

George
Miksch
Sutton
AVIAN RESEARCH CENTER



The

SUTTON

NEWSLETTER

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

Volume 30, Spring 2008

Reaching out to Oklahoma students



See Page 2 for details. *Cover: Polar Bears of the Arctic. Photography by Paul Nicklen. Inset: Left to Right; Mr. Robert E. Lorton III, Mr. Paul Nicklen, and Mr. Tony Davis. Photography by Tom Gilbert.*

What's Inside...

- 2 2008 Natural History Forum & Sutton Awards
- 4 A "Big Sit"
- 6 Lesser Prairie-Chicken Crisis
- 7 Avoidance Buffers & Prairie-Chickens
Wild Brew turns 10!
- 8 Wind Power & Lesser Prairie-Chickens
- 9 Nest Cam Follies
- 10 Changes at the Sutton Center
- 11 The Golden Touch

2008 Natural History Forum and Sutton Awards!

The F&M Bank & Trust Company, NatureWorks, and the Sutton Center

join to promote conservation education

by Margie T. Nolan

This year's Natural History Forum kicked off with a series of presentations by *National Geographic* photographer Paul Nicklen. Sponsored by Tony Davis and The F&M Bank and Trust Company and others, Paul gave presentations from February 26–28 to over 3,000 students as well as to interested community members and Sutton Center supporters.

Paul Nicklen was raised on Baffin Island, Nunavut, Canada, where he spent most of his time outdoors with his Inuit friends and mentors. He learned to survive in the Arctic, read the weather, and acquire the patience to do both. His early experiences led him to earn a degree in wildlife biology, and he worked in the Arctic for four years, studying the animals of the area, including lynx, grizzly bears, bison, caribou and, as seen from his award-winning photos, polar bears. He eventually realized he could do more to help the wildlife populations and

wilderness areas that he loved by becoming a photojournalist. He has combined his knowledge of biology and skills as a photographer to produce some of the most exciting stories in *National Geographic*.

Not only is his work exciting to hear about and beautifully, yet realistically illustrated, but Paul has been able to use his skills to help scientists learn more about the environments in which he is unusually adept at working. Like many of our past Natural History Forum presenters, Paul has many dangerous and exciting experiences to relate. While doing a piece on leopard seals, which can be considered vicious, even deadly, Paul worked closely with a large alpha female that kept trying to feed him penguins, as well as others who, while curious, were by no means interested in harming him. While photographing polar bears in the Arctic, a big bear surfaced right next to the ice floe he was sitting on, but he was saved from a physical encounter when the ice broke beneath the bear. Most important, Paul's work is able to show both scientists and others the reality of what is happening in our world today. Because he dives in freezing water, he was able to spend five days photographing leopard seals and, as a result, show that they are not always vicious killers. His work under the ice in the Arctic documented the huge variety of living organisms dependant upon the ice in order to live, and, in turn, to support other life forms; some of these organisms had never before been photographed. In the process of this assignment, he nearly lost his life when the boat to which he was tethered started its engines forcing him further and further under the ice, with little air left in his tanks. Luckily he survived, and we are grateful he could share his observations and experiences with all of us.

It is this mix of adventure, science and education that motivates The F&M Bank & Trust Company and our other sponsors, AEP/PSO, Frisco Title, and Riggs Abney Law Firm, to help the Sutton Center bring programs to students and others in this geographical area. This year we were able to reach more than 3,000 students from Union Schools, Owasso, Jenks, Bartlesville, Holland Hall, Marquette, Collinsville, Pawhuska, Dewey, Tulsa Tech, and home schoolers. We did it all in only three days. For helping us to gather so many schools into their auditoriums, we owe thanks to our host schools of Union and Jenks, and to the Bartlesville Community Center.

Continued on page 3



Rob Lore



Dan Remking



Paul Nicklen

Above: Paul Nicklen at work. Below: Paul communes with a leopard seal lounging on the ice in the Antarctic. His work there helped show that these are not always vicious killers as was previously thought.



Paul Nicklen

Continued from page 2

The culmination of Paul Nicklen's visit was a presentation for guests and supporters of the Sutton Center at the Natural History Forum entitled *Paul Nicklen's Polar Perils*. This evening was again generously hosted by The F&M Bank & Trust Company. After the presentation, guests dined on the superb food created by the Bank's own Executive Chef Ling Pham, and then engaged in a live auction presided over by Jay Litchfield! We cannot thank Tony Davis and his colleagues and staff enough for all their hard work and generous support!

As in past years, the Forum was scheduled to coincide with the presentation of the Sutton Awards scholarships. The awards, sponsored by NatureWorks, The F&M Bank & Trust Company, AEP/PSO, Frisco Title and others, are given to outstanding conservation communicators in 10th through 12th grades throughout Oklahoma. Each entry includes a visual arts piece that communicates a conservation issue and an accompanying essay explaining the student's choice of project, material and message. This year we had a wonderful group of entries and we awarded nearly \$30,000 to 19 winners and their teachers. In addition to being displayed at the NatureWorks Art Show and Sale, our winners' work was also displayed in the foyer of The F&M Bank & Trust Company—a gallery created just for this purpose! We are truly grateful to be able to partner with organizations that put a premium on art and conservation education!

Our three judges—from NatureWorks, the Sutton Center, and the arts community spent several days determining the best out of a fine group of 46 submissions. Our four first place winners, receiving \$2,500 each, were Torrie Jo Wale (Jenks H.S.), Kyle Ressel (Comanche H.S.), John Powell (home school and Contreras Art Institute) and Joon Bum Lee (Victory Christian School). We also had four second place winners who received \$1,000 each: Jennifer Plett (Metro Christian Academy); a repeat winner from last year, C.C. Stone (Broken Bow); Deven Sullivan (Bartlesville H.S.); and Leona Thao (East Central H.S.).

