

Volume 19, Number 3

August, 1993

**World Center for the Study and Preservation of Cranes** 

# A Thousand Ways to Save a Wetland

by Jim Harris, Deputy Director

Forty of us stood at the edge of an upland terrace, looking out over varied greens of the Murovyovka wetlands. The valley had been the channel of a great river, and even now we could see a string of narrow pools edged with reeds. Far to our left, rooftops glinted, a village of the nearby collective farm; not many miles beyond, the Amur River ran through its present channel which forms the international border. We could see the hills of China in the distance.

In front of the Russian village, and all across our view, a million flowers grew among sedges. These lowlands were the territories of nesting cranes, the greatest density of breeding Red-crowned and White-naped Cranes in all of Russia.

Our little crowd of forty had gathered to dedicate the Murovyovka Nature Park, 11,000 acres, the first private nature reserve established in Russia since 1917. The moment symbolized the new possibilities for Russian conservation. Even as political and economic changes encourage exploitation of pristine resources, conservationists in Russia are seeking tools for nature protection suited to the new conditions. There must be a thousand ways to save a wetland. It is a time for vision and risk, and also hard practicality.

As bottles of champagne for Murovyovka popped open, I noticed a small trail just left of the nearest pool. The evening before, and nine days before that, a few of us had entered the wetland here, sloshing and bouncing upon the floating mat of sedge and reed roots that overlay a moat of deeper water edging

the wetland. It had been like a squishy trampoline with flowers, only we never knew when we might fall through.

Our guide was Sergei Smirenski, a professor at Moscow State University but more especially one of the new conservation activists pioneering strategies for wildlife and wetlands. Since the early 1980s, Sergei had studied the cranes of Murovyovka, and dreamed of protecting their homes. When Russia opened itself, however unpredictably, Sergei saw the great threat to crane habitats along the Russian-Chinese borderlands of the Amur River, the mildest climate in eastern Russia and a prime area for trade with economically booming China. Privatization of lands began when people had little money to invest and wetlands still were valued at pre-Perestroika prices. Sergei saw the chance to buy Murovyovka-actually it turned out to be a lease for 50 years, once the legalities ran their course.

Sergei, the activist, has remained a lover of guiet and space. During our forays into the wetland, he pointed out the territories of each crane pair. We watched the tall, glowing white Red-crowned Cranes from great distances, and with more difficulty the subtle grays and silver of White-naped Cranes moving in and out of reeds. Even with the birds as mere specks, Sergei could tell if they had chicks hidden in the green. "These White-napeds," he remarked, "are just standing around. They're not busy enough to have chicks." Through the telescope, I compared the White-naped with their neighbors, male and female Red-crowned Cranes some distance apart and constantly pacing an erratic course over the marsh that

continued on page 4



Vast complexes of wetland and forest remain undeveloped in the Russian portion of the Amur River Basin. Economic and political changes have created new development pressures, but also opportunities for conservation. Wetlands shown here, nesting habitat for Hooded Cranes, have been proposed for inclusion in a new national park. Photo by Jim Harris.

# Bumper Crop of Chicks at ICF

## **Whooping Cranes**

by Wendy Munroe, Aviculture Intern

We began the 1993 breeding season with improved video equipment. Two of the pens were equipped with cameras capable of scanning the entire pen, allowing for better observation of egg-laying, incubation and chick-rearing behaviors. We now can observe Whooping Cranes during these fascinating periods round-the-clock, without disturbing their normal behavior.

Gee Whiz is the only offspring of Tex, a genetically valuable bird that was killed by raccoons in 1982. Last year, Gee sired four grandchicks for Tex, and this year, he was again the proud father of three healthy Whooping Crane chicks. One of these, named Horton, is being raised by Riva and Rattler in Crane City.

Ursula and Ulysses are another pair of Whooping Cranes also rearing their own chick in Crane City. Because these two parents are determined to keep humans away from their young, feeding and cleaning their pen daily has become quite a challenge. Aviculturists have to arm themselves with water sprays, rubber boots and goggles to ward off this pair of proud parents.

But back in the chick yard where Lorax, Gertrude McFuzz, and Oobleck are getting plenty of exercise, things are a little less life-threatening for the staff. Lorax and Gertrude McFuzz are offspring of Gee Whiz, while Oobleck is the strong chick of Ursula and Ulysses.

Gertrude McFuzz had a suspenseful hatching because she wasn't positioned properly within the egg. Her head was located at the small end of the shell instead of at the large end. After hearing her peep, followed by an ominous silence, our aviculturist in charge of incubation, Bryant Tarr, opened up the shell so Gertrude could breathe fresh air. Since she was not fully hatched, the tireless aviculture staff had to come in 'round-the-clock to check Gertrude's progress and keep her eggshell membrane moist. If the skin-like membrane lining the egg is allowed to dry, the chick becomes glued to the shell and cannot hatch on its own.

