



THE BROLGA BUGLE

Editor: Scott Freeman; Assistant Editor: Joan Fordham

INTERNATIONAL CRANE FOUNDATION
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Crane Painting Presented to Mrs. Gandhi

by Ron Sauey, ICF Co-founder

The Siberian Crane has been aptly called "Asia's Whooper." This tall white bird with black wing tips not only closely resembles the North American Whooping Crane but shares as well its cousin's endangered status. Unfortunately, the resemblance stops there. For while the Whooper has been zealously protected for the last half century and is now increasing in numbers, the Siberian Crane is still hunted throughout its extensive range and its future is more precarious than ever before. Today only 150 of these birds have been sighted in the wild.

Last February in New Delhi, the Siberian Crane and its alarming decline came to the attention of world famous politicians and conservationists alike. The occasion was the Third Meeting of the Convention on International Trade in Endangered Species, and the banquet following the conference included the presentation of a beautiful oil painting of Siberian Cranes to Mrs. Indira Gandhi, India's Prime Minister.

The work of Diane Pierce, one of America's most gifted bird artists, the painting depicts a pair of snow-white Siberians standing guard over their single cinnamon-brown chick. In the background, a mound of acacia trees juts out of the early morning mist, establishing the picture's locale as the Bharatpur Bird Sanctuary of northcentral India.

Diane, who has illustrated many articles in past issues of *The Brolga Bugle*, managed to instill an ephemeral quality to this painting almost as if the birds were a vision which might suddenly vanish before the viewer. Considering that only 34 of these cranes were counted in India last year, the pictorial metaphor is tragically fitting.

Lovely as Diane's artwork might be, the painting and its presentation were perhaps more significant as a political statement and an affirmation that wildlife protection is now a major concern of governments at the highest level. With Diane Pierce at the presentation was Sir Peter Scott, world famous conservationist and a member of the International Crane Foundation's Board of Advisors, who lauded Mrs. Gandhi's past record of interest and concern for wildlife. Mrs. Gandhi was completely surprised by the gift but charmed her audience with an impromptu account of her life-long love for animals and her continuing support for wildlife conservation.

The presentation of the Siberian Crane painting to Mrs. Gandhi is an example of how conserving cranes and indeed all wildlife in the last decades of this century will require more than good research and effective habitat management. Imaginative public relations will be just as important. Only by sparking the interest of the public and their government representatives in rare and beautiful creatures can conservationists amass the necessary political clout to prevent destruction of irreplaceable natural areas and resources.

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Artist Diane Pierce (left) and ICF Advisor Sir Peter Scott (right) present Siberian Crane painting to Prime Minister Indira Gandhi. —photo by Punjab Photo Service

From China and Iran - GOOD NEWS

by George Archibald, ICF Co-founder

For years ICF has followed the decline of the Siberian Crane flock wintering in India through an annual census made at the famed Keoladeo Ghana Bird Sanctuary. This flock has declined from 76 birds in 1970 to just 34 this past winter. But until recent weeks ICF had never been able to make an accurate estimate of the species' total numbers. We were unsure about the fate of the tiny flock which was discovered wintering in Iran in 1978, and no one knew the location of the group wintering in China. A phone call and a letter I received recently have finally answered our questions, and brought a long-awaited hint of good news for a beleaguered species.

Siberian Cranes formerly wintered in significant numbers along the Caspian lowlands of northern Iran. But repeated surveys in recent decades indicated that the species was extirpated. Then in the spring of 1978, just as the cloud of political turmoil began to break over Iran, ornithologist Mr. Mohammed Ali Ashtiani discovered a relict group of nine Siberian Cranes. The cranes were actually wintering in a wetland at the heart of a huge duck trapping complex near the village of Feredunkenar — along the southeast shore of the Caspian.