In addition, we awarded \$500 each to the following as honorable mentions: Anthony Borges (Ada Senior H.S.); Chelsea Buntario (Victory Christian School); another repeat winner, Alex Drummond (Metro Christian Academy); Duke Goulden (Tulsa School of Arts and Sciences); Gun Hee Lee (Victory Christian School); Mitchell Manning (Broken Bow H.S.); Mindy McConnell (East Central H.S.); Lara Randolph (Metro Christian Academy); Brittany Roberts (East Central H.S.); Jason Sam (Ada Senior H.S.); and Ryan Starr (East Central H.S.).

We also congratulate the following teachers for their outstanding work with these fine artists and conservationists: Judy McIntosh, Heidi Contreras, Brian Arneecheer, Brandy Sanders, Ruth Vesanen, Kelly Persinger, Andrew Anderson, Clancy Gray, Kay Faulkner, and Mark Wittig. Most of these dedicated instructors encourage students to enter year after year with thoughtful and talented work. Thank you for your dedication, and we hope the cash awards help you continue supporting your students.

We thank all of our sponsors and congratulate all of our award winners! Special thanks to Tony Davis, Bobby Lorton, Marilyn Morris, David Nunneley, Ken Greenwood, Howard Ground, Rita Hughes, Carrie Wilson, and Liza Wenzel. We hope to work with all of you again next year!



Marilyn Morris (second from left) of The F&M Bank & Trust Company and Paul Nicklen (far right) of National Geographic congratulate two first place winners of the Sutton Awards scholarships: Torrie Jo Wale from Jenks H.S. on the left and John Powell from the Contreras Art Institute in the center. Torrie Jo, John and two other first place winners received \$2,500 for themselves and \$250 for their teachers!

TulsaPeople Magazine/Michelle Weeks



Above: Ken Greenwood, NatureWorks, and Margie Nolan, the Sutton Center, present C.C. Stone of Broken Arrow H.S. with her second place award of \$1,000 at the NatureWorks Art Show & Sale Breakfast on February 24, 2008. Below: Most of the winners and their teachers present at the NatureWorks Breakfast! We had a total of 19 winners this year! What a talented group they are!





A “Big Sit”

Adventures in OK Birding

Story & Photography by Dan L. Reinking

An early start at our big sit observation platform was important. Our view overlooked the large heron roost visible in the trees across the marsh. As the thousands of white herons and egrets left the roost in the morning, our job was to find the occasional uncommon species mixed in with the masses. Each new species seen added to our day’s list and brought us closer to a record total for Oklahoma.

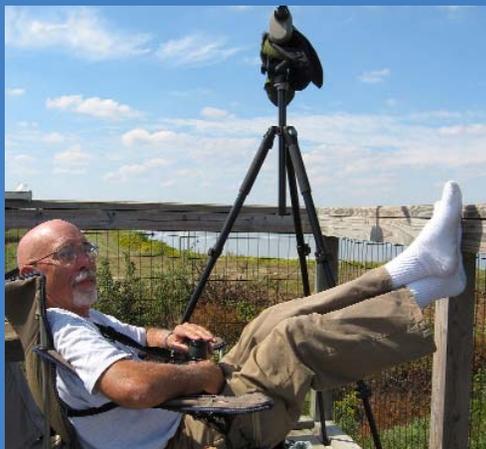
Bird Club and now hosted by *Bird Watcher’s Digest* magazine, the Big Sit (as it is known) has evolved into an international event. The rules for the Big Sit are straightforward. Participants choose a location, which can be any place from a back yard, to a beach, to a wildlife refuge. They measure and mark a circle 17 feet in diameter, and spend up to 24-hours recording all of the bird species they see or hear from the circle on the date of the Big Sit. If a bird is seen or heard from the circle that cannot be identified, it is permissible to leave the circle to obtain a better look at it, as long as it was first noted from within the circle. Lawn chairs, ample food and beverages, and as many participants as can comfortably fit in the circle are all encouraged by team captains. Results are reported to the national organizers and summarized online. In 2007, 199 Big Sits were conducted in 41 states and 8 additional countries.

One of Oklahoma’s Big Sits was established several years ago by David Arbour at the Red Slough Wildlife Management Area in far southeastern Oklahoma. Red Slough is one of the premier birding destinations in Oklahoma, and is home to a wide variety of wetland birds. It has also hosted many birds over the years that are otherwise very rare in the state. Several wildlife viewing platforms have been erected at Red Slough, and it is on one of these that David established his Big Sit location. The platform is small enough to comply with the 17-foot circle rule, large enough to hold several observers, and overlooks both wooded habitat and wide expanses of wetland. The 2007 Wetland Watchers team included team captain David Arbour of DeQueen, AR, Berlin Heck of Broken Bow, Mike Dillon from Texas, Eric Beck from Lawton, who has worked on several Sutton Center projects, and Cheryl Jackson and me from the Sutton Center.

Eric suggested that the Big Sit event be used as a fund raiser to benefit the Sutton Center, and team captain David Arbour agreed. Eric collected pledges from birders, relatives, and acquaintances, many of whom pledged a set amount per species seen, giving the team even more motivation to stay alert and focused on every sound and movement. October 14 was the big day, so to speak, for the Big Sit. With only 24 hours available for counting, some team members threw out sleeping bags on the platform at midnight to begin the count, and heard three species of owls as their reward. Some other team members assembled before dawn, for it is the first few hours of daylight when birds are most active and additions to the list come fast and furious. Rails began calling from the marsh at daybreak, and a variety of herons and other wading birds began to leave a large roost, requiring constant attention lest an uncommon species be missed in the large flocks passing by. Yet, our attention also had to be focused on the woodlands in the other direction, for a variety of songbird species would be needed to achieve a good list for the day. Cries of “Catbird!,” “Marsh Wren!,” “American Bittern!,” rang out, with each new species diverting our attention momentarily. Soon after, “Rose-breasted Grosbeak!” or “Tricolored Heron!” would be called out, perhaps even simultaneously. We had reached 60 species by 10:15 AM. As tends to be the case when birding, the pace slowed rapidly by late morning, allowing time for snacks



Watching the sun rise over a wetland is excellent compensation for a very early awakening.



