation (NFWF), and pledged \$2 million in immediate funding for on-the-ground conservation projects around the country.

Introducing the new initiatives at the National Press Club in Washington, D.C. were Service Director Dan Ashe, U.S. Senator from Minnesota Amy Klobuchar, NWF President and CEO Collin O'Mara, and NFWF representatives.

Monarchs are found across the United States. While they numbered some 1 billion in 1996, their numbers have declined by approximately 90 percent in recent years. The decline is the result of numerous threats, particularly loss of habitat due to agricultural practices, development and cropland conversion. Degradation of wintering habitat in Mexico and California has also had a negative impact on the species.

“We can save the monarch butterfly in North America, but only if we act quickly and together,” said Ashe. “And that is why we are excited to be working with the National Wildlife Federation and National Fish and Wildlife Foundation to engage Americans everywhere, from schools and community groups to corporations and governments, in protecting and restoring habitat. Together we can create oases for monarchs in communities across the country.”

The memorandum of understanding between NWF and the Service will serve as a catalyst for national collaboration on monarch conservation, particularly in planting native milkweed and nectar plants, the primary food sources in breeding and migration habitats for the butterfly.

The new NFWF Monarch Conservation Fund was kick-started by an injection of \$1.2 million from the Service that will be matched by private and public donors. The fund will provide the first dedicated source of funding for projects working to conserve monarchs.



From California to the Corn Belt, the Service will also fund numerous conservation projects totaling \$2 million this year to restore and enhance more than 200,000 acres of habitat for monarchs while also supporting more than 750 schoolyard habitats and pollinator gardens. Many of the projects will focus on the I-35 corridor from Texas to Minnesota, areas that provide important spring and summer breeding habitats in the eastern population's central flyway.

Cont. on P.7

# Subscribe to our Electronic Newsletter

Is this the first time you have read **THE BOOMER**? Was it forwarded to you by a third party? Would you like it sent directly to your email address so you never miss an upcoming issue. Just send an email to

[oldpartnersguy@gmail.com](mailto:oldpartnersguy@gmail.com)

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

Interested in reading back issues?

Visit [www.attwater.org](http://www.attwater.org) and you will find them archived on the publications page.

## *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.

# 2015 PRAIRIE CHICKEN WEEK

**April 8 & 10, 2015 at 2 pm & 3 pm: Guided Tour: Attwater's Prairie Chicken Breeding Facility at NASA's Johnson Space Center** A rare chance to see where prairie chickens are bred and nurtured. Registration deadline is Monday, April 6 at 2 pm. <http://prairiepartner.org/page/15-prairie-chicken-week>

**April 9, 2015 at 7 pm: Lecture - The Attwater's Prairie Chicken: Past, Present and Future @ Houston Zoo** U.S. Fish and Wildlife Service biologists and Houston Zoo experts will provide a two-part lecture on efforts to save the highly endangered Attwater's prairie chicken. <http://prairiepartner.org/page/15-prairie-chicken-week>

**April 11-12, 2015: Event: Attwater's Prairie Chicken Booming - N - Blooming Festival @ Attwater Prairie Chicken National Wildlife Refuge.** Experience the courtship dance of the Attwater's prairie chicken on this 10,000- acre coastal prairie refuge. Hosted by U.S. Fish and Wildlife Service and Friends of Attwater Prairie Chicken Refuge. [http://www.fws.gov/uploadedFiles/BoominNBloomin\\_2015.pdf](http://www.fws.gov/uploadedFiles/BoominNBloomin_2015.pdf)

*"We simply need that wild country available to us, even if we never do more than drive to its edge and look in. For it can be a means of reassuring ourselves of our sanity as creatures, a part of the geography of hope."*  
*Wallace Stegner*

### *APC Update Cont. from P. 2*

Study sites included APCNWR and the River Ranch in Goliad County. Both of these sites were treated to suppress fire ants for APC management. Preliminary data collected by these researchers have found: (1) tick infestation of rodents was greater on fire ant-treated vs. non-treated sites across the year at both sites, although this pattern was significant only at one site. Drag sampling for ticks found that 65.2% of ticks were collected on untreated areas. (2) Capture success of rodents was significantly greater on treated vs. untreated areas across the year at both sites. (3) Using traditional PCR and DNA sequencing methodologies, tick-borne pathogens of 3 focal genera (*Borrelia*, *Rickettsia*, and *Ehrlichia*) were found in 8.4% of samples across treated and untreated control plots.



Texas A&M University research team processing Hispid cotton rat in refuge shop (Photo credit: John Magera, Attwater Prairie Chicken)

***Use of Amdro to control red imported fire ants and increase quail numbers.*** This project was initiated in January of 2014 under the direction of Dr. Nova Silvy, Department of

Wildlife and Fisheries Sciences, Texas A&M University. Specific objectives of this project are to: (1) evaluate the impacts of RIFA on quail nest success, (2) evaluate the impacts of RIFA on quail brood habitat quality as indicated by invertebrate abundance, and (3) evaluate the influence of invertebrate abundance with respect to quail brood survival. This project will continue into 2015, and is being dove-tailed into on-going management of fire ants on APCNWR to improve APC brood habitat.