The fun didn't end there, because on May 28, ICF received ten Whooper eggs from Canada, where the only wild, self-sustaining flock breeds. Each year, "surplus" eggs are removed from wild nests and sent to ICF or

the U.S. Fish and Wildlife Service's breeding center. Of the ten ICF received, eight successfully hatched. Three of these eight named Grinch, Ish, and Snoopy are on display for the public in the chick yard. Many of the chicks this year were named after Dr. Seuss characters.

Four of the remaining Whooper chicks were flown to Idaho when they were 16-21 days old. They are part of an experimental "guide bird" release at Grays Lake National Wildlife Refuge. This project is an experiment involving two wild-caught Whooping Cranes that were raised by Sandhill Cranes back in 1983 and 1984. The young Whoopers followed their Sandhill parents and learned the migration route to New Mexico, but they have never reproduced. Now there are only nine Whooping Cranes left in this Rocky Mountain Flock.

This experiment will use the two Grays Lake adult Whoopers and the four chicks reared at ICF to test the feasibility of using Grays Lake Whoopers to adopt and teach young captive-reared chicks the migration route to New Mexico. If successful, this "guide bird" technique may be used to create another migratory flock in Canada.

## Siberian Spring

by Bryant Tarr, Aviculturist

This spring has been one of the most successful for Siberian Cranes at ICF. We now have six females producing eggs in ICF's Crane City. Our success is a ray of hope, for this year there were only ten birds wintering in Iran and only five birds wintering at Keoladeo National Park In India. These two groups comprise the entire remaining western flock of wild Siberian Cranes.

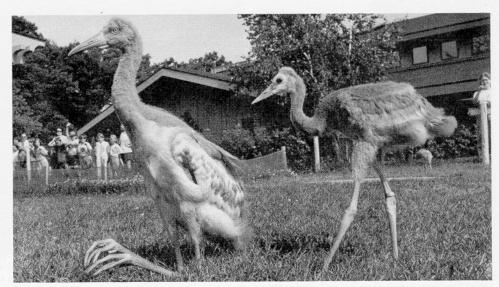
Hence the significance of producing 15 fertile Siberian eggs at ICF this spring! Six were sent to Russia in early May, thanks to transportation courtesy of Lufthansa German Airlines, for rearing and release to the wild. Three of them hatched and are now being reared in the wilderness of western Siberia. All nine eggs remaining at ICF hatched.

We hope that, by the end of the summer, the chicks in Russia will begin associating with the wild birds that breed nearby. If all goes according to plan, our young cranes will migrate with the wild Sibes to India, thereby learning their ancestral migration route.

But if the young cranes released in Russia don't migrate with the wild birds, we hope to work with India to release Siberians on the wintering grounds in India. Some of the chicks being raised right now by adult birds in Crane City may be standing in a marsh in India this coming winter, and hopefully they will migrate back to Russia with the wild birds next spring.

Any reintroduction effort requires many chicks, so it is important to increase the productivity of all adults breeding in captivity. We not only need to produce adequate numbers of chicks, but we must also produce chicks that will have the best chance of joining flocks of wild Siberians and learning the migratory route. To this end more young Siberian Cranes at ICF are being raised by Siberian adults. This "parent rearing" will allow the chicks to learn survival and social behaviors which may make them more suitable for release to the wild.

Increasing the productivity of Siberian Cranes is a formidable task. One important variable is the age at first breeding. Most cranes raised in captivity breed at an earlier age than their wild counterparts, perhaps



Dinosaurs from Jurassic Park, or just chicks from ICF's chick yard? The comparison isn't farfetched, since cranes were alive during the time of the dinosaurs, and the Sandhill Crane is the oldest species known that is still alive today. Siberian Crane (left), Sandhill Crane (right). Photo by David Thompson.

because we have eliminated food scarcity, competition for mates or territories, and the threat of predation. But at ICF, we were unable to achieve earlier breeding with Sibes—for unknown reasons, they had delayed egg-laying until they were 8-14 years old.

Last year, however, we were overjoyed when a six-year old female named Ranjit began laying. And this spring, Oka, who was hand-reared in ICF's chick yard in 1989, laid her first egg at the tender young age of only four years. This makes her the youngest Siberian crane in captivity to begin laying eggs. Oka's early egg-laying suggests that we can increase productivity substantially by pairing birds at an earlier age and thus advancing the onset of first breeding.

Even though her first eggs were infertile, we gave Oka some "dummy" eggs to incubate, followed by a hatching Siberian egg produced by a different pair. This was done as a "confidence-builder." The chick hatched and is now being raised by Oka and her mate, Dushenka. From their perspective, it was a successful breeding season. We feel it is important for inexperienced pairs to succeed—this early success likely strengthens the pair-bond and may even increase the desire to breed next season.

Breeding substantial numbers of Siberian Cranes at ICF has quickly progressed from dream to reality. Our increased productivity means that more captive-bred young can be released to the wild sooner to bolster rapidly dwindling wild populations, so that this ancient migration has a chance to continue without interruption.