Berlin Heck's skilled performance of the ideal afternoon Big Sit technique left the rest of us clamoring for lessons. Comfort is important, and is ably demonstrated here, but also note the binoculars in hand and the nearby spotting scope for examining any distant hawks that might suddenly appear on the horizon.

Continued from page 4

and other necessities. The afternoon proved long, warm, windy, and sleep-inducing, although an occasional addition to our list was made. A King Rail calling in the evening was the last bird of the day, yielding a record total of 76 species for the Red Slough Big Sit and a surprisingly good result for an inland location. Among all Big Sit locations in 2007, the record total was 115 species, with teams from Los Osos, California, and Cape May, New Jersey, tied for first place.

The Sutton Center thanks David Arbour for organizing the event and letting us participate in the fun, we thank Eric Beck for organizing the fund raising, we thank the contributors whose donations will help further the Center's mission, and we also thank the other team members who all contributed to our remarkable collective "Big Sit list." For more information about the Big Sit or to view results from other locations, visit www.birdwatchersdigest.com.



After a late night, an early rise, and a frenzied few hours of morning birding, the warm afternoon sun and slow afternoon birding managed to lull Eric Beck away from duty for a little while.

Species seen or heard on the October 14, 2007 Red Slough Big Sit:

1. Pied-billed Grebe *Podilymbus podiceps*
2. American White Pelican *Pelecanus erythrorhynchos*
3. Double-crested Cormorant *Phalacrocorax auritus*
4. Anhinga *Anhinga anhinga*
5. American Bittern *Botaurus lentiginosus*
6. Great Egret *Ardea alba*
7. Great Blue Heron *Ardea herodias*
8. Little Blue Heron *Egretta caerulea*
9. Tricolored Heron *Egretta tricolor*
10. Snowy Egret *Egretta thula*
11. Cattle Egret *Bubulcus ibis*
12. Green Heron *Butorides virescens*
13. Black-crowned Night-Heron *Nycticorax nycticorax*
14. Yellow-crowned Night-Heron *Nyctanassa violacea*
15. White Ibis *Eudocimus albus*
16. White-faced Ibis *Plegadis chihi*
17. Black Vulture *Coragyps atratus*
18. Turkey Vulture *Cathartes aura*
19. Black-bellied Whistling-Duck *Dendrocygna autumnalis*
20. Canada Goose *Branta canadensis*
21. Wood Duck *Aix sponsa*
22. Northern Pintail *Anas acuta*
23. Blue-winged Teal *Anas discors*
24. Osprey *Pandion haliaetus*
25. Northern Harrier *Circus cyaneus*
26. Cooper's Hawk *Accipiter cooperii*
27. Sharp-shinned Hawk *Accipiter striatus*
28. Broad-winged Hawk *Buteo platypterus*
29. Red-shouldered Hawk *Buteo lineatus*
30. Red-tailed Hawk *Buteo jamaicensis*
31. American Kestrel *Falco sparverius*
32. King Rail *Rallus elegans*
33. Virginia Rail *Rallus limicola*
34. Sora *Porzana carolina*
35. Common Moorhen *Gallinula chloropus*
36. American Coot *Fulica americana*
37. Greater Yellowlegs *Tringa melanoleuca*
38. Long-billed Dowitcher *Limnodromus scolopaceus*
39. Wilson's Snipe *Gallinago delicata*
40. Mourning Dove *Zenaida macroura*
41. Eastern Screech-Owl *Otus asio*
42. Great Horned Owl *Bubo virginianus*
43. Barred Owl *Strix varia*
44. Chimney Swift *Chaetura pelagica*
45. Belted Kingfisher *Ceryle alcyon*
46. Red-headed Woodpecker *Melanerpes erythrocephalus*
47. Red-bellied Woodpecker *Melanerpes carolinus*
48. Yellow-bellied Sapsucker *Sphyrapicus varius*
49. Downy Woodpecker *Picoides pubescens*
50. Northern Flicker *Colaptes auratus*
51. Pileated Woodpecker *Dryocopus pileatus*
52. Eastern Phoebe *Sayornis phoebe*
53. Loggerhead Shrike *Lanius ludovicianus*
54. Blue Jay *Cyanocitta cristata*
55. American Crow *Corvus brachyrhynchos*
56. Fish Crow *Corvus ossifragus*
57. Tree Swallow *Tachycineta bicolor*
58. Northern Rough-winged Swallow *Stelgidopteryx serripennis*
59. Barn Swallow *Hirundo rustica*
60. Tufted Titmouse *Baeolophus bicolor*
61. Carolina Wren *Thryothorus ludovicianus*
62. Marsh Wren *Cistothorus palustris*
63. Ruby-crowned Kinglet *Regulus calendula*
64. Gray Catbird *Dumetella carolinensis*
65. Brown Thrasher *Toxostoma rufum*
66. Orange-crowned Warbler *Vermivora celata*
67. Common Yellowthroat *Geothlypis trichas*
68. Lincoln's Sparrow *Melospiza lincolni*
69. Swamp Sparrow *Melospiza georgiana*
70. White-throated Sparrow *Zonotrichia albicollis*
71. Northern Cardinal *Cardinalis cardinalis*
72. Rose-breasted Grosbeak *Phaeucticus ludovicianus*
73. Indigo Bunting *Passerina cyanea*
74. Red-winged Blackbird *Agelaius phoeniceus*
75. Eastern Meadowlark *Sturnella magna*
76. Brown-headed Cowbird *Molothrus ater*

The Lesser Prairie-Chicken

—An Impending Conservation Crisis

by Michael A. Patten



Few species of birds are endemic to the continental United States. There is a magpie in California, a sparrow and a woodpecker in the piney woods of the Southeast, a crow and a chickadee more widespread in the Southeast, a duo of scrub-jays (one in California, one in Florida), a pair of rosy-finches in the mountainous West, a grackle and two sparrows in marshes of the Eastern Seaboard and Gulf Coast, and a couple of grouse. One of the grouse is the Gunnison Sage-Grouse (*Centrocercus minimus*) of Colorado and Utah, a species only recently described to science. The other is the Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*), a species that occurs only in the shortgrass prairie region of five states: Texas, New Mexico, Colorado, Kansas, and Oklahoma.