I visited Iran that spring and saw the cranes, but soon after my departure the paths of the United States and Iran diverged. Reports from Iran indicated that the recently-established wildlife sanctuaries were not respected by the new government. Although I tried to correspond with Mr. Mohammed Reza Vazarie, a colleague in the Department of the Environment, the letters were returned unopened. Three years of silence prevailed.

But the sky began to brighten several weeks after the release of the American hostages when Mr. Vazarie reported, via telephone, that 16 Siberian Cranes were wintering in Iran — a 44% increase from the 1978

count. Apparently the Iranian crane conservationists had continued their surveys. Perhaps as a consequence of their interest in the Siberian Cranes, the duck trappers began to take pride in their rare white visitors. ICF looks forward to rekindled cooperation with Iran through helping the small flock of Siberian Cranes along the Caspian, and ICF's proposal to restock a new Siberian Crane flock via Common Crane foster parents.

So in late winter of 1980-81 the western population was confirmed at 50 birds, with the 34 in India declining and the 16 in Iran increasing. Our hopes for the species' survival rested predominantly in the eastern population, which our Soviet colleagues estimated at about 200. But counts made on the tundras of Yakutia, where the cranes breed, are difficult because the pairs are scattered on breeding territories over an enormous area.

An accurate count could be made only if the wintering grounds of this flock, which we suspected were somewhere in the basin of the Yangtze River in China, could be found. The search for the wintering grounds gained increased urgency since wetlands in the Yangtze River basin are being developed in China's drive for modernization.

Ornithologist Mr. Fu-chang Chou of the Institute of Zoology in Beijing heroically searched for the cranes through the winters of 1977-78, 78-79, and again last year. In keeping with the old saying: "If at first you don't succeed, try, try again" Mr. Chou and a colleague, Mr. Ting, found approximately 100 Siberian Cranes in northern Jiangxi Province this winter, near the great river in company with White-naped Cranes.

This discovery brings new hope for the eastern population, and thus the species. We hope the wetlands will be protected as a Natural Reserve by the Chinese government. The situation is made urgent by

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Captive-reared Mississippi Sandhill Cranes Released into Wild

by Dr. Scott Derrickson, Patuxent Wildlife Research Center

For the first time, crane chicks of an endangered subspecies have been hatched and reared in captivity and restocked into the wild. This effort, spearheaded by the U.S. Fish and Wildlife Service's Patuxent Wildlife Research Center, holds great promise for the recovery of not only Mississippi Sandhill Cranes, but of other non-migratory endangered cranes as well.

Following its description as a distinct subspecies in 1972, the Mississippi Sandhill Crane (*Grus canadensis pulla*) was placed on the United States List of Endangered Fish and Wildlife. The remaining wild population, reduced to only 30-40 birds, is restricted to a small area in southern Jackson County, Mississippi. The precarious status of this remnant population resulted from a number of factors, such as logging, urban and suburban growth, and highway construction, which together have reduced or eliminated essential suitable habitat. The few remaining wetlands used by the Mississippi Sandhill were rescued in 1977 by a landmark Supreme Court decision, which halted construction of a superhighway.

The Mississippi Sandhill Crane Recovery Plan, which was approved by the Director of the U.S. Fish and Wildlife Service (FWS) in October, 1979, identified habitat restoration, habitat maintenance, and captive propagation as key components in the survival and recovery of this endangered subspecies.

Approximately 16,000 acres of land have already been acquired for the Mississippi Sandhill Crane National Wildlife Refuge (MSHCNWR). An active program of habitat restoration and management (land clearing, prescribed burning, water control, and the establishment of crop units) is currently being implemented. Researchers initiated captive propagation of the Mississippi Sandhill Crane over a decade ago, and there are now 21 birds in captivity, including seven breeding pairs at the FWS's Patuxent Wildlife Research Center in Laurel, Maryland, and two breeding pairs at

the National Zoological Park in Washington, D.C.

