

George  
Miksich  
Sutton  
AVIAN RESEARCH CENTER



*The*

**SUTTON**

**NEWSLETTER**

*“finding cooperative conservation solutions for birds and  
the natural world through science and education”*

*Volume 45, Winter 2015*

***Upland Gamebird Research  
& Conservation takes  
Center Stage***



A male Greater Prairie-Chicken performs an age-old courtship ritual in the golden light of a spring morning. Cover Photography by: Daniel L. Reinking.

**Issue dedicated to the Society of Tympanuchus Cupido Pinnatus  
for their generous gift (story on page 3)**



# The Sutton Newsletter

Winter 2015  
edition

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GMSARC file photo

## Director's Note:

### The Circle Mountain View

Google Earth

**J**ust in time for winter ... the beard is back! It is getting cold, but perhaps it's a reflection of things settling into a rhythm with my new position at the Sutton Center. After all, I do subscribe to the mantra of "comfort in face and pace."

The look of the Sutton Center itself has itself seen a fair share of change since spring. We've brought on a very skilled biologist in Dr. John Toepfer and have some new members on our Board after a landmark deal was struck with another conservation organization [page 3]. New buildings and birds within them have been springing up at our prairie-chicken breeding facility [pages 6-7]. Volunteer effort has spruced up our campus and helped organize our extensive collections [page 11]. We have new cast members in training for our It's All About Birds program [page 12]. Another endangered species is coming under the study and, perhaps, care of the Sutton Center [pages 4-5]. And we have a brand-new look to the SuttonCenter.org website!

These are just a few of the exciting ongoing and planned developments up here at the Sutton Center. With the anticipated addition of more personnel, birds, facilities, and projects we're set to have a very active 2016! Stay abreast of developments as they happen by checking out our Facebook page, our Twitter account (@SuttonCenter), and the news feed on our website.

Jeremy D. Ross, Ph.D.  
Executive Director  
George Miksch Sutton Avian Research Center



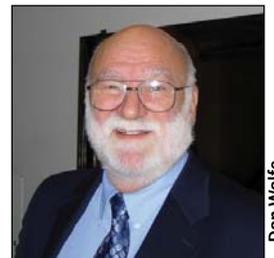
Dan Reinking

## New Face at the Sutton Center - John E. Toepfer, Ph.D.

**Education:** BSc & MS: University of Wisconsin - Stevens Point;  
PhD - Montana State University

**Background:** Dr. Toepfer grew up in Wisconsin and developed a passion for prairie-chickens during college that continues to this day. Though he has studied other bird species, his life-long experience with prairie grouse biology and contributing to recovery efforts with imperiled prairie-chicken populations truly makes him an expert with those species. Dr. Toepfer served as the primary Research Consultant for the Society of Tympanuchus Cupido Pinnatus, Ltd for 20 years prior to joining the Sutton Center as the first STCP/Hamerstrom Prairie Grouse Research Chair.

**Future plans:** Dr. Toepfer will continue to oversee research projects with prairie-chickens, but will transition to analyzing and publishing years of research data that he and other researchers have gathered. In addition to his publication record of peer-reviewed articles, technical reports, and book chapters, Dr. Toepfer will continue to enter his accumulated knowledge into the scientific record from which future generations of biologists will learn.



Don Wolfe

# *Sutton Center receives a boost from Society of Tympanuchus Cupido Pinnatus:*

## **Agreement will enhance our prairie grouse studies for years to come!**

*by Jeremy D. Ross*

June 2015 brought a major change to the Sutton Avian Research Center, when the Board of Directors of the Society of Tympanuchus Cupido Pinnatus, Ltd. (STCP) finalized an agreement to dissolve their organization and donate the proceeds to the Sutton Center.

As part of the agreement the Sutton Center received funds slightly over \$1M with the understanding that we would continue our common goals of researching the ecology and conservation needs of prairie grouse species. To this end, we added long-time STCP research consultant Dr. John Toepfer to our staff as the inaugural STCP/Hamerstrom Prairie Grouse Research Chair at the Sutton Center and continued to support his research into Greater Prairie-Chicken (*Tympanuchus cupido pinnatus*) ecology in Nebraska and Minnesota. Dr. Toepfer's current and past research place him as one of the top prairie grouse biologists in the world, so we are very excited to have him making significant contributions to our data collections and research activities.

The STCP was an organization founded in Wisconsin in 1961 with a stated mission "to preserve and protect the prairie-chicken." Concerned citizens had noticed that populations of Greater Prairie-Chicken had drastically declined over the preceding 15 years, so soon after formation the STCP consulted with biologists Dr. Frederick & Frances Hamerstrom as well as Oswald Mattson to identify possible grassland reserves which could be purchased for the preservation of the species in Wisconsin. Their selection of a network of "ecologically patterned" parcels of grasslands totaling over 7,000 acres interspersed over the central Wisconsin region helped the STCP to play a central role in saving the species in that state.

The legacy of the STCP can be witnessed in the Greater Prairie-Chickens that still "boom" from the >17,000 acres of protected grasslands that are now administered by the Wisconsin Department of Natural Resources. But the organization's footprint extends further, with decades worth of data and specimens that are now in the care of Dr. Toepfer. As part of the arrangement between the STCP and the Sutton Center, these materials will be taken care of by the Sutton Center and be used for years to come to examine such topics as the long-term trends in prairie-chicken populations, potential causes of decline and recovery for the species, and molecular studies of feather DNA or environmental pollutants.

As the STCP found success at preserving the Greater Prairie-Chicken in Wisconsin, they began to branch out and begin studies in other states and with other types of prairie

grouse. Soon STCP researchers were crossing paths with Sutton Center biologists, who were studying similar questions with other prairie grouse populations in Oklahoma and beyond. Recognizing each organization's outstanding contributions in the field of prairie grouse biology, the National Prairie Grouse Technical Council awarded their Hamerstrom Award to Dr. Toepfer in 2003, and to the Sutton Center in 2013. Clearly the STCP and the Sutton Center had similar interests and a great track record with prairie grouse research!