## First Wattled Chick

by Ann Burke, Aviculturist

I squinted into the harsh white of the February snowstorm as I trudged through Crane City. Strangely enough, I was checking for a Wattled Crane egg. As I peered inside a building, Nandi's tall, shadowy form quietly arose from a nest that she and her mate, Chaka, had built from wood shavings. Underneath her lay an egg, warm as toast.

Prior to this, ICF had successfully bred 14 of the world's 15 species of crane. But the fifteenth species had eluded us, because our most valuable pair of Wattled Cranes, Chaka and Nandi, had many behavioral and physical problems that prevented successful breeding. Overcoming these challenges required a variety of "behavioral management" techniques:

1) Chaka and Nandi were extremely fearful of humans because they had been collected from the wild in Africa. To create a sense of privacy from humans and other cranes, we helped provide them a secure territory by



Each March and April, George Archibald has moved his office to a shed in Crane City to work with two female Siberian Cranes that did not lay eggs until George started working with them in 1991. Over the past three years, the females have laid 18 eggs. All were fertile by artificial insemination, and the resulting birds are now in Russia (5), Germany (1), India (1), and ICF (5). Photo by Ned Vespa, Milwaukee Journal.

keeping them in the same pen for the last five years, and by adding additional screening to their fence to increase visual isolation from neighboring pairs and from keepers. We placed discarded Christmas trees along the pen's fences to provide both shade and a "cushion" against injury when the cranes are caught for artificial insemination (Al). Every day, we tried to give the pair positive reinforcement by humans. So we tossed them whole-kernel corn as a tasty treat—crane candy.

2) The pair is unable to copulate successfully because Chaka (the male) has a pinioned (flightless) wing, making him unable to mount the female. So ICF staff have to perform AI to fertilize Nandi's eggs. But unlike most captive-reared pairs, Chaka and Nandi are unable to withstand the disturbance and stress caused by Al. Handling the birds for semen collection and insemination causes a delay in Nandi's ovulation, making it difficult to predict accurately when Nandi will lay her next egg, and therefore, to determine when ICF staff should perform AI. So this year we used a closed circuit video camera to make 'roundthe-clock video tape recordings of the pair's activities. By observing subtle changes in Nandi's behavior, we were able to detect the time of her ovulation, helping us to improve the timing of AI to ensure fertility of her eggs.

3) Finally, the pair has a history of breaking and eating eggs, so we had to retrieve their eggs as soon as they were laid. The

video camera helped us know when the egg was laid and thus to collect eggs quickly.

Responding to these techniques, Nandi laid two fertile eggs in February of 1993. The eggs had to be artificially incubated because no other cranes were nesting during the winter months. A surrogate crane incubator was unavailable. Unfortunately, eggs incubated by machines have lower rates of hatchability than eggs incubated by birds. Although ICF staff carefully monitored the temperature and relative humidity of the incubator, the pair's first and second eggs died just before hatching.

After these setbacks, our spirits soared when Nandi laid two more fertile eggs on March 19 and April 23. They were given to reliable pairs of Sandhill Cranes for incubation, and on April 20, a healthy chick named Maozeka hatched. The second chick, Kafue, hatched on May 25.

In 1993, as ICF celebrates its 20th anniversary, we have now bred all 15 crane species. It took teamwork among staff—close cooperation between those involved with pair management, AI, incubation, and analysis of the video tapes. But the success was also based on the work of earlier ICF aviculturists who developed and refined advanced techniques in all aspects of crane breeding. The hatching of our fifteenth species, the Wattled Crane, was a milestone of success for all who have worked in the art and science of breeding cranes at ICF.

### Saving Russian Wetlands

continued from page 1

at last revealed the pale brown of one, then two chicks, heads up over the sedges.

We found the ancient river channel to have abundant microhabitats, made visible by the remarkable and varying flowers. And Murovyovka had changed in the nine days between our two wetland walks. The lilies and poppies had diminished, a new species of iris had emerged amidst the trailing, fibrous white heads of the cottongrass, and the water lay deeper around our ankles. "The ice beneath is melting," said Sergei.

"Listen," he hissed. There were buntings, endless songs of reed warblers, and from the terrace, cuckoos and the begging of baby long-eared owls. "No, not that, or that. Behind, and above, softer..." We heard the jumbling, squeaky crescendo of a pipit in aerial song. At last we saw the bird, small and colorless, a speck in the sky but each time it sang, it held its wings still at 45 degrees or hovered in a barely visible climax. Sergei explained that this pipit of the Amur, with highly distinctive habitat and behavior, lived at very few places. Murovyovka perhaps had the largest population of all.

On dedication day, while other participants toasted the cranes, I toasted also the secret pipits and a Chinese Bush Warbler giving its raspy song from the nearest bushes. This species also is rare along the Amur and now protected by the nature park. I had the sense we hardly knew what we were protecting, for the wetland must represent far more than even Sergei understands.

Unlike the cranes, which have nested here since the river changed course, we human celebrants were trying something entirely new to Russia. Our mixed group reflected the varied efforts that will be needed to make Murovyovka Nature Park a success: the leader of the collective farm; farmers from Murovyovka village who have helped stop fires that sweep the wetland and destroy crane nests each spring; two wardens now working for the park; both executive and legislative leaders of the Tanbovka district; members and advisors of the Committees for Ecology for district and regional governments; television and newspaper reporters; and young scientists from Moscow.