The ultimate goal of the propagation program at Patuxent is to produce stock for augmenting the declining wild population, and for establishing additional populations within the subspecies' former range. Although relatively few attempts have been made thus far to release captive-raised cranes into the wild, several experimental releases of Florida (*G.c. pratensis*) and Greater (*G.c. tabida*) Sandhill Cranes demonstrated that young, parent-reared birds possess many of the behavioral characteristics of their wild counterparts, and consequently are better able to make the difficult transition from captivity to the wild than hand-reared birds.

Consequently, beginning in 1979, propagation procedures at Patuxent were modified to avoid hand-rearing. Although eggs were still routinely collected immediately after oviposition to maximize total production, they were placed under pairs of Florida or Greater Sandhill Cranes for incubation. These "foster parents" were allowed to complete incubation, and subsequently raise the young Mississippi Sandhills as their own.

During the entire rearing period, human contact was avoided as much as possible. At approximately 60 days of age, the full-winged chicks were rendered flightless through the use of wing brails (wire restrainers), which were changed from one wing to another at about 14-day intervals to prevent stiffness from developing in the wrist joint. At about 120 days of age, the brails were removed and the young were transferred to large, covered enclosures where they were held until their release.

In cooperation with the Louisiana Cooperative Wildlife Research Unit, nine Mississippi Sandhills, which were "parent-reared" at Patuxent, were successfully transferred to southeastern Mississippi this past



A foster parent-reared Mississippi Sandhill Crane chick, ready for release into the wild (note wing brail).

—photo by S. Derrickson

January. Initially, these birds were wing-brailed and held in a large five-acre enclosure constructed in natural habitat. Once the birds had adjusted to their environment and were foraging exclusively on natural foods, their wing-brails were removed and they were allowed to leave the holding pen.

At the present time, all nine birds are doing well, and appear to have successfully made the transition from captivity to the wild. Because these birds are individually color-marked and equipped with radio-transmitters, valuable information concerning their behavior, movements and habitat-use is being obtained. Additional releases are now being planned on an annual basis and will undoubtedly influence future management and conservation efforts for the Mississippi Sandhill and other species of endangered cranes.

Wings Over the Platte

by Joan Fordham, Administrator

When offered a chance to see cranes on the wing last March, I could hardly refuse. My job at ICF keeps me working on the business end of cranes, not in field studies. In fact, I can hardly remember seeing any cranes except captive ones. But then Scott Freeman, ICF's Education Coordinator, planned a field trip for ICF members to the Platte River in Nebraska — the spring staging area for thousands of Lesser Sandhill Cranes (*Grus canadensis canadensis*). Word was passed to bird clubs and ICF members in Nebraska. We hoped that a "scouting" trip would prove successful enough for us to advertise to all of ICF's members in the future, and make it an annual event. We made a good start.

Some of the 60 total participants arrived in Grand Island on Friday and were able to go out look-

ing for birds early the next morning. Not only is the Platte a stop-over area for hundreds of thousands of migrating cranes, but also over a million ducks and geese. As the sun rose the roosting cranes flew away from the river in spectacular numbers and dispersed to the surrounding fields. There they gleaned corn and wheat left from last fall's harvest. The cranes fed all around the Platte River area in small flocks (100-250 birds) during the day. Since the next big flight would be at dusk, Scott had scheduled a series of presentations by experts from the area during the day.

Gary Lingle spoke on the history and management of the Mormon Island Reserve. This 1,000 acre mosaic of wet meadows and pastures along the Platte is owned by the Whooping Crane Preservation Trust and managed by The Nature Conservancy. The Reserve

is in the dwindling section of the Platte still available to migrating waterfowl as a vitally important stop-over, or "staging" area.

Wet meadows are important sources of protein (packaged in invertebrate animals like worms and snails) for the cranes. But many meadows are being plowed up to make way for cornfields. The Whooping Crane Preservation Trust's mandate is to buy and preserve vital habitats like the wet meadows of the Mormon Island Reserve.