Because of the strong overlap between the two organizations and the changing landscape of prairie grouse research and conservation needs, the STCP felt that they could maximize their impacts by gifting their resources to the Sutton Center to combine our collective talent and motivation into a single organization. In addition to the tremendously skilled and knowledgeable Dr. Toepfer, the Sutton Center has also welcomed four former members of the STCP Board of Directors into the Sutton Center fold as new members of the Sutton Center Board: Jeffrey Kenkel, Charles Newling, Russell Schallert, and Gregory Septon. These new Sutton Center Board members collectively bring a deep knowledge of conservation nonprofits and the plight of prairie grouse, having contributed decades of service to the STCP and like-minded organizations.

The Sutton Avian Research Center and our entire staff are deeply appreciative for the funds donated by the STCP. We are humbled to be given the opportunity to carry their torch as we continue our important work on prairie grouse ecology and conservation. If you would likewise wish to support these endeavors, please contact the Sutton Center [info@suttoncenter.org](mailto:info@suttoncenter.org) or (918) 336-7778 to explore options for sponsorships or donations which will keep prairie-chickens booming across the prairies!

[Read more about the STCP at [prairiegrouse.org](http://prairiegrouse.org)]



Wayne Rhodus



# *Cordorniz Mascarita* *(Masked Bobwhite)*

*by Donald H. Wolfe and Jeremy D. Ross*

The Sutton Center's commitment to conservation of rare birds, and particularly our experience with gallinaceous birds, often leads to invitations to collaborate with outside agencies. In one particular case a few years ago, U. S. Fish and Wildlife Service representatives approached the Sutton Center about the prospect of becoming another breeding facility for the critically-endangered Masked Bobwhite. Because we were in the midst of just then securing full funding for our Attwater's Prairie-Chicken breeding facility, and so many other ongoing projects were demanding time commitment from our limited staff, the idea was put on hold. This spring we were in a position to reopen conversations with the Masked Bobwhite Recovery Team and there have been several recent developments that might be of interest to our readers and supporters.

First off, we realize that not everyone may be familiar with this bird, so let's provide a brief overview; call it Masked Bobwhite 101. Classified as a distinct subspecies of Northern Bobwhite, the Masked Bobwhite is found only in the Sonoran Desert and semi desert regions of southern Arizona, USA, and northern Sonora, Mexico. Though originally described as a separate species, in 1947 they were reclassified as a subspecies based on what were deemed significant vocal and plumage overlaps with the Northern Bobwhite. Though females of each type do appear similar, male Masked Bobwhite would never be mistaken for their Northern cousins. Likewise, recent and ongoing genetic analysis is beginning to indicate possible divergence from other bobwhite populations, perhaps vindicating the full species designation. Regardless of the classification, the Masked

Bobwhite is certainly a unique and irreplaceable thread of nature that is in great need of intense conservation efforts to save it from outright extinction.

The rangewide decline of Masked Bobwhite has been primarily attributed to intensive livestock grazing in an ecosystem that cannot rejuvenate quickly, particularly during

the beginning of the 20<sup>th</sup> century. So rapid were the declines that wildlife officials actually declared Masked Bobwhite extinct more than once over the past century. Yet the bird, known as "Cordorniz Mascarita" in Mexico, held on at ranches in central Sonora and from those populations a captive flock was established in Arizona for the purposes of captive-breeding birds for release in the United States. By 1985, the U. S. Fish and Wildlife Service had acquired a large ranch in the Alter Valley of southern Arizona, which became the Buenos Aires National Wildlife Refuge (BANWR). This 118,000 acre refuge was the only place in the USA where Masked Bobwhite had been known to regularly occur and the refuge was to be managed specifically for the preservation of this critical-

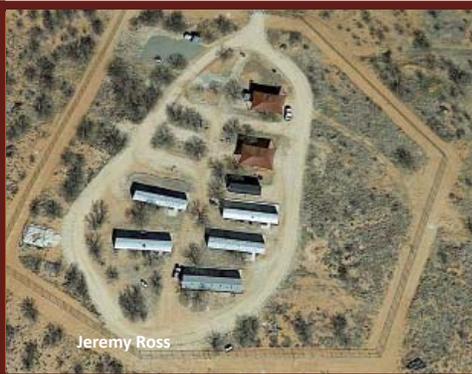
ly-endangered quail and its habitat. Despite the best efforts by all agencies involved, the Masked Bobwhite continues to hover on the brink of extinction and, sadly, has not been verifiably reported from its last stronghold in Mexico for the past five years.

While the outlook may seem bleak, there is also cause for optimism. A sizable captive breeding flock exists at BANWR, and captive breeding efforts with these birds



**Don Wolfe deploys a temperature and humidity data logger at BANWR. Baboquivari Peak can be seen on the horizon.**





The Sonoran Outpost located on the Buenos Aires National Wildlife Refuge (BANWR) is a sign of hope for this critically endangered bird.



PHOTOARK

have produced many offspring. However, reintroducing these offspring into the wild has not yet re-established a self-sustaining population and, as a result, large-scale releases were halted in 2007. Since that time the BANWR staff has refocused resources into habitat management and those efforts appear to be making gains at restoring conditions suited to the Masked Bobwhite. Various rearing methodologies are now being tested to better ready captive-bred individuals for the large-scale reintroduction efforts that will hopefully be resumed in the near future.

To not have all their Masked Bobwhite in one facility, BANWR staff worked with colleagues in Puebla, Mexico to transfer 70 birds to a separate facility at the Africam Safari Zoo in 2015, with plans to transfer another 70 birds there in 2016. This flock will serve both as a hedge against a catastrophic event that could wipe out almost the entire global population currently housed at BANWR, as well as provide captive-bred offspring for release in Mexico.