Harboring an endemic in one's borders brings both pride and responsibility. It is somehow heartening that through accident of geopolitical lines on a map a species is confined to only a particular circumscribed region. The species becomes "ours," and it brings folks from far afield to see "our" birds. But being ours also means we are responsible for the species' long-term well being. Like it or not, humans have had a huge and oft-times irreversibly negative impact on the planet's biodiversity and natural habitats. Such has happened in all places, in all countries. While true that some nations do better than others, it is also true that if one of our endemics is lost, we have no one to blame but ourselves. Indeed, the United States has already lost one endemic bird. The Carolina Parakeet (*Conuropsis carolinensis*) was confined to lowland forests of the Southeast. The last definite record of a wild individual was of a bird shot in Florida in 1904, and the last captive died in the Cincinnati Zoo—coincidentally and sadly the fabled home of the last Passenger Pigeon (*Ectopistes migratorius*)—in 1918. We cannot let so unconscionable an act happen again.

Yet we face this threat with the Lesser Prairie-Chicken. Formerly a widespread and common bird of the shortgrass prairie, this species has declined dramatically and continuously for a century or more. It is estimated that both the species' population size and its geographic range have shrunk by over ninety percent in that time. Causes long identified for the species downturn are headlined by the stock answers of habitat loss and fragmentation. These related threats, the former referring to outright conversion of suitable native habitat to an unsuitable alternative, the latter referring to the chopping up of suitable habitat into smaller and smaller bits, have been a key cause in population crashes of many species. Only land preservation, restoration, and wise management will stem the tide.

Once upon a time, over-harvesting was a cause of decline, but hunting now likely plays a negligible role in long-term population dynamics, in no small part because it is now tightly regulated or outlawed. Additional causes cited frequently include processes that alter habitat but do not convert it outright to something that is unsuitable. Such causes can include cattle grazing, herbicide application, and fire suppression. And it is possible that the vaunted Conservation Reserve Program has had a mixed impact depending on the type of vegetation planted in lieu of cultivating crops. While true that CRP is more valuable to birds than, say, a wheat field, it nonetheless appears that the Lesser Prairie-Chicken somewhat avoids certain types of CRP (e.g., Old World bluestem) but heavily uses other types of CRP (e.g., native-mix grassland).

As if habitat loss, fragmentation, degradation, and alteration were not enough to spell trouble, a major cause of population decline has been identified only recently, thanks to long-term field work and research of the Sutton Center. With extensive fencing of prairie to mark property boundaries or keep cattle in check, the Lesser Prairie-Chicken has paid again. Prairie-chickens fly fast and low, often only a meter or so above the ground. It only can be called bad luck that the height at which these birds fly coincides roughly with the height of a barbed-wire fence. Sadly, then, mortality has been elevated considerably as a result of fence collisions.

Whether the combination of these factors, to say nothing of altered predator communities that could impact adults and nests alike, is enough to doom the Lesser Prairie-Chicken to extinction will take time to see. We should not want to see it, of course, but with each new problem identified, a new set of solutions needs to be identified and implemented. Time is not kind in such circumstances. Indeed, with emerging threats of anthropogenic global climate change and a sharp increase in wind development, there is even more work to be done if we have any hope of saving this charismatic endemic of the shortgrass prairie.