For local supporters, the international participants confirmed Sergei's claims about the importance of Murovyovka. Noritaka Ichida, Director of the Wild Bird Society of Japan, had obtained a grant of \$80,000 from POP Group Corporation, a Japanese textile company which was sponsoring lease of the land. The lease is held by the non-profit Socio-Ecological Union of Russia. Catherine

Gray represented The Nature Conservancy, which is exploring how to develop programs in Russia, and has focused initially on Lake Baikal and Murovyovka. And I represented ICF, which has been linking Sergei with all sorts of American conservationists regarding Murovyovka and other sites in the Amur Basin. On this trip, I worked with Sergei to create detailed plans and budgets, the nuts and bolts of establishing a nature park.

Lastly and most specially, Wisconsin farmers Don and Ellen Padley were spending the summer here, learning about local agricultural practices and preparing land provided by Tanbovka District for a demonstration farm. They will return and plant the land in 1994. The key to Sergei's view for conservation at Murovyovka is combining habitat protection with assistance to the local economy. The international link is crucial for both efforts. And to my surprise, local leaders also were eager for assistance in enriching education at nearby schools.

#### Traditional nature reserves adapt

Murovyovka Nature Park contains prime wetlands surrounded by farming. The park is an experiment for Russia, integrating ecosystem protection with intensive economic activity. Russia's traditional nature reserves, or "zapovedniks," attempted to protect vast areas entirely free from human influence. These reserves were closed to tourism and bird watching, instead being sites for exhaustive research carried out over decades. Russia's budget crisis, however, has forced the government to slash allocations for the nature reserves, while remaining funds

are often delivered months late.

The far east of Russia has several zapovedniks critical for cranes. I visited Khinganski Nature Reserve to learn how it was adjusting to changing conditions. Vladimir Andronov, the reserve manager, is at heart a scientist. But like his colleagues across Russia, he tries now to be an entrepreneur. The formerly closed Khinganski must open to new activities. Andronov and his staff are balancing fund-raising with their old protection responsibilities.

The potential for local support has placed more emphasis on public relations and education, a trend that will also benefit management of Khinganski's wild resources. In wetland areas of the nature reserve, spring fires are the greatest threat to crane nesting success, most fires being set by people. As Khinganski staff teach people more about the values of wild ecosystems, fire protection should become easier.

The morning I arrived at the reserve headquarters at the town of Archara, a youth group visited the captive Red-crowned and Whitenaped Cranes, much as Wisconsin children visit the crane exhibits at ICF. Khinganski has moved its crane breeding facilities into Archara, and local funds have just been pledged to build more pens.

Formerly, Khinganski's captive crane work occurred at a Crane Station on an island in the heart of the reserve, a place far removed from local people. Andronov took me to the Crane Station for an overnight stay, where we laid plans for how American groups could visit the lonely spot, to watch nests of Eastern



Local officials, farmers, and international conservationists all gathered for the dedication of Murovyovka Nature Park on June 28, 1993. Noritaka Ichida, Director of the Wild Bird Society of Japan, wields the shovel. The Wild Bird Society of Japan obtained financial support for establishment of the park from POP Group Corporation, a Japanese clothing manufacturer. Photo by Jim Harris.

White Storks and find orchids in the woods. The challenge for ecotourism is to connect the remote nature reserves with potential audiences. ICF has encouraged Russia's Socio-Ecological Union to organize an ecotourism workshop in late summer of 1993 in the far east, where nature reserves can learn how to develop this source of income.

Khinganski has already been pursuing cooperation with China's Zhalong Nature Reserve. They are organizing exchanges—Chinese visiting Russia and Russians traveling to China. The local Archara population has been quite interested, although both Russians and Chinese are more inclined toward shopping than bird watching. A more serious problem has been the inconvenience of travel from the international border to Zhalong.

At Khinganski's Crane Station, Andronov and his wife Rimma have been working for years to develop methods for rearing and release of semi-wild cranes into wetlands with too much human activity for wild cranes to tolerate. The Andronovs thus have experience valuable to workers in America and elsewhere who are developing reintroduction programs. The Andronovs have also learned methods for removing eggs from wild nests, both for cranes and Eastern White Storks, with minimal effect on reproduction in the wild—taking a first clutch at the right time, for example, will lead to renesting.

At the Crane Station, we completed plans for an exchange of reintroduction experts between Khinganski and America, delivery of Red-crowned and White-naped Crane chicks from Khinganski to expand the North American captive population, and a grant rom Cincinnati Zoo to support equipment purchases for Khinganski.

#### A national park for Zuravalini?

Zuravalini means "a place for cranes." Last year, delegates at the International Workshop on Cranes and Storks of the Amur Basin (see August, 1992 ICF Bugle) visited Zuravalini. Sergei Smirenski and I had hoped that some new approach could be developed for safeguarding at least part of this vast complex of grassland and wetlands, about 100,000 nectares. With the possible exception of Chinganski, Zuravalini has the largest nesting copulations of Eastern White Storks known, and also nesting Red-crowned, White-naped and Hooded Cranes.