Dr. Harold Nagel of Kearney State College then explained the changes which the Platte has seen over the last few decades. Irrigation is now used extensively in the Platte River basin. Consequently, a river that was once "a mile wide and an inch deep" is now reduced to a trickle by midsummer. This loss of water, combined with fire control, has allowed trees to thrive on sandbars formerly used as roosts by the cranes. Aerial photographs of the river, past and present, show how dramatically roosting areas have been reduced. Man's needs for water must be met, but we hope not at the expense of our wildlife. Conservationists from all over the Great Plains, led by John Van Derwalker of the Whooping Crane Preservation Trust and Ron Klataske of National Audubon Society's Regional Office, are working to protect minimum water flows in the Platte, especially during the spring migration.

Chuck Frith of the U.S. Fish and Wildlife Service completed our morning's education with a summary of the recently completed Platte River Study. Besides documenting the threats to roosting habitats and wet meadows, the study contained fascinating insights into crane biology. I am always amazed at how little we know about these magnificent birds.

Mr. Frith closed the presentations by pointing out the irony of the Platte River spectacle. Several large-scale water projects, which could effectively dry up spring flows in the Platte, are now being proposed. If migrating cranes find the Platte's bed dry, they will probably begin roosting in stagnant water ponds. Large concentrations of birds drinking stagnant water is a perfect formula for a disease outbreak. The up-



Lesser Sandhill Cranes roosting on the Platte River, Nebraska. This photo, taken in 1954, shows extensive shallow-water roosting sites. Many of these roosting

areas are now dry and have grown into forests due to water diverted for irrigation.

—photo by L. Walkinshaw

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Tancho Club Fledges

by *Kyoko Matsumoto, ICF-Japan*

The Tancho or Red-crowned Cranes (*Grus japonensis*) which nest in Japan's northernmost island of Hokkaido are struggling for survival. In the past ten years thousands of hectares of marshlands have been destroyed and replaced by roads, pastures, factories, houses, and farms. In 1972 an ICF air survey revealed for the first time that Hokkaido's Tancho are resident breeders in Japan and not migrants to Siberia as formerly believed. Since then the Japanese Government and private conservationists have been struggling to protect the threatened crane marshes. About 7000 hectares of wetland in the Kushiro marsh are protected as a Special Natural Monument and contain 6-9 pairs of cranes. But the majority of the cranes nest on land that is not permanently protected. Pressure on the wetlands is mounting, and one look at the marshes will tell you that development has had the upper hand over conservation.

So last winter ICF-Japan activated an innovative program to protect the remaining crane habitats. The project is called the "Tancho Club," and is moving forward on two fronts. One of those fronts might be called the "Foster Parent Project." Under this program individuals or organizations "adopt" a pair of Tancho with a donation, and receive regular reports about their pair's nesting success, migration, etc. The funds raised will be used to sponsor aerial and ground surveys and other research projects. The other conservation effort could be called the "Crane Marsh Project" and consists simply of soliciting donations to purchase wetlands for crane sanctuaries.

But before ICF-Japan could launch these ambitious projects, we needed to know more about where the breeding marshes were, and who owned them.

So on the 26th of January I left Tokyo for snowy Hokkaido. I visited the Educational Bureau of Hokkaido, three branch government offices, a city office, and ten town and village offices. In addition I met with many conservationists, researchers, feeders from the feeding stations, farmers who love cranes, and a host of others.

From those inquiries I determined that in May of 1979 there were 72 total nesting sites located in three different regions of Hokkaido, and that by December of that year a total of 36 chicks had been produced.