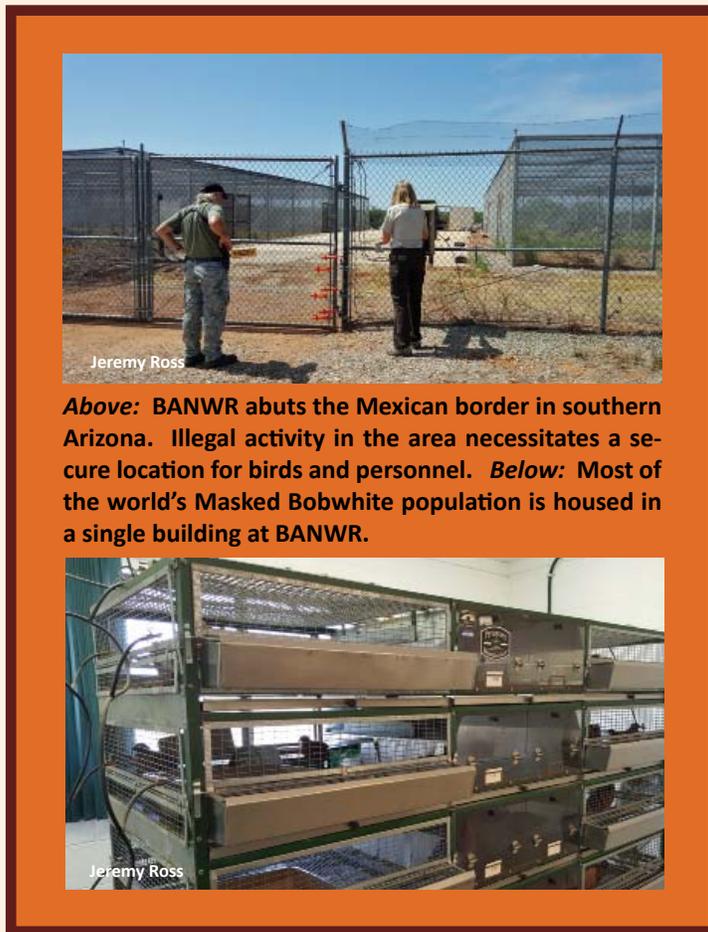
The Sutton Center's involvement is multi-pronged. Senior Biologist Don Wolfe has been selected to join the Masked Bobwhite Recovery Team, which oversees all aspects of the species' conservation efforts. In June of this year, Don and Executive Director Dr. Jeremy Ross deployed temperature data loggers along an elevational gradient and in different vegetation types to begin a long-term thermal mapping program. As with any bird species, bobwhites have specific thermal tolerances, as well as particular habitat needs and vegetation preferences. Even at small scales the difference in temperature in areas of respite from the searing heat or freez-

ing cold, called thermal refugia, can be life-saving for bobwhite. Determining the thermal characteristics of BANWR can, therefore, aid in guiding vegetation restoration efforts as well as delineating areas where future releases are most likely to be successful.

The Sutton Center has also taken the lead on setting up informational posters in southern Arizona about the rarity of Masked Bobwhite and how sightings can be readily reported to us. We are in the process of recruiting capable volunteers in southern Arizona and Sonora that can assist in verifying such reports. Across the vast and remote area where Masked Bobwhite once existed, this volunteer verification team will be of tremendous value in confirming hopeful reports that this bird may still exist in the wild.

Finally, we are exploring possible modifications to existing Sutton Center facilities to allow us to accommodate a few dozen Masked Bobwhite from the BANWR flock. Ultimately, this would be the first stage of heavy involvement by the Sutton Center in the preservation of this rare bird. We feel that our experience with raising captive birds and

vast research experience with grouse could make such an endeavor not only feasible, but perfectly suited to our mission statement and commitment to conservation. To find out more about our emerging research and conservation work with Masked Bobwhite, including how you can help fund or otherwise support the effort, please go to <http://www.sutton-center.org/conservation/saving-species/masked-bobwhite/>



**Above:** BANWR abuts the Mexican border in southern Arizona. Illegal activity in the area necessitates a secure location for birds and personnel. **Below:** Most of the world's Masked Bobwhite population is housed in a single building at BANWR.

# THE ATTWATER'S PRAIRIE-CHICKEN BREEDING FACILITY IS NOW HOUSING GREATER PRAIRIE-CHICKENS!

*by Ryan N. Christensen, Luke A. Evans, Lena C. Larsson,  
Carla A. Potts, Steve K. Sherrod, Ryan A. VanZant, Donald H. Wolfe*

*Photography by Steve K. Sherrod and Lena C. Larsson*



There is now a small flock of greater prairie-chickens testing out the design of the first building at Sutton Center's prairie-chicken breeding facility! As the Attwater's prairie-chicken is one of the most endangered birds in North America, and with so few remaining birds, we are initially using greater prairie-chickens as surrogates. The Sutton Center's breeding facility team is working hard on the design to achieve the best results. We need to construct several more buildings, including breeding barns to test the best methods for prairie-chickens to breed and flourish in captivity.

Dr. John Toepfer, who joined our staff as Sutton Center's first Society of Tympanuchus Cupido Pinnatus-Hamerstrom Prairie Grouse Chair, continues his research comparing a large, healthy Nebraska greater prairie-chicken population with a more disturbed, fragmented, and smaller Minnesota population. John is radio-tracking females to monitor their nest success and their chicks' survival. And as there are several hundred thousand greater prairie-chickens in Nebraska, the Nebraska Game and Parks Commission gave us permission to collect some eggs.

During prime prairie-chicken egg incubation season, our Sutton Center crew traveled to Nebraska. There we met up with John Toepfer who took us to three nests on properties owned by Rich Lackaff, a veterinarian who also runs a very impressive cattle

ranch. Two nests had 14 eggs, and one had 13. We collected the full clutches since total removal encourages the hens to recycle with a second clutch. John Toepfer confirmed that these hens indeed re-nested following the collection.

Once we had the "eggs in the basket," every move was carefully orchestrated. Developing embryos are sensitive to a) vibration, b) immobility, and c) temperature/humidity changes. Shaking is easy to understand; we don't want scrambled eggs. But it is also important to turn the eggs intermittently so that the developing chicks will not stick to the inner membranes of the egg shell. Once incubation starts, too cold temperatures stall development, and too hot temperatures can kill. An egg should lose an average of 15% of its weight during incubation. We used egg size and weight to estimate hatch dates for the three clutches.

