



# THE UNISON CALL

A Newsletter of the North American  
Crane Working Group

Vol.10, No.1, 1998

## ANNOUNCEMENTS

### **Platte Search Database Available**

*Gary Lingle*

Platte Search is a search-and-retrieval database program with bibliographic information on more than 1,500 Platte-related publications, reports, projects, and academic studies. The basin includes the North Platte, South Platte, Central Platte, and Lower Platte basins encompassing the states of Colorado, Nebraska, and Wyoming.

Sources such as Central Platte Natural Resources District, Central Nebraska Public Power and Irrigation District, Nebraska Public Power District, University of Nebraska libraries, Nebr. Dept. of Environmental Quality, and the Nebr. Natural Resources Commission were used to develop the database. The output can be a printed report, screen display, or text file. Keywords provide extremely fast retrieval, but any field can be searched. The program has a wide range of configuration options to best suit your needs.

*The database is available free of charge. Contact Gary Lingle at [glingle@unlvm.unl.edu](mailto:glingle@unlvm.unl.edu) or (308)236-1235 for your copy.*

### **WELCOME NEW MEMBERS...**

1997: Allan & Anita Beach of Cincinnati, OH; Joe Duff of Blackstock, Ontario; Wenrui Duan of Columbus, OH; Kenneth Dubke of Ooltewah, TN; Tracy Grazia of Gautier, MS; and Curtis Lovejoy of Kissimmee, FL.

1998: Sandra Ewart of Regina, Saskatchewan; Thomas Hoffman of Seattle, WA; Michael Kreger of Laurel, MD; and Mark Czaplewski of Grand Island, NE.

**Platte River Websites** - *Gary Lingle*

The Platte River: An Atlas of the Big Bend Region: <http://platteriver.unk.edu/>  
Platte Watershed Program: <http://ianrwww.unl.edu/ianr/pwp/>  
Platte River Ecology Study:  
<http://www.npsc.nbs.gov/resource/othrdata/platteco/platteco.htm>  
Platte River Ecosystem Resources & Management:  
<http://www.npsc.nbs.gov/resource/othrdata/platte2/platte2.htm>  
Breeding Birds of the Platte River Valley of Nebraska:  
<http://www.npsc.nbs.gov/resource/distr/birds/platte/platte.htm>  
Audubon's Rowe Sanctuary: <http://rip.physics.unk.edu/audubon/>  
Platte River Endangered Species Partnership: <http://www.platteriver.org/>  
Crane Meadows Nature Center: <http://www.cranemeadows.org/>  
Operation Crane Watch: <http://159.189.96.215/perm/cranemov/cranemov.htm>

*Webmaster's note: The preceding URL's were updated 18 Feb 99.*

## REGIONAL REPORTS

### MISSISSIPPI

After using 2-5 acre semi-permanent acclimation pens since 1981, we decided to borrow the recent model used with the Florida whoopers and put up small, plastic temporary pens placed in roost areas. Attempting to build a permanent chain link pen in this low wet soil proved difficult, even in a "dry" autumn. The original pens deteriorate in the acid soil in 3-6 years. We made a few adjustments to the new small roost pens and they worked well and will have some advantages such as cost, ease of building, and flexibility. However, we have very few areas of open water large enough to hold one, so we'll be constructing some ponds in the next few years. Two groups of 7 cranes captive-reared at Audubon were brought to the refuge in January. One group was acclimated and released at the pond at east Grabill in the Gautier Unit; the other 7 from a new man-made pond in the middle of the Ocean Springs Crop Unit. Six from each survive to date.