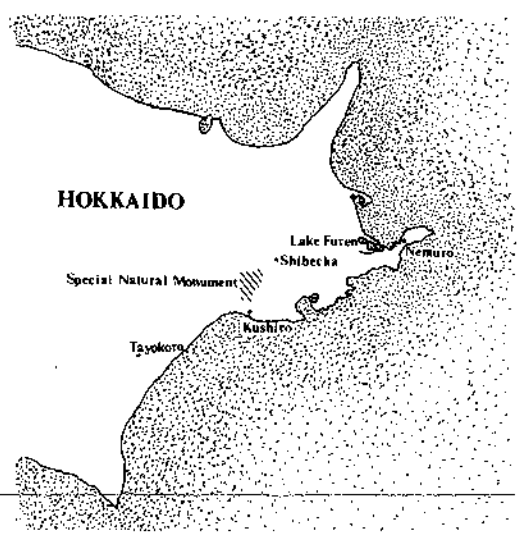
Though 36 chicks from 72 nests would appear to be poor production, the quality of the remaining

nesting sites doesn't necessarily seem to be worsening. In fact, the number of chicks produced rose to 38 in 1980. But problems remain: recently the Tancho have been building nests in marginal habitats like brushy areas along wetland edges and man-made ponds. I wasn't able to determine whether pairs were able to successfully rear chicks at these sites.

Clearly, the success of our "Crane Marsh Project" is increasingly urgent. One of the nesting sites in the town of Tayokoro, where a pair has successfully been nesting for years, will soon be destroyed by a huge sea port. All of the three chicks reared in the town of Taiki disappeared in November for unknown reasons. Though the wetlands surrounding the town of Shibechea contain the largest number of crane nesting sites, officials there have little interest in conservation. Inspiring their interest is vital, since the rivers in their town run down through the Special Natural Monument Area in the Kushiro Marshes. One of the four traditional nesting sites in Nemuro City has dried up, and another will be gone soon. A huge wetland north of Furen Lake was recently drained to create a pasture and several nesting sites were lost.

A wildlife protection area in Japan is protected by the government only for a defined period, with no guarantee of permanent protection. Even the Special Natural Monument Area could be developed under a special permit. The Tancho of Japan will therefore only be secure when their nesting grounds are owned by conservationists.

The project is enormous because the cranes require such vast territories for breeding. But ICF-Japan has already made the first small steps, and if all goes well we will begin publicizing the Tancho Club this fall.



—photo by K. Ozaki

Rare Ibis Captured

by *Scott Freeman, Education Coordinator*

Kunikazu Momose (above), a researcher with the Yamashina Institute of Ornithology and ICF-Japan, holds one of the last five wild "Toki," or Japanese Crested Ibis (*Nipponia nippon*). The last of the wild ibis were captured under the auspices of the Yamashina Institute last January, and are now well-established in captivity at the Japanese Government's Toki Center on Sado Island.

As expected, the recently-captured birds did not acquire their breeding plumage this spring and will not nest in captivity this year. By next year, however, aviculturists anticipate that their adjustment to captivity will be complete, and captive propagation may begin to pull this species back from near-extinction.

Thanks to last January's successful captures, the entire known Japanese population of six Japanese Crested Ibis is now secure in captivity. Little hope exists for the discovery of a relict flock in China, and ICF's George Archibald has recently failed to find any of the ibis remaining in South Korea. The flock of six in Japan is therefore thought to be the only group of Toki left.

ICF congratulates the Yamashina Institute and the Government of Japan on the successful capture. It is our earnest hope that the Toki will thrive in captivity, and that someday soon the offspring of captive Ibis will fly free in the blue skies of Asia.

Platte River

(continued from page 2)

shot: the crane population of 450,000 can be considered endangered.

The afternoon was free for birdwatching and talking with new friends. In the late afternoon we all gathered at a blind on the Mourmon Island Reserve to watch the cranes return to the roost. The Whooping Crane Preservation Trust, with the help of the children who read *Ranger Rick* magazine, has built a small concrete blind into a hillside opposite the major roosting area for the cranes. Once inside, we could watch the birds return from the fields unnoticed by the cranes. It is a tremendous sight to watch the spiraling flocks at close range, coming in wave after wave, landing in the field beside the bunker. As the sun sets, small flocks lift from the field and fly the last few hundred yards to roost in the river. The cacophony of crane calls completes the total sensation of being a part of the crane world.

