**GEE WHIZ! ICF HATCHES A WHOOPER**

by George Archibald, ICF Director

Last year was not an encouraging year for Whooping Crane conservationists. Only two chicks survived to arrive at the traditional wintering ground on the coast of Texas, no Whooper chicks were reared at Sandhills in Idaho, and only one chick was produced in captivity at the Patuxent Wildlife Research Center in Maryland. Several adult birds were lost over the year, and the annual December census fell from around 120 in 1980 to 105 in 1981. Tex, the lone female Whooper at ICF, was one of those precious few.

As many ICF members know, Tex is imprinted on humans rather than on cranes. She batted at the San Antonio Zoo in Texas in 1967, and had health problems that necessitated hand-rearing. She did not meet another Whooper until she was transferred to the U.S. Fish and Wildlife Service's Patuxent Center as a subadult.

Despite Patuxent's years of effort to pair Tex with a male Whooping Crane, she never laid a single egg. She preferred displaying to her human keepers rather than to her handsome mate Carrot.

In 1978 ICF proposed that Tex be sent to Baraboo. Patuxent agreed — accepting my offer to try and develop a pair bond with her, perform the spring courtship dancing, and induce her to lay eggs fertilized by artificial insemination.

I moved in with Tex for several months in 1976, and established a firm pair bond. During those first eventful weeks together, I learned to wake to an unusual alarm clock — Tex blasting 110-decibel calls beside my bed at dawn's first light.

The next spring I danced with Tex frequently and she laid the first egg of her life, at age 10. Unfortunately, the egg was infertile. We tried again the next spring and produced a fertile egg, but the chick died just before hatching. In 1979 Tex's egg was shell-shocked and broke.

I was too busy to spend the required hours with Tex the following two years, so Mr. Yoshimatsu Shigeta danced with Tex in 1980. Unfortunately, she

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Breeding Siberians: Lights, Cameras, Action
by Scott Freeman,
Education Coordinator

For years the formula for breeding Siberian Cranes eluded ICF: Siberians - the most endangered of all cranes - had never been bred in captivity. Producing a Siberian chick because one of the most involved breeding challenges ICF has ever overcome.

The first breeding experiment we tried used lights. During the spring of 1976 we turned floodlights on in the Siberian pens to extend their photoperiod, eventually giving the birds 22 hours of light. We were trying to simulate the day lengths of their arctic breeding grounds, and it worked. Our only female, "Puffy", came into breeding condition for the first time and laid a double egg. She didn't lay fertile eggs, though, because one 70-year-old male, Wolf, wasn't doing his part.

Then Tillman, a younger male, arrived from the Vogelpark Walsrode in West Germany in 1979, and fertilized four eggs the following spring. We tried to incubate the eggs artificially, but all the eggs died. Finally, in 1981 we incubated the Siberian eggs undernest foster- parent Sandhill Cranes. The cranes' incubation techniques worked, and the last piece was in the puzzle.

Dushenka, the first Siberian Crane bred in captivity, broke through its shell on June 4th, 1981. Within a few hours after hatching, Dushenka was likely the most photographed crane alive.

We had lights in 1976, cameras in 1981, and action in 1982. Four more Siberian Crane chicks have hatched this season, and all are growing strong. Years of effort and international cooperation are finally paying off.

The four Siberians in the Class of '82 were all fertilized by artificial insemination (AI), incubated undernest Sandhill Cranes, and hatched with help. Through AI, Tillman was the father of one and Wolf the father of three.

The incubation undernest Sandhill Cranes went well for all the Siberian eggs. The four groups at ICF were re-tested this spring. The incubating pairs of Sandhill Cranes were not disturbed by people going by, and all sat very tight. Only one of the five fertile eggs failed during incubation.

Actually hatching the Siberians, though, was more of a problem. All four chicks had to be helped through at least one stage of the hatching process. We actually had to make the initial "hatch" hole in one egg, and all four chicks made so much progress in breaking out on their own that we had to crack some of the shell away manually.

All made it safely through the hatching sequence, though, and ICF Director George Archibald christened each chick. The names were inspired by ICF's global conservation efforts:

* Gandhi, hatched May 13th, was named for India's Prime Minister Indira Gandhi, who has taken a personal interest in the conservation of Siberian Cranes.