In one of the more interesting and memorable experiences here, we were fortunate to host Indian Master Bird Trapper Ah Hussain and his son Mehboob for a week in late February. The idea for the visit came from conversations with Mini Nagendran about catching cranes. She had worked with Hussain in India with the Siberian cranes. After 3-4 years and much work by Mini and Dave Ferguson in FWS International Affairs, Hussain and son arrived in the U.S. and, accompanied by Mini for most of the trip, they visited Hawaii, California, Texas, here, ICF, and the D.C. area. Mr. Hussain has caught over 375 species of birds with 100 methods, and it was pure magic watching him and son work. He is the last of a tribe of bird catchers from NE India and was "discovered" decades ago by the venerable Salim Ah and has worked seasonally for ornithologists since, catching birds for studies. Here, he introduced us to the clap trap, nooseline, and snake trap. At the end of that wonderful week, we had caught about 10% of the crane population and our methods for the most part were rendered obsolete by ancient, inexpensive, low-impact, techniques.

In a spring not near as wet as 1997, 19 pairs have had 21 active nests so far. More renests are anticipated. There were at least 3 new pairs, including 1 nesting for the first time in Fontainebleau since 1977, and at least 2 new territories. Hatchability has been good compared to historic means, but still very few chicks survive past 15-20 days. In a pilot chick mortality study with Patuxent, Glenn Olsen implanted small radios into 4 chicks. Up to 3-4 more may be radio-equipped by end of July. We hope to expand the study for the next 2 years for a Ph.D. project.

A HY93 captive-reared bird found emaciated in September, probably due to mycotoxicosis, placed in rehab pen, re-released in January in Gautier Unit, relocated back to Ocean Springs Unit, has found a mate, and has nested.

As of July 19, Joe Hardy, Manager of the Mississippi Sandhill Crane NWR for the last 10+ years will retire from the Fish and Wildlife Service and move back to the Tennessee hills where he was raised and where he will work for the state Forestry Department. Joe has been easily the longest serving manager of this refuge and has overseen many important projects, programs, and changes in personnel. He has always been a fan and champion of the cranes. THANK YOU JOE. Hope it is cooler up in those hills.

*Scott Hereford, Gautier, MS*

## **FLORIDA**

This year has been one of the worst years we have experienced. We released 22 cranes this year and as of today there are only 8 still alive. Again this year predation, primarily bobcats, was the major cause of mortality. Why mortality was higher this year than we have seen before is not clear. We had a mild winter and early summer which may have increased bobcat activity during the release period. Late spring and early summer have always been times of high bobcat activity, and for that reason we have avoided releasing cranes after middle March. This year the peak in bobcat activity may have been a month or so earlier and occurred just as the 2 groups of Patuxent birds were being released. Whatever the reason this has been a very disappointing year for new releases.

Another unusual event occurred this year. For the first time since whooping cranes have been released in Florida we noticed birds that were flightless due to molt. Initially several birds that were approaching their third birthday were rendered flightless with the simultaneous molting of most, if not all, primary and secondary flight feathers. Additionally birds in other age classes also became flightless. We had been looking for flightless individuals since the second year of the study since this simultaneous flight feather molt occurs regularly in captive birds, but until now we had seen no flightless birds. Unfortunately there was some mortality that occurred among these flightless individuals which contributed to the unusually high losses so far this year.

On a more positive note, there were 5 pairs of whooping cranes that established territories and made, at least, a preliminary nest structure between January and April. In 1 pair the

female was not yet 3 years old. All this seems to indicate that if the birds can survive there is a good evidence they will form pair bonds and initiate nesting.

We have 58-60 whooping cranes in Florida as of this writing.

*Steve Nesbitt, Gainesville, FL*

## **CANADA**

**Wood Buffalo Whooping Cranes.-** Water conditions on the breeding area are about average. There has been little rain this spring but with average snowfall over the winter and good water conditions going into the fall, the marshes are holding their own. With virtually no rain in the last 7 weeks, the uplands are tinder dry. Lightning fires are beginning to show up in the nesting area. To date 48 nests have been discovered and chicks are in the process of hatching, with 42 seen so far.