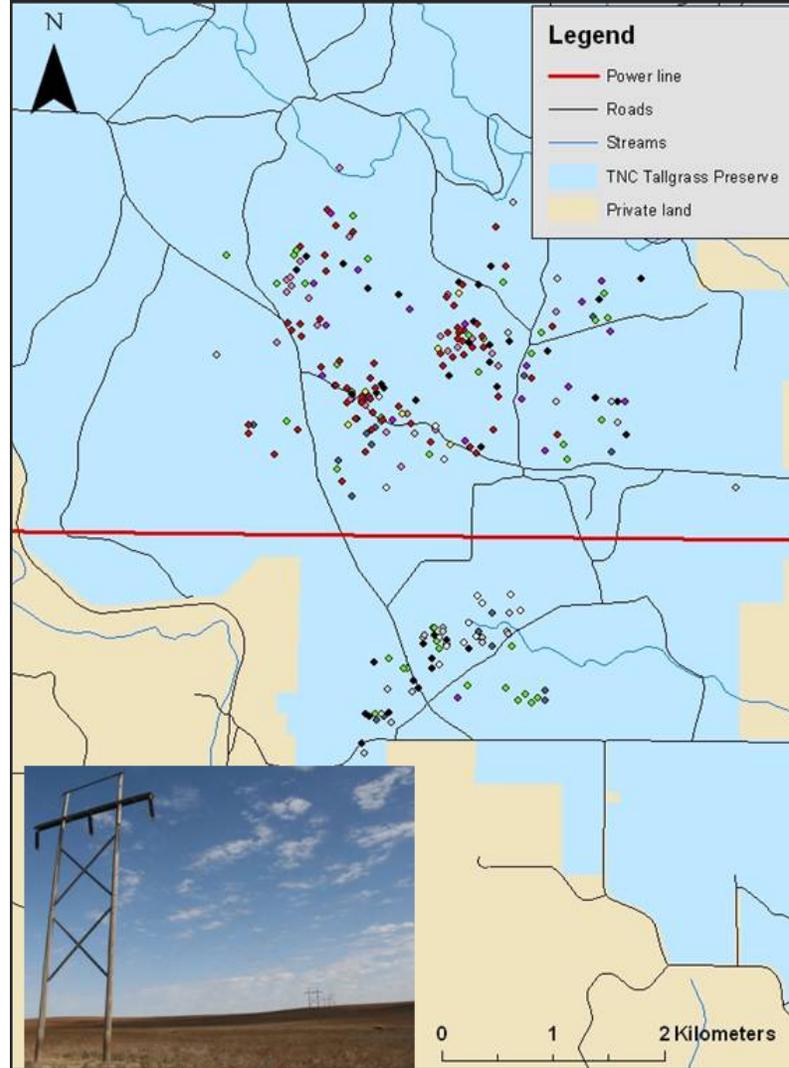
AVOIDANCE BUFFERS & PRAIRIE-CHICKENS

by Christy L. Pruett

Habitat fragmentation is thought to be a primary factor in the decline of prairie-chickens. When we think of fragmentation in prairie systems, we envision miles of irrigated cropland and the encroachment of trees, but rarely do we think about vertical structures as fragmentation agents. Limited research has shown that Lesser Prairie-Chickens appear to avoid tall structures such as buildings, natural gas compressor stations, and transmission lines. Structures could serve as avoidance buffers in that birds will not use apparently suitable habitat near tall objects, thus further fragmenting habitat. This is of real concern given the wind energy boom occurring in Oklahoma and other states where prairie-chickens are distributed. The reasons for avoidance are unknown, but one likely cause is that prairie-chickens see structures as perches for raptors, which are predators on these grouse.

At the Sutton Center, we have begun analyzing years of radio-telemetry data acquired for both Lesser and Greater Prairie-Chickens. We have found that Greater Prairie-Chickens on The Nature Conservancy's Tallgrass Prairie Preserve avoid a power line by at least 0.5 kilometers. Although birds appear to move under the line, they will not stay near these structures and do not use this apparently suitable habitat. It is important to note that this power line is much smaller than those currently proposed in western Oklahoma. Analysis of our data on Lesser Prairie-Chicken movements is ongoing, and we hope to document any avoidance patterns in this species as well.

The limited data available on the possible impacts of wind farms on birds is not encouraging, with avoidance behavior apparent in many grassland species. One small Lesser Prairie-Chicken lek that we had been studying was vacated after a wind farm was constructed within visual range. We hope to quantify the effects of wind energy development on prairie-chickens in the near future. Without this type of research, the possible negative impacts of unregulated development will likely be ignored.



Power line avoidance by Greater Prairie-Chickens on The Nature Conservancy's Tallgrass Prairie Preserve. Colored circles are different individuals (N = 9) that were tracked using radio-telemetry in 1999. Inset: Photo is of the power line pictured in red on the diagram; notice otherwise suitable habitat beneath and adjacent to line that was avoided by the birds. Photography by Dan Reinking.



2008

WILD BREW TURNS 10 !!!



This year, Wild Brew turns 10 years old! Our big event is growing up and getting even bigger!!!

Please plan to celebrate our birthday with us on Saturday, August 2, 2008, in our new and improved venue: the recently-opened Central Park Hall at the Expo Center. Here we will have more space to dance, better air conditioning (!), a VIP patrons' area, and lots and lots of great food and fine beers.

Please consider becoming a sponsor or a patron of this anniversary event and be forever associated with the 10th Annual Wild Brew! For more information call 918-595-0005 or the Wild Brew hotline at 918-699-8985! You can also visit our website at www.wildbrew.org and the Wild Brew Myspace page.

As in the past, you must be 21 or older to attend this event and tickets must be purchased prior to August 2. No tickets may be purchased at the door!

Wind Power and Lesser Prairie-Chickens

Why the growing concern?