On June 23, we joined with scientists from the Institute for Comprehensive Studies of Regional Development, located in nearby Birobidjan, and a group of sustainable forestry experts organized by the Pacific Energy and Resources Center of California, USA, for an erial survey of Zuravalini and two forest reas. These lands had been proposed by the



Vladimir Andronov, together with his wife Rimma, have worked for years on release of semi-wild cranes into wetlands at Khinganski Nature Reserve. This pair of Red-crowned Cranes has two chicks learning how to live in the wild marsh. Photo by Jim Harris.

Institute for inclusion in a new national park, which would incorporate all or part of several watersheds and a full complement of local ecosystems. The Russian government in Moscow likes the proposal, in part because a national park might include tourism and other economic activities to support conservation, unlike the traditional zapovedniks.

Our helicopter took us over a vast plain between the Amur and the forested hills, with winding rivers, oxbows, scattered pools, and flowering meadows on a much grander scale than at Murovyovka. We also looked down onto newly planted farmlands, and onto complex networks of ditches that had failed to dry the land for farming. The hills, too, were magnificent in places, with never-cut conifers in the broad-leafed forests, but many of the sloping valleys had lost their conifers to the loggers. Grassland, wetland, and forest had all suffered. Once the economy stabilizes, people may have money for buying land, and better machines for draining wetlands. The flowered crane meadows could quickly vanish.

Descending from our helicopter, we met with officials and citizens in Obluchi and Amurzet, the largest towns nearby. We sensed crosscurrents of emotion, the fear of change or loss. The forested lands in particular have vital interest to loggers, miners, and commercial hunters. Resource protection will only be possible as part of larger economic plans.

The commercial hunters were leaders of a state-licensed hunting organization. When a few of us sat quietly for talk, we discovered they knew the land well, and the wildlife, and the plants that they also gathered. I sensed their anger at the outside changes they were powerless to influence, the pressures for logging or mining that soon might destroy their forest, or the conservation that might

lock it away. But one member of our sustainable forestry group had much experience in marketing ginseng, honey, fern leaves, and other produce of the woodlands. The talk turned to problems of marketing for forest products. These hunters struggle with dirt cheap prices and poor markets, where the real profits all go to middlemen. When we explored ideas for keeping the profits locally, these hunters' faces seemed to open. Their lives, like the forest, were threatened from outside. Surely, alliance is possible between conservation and economic needs.

Protection for Zuravalini and the forests upstream is too large a task for private initiatives. But Sergei and the Socio-Ecological Union can work with the government to create the local dialogues needed to find the blend of resource control, wise use, and preservation that can benefit both present inhabitants and future generations. In Russia, the concept for national parks is still evolving. It is still unclear whether "national park" is the proper designation for lands at Zuravalini, or whether perhaps some new breed of protected zone is needed. In the far east of Russia, where so much of the old seems to have fallen away, one senses a thousand possibilities. Americans have a limited role, but our funding and interest can multiply the creative opportunities to safeguard these globally important resources.

We thank the Trust for Mutual Understanding and the Weeden Foundation for their support of work in the Amur Basin.

Don't forget Special Saturday workshops and tours of Crane City on August 28 and September 25, and teacher workshops on October 1, 9, & 15. For a brochure, write Rose at ICF.

# Volunteers Needed for ICF Work Trip to China

ICF is organizing an expedition to Cao Hai Nature Reserve in southwestern China, for three weeks during January 1994. Volunteers are needed to assist with observations of behavior and habitat use by Black-necked Cranes and with public education programs in villages near the nature reserve. This work will assist ICF's long-term program at Cao Hai to strengthen management planning and integrate local economic development with conservation needs. The wild cranes are extraordinarily tame here, and live close among people.

Volunteers do not need prior experience with crane study or with China. Good health, openness to a new culture, and a willingness to learn are the chief requirements. Work will not be strenuous. Please contact Jeb Barzen or Jim Harris at ICF for details, including exact dates and trip costs (tax deductible as a contribution to ICF).

# **Contributions**

Received April through June, 1993



## Lufthansa

ICF's Official Airline

Grants and Awards: Dorothy Alexander; Alma Doten Trust; Ernest Anderson; Mrs. S. S. Auchincloss; Mr. & Mrs. Ira Baldwin; David & Linda Balsiger; Genevieve Bancroft; Mary Bane; Thomas Bernthal; Mrs. John Best; Bolz Family Foundation; Lady Bouchier; Margaret Brandt & Albert Lyons; Mrs. Gene Brock; Mary Jane Bumby; Jim Burgess; Mrs. Jackson Burke; Myrtle Busse; Charles

THE ICF BUGLE is the quarterly newsletter for members of the International Crane Foundation (ICF). Articles review ICF programs as well as crane research around the world.