*Brian Johns, Saskatoon, Saskatchewan*

## **TEXAS**

### **WHOOPING CRANES AT ARANSAS DURING THE 1997-98 WINTER**

Twenty-one charter flights with a total air time of 126 hours were the primary method of studying the whooping crane population. The peak population equaled 152 white-plumaged birds (98 adults and 54 subadults) and a record 30 juveniles (including 1 set of twins) totalling 182 whooping cranes during the 1997-98 winter. This record number is probably the peak population this century and was an increase of 22 over the 160 present during the 1996-97 winter. With the addition of 30 juveniles that reached the wintering grounds, the flock could have reached 190 if survival between spring and fall had been 100%. The peak population of 182 thus represented a loss of 8 birds (5% of the spring population) between spring and fall, 1997. One adult female was not found and presumed dead on aerial surveys in March 1998. This was the only loss during the 1997-98 winter. An estimated 181 whoopers migrated north in the spring of 1998.

Adult cranes and potential pairs occupied 49 winter territories. This number corresponds closely with the 50 or 51 nesting pairs present in Wood Buffalo National Park in 1997. Cranes were generally found on the refuge (84), Lamar (6), San Jose Island (27), Matagorda Island (39), and Welder Flats (25). One whooping crane juvenile wintered with sandhills about 90 miles northeast of the refuge in Brazoria County, Texas. Record highs were recorded for the Refuge (91), Lamar Peninsula (11), and Welder Flats (31). Forty cranes were color-banded, representing 22% of the population.

Plans were finalized on placing cement mats for erosion protection this summer as part of the \$2.8 million Section 216 funding to the Corps of Engineers appropriated by Congress. Areas protected will be on the Refuge and along the Victoria Barge Canal at Welder

Flats. A setback occurred when no monies were placed in the President's proposed budget in FY 99. We will hope for Congressional add-ons.

Public relation highlights included the Whooping Crane and Other Birds Festival held at Port Aransas February 27-29, and the filming by Jack Hanna Productions of a five-minute segment aired nationally on the cranes at Aransas.

### **SPRING MIGRATION - 1998**

A whooping crane subadult was confirmed on the Platte River on February 15 and stayed through March. This was the second earliest sighting ever for Nebraska. The bird was on the exact same section of river where a subadult had been present last winter starting March 9, 1997, and presumably was the same bird. Another subadult was sighted in Meade, Kansas, on February 19 and presumably moved to the Platte on March 23. The juvenile that wintered in Brazoria County, Texas, was sighted on the Platte River March 27-28.

The migration proceeded about one week ahead of average this spring. The largest departure is believed to have occurred April 5. Estimates of crane numbers at Aransas were as follows:

March 26:  $132+28=162$   
April 2:  $116+23=139$   
April 9:  $32+2=34$   
April 16:  $5 + 1 = 6$   
April 30:  $0$

Weekly reports were sent to Journey North and entered on the Internet by this educational group in Minneapolis. In addition, winter updates on the whoopers were entered on a home page for the Audubon Outdoor Club in Corpus Christi thanks to member Patty Beasley. Both groups answered many crane questions that came in electronically, with the few questions needing my input forwarded to Aransas.

*Tom Stehn, Aransas, TX*

### **CAPTIVE FLOCKS**

1998 has been a productive year for the captive flocks of North American cranes. At Patuxent Wildlife Research Center, Laurel, Maryland, we have produced 55 whooping crane eggs and hatched 30 of these. Of the 55 eggs, 35 were fertile, 14 known infertile, and 4 were broken. Twenty-seven chicks are surviving and growing older each day. Ten pairs produced the eggs this year. Also, past release records for our whooping cranes in Florida have shown an 85% survival rate for whooping cranes from hatch years 1994 and 1995 that received pond exposure preceding release versus only a 42% survival rate for those whooping cranes not receiving pond exposure. Therefore, this year we are making an effort to see that all release birds receive pond exposure.