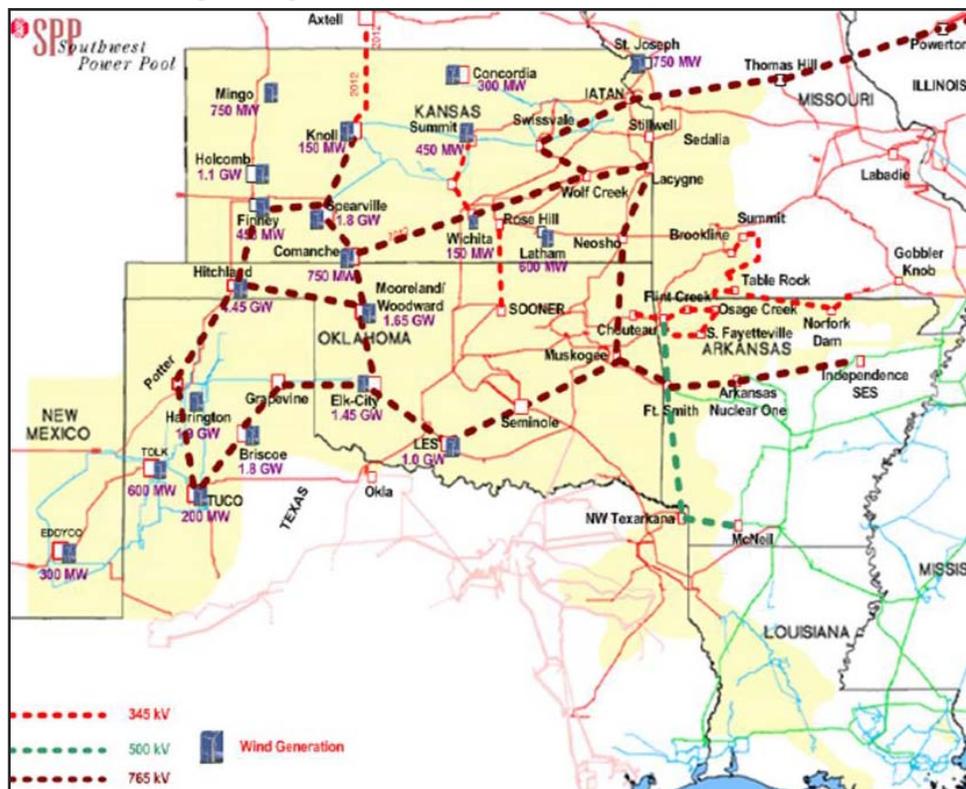
by Don H. Wolfe

In the Summer 2006 issue of The Sutton Newsletter, in an article entitled "From Green to Shades of Gray," we discussed the possible negative impact that the developing wind industry may have on Lesser Prairie-Chickens. In our current issue, articles both by Michael Patten and Christy Pruett further address some of these impacts. A lot has transpired since the 2006 article. First, additional wind power facilities are continuing to be built in northwestern Oklahoma. A few months ago, an energy company offered to purchase or lease a sizable portion of the Oklahoma Department of Wildlife Conservation's (ODWC) Cooper Wildlife Management Area in Harper County. While the monetary gain to the ODWC would have been substantial, ODWC and the Wildlife Conservation Commission (their governing board), expressed concerns about the possible impact on wildlife and sportsmen that utilize this public land. An amazing outcry of opposition from private citizens also made it clear that our public lands should not be compromised. After 4 months, the energy company withdrew their offer, realizing that the customers they serve also did not want to see public lands compromised this way. There is an important implication from this. Although we don't yet know the total impact that large-scale wind production may have on all wildlife, if ODWC had accepted the offer, they would essentially be endorsing such development, and making a silent statement that there are NOT wildlife concerns with this issue.

So why is wind development such a big issue? Northwestern Oklahoma has some of the best wind potential in the country. The location also allows for relatively easy transport of that power to major metropolitan areas to the south and east. The Southwest Power Pool projects that Oklahoma can be producing over 20,000 megawatts of wind power within the next 2 decades. The 260+ turbines in northwestern Oklahoma thus far have the capacity of 1 to 1.5 megawatts each, but many turbines in production now have the capacity of 2 to 3 megawatts. Still, in the next few years we may be seeing close to 10,000 turbines across northwestern OK and the OK Panhandle. The limiting factors right now are A) the manufacture of wind turbines cannot keep up with the demand, so there is a backlog of equipment, and B) the transmission system is not, at present, of the capacity needed to get the power from the source to the areas where it is needed. In recognition of this latter fact, the Southwest Power Pool is proposing adding new extra-high-voltage transmission lines across much of Oklahoma, Kansas, and Texas (see map below). Some of these new transmission lines will have the capacity of 765 kilovolts (more than twice the size of any lines currently in Oklahoma). Construction of the first of these new transmission lines will begin in 2009. Once the new transmission lines become available and the turbine equipment backlogs shorten, energy development in Oklahoma will likely rapidly approach the scale of the oil boom days.

How does all of this affect our conservation concerns for Lesser Prairie-Chickens? We know that prairie-chickens avoid many anthropogenic structures, especially tall structures. The main concern is that most of the remaining Lesser Prairie-Chicken occupied habitat is also where the highest wind potential occurs. We also know that collisions with obstacles, especially fences, are a common mortality cause for prairie-chickens. I think there can be little doubt that some displacement of prairie-chickens will happen, from not only the turbines and transmission lines, but also from the vehicular traffic needed to construct and maintain the equipment.

Planned extra high voltage lines. (Southwest Power Pool)



How does all of this affect our conservation concerns for Lesser Prairie-Chickens? We know that prairie-chickens avoid many anthropogenic structures, especially tall structures. The main concern is that most of the remaining Lesser Prairie-Chicken occupied habitat is also where the highest wind potential occurs. We also know that collisions with obstacles, especially fences, are a common mortality cause for prairie-chickens. I think there can be little doubt that some displacement of prairie-chickens will happen, from not only the turbines and transmission lines, but also from the vehicular traffic needed to construct and maintain the equipment.

All may not be doom and gloom, however. Several wind energy companies have at least verbally committed to undertaking mitigation efforts that may offset the negative impacts of both turbines and transmission lines within prairie-chicken range. We (Sutton Avian Research Center, University of Oklahoma), along with the U. S. Fish and Wildlife Service, the Oklahoma Department of Wildlife Conservation,

Continued on page 11

Nest Cam Follies

by M. Alan Jenkins

This year we purchased a smaller camera for our second year of peeking in on Bald Eagles nesting on the artificial platform constructed by OG&E when the eagles' former nest tree in Sooner Lake fell down. We mounted this camera below the crossbar so the eagles would only be about 5 feet away, turned it on, and enjoyed the view. The eagles rewarded us with an almost unheard of clutch of 4 eggs which we planned to watch hatch and grow from our vibrating recliners, sodas in hand, here at work. With last year's pole-mounted camera, 100-yards away from the nest, we would have two views of the nest. Simple, yeah? No, remember that Murphy is a Sutton volunteer, and his law prevails.