Co-Founders:

George Archibald Ron Sauey

Kon Sauey

**Editor:** 

David Thompson

ICF offers memberships at the following annual rates:

Individual\$20Foreign\$25Family\$30Sponsor\$500Associate\$100Patron\$1,000



Carpenter; Gertrude Carter; Chapman Foundation; Catherine Cleary; R. Marshall & Arlene Colburn; John Constable; John & Judy Day; The Edward Demmer Foundation; Audrey Voss Dickerson; Dr. Margaret Drager; Lucile Durrell; Kay Easton; Philip & Lynne Effinger; Theodore L. Eliot, Jr.; John & Catherine Erskine; Sam Evans; Evjue Foundation; Mr. & Mrs. Thomas Fifield; Dennis Fisher; G. W. & Jeanette Foster; Buzz Fritch; Dr. & Mrs. John Garvin; Victor & Helen Geisel; Margaret Gettings; Mildred Gill: Chris & Nancy Gloe; James Greenhalgh & Cheryl Hunter; Mary Griffith; Charles Haffner Foundation; Mr. & Mrs. James Hageman; Bob & Vicki Hallam; Mr. & Mrs. Corwith Hamill; Helen Hands; Mr. & Mrs. John Hands; Lucia Heyworth; Joseph & Lula Hickey: Shirley Hicklin: M. Hillenbrand; Thomas Hoffmann: Michael & Reva Holmes: William Huffman; Institute of Museum Services: Reinhardt Jahn; Allan & Rosanne Johnson; Brian & Laurel Joiner; Catherine Jordan; Mrs. Olive Kemp; William Kieckhefer; Donald Kindschi; Warren & Barry King; Anne M. Klaprat; Mr. & Mrs. Donald Koskinen; Donovan Kotze; Harold Kubly; Rosemary Ripley Lanius; Robert Laux & Ann Casey; Elizabeth Lister; Mrs. Glen Lloyd; Serge Logan; Kathy Luck; Dorothy Lungmus; Dr. Llovd & Patricia Maasch: John D. & Catherine T. MacArthur Foundation; Madison Audubon Society; Harold & Margie Malmberg; Dr. & Mrs. David Manning; Robert & Agatha Mantovani; Elisabeth Marling; M & I Bank Foundation; James & Joyce Martin; Peter Matthiessen; Ronald Mattox; Oscar & Elsa Mayer Charitable Trust; Brooks & Hope Mc Cormick; Roy & Carole Merath; Mrs. Wm. Messinger; Glenna Miller; Earl & Maria Minton; Margaret Modine; Philip Morris Co.; National Wildlife Federation; James & Ann Nelson; Edward John Noble Foundation; Dr. & Mrs. E. J. Nordby; Charlotte Oglesby; Fred & Jolly Ott; R. D. & Linda Peters Foundation; Harold & Gretchen Petraske; Dr. & Mrs. Philip Piper; Oliver Pittenger & Kathy Drazen; Sonogi Pitts; Jennifer Presley; Norman & Elisabeth Quale; Marli Rabinowitz; Dr. Ellen Rasch; Mr. A. R. Rathert; Nathaniel Reed; Frank & Catherine Reichelderfer; Jane Rikkers; David & Maureen Rorick; Bernice Roth Flaningam Trust; Dr. & Marilyn Sachtjen; Anne Sands; Donald Sauey; Norman & Claire Sauey; Jan Scalpone; Garth & Karen Scott; Mr. & Mrs. W. L. Searle; Leonard & Frances Shelton; L. Ann Sherman; J. R. Short Milling Co.; L. R. & Ruth Sjoblom; Miriam Smead; Arthur Smith; Sue Steinmann; Rodney Stewart & Jan Mittelstaedt; Mrs. Mary Stout; Joanna Sturm; Earl & Kay Strutz; Mrs. Willis G. Sullivan; Dr. & Mrs. Samuel Taylor, III; The World Bank; Mr. & Mrs. Bruce Throne; R. Roberta Throne; Russell Train; U. S. Fish & Wildlife Service; Lynde Uihlein; Mr. & Mrs. Peter Van Cleave; William Van Dyke, III; William Van Evera; Peter & Frances Vandervoot; Martin & Karen Voss; M. R. Vrtilek; Wausau Insurance Co.; Jane Wood; Don & Carol Worel; World Wildlife Fund.

**Patrons:** Philip Effinger - Clairson Industries Corp.; Tom Foley; Jeff Rambo; Joe & Mary Ellyn Sensenbrenner.

**Sponsors:** Mr. & Mrs. Reed Coleman; Barbara Crass & Paul Holzman; Mary Ann Damm; Kenneth Findley; Mary Fitzgerald; Genetics Computer Group; Gompers Elementary; Dr. & Mrs. Andrew Major; Olson Middle School.