After dinner George Archibald, ICF's Co-founder, completed the day by presenting the international aspects of crane migrations. Even with all the problems the Platte River cranes face, there is no political strife between nations as a complication. George suggested that cranes can serve as a vehicle to peace. To protect crane migration routes, along with their breeding and wintering grounds, we must foster cooperation among nations. Working together to achieve the common goal of crane conservation will perhaps have wide-reaching effects on the featherless populations to which you and I belong.

Seeing cranes by the hundreds of thousands, in the company of congenial crane watchers, made for an exceptional day. Watch the *Bugle* for announcements of future field trips.

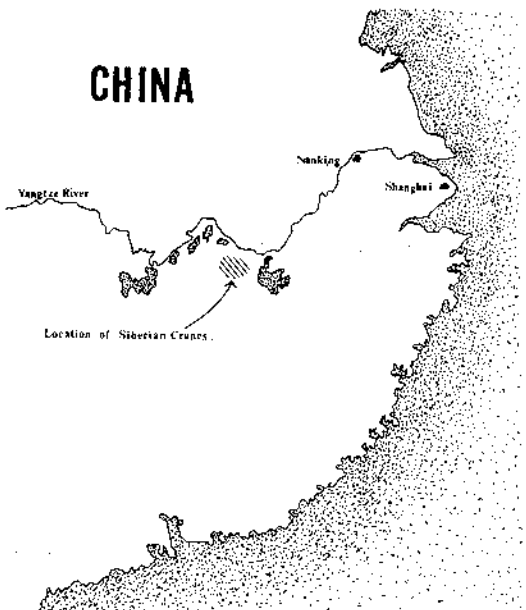
Good News

(continued from page 1)

the count of 100 birds, since this number is one half the Soviet estimate. Unless there are as yet undiscovered Siberian Crane flocks wintering on other wetlands, the total wild population now stands at 150 — a 40% decrease over our former estimate of 250 birds.

Though our previous estimates of Siberian Crane numbers may have been overly optimistic, we now at least know where the birds winter and breed. Research can now be expanded to understand the needs of these great white birds. This knowledge, combined with enthusiastic public education programs, will help the governments of China, India, Iran, and the USSR to mold a bright future for what was a dying species.

JUST RECEIVED: ICF advisor Raj Singh reports that 24 Siberian Cranes left the Ghana Sanctuary in India on March 5th, seven left on March 6th, and three departed on March 7th. This indicates that 34 Siberian Cranes wintered in India this year, rather than the 30 reported previously (*Brolga Bugle*, 7:1). Our Soviet colleagues should take note of these departure dates as they monitor the Siberian Crane's return to their breeding grounds.



One Whooping Anniversary

by Scott Freeman, Education Coordinator

The Whooping Crane Conservation Association (WCCA) is celebrating its 20th year of efforts on behalf of one of the world's rarest and most treasured birds: the Whooping Crane.

When a small band of conservationists met in Tucson, Arizona to form WCCA in 1961, there were about 30 Whooping Cranes left in the world, up from a low of about 15 in the early 1940's. In the 20 years since WCCA's founding, the Canadian Wildlife Service (CWS) and the U.S. Fish and Wildlife Service (USFWS) have protected critical habitats, established a thriving captive population, and begun a promising restocking program. In response to these efforts, the total population of Whooping Cranes has risen to about 120. The species is slowly, but steadily, edging away from the brink of extinction.

Conservationists have been able to move effectively to preserve Whooping Cranes largely because they were supported by an educated and concerned public. Effective public education has been the heart of WCCA's work. In the early 1960's, WCCA members mounted a campaign to educate hunters in the Whooper's migration path by teaching waterfowlers the difference between cranes and geese, swans, and herons. Thanks to these efforts by WCCA and cooperating government agencies, accidental shootings of Whoopers are now virtually unheard of.