The International Crane Foundation, Baraboo, Wisconsin has had 22 eggs laid by 6 pairs; 11 eggs are fertile, 6 chicks have hatched so far and 4 are alive. Two former egg producing females didn't lay this year because they have new mates. Two new females did lay, 1 producing 2 eggs and broke both, while the other laid a single egg. In addition to the whooping crane release program, ICF is participating in international releases and has sent 5 fertile red-crowned and 1 fertile white-naped crane eggs to the Khinganski Nature Reserve in eastern Russia for a release program there. Nine fertile Siberian crane eggs went to the Oka Nature Reserve in Russia for a release program in western Siberia, and 2 Siberian crane eggs went to Vogelpark Walsrdoe, also for eventual release in Siberia.

The Calgary Zoo, Calgary, Alberta has had a total of 10 whooping crane eggs laid this year, 2 were fertile, 4 infertile, and 4 broken with fertility undetermined. In addition, they received 2 eggs from Wood Buffalo National Park that were fertile. One chick died in the hatching process. One chick is being parent-reared and 2 are being costumed-reared.

The Audubon Center for Research of Endangered Species, New Orleans, Louisiana, has 9 egg-laying Mississippi sandhill cranes, with 55 eggs produced. They have 24 fertile eggs, plus have received 5 eggs from White Oak Conservation Center, Yulee, Florida, of which 2 were fertile. Eighteen chicks have hatched and 17 survive at this writing.

I wish to thank Matt Kinloch, Jonathan Male, Scott Swengel, Dwight Knapik, and Dr. Susan K. Mikota for the information used in preparing this report.

*Glenn Olsen, Laurel, MD*

**San Antonio Zoo.** - Two pairs of whooping cranes are presently being held on exhibit at the zoo. It was decided last year by the Recovery Team to utilize AI this season with one pair, Wanda and Chesty, and give Tarzan and Jane another season to breed naturally. Wanda laid her first egg of the season on March 11. After reviewing our tapes it was evident that Chesty was attempting to copulate with Wanda but with her arthritis she was unable to support him. So in our efforts to strip semen from him and his attempts to copulate naturally with her, we were only successful in collecting semen from him several times. Semen was shipped to us from Patuxent on seven different occasions but we were still unsuccessful in covering any of the five eggs Wanda laid this season. Tarzan and Jane produced five eggs this season but all were infertile. - *Jeff Rouse, San Antonio, TX*

## **ABOUT OUR MEMBERS**

### **Board Member has New Position**

After serving 15 years as the Avian Ecologist for the Platte River Whooping Crane Trust, Gary Lingle's position was abruptly and involuntarily terminated a year ago. He is now employed by the University of Nebraska as the Platte Watershed Program (PWP) Coordinator. The PWP was created in 1994 through a partnership between the University

of Nebraska Cooperative Extension, the Water Center/Environmental Programs at UNL, and the U.S. Environmental Protection Agency, Region VII. The mission of the PWP is to identify and address the information, education and research needs of stakeholders while developing cooperative partnerships to assess the management needs of the watershed within the states of Colorado, Wyoming, and Nebraska. To achieve this end, PWP sponsors the Platte River Basin Ecosystem Symposium, works with the tri-state Cooperative Agreement (see article), publishes and distributes newsletters and other educational materials, and serves as liaison between agencies, academia, private organizations, and the general public. Platte River issues are the mainstay of this program and Gary is no stranger to them.

He will spending be 4-6 days a month in Lincoln, telephone (402)472-0891; however his "home" address is: University of Nebraska Cooperative Extension, Buffalo County, 1400 E. 34th St., Kearney, NE 68847-3998. His telephone number there is: (308)236-1235; FAX: (308)234-6319; E: *glingl@unlvm.uni.edu*.