Associates: Helen Adelt; Sandra Allen; Ernest & Bettylu Anderson; John & Joanne Anderson; Miss Hope Anderson; Jan Aslaksen; Wendy Ault, M. D.; Roger & Ann Avery; Susan Avery; Lorraine Bartlett; George Payne Bent 2nd; Annette Beyer; Charles & Nina Bradley; Joyce Brink; Donald & Polly Bruckman; Betty Bunge; Dr. George & Judy Bush; John Canfield; Susan Carlyle; Citizens Natural Resources Assn.; Mr. & Mrs. Ernst Conrath; William Conway; Diane Curtis; Dec. Int'l - Albrecht Foundation; Derse Foundation; Phyllis Diller; Roy & Lola Duff; Burdette & Sarah Eagon; Lora Jane Eastham; Marshall Erdman; Field Museum of Natural History; Ken Finkel & Jane Delzer; Mr. & Mrs. Dean Fitzgerald; Daniel & Georgia Gomez-Ibanez; Mary Greiner; Sally Grootemaat; Sarah Harris; Marion Hartman; Sibyl Heide; Charles Heine; Sally Hennen; Mr. & Mrs. Melvin Henry; Ann Henschel; Charles Jahn; Allan & Rosanne Johnson; Norma Jung; B. Kabler; James Kieckhefer; William Kieckhefer; Kinnick High School; Donald Kloehn; Joyce Knutson; Herman Kuhn; Aldo Leopold Audubon Society; Henry C. Longnecker; Katherine Luck; Lesleigh Luttrell & Dave Schreiner; Marion Mac Lean; Madison Audubon Society; Marathon Box Corp. - Harvey H. Scholfield, Jr.; James & Joyce Martin; Mr. & Mrs. Robert Matteson; Peter & Maria Matthiessen; Mrs. William Messinger; George Mitchell; Mrs. Clinton Morrison; Merlin Moser; Thelma Moss; Jo Anne Overleese; Kay Paietta; Gerald Palmer & Kathleen Jordon; Leah Patton & Jay Hair; Mr. & Mrs. Roger Pence; Mary Ellen Peters; Nathaniel Reed; John & Ruth Reeves; Kathleen Ryan; Margaret Ryerson; Robert Sabin; Dr. James & Marilyn Sachtjen; Leon & Lucy Sanna; Larry & Marilyn Sauey; Janet Scalphone; Howard Scott; Hustace & Janice Scott; Silverbrook Middle School; Jim & Rosie Sime; Mr. & Mrs. Laurence Sjoblom; Miriam Smead; G. Kendall Smith; Mr. & Mrs. Rodney Stewart; Len & Carlene Taylor; Alice Thorngate; Raymond Trussell; Dr. & Mrs. John Twoney; Vivid Inc. - Art Donaldson; Dorcas Volk; Mrs. Margaret Wallace; West Middleton Elementary; Wisconsin Association of Lakes Incorporated; Richard Wolfe.

# Many Ways to Help

by Bob Hallam, Development Coordinator

#### Create a Fund In Your Name

You can help endow ICF's International Training Program by creating an endowment fund in your name. The fund's interest will support travel, food, and lodging of foreign researchers and conservationists who visit ICF. Endowments bring needed stability to ICF's programs, so we can plan ahead.

The International Training Program has been established to support regional efforts toward crane and wetland conservation. Many countries considering crane conservation projects lack trained personnel. ICF's International Training Program is designed to provide conservationists with first-hand knowledge of specialized techniques for crane and wetland protection.

Over the past 20 years, approximately 300 foreign colleagues have studied at ICF. Most participants come from Asia and Africa, where wetlands and cranes are in greatest trouble. These developing nations have little money to support even basic conservation activities within their borders, so travel to the U.S. and training here must be supported by ICF.

Any amount of contribution to ICF's foreign training endowment is welcome. A donation of \$10-20,000 can fund annual grants in your name to foreign researchers and conservationists for support of their work overseas. Or, a gift of \$50,000 can bring a Foreign Fellow to ICF each year and support him or her for one month.

Creating an endowment in your name will be like planting a tree for the future. Every year it will bear fruit. For you and your family, it means recognition every year when the grant is awarded. For the researchers, it means a chance to get ahead. For cranes and their habitat, it means the gift of life. And for ICF, it means stability in our mission. If you want to help with our International Training Program in this manner, please contact George Archibald, Director, or Bob Hallam, Development Coordinator, at (608) 356-9462.

## Your Will and ICF

A bequest to the ICF is an excellent way to help. A clause like the following can be used in your will: "I give and bequeath (cash amount or description of property) to the International Crane Foundation, having its principal offices at E-11376 Shady Lane Road, Baraboo, WI 53913-9778, to be used for the general purpose of the Organization." Consult your attorney to ensure that your will is legally valid.

## **ANNOUNCING:**

# The 19th Annual Meeting of the International Crane Foundation Saturday, October 23, 1993

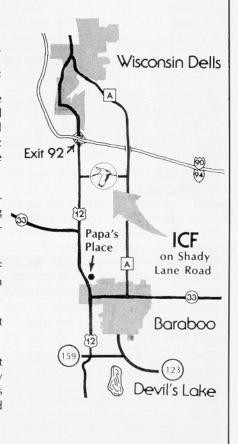
ICF members and their guests are invited to attend the annual meeting and dinner. Reservations are required, so please use the form provided below. Be sure to respond by October 1, since space is limited.