WCCA'S present efforts, and future plans, still involve the sphere of public education and information. An all-volunteer crew now sends information to, in the words of Secretary-Treasurer Jerome Pratt, "hundreds of school kids, from grade schools, high schools, and universities, who all want to know about Whooping Cranes."

Interestingly, the novel idea of restocking a crane population through foster-parenting — placing Whooping Crane eggs in the nests of Sandhill Cranes — originated with WCCA charter member Fred Bard. This is the same technique ICF and Soviet ornithologists hope to use in restocking a safe population of Siberian Cranes, using the Common Crane as a surrogate parent. There are now at least 16 Whooping Cranes in the new population hatched and reared by Sandhill Cranes. All are regularly migrating from nesting grounds in Idaho to wintering areas in New Mexico. The vital question in this experiment — whether the young Whoopers will try to pair and breed with Sandhills or with their own kind — has yet to be answered. Dr. Rod Dreweir of the University of Idaho, the biologist who is heading the experiment, reports that all of the several sexually mature Whooping Cranes are male. The adult Whoopers have not yet attempted to pair with Sandhill Cranes, which is an encouraging sign. They haven't attempted to pair with each other for what biologists hope are obvious reasons.

This September ICF and WCCA will be holding annual meetings in conjunction. On Friday, September 25th WCCA members will register in Baraboo and hear presentations by several distinguished speakers, including Alan Loughery, Director General of the Canadian Wildlife Service, and Harvey Nelson, the Regional Director of the U.S. Fish and Wildlife Service. On Saturday morning WCCA members will visit the Horicon Wildlife Refuge, and later will join ICF members in tours of the Crane Foundation. WCCA members will then participate in ICF's banquet on Saturday evening, September 26th. ICF members will receive invitations to the annual meeting later in the

summer, but can mark the date down now!

Another gathering of crane-ologists is approaching: the annual Crane Workshop scheduled August 25-27 in Jackson Hole, Wyoming. Researchers and crane enthusiasts will be flocking to this conference to give papers, attend field trips, and plan future research and conservation work. If you would like to attend this conference, contact Jim Lewis at USFWS in Fort Collins, Colorado.

The International Crane Workshop will be held in New Delhi, India in January of 1983. Persons who would like to attend this conference should contact Dr. George Archibald at ICF.

ICF applauds the inspired work done by WCCA, USFWS, the CWS, and the University of Idaho to preserve Whooping Cranes, and we look forward to an interesting and fruitful series of crane meetings and conferences.

Painting

(continued from page 1)

We would like to thank Diane Pierce, a life member of ICF, for her continuing generosity to this organization. Diane donated the crane painting for the occasion and even traveled to India at her own expense to be at its presentation to Mrs. Gandhi. We also thank Dave Ferguson and the staff of the International Affairs Office of the U.S. Fish and Wildlife Service for their help in arranging the painting's transport to India.

STOP PRESS: ICF has just learned from Mr. Samar Singh, Joint Secretary of India's Ministry of Agriculture, that the Bharatpur Bird Sanctuary — the locale pictured in Diane Pierce's magnificent painting — has just been designated a National Park. ICF congratulates the Government of India for the honor and increased protection which will now be afforded this magnificent wildlife refuge.

Contributions



Received January through March, 1981

Grants and Awards:

Cudahy Fund, Anne and Owen Gromme, Japan Johnson, Johnson Wax, Sam and Gene Johnson, Marshall and Hsley Bank (Jack Puelicher), World Wildlife Fund.

Patrons:

Atlantic Richfield Co., Mr. and Mrs. James Balding, Estate of Ivy Neel Balsom, Baraboo National Bank (Merlin Zitzner), Mary Burke, Gaylord Donnelly, Evjue Foundation, LAW Fund, Inc., D. S. Van Pelt, Mr. and Mrs. Waterman and family.