***Winter ecology of a declining grassland bird, the Sprague's pipit (*Anthus spragueii*).*** This study was initiated in 2013 under the direction of Drs. Rich Kostecke, The Nature Conservancy of Texas, and Joe Veech, Texas State University. Texas Parks and Wildlife Department provided funding for this project as a federal aid project through Section 6 of the Endangered Species Act. The objective of the project is to estimate abundance of Sprague's Pipit and quantify local and landscape-level characteristics of occupied wintering habitat at sites along the mid- and upper-Texas coast. While information is available to guide conservation of breeding habitat in the northern great plains, conservation of Sprague's pipit wintering habitat in southern grasslands is limited by lack of information about wintering ecology. Data for this project are being collected from 5 sites along the middle and upper Texas coast, including APCNWR.

***An evaluation of whether Houston toads can persist in a prairie environment absent red imported fire ants.*** This project is being conducted under the direction of Dr. Mike Forstner, Texas State University, Jeff Hill, USFWS Clear Lake Ecological Services, and APCNWR staff. Funding for this project came from the USFWS Cooperative Recovery Initiative. Despite recent observations of Houston toads primarily in forested habitats, early surveys suggest this species was found in coastal prairie ecosystems prior to the proliferation of fire ants in the southern United States. This led to the initial presumption that the Houston toad was a prairie-associated species. Houston toads currently occur in their highest densities in habitats with 80% canopy cover.

*Cont. on Page 7*

*APC Update Cont. from P.5*

. Interestingly, this is the same canopy density at which fire ants decline dramatically in the same habitat. Houston toadlets reared at the Houston Zoo will be placed in enclosures on APCNWR grasslands, and survival for areas treated to suppress fire ants will be compared to non-treated areas. If juvenile Houston toads can survive in fire ant-suppressed areas of prairie habitat, release sites for ongoing captive propagation and population restoration efforts (i.e., reintroductions), could be widely expanded. Initial field work for this project will be conducted in spring 2015.



Sprague's pipit (Photo credit: John Magera, Attwater Prairie)

As you can see, APCNWR grasslands provide habitat or potential habitat for a myriad of taxonomic groups of interest to a diverse group of researchers and conserva-

tionists. Refuge grasslands represent one of the largest contiguous tracts remaining of the once vast coastal prairie ecosystem, and provide a unique opportunity to study species that were once common throughout this region. In addition, fire ant research and management at the refuge implemented for prairie-chickens has created an opportunity to study the impact of fire ants on other grassland species. That after all is what a laboratory does – it provides the setting and opportunity for gathering information. As such, the Attwater Prairie Chicken National Wildlife Refuge not only provides habitat for one of the most critically endangered species in North America, but also serves as habitat for many other grassland-dependent species and a natural laboratory for those who study them.

**You can help with this vital RIFA suppression by supporting the “Fire Ant Control/Brood Survival Fund”**

## 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](http://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.**



Cont. from P.3      The monarch serves as an indicator of the health of pollinators across the American landscape. Conserving and connecting habitat for monarchs will benefit other plants, animals and important insect and avian pollinators.

A new Website— <http://www.fws.gov/savethemonarch>—provides information on how Americans can get involved with the campaign.



# Changes Are Coming



**A word from our friends at the Refuge:** The auto-tour route at the Refuge is being relocated.

The current route takes visitors by “Teal Marsh” and “Pintail Marsh” and by the Refuge boundary. In addition, the route ends at the Refuge entrance road rather than loop back to the Visitor Center making it inconvenient for visitors to use the facilities and to leave feedback concerning their visit.

Both marshes are being restored to habitat for the endangered Attwater’s Prairie Chicken. The diked road next to “Teal Marsh,” which is part of the current tour, has narrow shoulders and steep drop-offs into ditches on both sides and constitutes a safety hazard for visitors.

The new route will conveniently loop back to the Visitor Center facilities and the opportunity for visitors to provide feedback. Also, the new route will allow deeper penetration into higher-quality habitat and enhanced possibilities of an encounter with Attwater’s Prairie Chickens and other flora and fauna.

And, the new route will feature an observation deck with professionally-crafted interpretive panels. The deck will also enable long-distance views of the expansive prairie habitat.

Construction on the new, auto-tour route will begin late this fall and is expected to be complete after the first of the year. The project also included a mile of new asphalt paving for the county road that runs from FM 3013 to the Refuge entrance. Funding for these improvements is provided by a grant from the Federal Highways Administration.



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