We placed the eggs on egg crate foam in two portable incubators, and strapped each egg in with netting fastened to the foam with alligator clips. Humidity was maintained by placing wet sponges inside, and the incubators were connected to auxiliary power sources. Now, the faster we could get the eggs to the more sophisticated incubators back home, the better. These have more reliable temperature and humidity and turn the eggs automatically. We are very grateful to Dwight Boesiger, who flew his Mooney Ovation, and returned half of the eggs safely to Bartlesville, all in the same day. He also transported Steve Sherrod, which was probably the

more difficult part... One worry was the effect that high altitude could have on developing eggs, so Dwight kept the plane below 6,000 ft since his aircraft is not pressurized.

The other incubator was transported back on a pillow on a person's lap (we took turns) in the back seat of a Toyota Tundra. We made an overnight stop in Grand Island, Nebraska, getting up every other hour to turn the eggs and check temperature and humidity.

We are happy to report that 40 of the 41 eggs hatched successfully! Then, talk about hectic times. The chicks needed a carefully prepared and weighed meal four times a day. Full time staff now lives on the breeding facility property, so there was always someone watching. Even so, it is not uncommon that some chicks "fail to thrive," something that we experienced when the chicks became around 5 days old. We unfortunately lost several chicks before lab analysis determined that the bacterium *Pseudomonas* was present, and we began successful antibiotic treatment. We are pleased to have ended up with 26 healthy prairie chickens, and we offer our sincere gratitude to other Attwater's Prairie-Chicken Recovery Team members, who are used to dealing with similar medical emergencies.

Although the construction of the chick building was delayed by the wettest spring in Oklahoma records, we temporarily made do by housing the growing chicks in large plastic stock tanks in the renovated farm house. These birds are very precocious, and can quickly jump and fly, so the tops needed to be covered by netting right away. In addition, we installed netting in the interior of the newly constructed building, since prairie-chickens are very powerful and fast flyers, and could potentially kill themselves flying into walls or objects. Our resident greater prairie-chickens also have an outside enclosure where they can enjoy sun and dust bathing as well as green grass and unfortunate but nutritious invertebrates.



We want to thank so many for their support and advice, including: Emirates Center for Wildlife Propagation, MBZ Species Conservation Fund, National Fish & Wildlife Foundation, U.S. Fish & Wildlife Service, Attwater Prairie Chicken National Wildlife Refuge, Attwater's Prairie-Chicken Recovery Team, Fossil Rim Wildlife Center, Houston Zoo, Oklahoma Department of Wildlife Conservation, University of Oklahoma Institutional Animal Care & Use Committee, Beaver's Game Farm, Timberline Fisheries, Dr. Jill Nesworski, Dr. Joe Flanagan, Hannah Bailey, Janet Johnson, Dr. Ken Riddle, and John Seabury.

We want to extend special thanks for making the egg collections possible: 1) Dwight Boesiger, for providing his plane, fuel, and piloting expertise, 2) Bill Vodehnal and the Nebraska Game and Parks Commission for giving us the permit to collect eggs and export them out of the state, 3) Richard Hatcher and Bill Hale with ODWC for providing an import permit, 4) Veterinarian and cattle rancher Rich Lackaff for providing land access, and 5) Dr. John Toepfer for guiding and providing expertise and nest locations.

# *The International Grouse Symposium*



*From left to right: Organizing committee chairman, Professor Ólafur Nielsen, Dr. Steve Sherrod, Yasuyuki Nagano of Niigata Japan, and Dr. John Toepfer, a recent addition to the Sutton staff, enjoy a fieldtrip to Godafoss falls.*

*by Lena C. Larsson, Steve K. Sherrod,  
John E. Toepfer and Donald H. Wolfe  
Photography by Daniel L. Reinking and  
Steve K. Sherrod*

Another International Grouse Symposium (IGS) can be added to the records. It was fantastic to meet up with fellow grouseers, although in a much different environment than the 2012 IGS in Matsumoto, Japan. In common are high potentials for seismic activities and rock ptarmigan. Best guess? A latitudinal difference of 28° further north and a longitude 158° further west compared to Japan put us in Iceland. Definitely cooler and less populated. The Sutton Center was represented by Steve Sherrod, Don Wolfe, John Toepfer, and Lena Larsson. We enjoyed our Labor Day weekend listening to 79 oral presentations and discussing 35 posters in the capitol city Reykjavik. There were about 150 participants and over 17 nations represented at the symposium.

Our first day in Iceland was a field trip. Rain and fog caused re-planning but our host Ólafur Nielsen and his team took us to an area where we observed the Icelandic rock ptarmigan. We were also treated to birding at an estuary (whooper swan, common loon) and along the coast: lots of terns and gulls (glaucous are common), gannets, guillemots, greylag geese, ducks (eiders, long-tailed), shorebirds, puffins flying by, and the parasitic jaegers showing off their mobbing behaviors.

The next four days consisted of presentations from 8am to 6pm. Steve shared the recovery efforts of the Attwater's prairie-chicken, Lena presented genetic results from our white-tailed ptarmigan research in New Mexico, and Don hosted a poster about the lesser prairie-chicken saturation surveys. There were many North American researchers presenting data on Gunnison/greater sage-grouse, several talks about prairie-chickens, although only one talk each on the ruffed grouse and the sharp-tailed grouse. Our Polish colleagues shared videos of capercaillie recovery efforts, in fairy land looking old growth forests. Our IGS 2012 host, Professor Nakamura also showed videos of the cages that they now have fitted with inside netting (as Steve Sherrod recommended three years ago). The Japanese rock ptarmigan are so unafraid of humans, that they are simply able to herd hens with young chicks into these enclosures to keep them safe during nights.

As the conference concluded, some rather “local” researchers offered to host IGS in 2018. Dwayne Elmore (professor at OSU) and Dave Dahlgren (until recently working with prairie-chickens in Kansas) will organize the 32th IGS in Logan, Utah. We are looking forward to it!