* Poyang, hatched May 16th and was named after the wetland complex in China where the largest remaining flock of wild Siberians spends the winter.

* Ramsar was out of the egg on May 22nd, and named for the city in Iran where an international wetland protection agreement was signed.

* Sorokin, the final chick of the season, hatched on June 8th and is the namesake of Soviet crane specialist Sasa Sorokin.

All four birds are being reared in complete visual isolation from people, with the help of a crane puppet. Gandhi will be in an enclosure behind one-way glass for three months. Ramsar and Poyang will be isolated for two months, and Sorokin for one month. All the birds have learned to feed and drink from the bill of a crane puppet - a technique we tested last year with Stanley Crane chicks.

We're using the isolation techniques on the Siberian chicks because they are extremely aggressive, and therefore difficult to hand feed. By experimenting with different isolation times, we also hope to get an idea of the minimum isolation period necessary to produce a "wild" chick.

Gandhi, Poyang, Ramsar, and Sorokin have made 1982 a banner year in ICF's captive breeding effort.

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From the Daily Reports
by Michael Putnam,
Supervising Aviculturist

Editor's note: ICF's aviculturists record all events and observations concerning the captive cranes on daily reports. Here are a few excerpts from an eventful spring.

6 April: Ronnie, a young White-naped Crane, has hot and swollen hock (ankle) joint. Treated by injecting a 10% fenbendazole solution into the affected joint. He also receives 1.0 ml injection of gentamicin in the breast muscle. We wrap the hock joint for support. Within four days he shows improvement. A week later he injures it again and is treated once more. On 24 April he was doing well.

20 April: began artificially inseminating Tex with fresh semen shipped in from the Patuxent Wildlife Research Center. First long distance insemination successfully performed with cranes.

27 April: candled first two Siberian eggs of season; both fertile.

2 May: felt eggs in Tex's ovaries at noon. 3:00 p.m. following day she lays the egg. Sari, a yearling Eastern Sarus Crane, was found with a broken upper mandible. Aviculturist Rich Breier and Sue Rogers splinted the bill. On 4 May Dr. Stewart Taylor and Marge Lopez reset the bill using a different method. They drilled three stainless steel pins perpendicularly through the distal (flat) and proximal (near) portions of the broken break. They then created a frame by cementing the ends of the pins to rods running parallel to the beak. The bill was thus held rigidly by a lightweight external frame. The frame also eliminated the need to wrap the break, which sometimes causes infections. They removed the frame two months later by cutting off the connecting rods and pulling out the pins. Beak healed.

13-21 May: our first three Siberians for 1982 hatched during this period: Gandhi (13 May), Poyang (16 May), and Ramsar (21 May).

1 June: Gee Whiz hatches.

6 June: our first full second generation chick hatches. Named Gunther, a Red-crowned crane from Tsun and Sawakwa.

23 June: Tex is killed by raccoons in the early hours of the morning. Staff begins all-night patrols, constructs electric fence, sets live traps for duration of summer.
Crane Counts, Wetland Bills

by Scott Freeman, Educational Coordinator

Two outstanding events occurred in the lives of Wisconsin's Sandhill Cranes this spring: over 1600 people surveyed the population on April 17th, and the Governor of Wisconsin signed a wetland protection bill on April 28th. The cranes, the crane counters, and the wetlands law all have an important common thread: public interest.

Sandhill Cranes were nearly extinct in Wisconsin by the early 1940's. New state wildlife refuges and firm control over hunting rescued what was left of the population - in a few small Piedmont areas. The survey and landowners also began to take a keen interest in Sandhill, starting with the publication of "A Marshland Elegy" - Aldo Leopold's stirring essay on the crane's demise. Public concern and action worked, and Sandhill Cranes are coming back. In 1976, ICF and the Wisconsin Wetlands Association (WWA) began counting them. From a brave start in one Wisconsin county, the annual Sandhill Crane survey began to build on the public interest in cranes and wetlands which Aldo Leopold kindled.

LAST YEAR ICF and WWA sponsored the crane survey statewide for the first time. Volunteer county coordinators recruited and trained participants in 23 counties. Participants were given surveys, maps, and details on where to look, counting for cranes on the morning of April 17th. Miserable weather kept the bird count down, but the crane counters still saw or heard more than 2600 cranes.