The whole process of getting the camera up to and mounted on the nest involved the unlikely combination of arrows, fishing line, and ascenders (small mechanical devices that will slide up a rope, but not down, and are used to ascend ropes.) Work on the nest camera had to be complete before egg-laying in January. The nest is in the water, so no ladder or bucket truck could get Executive Director Steve Sherrod up into the nest. To do this he shot an arrow over the nest but below the crossbar on an Oklahoma day (~~WINDY!~~) on his second try. The arrow was attached to strong fishing line and came down in the lake a few yards beyond the nest. I launched my kayak and retrieved the arrow and line. Ryan VanZant and Steve, in a small bass boat, attached the climbing rope to the line; I pulled the line and thereby the rope over the nest, then Steve made the exhausting climb up to the nest, over the nest (always the hardest part to avoid damaging the nest), and attached the camera to the underside of the perch pole. Murphy made it cold and windy that day, and Steve had to avoid losing any camera parts or tools with numbed fingers. Three hours later Steve attached the video cable to the pole on his gravity assisted way down. The cable was run through some protective water hose from the base of the nest to the shore. From there it would later be run up a pole the OG&E crews would place (requiring a pole truck to drill holes for the poles and place the poles, and a bulldozer to pull the pole truck out of the mud). From there the line would run along a steel cable to another pole and on to the hilltop pole. Atlas Computer technicians would connect the whole shebang after the pole placements. For the time being, the hard work of placing the camera on the nest was complete, we vainly thought. But, later that night it was realized that the line connection to the camera was not configured correctly. This necessitated an encore performance on an even colder day (with help from volunteer Steve Trent who saved the day by cutting a notch in an arrow which had lost its nock on the trip out). The final work on the nest-mounted camera was delayed by the Great Ice Storm of 2008 which occupied OG&E linemen for weeks.

After the camera connection was corrected, the poles and steel cable were placed, the electronics were up and running, and the dots connected, the signal went online. We had a super view of the nest cup; everything was copasetic...for 1.5 Murphy Moments, then the signal kept dropping in and out, and finally stopped altogether. A diagnosis of the system indicated that there was too much line for 12 volts to operate, so Vlad Sedova and Milos Milenkovic of Atlas Computers devised a 24-volt system that could go the distance and which was then stepped down to serve the 12-volt camera. That camera was finally operating while the eagles repaired the nest and laid the 4-egg clutch. We made many trips with Milos, Vlad, and Lewis Gordon to change equipment and get the pole-mounted camera going as well, but then the nest-mounted camera failed. In retrospect, so many things were malfunctioning it was speculated that perhaps the system had been struck by lightning. After changing out the camera twice, designing a new mount, and lots of greasy road food (it's a 2-hour trip one-way from Bartlesville), we had a picture. The only positive outcome from all of this year's work is that the camera now operating has a stabilized image system and a greater zoom capability. We hope that next year our dream of dual, year-round views of the Sooner Lake nest will be realized.

As I write this on May 2nd there are two young eagles in the nest about 6-7 weeks old. Owing to the failure of the nest-mounted camera we don't know what the fate of the other two eggs was.



Changes at the Sutton Center ...

by Steve K. Sherrod

Barn Gets Facelift

The Sutton Center started erecting a large aviary barn in 1985 and completed it in 1986. The building is 110 ft long by 72 ft wide and is divided into ten 20-ft wide “chambers” with an upstairs viewing hall utilizing one-way glass. It was originally built to house some 275 young Bald Eagles, twenty to sixty or so at a time, in annual increments from ages 6 weeks until 10 weeks or until they were placed at hack sites in preparation for release. In addition, we have bred in the structure Bald Eagles, Cape Vultures, Andean Condors, and myriad other birds. The barn was designed to have a half open but barred roof, so that the eaglets would be exposed to cold (down to zero F) and wet weather and thus “hardened” to the elements while fed remotely under our careful watch. That half open roof was good for the eagles but bad for the barn, and over some twenty plus years, the wooden room dividers that were exposed to the weather began to deteriorate.

With all the housing and commercial building that has been underway in Bartlesville during the past five years, it was hard to find a truly skilled carpenter to repair and modify our aviary barn as we wanted. In addition to repairing the room dividing walls, we needed the open half of the metal roof enclosed, the dirt-floored hall poured with concrete, and the outside windows screened and wired. Today we have to worry about avian malaria, West Nile virus, and potentially “bird” or avian flu, all diseases born by mosquito vectors. In addition, the natural habitat surrounding the Sutton Center is home for opossums, raccoons, bobcats, and myriad other threats that will eagerly invade the chambers after our captive birds and their food.

Fortunately our good friend, Steve Trent of Steve Trent Construction from Latham, Kansas, is a bird and environmental enthusiast as well as a master carpenter and craftsman. He took on the entire project by himself and completed it in fine style at a bargain price and in record time. The barn still holds our Bald and Golden Eagles used in the educational bird program. But, now it also has an “auditorium room” wherein the birds can be trained and where attendees at our annual picnic can see these birds in action and learn about some of their special adaptations. For now, we are using folding chairs for attendee seating, but we hope to eventually purchase or build bleachers. We owe Steve a debt of gratitude for the excellent job he has done!



Dan Reinking



Steve Sherrod

New Sutton Staffers Aboard

Our educational specialist, Cheryl Jackson, succumbed to homesickness for her native state of Delaware after two years working for the Sutton Center, and she has returned to the East Coast to run an environmental educational program back home. We had a going away party for Cheryl, and many Sutton staffers showed up to help Cheryl load her van for the trip back home. Jennifer Charles, who was interning prior to Cheryl’s departure, actually grew up in Bartlesville, likes the area and likes Sutton’s educational work with kids as well as working with birds. She has a degree from Texas State in Zoology, and she is a great addition to our staff and educational program.

Our grounds maintenance and quail raising specialist, Scott Kohnle, has also taken another job now that he has finally completed his teaching certificate. In his place, we have hired Robbie Hicks, again a Bartlesville-Dewey native who is attending Rogers State College in environmental biology. Robbie has also attended Tri-County Tech and achieved training in welding, something we find handy here at Sutton. So welcome aboard to both Jennifer and Robbie!