Some of us were able to stay for a post-conference fieldtrip. Steve, Don, and John went with a smaller group to northern Iceland, where research on rock ptarmigan is ongoing. We saw a good number of ptarmigan, and much to Steve's pleasure, four Gyrfalcons, the primary predator of ptarmigan. Ólafur Nielsen also led the post-conference field trip, and with every stop, we received lessons on the local history, the geology, local flora and fauna, conservation issues, and even local folklore. A special thanks to Ólafur for sharing his very impressive knowledge!



*Top:* Lena gives her presentation on white-tailed ptarmigan genetics. *Above:* Close up look at an Icelandic rock tarmigan. *Below:* These purebred Icelandic horses are the only horses allowed on the island.



# ***Prairie Grouse Technical Council Meeting***

*by Donald H. Wolfe and  
Lena C. Larsson*



Don Wolfe

**Missouri Department of Conservation (MDOC) staff cleans and sorts wild seeds for distribution.**

In addition to the International Grouse Symposium, which is every 3 years, this year was also the year of the 31<sup>st</sup> meeting of the Biennial Prairie Grouse Technical Council (PGTC), which was held in Nevada, Missouri, 22-24 September. The location was not quite as exotic as Iceland, but the information exchange was also very interesting. This meeting had 26 oral presentations and 8 posters, almost completely dominated by presentations on Greater and Lesser Prairie-Chickens. Indeed, a total of 20 presentations dealt solely or partly with Lesser Prairie-Chickens but that is little surprise considering the emphasis that has been placed on this species over the past few years.

About 80 attendees were at the PGTC meeting, which was slightly lower than normal, undoubtedly due in part to the out of state travel restrictions imposed on biologists from various state agencies. Don, Lena, John, and Steve all attended and presented.

The first complete day of the meeting included a field trip to Wah-Kon-Tah Prairie, one of a few tallgrass prairie remnants remaining in Missouri. This particular prairie remnant is co-owned by the Missouri Department of Conservation (MDOC) and The Nature Conservancy, and was chosen as a site for reintroduction of Greater Prairie-Chickens. Greater Prairie-Chickens can still be found on some other prairie remnants in Missouri, but persist mostly as a result of continual restocking of birds from other states. The MDOC faces a lot of hurdles in managing these prairies and the prairie-chickens that reside there, including invasion of non-native grasses, and ever encroaching trees. One of the highlights of the field trip included a visit and explanation of their native seed harvesting, cleaning, and sorting operation. They had a large barn filled with big piles of seeds waiting to be cleaned and bagged. Hundreds of pounds of native seeds are processed annually, and not only used by Department of Conservation personnel, but also distributed to partnering private landowners. Needless to say, this is a dirty, dusty job, and definitely not one for anyone with severe allergies. The field trip day ended with a fish fry dinner, band, and bonfires, and included camaraderie and problem solving with fellow colleagues.

The conference concluded with a banquet where we were also treated to an amazing presentation by wildlife photographer Glenn Chambers, whose spectacular photographs were accompanied and possibly surpassed by his story telling. Also, as is traditional at the PGTC meetings, the Hamerstrom Award recipient(s) are honored. This award is given to individuals or organizations that have made significant lifetime contributions to prairie-grouse research or conservation. Congratulations to the 2015 Hamerstrom Award recipients Patricia (Tish) McDaniel and David Haukos, both of whom have been heavily involved with Lesser Prairie-Chicken conservation.

The 32<sup>nd</sup> PGTC meeting will be held in North Dakota in 2017.

# Grouse News...

## The Lesser Prairie-Chicken and the Greater Sage-Grouse make national headlines

by Lena C. Larsson, Steve K. Sherrod, and Donald H. Wolfe

The lesser prairie-chicken was listed as a threatened species in the spring of 2014, with a special ruling to limit regulation impacts on landowners and businesses. But, September 1, a federal judge in Midland, Texas, “vacated” the lesser prairie-chicken’s threatened status. He ruled that U.S. Fish and Wildlife Service (USFWS) did not properly consider the voluntary Lesser Prairie-Chicken Range-Wide Conservation Plan. The 2015 fourth annual aerial lesser prairie-chicken lek survey estimated a population size of 29,200 (90% confidence interval, CI: 21,700-41,000), which is lower than 2012 (37,100, CI: 28,100-57,000), but a good increase from the drought year 2013 when the population was estimated to be only 19,600 (CI: 12,600-27,800; McDonald et al. 2015). (We included the confidence intervals to illustrate the uncertainty in the population size estimates.) USFWS is hopeful that the population numbers continue to improve, but the goals of the range-wide plan require many more years of increases.

Ten years ago, USFWS designated the listing status of the greater sage-grouse as “unwarranted” under the Endangered Species Act. Since then, there has been a substantial effort to curtail a possible listing, which has included collaborations among stake holders such as states, federal entities, energy companies, conservationists, and landowners. According to the Endangered Species Act, USFWS must evaluate whether listing of a species as threatened or endangered is warranted based on: (1) the present or threatened destruction, modification, or curtailment of its habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; or (5) other natural or manmade factors affecting its continued existence (16 U.S.C. § 1533(a)(1)). In September, the U.S. Department of the Interior finalized a range-wide strategy for sage-grouse habitat on Bureau of Land Management and U.S. Forest Service lands. It may not be possible for conservation plans to ad-



Noppadol Paothong

dress all threats, but USFWS announced on September 22 that they will not grant the greater sage-grouse protection based on their current status review. The past ten years have seen various arguments for and against listings. As with the lesser prairie-chicken, the bio-political arguments are likely to continue.

Another update since the latest Grouse News – the language in a Department of Defense bill to prevent endangered species protection for the greater sage-grouse and the lesser prairie-chicken was removed. But budget riders with similar anti-conservation intent flourish. For example, the Fiscal Year 2016 Commerce, Justice, Science, and Related Agencies Appropriations Bill included an amendment prohibiting the use of Department of Justice funds to prosecute or hold liable any person or corporation for a violation of the Migratory Bird Treaty Act. There have also been riders that threaten the Bald and Golden Eagle Protection Act.