The Board Expands

by Joan Fordham, Administrator

The Board of Directors has been a vital part of ICF's growth. Our 18-member board is responsible for directing all of ICF's financial and activities. We've been fortunate to have a board that has maintained a high level of involvement and interest for several years. The board has been active and dedicated through their hard work.

THE MOVE:
Phase I Nears Completion

by Konrad Liegel, Site Manager

After years of careful planning and site preparation, ICF's dream of transforming a 160-acre farm near Baraboo into a home for cranes, wildflowers and people close to reality. As the Duck goes to press, the construction and landscaping of the lovely Johnson Exhibit Building (named in honor of its benefactors - Mr. and Mrs. John Johnson of Madison) is nearing completion.

Nestled into ICF's rolling meadows, the Johnson Pod is an ideal structure for exhibiting cranes. The building is hexagonal in shape, with long pines radiating out from the center. Inside the building, the courtyard is a delightful spot, with gently winding paths, skylights, and the sound of running water. The south side of the building opens up to a large lawn that is surrounded by the exhibit building, allowing visitors to walk along the south side and view the cranes through a series of windows.

The largest landscape planting we've started at ICF's public area, though, is the 1.5 acre "African Garden Crane Exhibit." Using funds given in memory of Mr. Ervin Mueller, ICF volunteers and members have planted bushels of wildflower and native grasses in and around the exhibit building, allowing visitors to walk through and enjoy the beauty of the gardens.

The Crowned Crane Exhibit is a product of cooperation between ICF and the UW-Madison Department of Landscape Architecture and the Wisconsin Landscape Architecture students. They have designed and built the exhibit, with the help of students from the UW-Madison Landscape Architecture program.

Field Trip

The University of Wisconsin-Extension is offering a seven-day exploration of the fresh and saltwater wetlands of south Florida this winter. When: Dec. 16-Jan. 1; Where: Sandhill Island, Corkscrew Swamp, the Everglades, and Bird Keys (tours to and from Florida has been arranged for the group but is not included in the fee); Instructor: Jim Harris; Limits: 20; Registration Deadline: Oct. 15, 1982. For a flyer describing the trip in detail, write Doni Zenke, 1815 University Ave., Madison, WI 53706 or call (608) 262-1377.
Of Cranes, and 'Coons, and Red-boned Hounds

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Of Cranes, and 'Coons, and Red-boned Hounds (continued from page 1)

The Bottom Line
by Bob Ballam
Development Coordinator

After my first six months of raising operational funds for ICF I can make two interesting observations.

The first is that new sources of private funding are starting to come in, as more people become aware of ICF's accomplishments. Television, radio, media and newsletters feature ICF's accomplishments in the forefront of internationally-

The other point I have to note, though, is that nationally less than 1% of all corporate, foundation and private giving goes toward the conservation of wildlife and our environment. I could get discouraged, recognizing that every time we submit a proposal we're faced with a predicted rejection rate of 99%. But I'm happy to report that I'm not in the least discouraged. Our success rate is much higher, thanks to the support of our members and the dedication of our Board of Directors.

As a loyal member, you may be able to help us by providing the name of a corporation, foundation or key individual who is sympathetic to our goals.

For the sake of the people with these powers, I suggest:

Grants and Awards:


Patrons:

- Deois Print.

Associate:

- Audubon Society of Ohio, C. H. Bird Elementary School, Annette Garner, Barbara and John Canfield, Colin Casey, Central Ohio Anglers and Hunters, Mr. and Mrs. Norman Coleman, John Constable, Judith Day, Thomas Elliott, Beyers, Kent W., and E. Frederick E. Goodwin, Grootemaat Foundation, Fran Hamill, Jeff Harris, Anna and Karen Hobbs, Joe and Lola Hickey, C. Robert Jackson, Dr. and Mrs. Helen Johnson, Joyce and lan Knowlton, Robert and Maxine Lampe, Larry Lange, Madison Audubon Society, H. E. Manhart, Charlotte Oprey, Virginia Opel, Mr. and Mrs. William Preston, Dr. and Mrs. Walter Spofford, Mrs. A. M. Thompson, Mr. and Mrs. Nash Williams.

Contributions

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