## **CRANE RESEARCH**

### **SPRING STAGING ECOLOGY OF SANDHILL CRANES IN THE PLATTE RIVER VALLEY OF NEBRASKA AND ITS RELATION TO OTHER PARTS OF THE ANNUAL CYCLE**

*Gary Krapu*

Staff at the Northern Prairie Wildlife Research Center (NPWRC) measured part of the estimated 2,000 sandhill cranes killed by a March blizzard in the Platte Valley in 1996 to assess whether capacity of staging cranes to store fat has declined from the 1970's. Results, while potentially not representative of the population because of cause of death, suggested that daily rate of fat gain may have declined sharply from the 1970's when corn was present in excess of crane energy needs. Thus, an investigation was begun in November 1997 and will continue through 2001 examining the role of the Platte Valley to the midcontinent sandhill crane population. The study is focusing on the magnitude of change in fat storage rate, underlying causes for the change, how staging behavior of cranes has changed since 1978-79 when the last studies were conducted, and potential implications concerning energy needs of cranes for migration and reproduction. The sandhill crane study is being undertaken as part of a larger Platte River ecosystem initiative being funded by the U.S. Geological Survey. Partners in the crane research include the U.S. Fish and Wildlife Service, the Nebraska Game and Parks Commission, The Platte River Trust, and The National Audubon Society.

A cooperative agreement signed on 2 July 1997 by the governors of Nebraska, Wyoming, Colorado, and the Secretary of Interior approved a plan for long-term restoration and management of habitats for endangered waterbirds in the Central Platte River Valley. This plan offers potential major improvements in habitat not only for whooping cranes stopping at the Platte but also the midcontinent population of sandhill cranes. Results from the current study will be used to produce a mathematical model capable of assessing number of sandhill crane use-days that can be supported under current and alternative

land uses. A long-term goal has been set of restoring or otherwise conserving 29,000 acres of habitat in the Platte Valley for cranes and other species of migratory birds.

Beyond establishing current nutrient storage patterns in the Central Platte River Valley and factors responsible, a need exists to better define the relationship of crane staging in Nebraska to other parts of the annual cycle. In addition, several other major questions have surfaced concerning the midcontinent population not directly linked to Platte River issues. Thus, the Migratory Shore and Upland Game Bird Committee of the Central Management Unit is working with Gary Krapu to secure adequate funding for a large scale satellite telemetry study to be conducted in conjunction with Platte River studies starting in 1999 and continuing through 2001. Pilot work for this study was begun in 1998 when 5 cranes were captured and satellite transmitters attached at the Platte. The locations of the satellite-linked cranes have been monitored since leaving the Platte in April. These radio-marked cranes now are on breeding grounds extending from northeastern Siberia to the west side of Hudson Bay and ranging southward from east-central Saskatchewan to eastern Manitoba near Lake Winnipeg. By late July, NPWRC plans to have the satellite-monitored cranes featured on its home page (<http://www.npwrc.usgs.gov>) with updates daily as new information comes available.

## **UPDATE ON THE TRUCKING MIGRATION PROJECT**

*David Ellis*

*A brief overview:* In 1995, 10 cranes were led south from northern Arizona behind a truck and only 1 bird died (powerline collision). The birds wintered in a pen at the Buenos Aires National Wildlife Refuge on the Mexican border. They were very tame in spring 1996 and did not fly north when given limited opportunities to go north on their own. Then, they (9 birds) were trucked to our preferred summering area and released. Six survived until their marsh dried up when 2 died in a short time (probably due to coyotes). Four survivors did not seem to know to fly south in October 1996, and when "jump-started", they flew south but not along the "taught" route. Further, they were too tame to remain in the wild. We caged them until spring.

Come spring 1997, we released them at the Buenos Aires NWR again. Because they now knew how to avoid predators, this time we abandoned them to fend for themselves. On a strong south wind (about 1 April), they flew 80 miles north and lit right on course (but also on a golf course). So we moved them to a novel location (near, but not on, the route) and probably confused them because their next move was to fly 72 miles east and into a Federal Penitentiary. The convicts loved them, but they (the cranes) have not been seen since.