## **SCHEDULE**

\*10:00, 1:00, & 3:00. Regular tours.

SPECIAL EVENTS for members & guests:

- \*1:00 4:00 p.m. **Open House** at the Stedman Training Center (ground floor), and the new Gerald & Gladys Scott International Guest House (main floor) where Barbara Katz will be signing her new book about the history of ICF, **So Cranes May Dance.**
- \*1:30 & 3:00 p.m. **Crane City**—a rare opportunity to see 16% of the world's Whooping Cranes, and ICF's video system for monitoring crane breeding behavior.
- \*1:30 & 3:00 p.m. **Restoration Tour at ICF**—learn the shady secrets of oak savanna restoration not usually revealed to visitors.
- \*5:30 p.m. **Hospitality Hour** (cash bar) at Papa's Place.
- \*6:30 p.m. Annual Meeting Program at Papa's Place starts with dinner, followed by fresh reports from George Archibald on ICF's 1993 work in Africa, China, Russia, and Vietnam.



Please clip or copy, and mail to: ICF, E-11376 Shady Lane Road, Baraboo, WI 53913.

Reservation deadline—October 1

	Please make dinner/program reservations for people.  My check for \$17.00 each is enclosed.
	This will be my first time attending an ICF annual meeting.
	I cannot attend the meeting, but please send me a copy of the Annual Report
Name:	
Address: _	

# **News From ICF**

by David Thompson, Education Director

No doubt most *Bugle* readers have heard of the extensive flooding throughout the Midwestern USA. Flooding hasn't been a problem at ICF's site, but the rain has affected both birds and visitors. Visitation is down 5.3% compared to last year, but many dedicated visitors still come despite the rain. On days with heavy rain, guides alter the format of the tour, taking people first to see the video "Raising Crane," hoping the rain will let up. If the downpour continues, the guides always offer to take visitors outside to see the birds, but they also describe alternate activities for those who want to stay indoors.

Seasonal Guide Barb Nordin said: "It's a little hard to talk with the rain dripping down your face, but I don't mind too much. The real problem is when you get back to the office, and your legs, shoes, and socks are soaked. You have to live with that for the rest of the day."

When it rains, the cranes often come to the front of their pens. Trung Trung the Blacknecked Crane looked somewhat bedraggled the other day—the feathers on her head were wet and spiky, although the rain rolled off the rest of her body. After a recent downpour of nearly eight inches in three hours, several aviculturists were talking of building an ark, and wondering which crane pairs they would invite to come along for the voyage. Le Hue, our new tour guide from Vietnam, takes the rain in stride. It reminds her of the summer monsoon rains back home.

#### Black-necked eggs to New York

Three years ago, Trung Trung hatched at ICF—the first Black-necked chick in North America. Since then, six more chicks have been produced by her parents. Here's where



May 22 was ICF's 20th birthday. A crowd of 200 staff, supporters, and wonderful people from our past wished ICF "happy birthday," and helped us dedicate the new Gerald and Gladys Scott International Guest House. Photo by David Thompson.

the seven Black-necked chicks are located: Trung Trung is on public display at ICF, two are living in Crane City, and this spring, four eggs were sent to the Bronx Zoo where they subsequently hatched. The eggs were sent because, with so many other chicks hatching at Baraboo, ICF wanted to ensure the best care for each chick, and also wanted to involve other facilities with the species. Besides the Bronx Zoo, there is only one other facility outside China raising Black-neckeds—Vogelpark Walsrode in Germany. This fall, ICF is slated to receive a mate for Trung Trung from Vogelpark.

#### New project with oak savannas

ICF has just received a grant from the U.S. Environmental Protection Agency to improve our education and restoration programs for the oak savanna and wetland communities. Jeb Barzen, Director of Field Ecology, said: "Midwestern oak savanna is the most

endangered community in North America and possibly in the world. The grant will allow us to embark on a new course to learn about the ecology of savannas, and to develop a savanna nursery, in cooperation with the Sand County Foundation."

#### Vietnamese visit ICF

Another highlight of the season for the Field Ecology Department was a visit in May by a delegation of Vietnamese officials. The seven Vietnamese included officials from the Tram Chim Nature Reserve, its province, and its district. The goal of their visit was to find out how they could use sustainable development to balance reserve needs with those of a growing number of neighboring farmers. Said Barzen, "I think we forged a better working relationship between ICF and the various levels of government in Vietnam, relationships that will serve as a foundation for future work."

# E-Ba

# **International Crane Foundation**

E-11376 Shady Lane Road Baraboo, Wisconsin 53913 (608) 356-9462 Fax: 356-9465 Nonprofit
Organization
U.S. Postage
PAID
Permit No. 179
Baraboo, Wi 53913

**Address Correction Requested** 

ICF's Annual Meeting: See Page 7.

WATER AND THE RESIDENCE OF THE PROPERTY OF THE

8