Dan Reinking



Dan Reinking



Continued from page 10

Bird Houses for Sutton Center

For his Eagle Scout project, eagle candidate Alden Schwantes has been constructing a series of bird houses, with materials donated by Overlees-Woods Lumber in Bartlesville, that he has mounted on Sutton Center property. They include houses for Wood Ducks, Eastern Screech-Owls, White-breasted Nuthatches, Tufted Titmice, Carolina Chickadees, Eastern Phoebes, and flying squirrels. While it may take a while before occupation, once any of the houses are utilized, we hope to mount lipstick cameras within and connect them to the internet so all can see what is going on inside. This should be an exciting project that will allow many viewers to share the nest life of some interesting species!



The Golden Touch

by Ryan A. VanZant

It's All About Birds! has added another member to its team of feathered educators. Midas, the male Golden Eagle will soon be taking flight in programs throughout the state, becoming the Sutton Center's largest flying bird. This Golden Eagle is a perfect fit at the Center, providing a new educational element to our shows.

Midas came to the Sutton Center from a rehabber in Gillette, Wyoming. The rehabber had received a call that a Golden Eagle was hanging around a neighborhood in the area and seemed a "little too friendly" for one of these generally aloof birds. When this call was investigated they found the eagle tearing apart a bicycle seat with his beak and talons. This was obviously strange behavior, and it was determined that the bird was illegally imprinted, that is, raised by people and therefore does not identify with his own kind. The only option was to trap the bird before it harmed itself or some human. The rehabber then set out to find a good home for the eagle with an education program so that a positive result could come from this unfortunate situation.

The Sutton Center fit the bill, and I was driving to Wyoming the next day to pick him up. The closest airport that could ship the bird from Gillette was nine and a half hours away from the rehab facility. So, we agreed to meet somewhere in the middle and Midas joined our flock.

This Eagle had never been trained but quickly got used to our routine here. Within two weeks he was flawlessly sitting on a perch at our F&M Bank Event, allowing patrons to stand right next to him to get their pictures taken. He now is being trained to fly from perch to perch, and at the time of this writing we are preparing him for his show debut at the annual Sutton Center Picnic.

We are very excited about the educational prospects that this beautiful eagle will provide. Soon he will be to the point in his training where he will be able to educate and inspire Oklahoma school children and adults alike, just as the rest of the *It's All About Birds!* feathered team continues to do on a regular basis.



Wind Energy (Continued from page 8)

The Nature Conservancy, and Oklahoma State University, are now attempting to identify the best mitigation efforts, not only where and how such conservation effort should occur, but also a site-specific prescription. Some examples of the efforts will include: conservation easements in areas considered vital for prairie-chicken connectivity, removal of eastern red cedar (which is invading our remaining prairies faster than the wind energy development), removal of all unnecessary fences and old oil-field equipment, and marking fences in critical areas to reduce collisions. Additionally, the wind industry seems willing to follow recommendations, at least to an extent, regarding where turbines and transmission lines will have the least impact. Today, the fate of the Lesser Prairie-Chicken lies partially with the state and federal entities mentioned above, but to a greater extent with the wind energy industry. We hope even more wind energy companies will undertake conservation efforts for prairie-chickens and other wildlife, and thus be able to more truly proclaim wind energy as "green energy."

G. M. Sutton Avian Research Center
P.O. Box 2007
Bartlesville, OK 74005
(918) 336-7778
(918) 336-BIRD
e-mail: GMSARC@aol.com
web site: www.suttoncenter.org

Non-Profit Organization
U.S. Postage Paid
Bartlesville, OK 74003
Permit #13



*A 501(c)3, non-profit, constituent organization of the
University of Oklahoma's College of Arts and Sciences and the
Oklahoma Biological Survey*



BOARD OF DIRECTORS

M. David Riggs, Chairman	Kate Iwata
H. Tom Sears, Treasurer	George H. Kamp, M.D.
Stephen S. Adams	Jean Little
Ellen G. Adelson	Robert E. Lorton III
Steve C. Alter	Carol A. McGraw
Barbara L. Bates	Jerry P. Parkhurst
Paul B. Bell Jr., Ph.D.	Harold C. Price
Sam P. Daniel	Gary D. Schnell, Ph.D.
David M. Delahay	Steve K. Sherrod, Ph.D.
Rebecca L. Dixon	Scott D. Thompson
Donald E. Eller	Caryn C. Vaughn, Ph.D.
Warren D. Harden	Senator Penny B. Williams
M. Lee Holcombe	

CHAIRMAN'S ADVISORY COUNCIL

Joseph H. Williams, Chairman	John S. Shackford
Robert E. Lorton	Richard J. Sherry
Wilma P. Mankiller	Jack D. Tyler, Ph.D.
Vesna Mihailovic, M.D.	Clayton M. White, Ph.D.
Gary L. Neal	

VOLUNTEERS

Rayné Bordon	Education Program
Noah Cannady	Education Program
Rhonda Cannady	Education Program
Bonnie Gall	Data Entry
Suzy Harris	Data Entry
Sally Jenkins	Various
Navigo.com	Web Site Hosting
Mark Peaden	Education Program
Rebecca Renfro	Education Program
Patricia Velte	Web Site Assistance

SUTTON CENTER STAFF

Steve K. Sherrod, Ph.D.	Executive Director
M. Alan Jenkins	Assistant Director
Michael A. Patten, Ph.D.	Director of Research
Dan L. Reinking	Senior Biologist
Don H. Wolfe	Senior Biologist
Karen A. Kilbourne	Managerial Associate
Christin L. Pruett, Ph.D.	Post-Doctoral Researcher
Margaret T. Nolan	Development Coordinator
Ryan A. VanZant	Education/Bird Trainer
Jennifer N. Charles	Environmental Educator
Robert J. Hicks	Grounds & Animal Care

SEASONAL STAFF

Eric Beck	Winter Bird Atlas
Kathy Dawson	Prairie-Chicken Study
Elizabeth Kissack	Education Program
Elizabeth Maupin	Education Program
Fumiko Sakoda	Prairie-Chicken Study
Candice Schamberger	Prairie-Chicken Study