## White-tailed Ptarmigan Update

by Donald H. Wolfe



Kyle Thomas

Although scaled back from the past few years, our survey and research efforts on White-tailed Ptarmigan continue. Working with Sara Oyler-McCance of the U. S. Geological Survey, additional genetic analyses have recently been completed. As we already expected, the three identifiable subpopulations in New Mexico are genetically very distinct. As there was an augmentation from

Colorado to the Pecos Wilderness population in the early 1980s, further analyses will compare the allelic makeup of these birds to donor populations in Colorado. The results of these analyses will soon be compiled and submitted as a publication. Also this year, we repeated our temperature data logger comparison between populated (Pecos Wilderness Area) and unpopulated (Latir Peak Wilderness Area) mountain ranges. While analysis of this year’s data have not yet been completed, we expect to see similar results to those from 2012. In that year, the Pecos area averaged 5 degrees Celsius cooler for afternoon highs in August on the surface, and 8 degrees Celsius cooler in potential

thermal refugia sites. Jeremy Ross and I deployed the loggers in both areas in early June this year. Then the ever eager and reliable volunteer Kyle Thomas and I retrieved the loggers in September. Both areas and each trip required some long, hard hiking, confirming (in my observation) that these mountains are still being uplifted, as they surely feel taller than they were a few short years ago. During the September trip, we came across a hen and brood of two nearly full grown chicks that showed little fear of us and were quite inquisitive about Kyle’s boots, coming to within 2-3 feet of him as he was attempting to photograph them.

# Fall Picnic 2015!

by Elizabeth A. Ross

This year we held our annual Member and Volunteer Appreciation Picnic in the fall in hopes of cooler, more outdoor friendly weather and we were blessed with an absolutely gorgeous day! The beautiful fall colors were just beginning their presentation.

Leonard Sumter, the world's friendliest and most helpful shuttle van driver, was nice enough to navigate the passenger van loaned to us by Jason Brimer and Doenges Toyota of Bartlesville from our off-site parking location. For those of you greeted by Sutton Staff in the rental van provided by Sutton Board member David Delahay; their names included Executive Director - Jeremy Ross, Assistant Director - Lena Larsson, and Quail Tech - Jonathan Coleman. Many thanks go to the Matoaka Baptist Church congregation and their pastor Sherman Jaquess for donating their parking lot for the picnic. Without their generosity we would easily have run out of room for guests' vehicles atop Circle Mountain.

Additional special thanks to our guest presenters that included herpetologist Richard Butler, urban forestry specialist James Barnes, AI and the Green Country Fly Fishers, and Oklahoma Naturalist Rebecca Renfro. With their help we were able to provide an abundance of activities in addition to those by our regular staff including bird mist netting and banding with Dan Reinking, geo-caching treasure hunt with Don Wolfe, tarantula presentation by Ryan Christensen, as well as the ever-impressive, "It's All About Birds" education program thanks to Ryan VanZant, Kim Lobit and Shannon Binkley.

The delicious BBQ lunch was generously provided by the folks at Riggs, Abney, Neal, Turpen, Orbison & Lewis of Tulsa, with volunteer servers Sharon and Don Meltzer, and grill masters/Sutton Center board members Jerry Parkhurst and Kris Koepsel. The beverages for the entire day were also donated by Sutton board member Steve Adams and the K.S. Adams Foundation.

To all of those members and volunteers who attended, **THANKS SO VERY MUCH!** We couldn't do our work of conservation, research and education/outreach without your support. We thank you and wish you a wonderful year! We also look forward to your return visit at the 2016 picnic!



Elizabeth Ross



Dan Reinking



Dan Reinking

## Volunteers: ConocoPhillips Day of Caring!

Story and Photography by Elizabeth A. Ross

The Sutton Avian Research Center could not be such a success without the undying efforts of our loyal volunteers from the Bald Eagle Survey Team (BEST), to the small, yet growing group Friends Of Sutton (FOS), as well as all the regular community members who support us through memberships and donations. A wonderful example of this fabulous connection with the community was a recent event called the United Way Day of Caring. Many United

Way affiliated organizations reach out to nearby non-profit organizations each year for this special day. They offer their gift of time and personpower for an entire 8-hour work day. This year Mike Zamrbzusi of Conoco-Phillips Petroleum in Bartlesville called the Sutton Center to ask if we would have any work available for his 80+ volunteers. Did we ever have things to do!

Our task list included painting a new shed, re-staining our faded signage, cataloging research files and scanning old slides for ease of later use, all the way to applying window decals to reduce bird collisions. Everyone on the Sutton grounds that day kept busy and accomplished a great deal with a wonderful bonus of the Conoco Phillips staff members' smiling faces and genuine interest in our organization.

The day began with a presentation from Director Jeremy Ross to familiarize everyone with the Sutton Center mission. We then broke 2 shifts of the 85-person group down into teams and tackled all of our goals for the day. This amazing group was kind enough to not only spend the time with us but they also were able to supply their own safety equipment (safety glasses, gloves and respirators) and snacks throughout the day. With only a Sutton Center water bottle supplied for their efforts, they helped us catch up on our "to do" list!

To Mike Z. and the Conoco Phillips team, **THANK YOU SO VERY MUCH!** for your friendly and enthusiastic service that day. We hope that you will all keep in touch with us!





4A...

# BIRD BREAK!

Bird is the Word!