The 1996 birds fared better. We led 12 south and 2 died on powerlines. Fearing the birds would be too tame if penned for the winter, we released them (plus 2 juvenile delinquents) with a wild flock half way down route (Gila Bend). The release was something of a pioneering experiment, so I interrupt this terse narrative to summarize that release.

Past experience in several projects has shown that cranes abruptly released without acclimation to their new environment died at unacceptably high rates. As a result, for the past 15 years, the conservation community has shifted toward the gentle or gradual release of captive-reared cranes. But at northern or temperate latitudes, there was not enough time (one month recommended) for captive cranes to acclimate to the wild before their wild flock mates departed for the south. Our November/December release at Gila Bend, Arizona, opens the door for success with extremely abrupt releases. There, the 12 cranes from our 1996 trucking experiment were released one-by-one into the roosting pond of wild cranes. The results were that the individual cranes immediately integrated with wild birds. Despite hungry coyotes and Mexican braseros, all 12 cranes survived the winter and all were unapproachable by humans until the wild cranes departed for their summering area. The difference between this technique and other abrupt releases (and even gentle releases) was that elsewhere groups of naive birds were released to fend for themselves in a predator-rich environment, whereas here, naive birds were released 1 or 2 at a time so they were anxious to socialize immediately with educated wild cranes. The implications for migratory and nonmigratory release of many species are far reaching.

Now back to our 1996 trucking birds. When spring 1997 came, we feared our cranes would go, not to northern Arizona, but to Oregon (with the wild flock), so we caught 4 and left the others free as a test. When the wild cranes left, only 1 of our birds disappeared: we were most relieved. Then on 11-12 March, 3 of the 1996 birds flew to Sedona (ca 130 miles), and the next morning they flew farther north a few days later; a heavy snow hit the high country and the three came back south to the Gila River. Later that spring, all survivors still in the wild flew north on their own and commenced wandering the region around Prescott-Flagstaff. By late May, all had been convinced to stay at our preferred marsh. They spent the summer without any supplemental food and come fall, 7 survived. The lake dried up again and 3 disappeared (no PTT), but in a few weeks, we were gratified to find them on the wintering ground by Gila Bend. The 4 remaining birds headed south in a big storm and were found 120 miles off course to the east. We returned them, not to the marsh but to the actual start of the migration route (ca 30 miles away). They then flew south 39 miles and waited several weeks at a mid-elevation site that could serve as a wintering area, but by 18 November, the PTT bird had flown to our preferred wintering site at Gila Bend. This week we hope to determine if his 3 flock mates are with him.

*Editor's note: This article was submitted in February. At the time when this newsletter was being compiled, Dave Ellis was unavailable to provide a recent update.*

## NEWS

### **Cooperative Agreement Now a Year Old - Gary Lingle**

The *Cooperative Agreement for Platte River Research and Other Efforts Relating to Endangered Species Habitats Along the Central Platte River, Nebraska*, was a year old on July 1. This landmark agreement between Nebraska, Wyoming, Colorado, and the Department of Interior has achieved many of the milestones set forth in the founding

document. The agreement calls for the protection of 29,000 acres of habitat between Lexington and Chapman plus an increase of 400,000 acre-feet of water annually at Grand Island. Irrigators are particularly concerned about future water supplies available for irrigation as evidenced at the North Platte River Basin Water Policy Conference in Scottsbluff last March. Where this water may come from is not clear at present; however, a study has been initiated to address this issue.