V B T M M S Q L T N H J U S I  
 K N Y H I H P B I J B B T H V  
 V I A K G A O I Q D K S N F A  
 G Y K K R I K M A U I B B R O  
 G G H J A G E F N G E U H J M  
 E H G J T C R D O I D N N T Y  
 N N Q Q E I S L M R V C T E E  
 Z C O E C X O E N E C O E B O  
 S Z T A A E N D A N G E R E D  
 A L T E A C P K G G C A E E O  
 J S Q H P H G O L C C P Z S S  
 V Y C L B W M A Z I Z E V C V  
 O R C G T U O T Z C A I L J L  
 A O N K A F R L N D T X G W D  
 L V W J F I A A I A C S S S T

- The grey crowned crane weighs about **EIGHT** pounds.
- Cranes eat almost anything and are considered **OMNIVORES**.
- Unlike many other cranes, the grey crowned crane does not **MIGRATE**.
- **ARCHAEOLOGISTS** discovered that their fossil record dates back to the **EOCENE** period.
- The grey crowned crane is on the **ENDANGERED** species list.
- They live in **AFRICA**.



The latest addition to the Sutton education program is Cici, an East African crowned crane.

**East African crowned crane:** These birds can be found in Africa's wetlands. Their varied diet consists of insects, lizards, amphibians, fish, grasses and seeds, making them omnivorous. The grey crowned crane does not migrate, but because they eat many different foods, it allows them to live in various habitats. They have been classified as Endangered and their principal threat is the loss of habitat due to drainage, livestock overgrazing, and heavy pesticide application. They weigh about eight pounds and reach close to three feet tall. The crowned crane is believed to be the oldest of the crane species. Primitive species of crowned cranes date back in the fossil record to the Eocene period. Archaeologists discovered that they once resided in Europe and North America, but because these climates are

much colder, it is believed they died out in those regions and only survived in warmer Africa.

## YOU QUACK ME UP!

How do birds get stronger? **Eggercise!**

How do birds stick together in a flock? **Vel-crow!**

What type of math are birds really good at? **Owlgebra!**

A duck walked into a feed store looking for treats. When he went up to the counter to pay for its goods, the clerk said, "That'll be \$20.15". The duck responded, "Just put it on my bill".



## Sutton Award 2016!

by Elizabeth A. Ross

The Sutton Avian Research Center would like to announce the 12<sup>th</sup> annual Sutton Award Scholarship Program and is presenting this opportunity to high school students grades 10 – 12.

Entrants to this award contest will potentially receive funding in order to continue their education into post-secondary degree programs utilizing their talents in the arts with a potential conservation connection. The Sutton Center would like to recognize those students who demonstrate the ability to communicate current conservation topics in compelling ways.

Fundraising for this award has recently begun, with student artwork submissions due by January 15, 2016 for judging. Every dollar counts towards supporting Oklahoma's young artists. The winning entries will be featured at the Nature Works Wildlife Art Show and Sale ([www.natureworks.org](http://www.natureworks.org)) this March 5<sup>th</sup> – 6<sup>th</sup> at the Renaissance Convention Center in Tulsa. If you would like to contribute funding to the scholarship awards or need information about submitting work from your school / students, please contact Elizabeth Ross at 918-336-7778 or email [Elizabeth@suttoncenter.org](mailto:Elizabeth@suttoncenter.org). As always, thanks so much for all of your support of the Sutton Center and our young Oklahoma artists!

## Sutton Center's Recent Publications

- Fuchs R, Bingman VP, **Ross JD**, and Bernroider G. (2015) Brain contrasts between migratory and nonmigratory North American lark sparrows (*Chondestes grammacus*). *Neuroreport* 26(17):1011–1016.
- Mirzaei G, Jamali M, **Ross JD**, Gorsevski P, and Bingman VP. (2015) Data Fusion of Acoustics, Infrared, and Marine Radar for Avian Study. *IEEE Sensors Journal* 15(11):6625 – 6632.
- Ross JD**, Kelly JF, Bridge ES, Engel MH, **Reinking DL**, and Boyle WA. (2015) Pallid bands in feathers and associated stable isotope signatures reveal effects of severe weather stressors on fledgling sparrows. *PeerJ* 3:e814
- Winder VL, Carrlson KM, Gregory AJ, Hagen CA, Haukos DA, Kesler DC, **Larsson LC**, Matthews TW, McNew LB, **Patten MA**, Pitman JC, Powell LA, Smith JA, Thompson T, **Wolfe DH**, Sandercock BK. (2015) Factors affecting female space use in ten populations of prairie chickens. *Ecosphere* 6(9): 166.

## Sutton Center's Recent Presentations

- Fritts, SR, Grisham BA, Haukos DA, **Patten MA**, **Wolfe DH**, Dixon CE, Heck WR (2015) Long-term evaluation of lesser prairie-chicken nest ecology in response to grassland restoration at two spatial scales. Oral Presentation. *The Wildlife Society Annual Conference*, Winnipeg, Canada, 18 Oct.
- Larsson LC**, Cavert C, **Ross JD** (2015) Bald eagle nest destruction relative to tornadic wind conditions. Oral presentation. *2015 Joint Meeting of the American Ornithologists' Union & The Cooper Ornithological Society*, Norman, OK, 30 July.
- Larsson LC**, Oyler-McCance SJ, **Wolfe DH**, Fike J (2015) Genetic diversity of the white-tailed ptarmigan *Lagopus leucura* in its peripheral range in New Mexico. Oral presentation. *International Grouse Symposium*, Reykjavik, Iceland, 5 Sept.
- Larsson LC**, Oyler-McCance SJ, DeYoung R, Hagen C, Johnson JA, **Patten MA** (2015) Rangewide genetic analysis of lesser prairie-chicken reveals population structure, range expansion, and possible introgression. Oral presentation. *31st Meeting of the Prairie Grouse Technical Council*, Nevada, MO, 21 Sept.
- Morrow ME, **Sherrod SK**, **Larsson LC**, **Toepfer JE**, **VanZant RA**, **Wolfe DH** (2015) Update on captive breeding and raising of Attwater's prairie-chickens and their release into and survival in the wild, with comments on experimental breeding methodologies. Oral presentation. *31st Meeting of the Prairie Grouse Technical Council*, Nevada, MO, 21 Sept.
- Reinking DL**, **Sherrod SK**, **VanZant RA**, **Larsson LC** (2015) Post-fledging Movements of Oklahoma Bald Eagles. Poster. *2015 Joint Meeting of the American Ornithologists' Union & The Cooper Ornithological Society*, Norman, OK, 29 July.
- Ross JD** and Bridge ES. (2015) Severe weather impacts on birds: Past, present, and future. Symposium introduction. *2015 Joint Meeting of the American Ornithologists' Union & The Cooper Ornithological Society*, Norman, OK, 30 July.
- Ross JD** and Bridge ES. (2015) Global patterns of avian extinction risk attributable to severe hailstorms. Oral presentation. *2015 Joint Meeting of the American Ornithologists' Union & The Cooper Ornithological Society*, Norman, OK, 30 July.
- Sherrod SK**, Moller D (2015) Flaring of eyespots in the American kestrel. Oral presentation. *2015 Joint Meeting of the American Ornithologists' Union & The Cooper Ornithological Society*, Norman, OK, 1 Aug.
- Sherrod SK**, Moller D (2015) Flaring of eyespots in the American kestrel. Oral presentation. *Sutton Seminar Series*, Bartlesville, OK, 26 Aug.
- Sherrod SK**, Moller D (2015) Flaring of eyespots in the American kestrel. Oral presentation. *Oklahoma City Audubon Society*, Oklahoma City, OK, 19 Oct.
- Sherrod SK**, Moller D (2015) Flaring of eyespots in the American kestrel. Oral presentation. *Raptor Research Foundation Annual Conference 2015*, Sacramento, CA, 7 Nov.
- Sherrod SK**, Morrow ME, **Larsson LC**, **Toepfer JE**, **VanZant RA**, **Wolfe DH** (2015) Captive breeding and raising of Attwater's prairie-chicken for release into the wild, with experimental methodologies potentially applicable for breeding other Galliformes. Oral presentation. *International Grouse Symposium*, Reykjavik, Iceland, 7 Sept.
- Toepfer JE** (2015) Greater prairie-chicken movements and production in Nebraska and Minnesota, 2012-2015. Oral presentation. *31st Meeting of the Prairie Grouse Technical Council*, Nevada, MO, 21 Sept.
- Wolfe DH** (2015) Research and conservation efforts for prairie-chickens and ptarmigan at the Sutton Avian Research Center. Oral presentation. *Masked Bobwhite Recovery Team Meeting*, Tucson, AZ, 23 June.
- Wolfe DH**, **Larsson LC**, **Ross JD**, Janus A, Cooper B (2015) Saturation surveys for Lesser Prairie-Chickens in Oklahoma, USA. Poster. *2015 Joint Meeting of the American Ornithologists' Union & The Cooper Ornithological Society*, Norman, OK, 23 July.
- Wolfe DH**, **Larsson LC**, **Ross JD**, Janus A, Cooper B (2015) Saturation surveys for Lesser Prairie-Chickens in Oklahoma, USA. Poster. *International Grouse Symposium*, Reykjavik, Iceland, 5 Sept.
- Wolfe DH**, **Larsson LC**, **Ross JD**, Janus A, Cooper B (2015) Saturation surveys for Lesser Prairie-Chickens in Oklahoma, USA. Poster. *31st Meeting of the Prairie Grouse Technical Council*, Nevada, MO, 24 Sept.



# Wild Brew 2015!

by Elizabeth A. Ross

This 2015 Wild Brew once again kept true to its slogan, “The greatest party ever hatched.” Shelby Eicher and Mark Bruner opened for The Fabulous Mid-Life Crisis Band and even one of our prairie chickens found itself tearing up the dance floor!

A Wild Brew-record 46 Tulsa-area restaurants provided an assortment of fresh sushi rolls, melt-in-your-mouth bundt cakes, tangy brisket debris poorboys... and the list goes on. Dishes served generally included some special treats for the occasion and demonstrated the talents of our local chefs. In particular, this year’s **Golden Spoon Winner – R Bar & Grill** – whipped up some Coffee, Toffee & Coconut R Bars, which were completely handmade candy bars that tasted like a “bite o’ heaven”!

Of course Wild Brew wouldn’t be complete without the delightfully rich variety of craft beer. This year Wild Brew boasted close to 200 varieties of beer, most from Oklahoma Breweries like Marshall, COOP Ale Works, & Anthem Brewing Co. In fact, this year’s **Wild Brew was brewed by Anthem – a marvelous 8.5% Belgian Tripel**. The wonderful selection of porters, stouts, pilsners, etc. provided a range of low-alcohol refreshers to high-test sippers for happy mouths!

For those of you who were unable to join us, some licensed vendors are still stocking Anthem Brewery’s 2015 Wild Brew. You’ll notice this year’s gorgeous label has the 2015 Wild Brew logo art by Tulsa artist and Wild Brew Committee Member, Lori Walderich.

An enormous **THANKS to all members of the 2015 Wild Brew Planning Committee, chaired by Wade Huntsman & Stephanie Williams!** These dedicated volunteers spent much of their rare extra time to plan the event, reach out to potential sponsors, and ensure that this giant event went smoothly.

If you or a friend may be interested in the advertising and networking opportunities a sponsorship for Wild Brew would bring (e.g., company logo on commemorative glass or t-shirt), information about sponsorship levels will soon be available on the WildBrew.org website. Sponsored items will be available on a first-come-first-served basis, so if you want your company’s logo on a popular item, get your request in early! For more information about Wild Brew 2016, please contact Elizabeth at 918-336-7778 or [elizabeth@suttoncenter.org](mailto:elizabeth@suttoncenter.org)

Wild Brew 2015 was supported generously by the sponsors seen around the border of this page, as well as the great many patron and general admission attendees. These businesses and individuals help keep this event rocking each year while also providing a substantial donation in support of the Sutton Center’s Conservation, Science, and Education mission. Hats off to these folks!



Elizabeth Ross



Dan Reinking



Elizabeth Ross

Elizabeth Ross

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## Memorials and Honoraria

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Craft & Barrel, Inbev, Kolibri Ale Works, Eagle Brands, LDF Companies, Patricia Otterstrom, Paragon Brands, Primo's Wine & Spirits.

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