Dr. Dale Strickland of Cheyenne, Wyoming, was hired as the Executive Director of the Governance Committee in April. Dr. Strickland brings a wealth of experience in wildlife management/research issues and policy matters to the table. He worked for the Wyoming Game and Fish Department for 16 years where he supervised a staff of 130 biologists and most recently has worked as a private consultant on projects taking him from Alaska to Florida. His expertise and diplomacy will undoubtedly be taxed as the Cooperative Agreement process unfolds. His address is: WEST, Inc., 2003 Central Avenue, Cheyenne, WY 82001; phone: 307-634-1756; email: [dstrickland@west-inc.com](mailto:dstrickland@west-inc.com).

A description of the Cooperative Agreement and a list of key contacts for the various committees may be found in the publication NebFacts 98-375 (available from Gary Lingle). The Bureau of Reclamation also maintains a website ([www.usbr.gov/platte](http://www.usbr.gov/platte)) which contains general information and upcoming meeting dates. You can be placed on the federal mailing list by contacting: Platte River EIS Office, POB 25007, PL-100, Denver, CO 80225-0007; telephone: 303-445-2096 or the Bureau 5 website. You can be placed on the state mailing list by contacting: Laurie Fredrick, POB 94876, Lincoln, NE 68509; telephone: 402-471-2081; email: [fredrick@nrcdec.nrc.state.ne.us](mailto:fredrick@nrcdec.nrc.state.ne.us)

### **Platte Ecosystem Symposium a Success - Gary Lingle**

Over 130 people attended the Ninth Platte River Basin Ecosystem Symposium held in Kearney, Nebraska, last February 24-25. The weather cooperated as participants hailed from throughout Nebraska, Colorado, Wyoming, Missouri, North Dakota, South Dakota, Minnesota, Arizona, and Texas. Five posters and 24 papers were presented. Highlights of the Symposium included a field trip to a nearby Nature Conservancy (TNC) preserve to observe a unique red cedar clearing operation, an unveiling of the latest findings of two major socio-economic studies, the announcement of the discovery of a new species of caddisfly, and a preview of the U.S. Geological Survey's (USGS) Platte River Ecosystem Project.

TNC staff led the tour to their Speidell Tract where a massive tree-clearing effort was taking place. Hundreds of acres of trees were being cleared in an effort to replace the existing forest with a prairie suitable for cranes and grassland birds. The cedars were trimmed and the logs hauled to a processor where they were chipped and sold primarily as pet bedding. TNC allowed the operator to remove the trees at no cost in exchange for having their land cleared. The economics of this venture were uncertain; however, this could potentially lead to a new industry within the state. It was the first operation of its kind on such a large scale.

Participants were astonished to learn that crane-watchers contributed \$30 to \$53 million to the local economy in 1996! Ted Eubanks presented his findings which examined the impact of nature-related recreation in the middle Platte region. His results closely parallel Gary Lingle's 1991 findings where he estimated a \$27 to \$40 million economic impact (vindication is sweet!!). John Allen related the results of his socio-economic study. Interestingly, he found that official attitudes toward Platte River resources often differed from personal attitudes. For example, a person speaking on behalf of a hydropower/irrigation company may rank the importance of the river as producing hydropower and providing irrigation water as first, but while speaking as an individual, that person may rank aesthetics or recreation as the most important.

A study funded by the EPA uncovered a species of caddisfly new to science! Researchers discovered the creature on a wet meadow near Grand Island. It belongs to the genus *Ironoquia* (family Limnephilidae) and marks a significant westward extension of this group in North America.

USGS described a number of studies they are kicking off this year as part of their Platte River Ecosystem Project. Topics ranging from the staging ecology of geese and cranes to the geologic evolution of the Platte River will be examined under this ambitious undertaking which will span the next several years. Results from these studies will be forthcoming in future symposia.

Participants look forward to next year's Symposium which will mark its tenth anniversary! Dates and location will be available this fall. Details will be announced on the Platte Watershed Program website ([www.unl.edu/ianr/pwp](http://www.unl.edu/ianr/pwp)) as soon as possible. The Proceedings of the Ninth Symposium will be available on the web or by calling Gary Lingle at (308)236-1235 for your free copy.