Sustaining Contributions:

Robert Nevins, Rexnord Foundation, Mrs. John C. Stedman.

Associate Contributions:

Andrews and Quigley, G. Leonard Apfelbach, Thomas Ashman, John and Barbara Canfield, Colin Case, Chippewa Wildlife Society, Bill and Judy Craig, John and Judy Day, George DeBelder, Eleanor De Chadenedes, John Dick, Lucy Gemlo, Grootematt Foundation, Mr. and Mrs. Corwith Hamill, Prof. and Mrs. Joseph Hickey, Hoy Nature Club, Myrtle Ingles, Charles Jahn, Algimantas Kelertas, Warren King, Sharon Lantis, Jay Last, William Levihn, Werner Nartel, Elmer Neel, Pauley Petroleum (William Pagen), Silas and Edith Peller, Mr. and Mrs. William Piel, Mildred Putnam, Ellen Rasch, Kristie Roth, Burton Russman, Tom and Regina Shea, Wallace Wendt, Wisconsin Power and Light Co.

Non-monetary Contributions:

Harold Allen, Bill Aylesworth (Texas Instruments), Curt Baumann, Elisabeth Beinert, Carpet Barn, Phil Dickert (Klein-Dickert, Inc.), Leslie Fields, Ken Georges, Mrs. Grosshans, Dr. Lyle Hart, Marion Hill, Dave Krueger, Sharon Lantis, Anita Lapp, Susan Leopold, Flo Leuders, Dr. Marge Losch, J. O'Halloran, Dr. Kathy Olsen, Shirley Russman, Dr. Milton Sunde, Dr. Stewart Taylor, Sandi Utech, Karen Voss, Dr. B. C. Wentworth, Mrs. Verne Wing.

The Bottom Line

by Alice D'Alessio,
Development Coordinator

"When are you going to build?" It's the question everyone has been asking since we made it known two years ago that we'd outgrown our quarters and purchased a 160 acre farm five miles north.

The answer: We're ready! With day-to-day operations more secure than ever before, we've set into motion the plans for Phase I of our Building Program.

Those of you who have visited our present quarters on the farm generously provided by Norman and Claire Sauey may have noted the preferential treatment of birds over humans. Example: each crane (almost), from the lordly Sarus to the petite Demioselle, has its own house and exercise pen. Humans — our full-time staff of ten — are wedged shoulder to shoulder into three small offices. It's cozy, and especially in the winter, the warmth is nice.

Well, at the new site we've maintained our priorities. Our first construction (starting date not yet set) will be a breeder unit to house 12 pairs of cranes. Designed by Madison architect Herb Fritz and donated by Sam and Gene Johnson, the unique building will combine visual beauty with the utmost in avicultural utility. Also of top priority are a quarantine unit for the birds, and the remodeling of a barn into a chick hatchery.

Far down the list is the purchase, lease, or loan of a second-hand trailer to house the staff.

No, we're not complaining. We just wanted to reassure you that the birds always have been, and always will be, our foremost concern (and the trailer is intended to be temporary).

It's an exciting time for all of us — but we need your support now more than ever before. We're actively seeking completion funds for the chick hatchery. To create a comfortable and energy-efficient home for our incubators, precious offspring, and their caretakers, Herb Fritz has designed a building that takes full advantage of the existing solid, south-facing barn. An estimated \$160,000 is needed for the remodeling. We've made a start, and will continue to keep you informed about this project.

Remember to call for a visit this spring to greet our newest treasures. We look forward to seeing you then!

THE WISH LIST

We ordered the microscope! Thanks to a very nice response to our appeal in last issue's Wish List and a large contribution from the World Wildlife Fund-U.S., a phase-contrast microscope for the Crane Foundation is on its way. Elizabeth Conger, Mary Doering, Mary Griffith, Marion Hill, Theresa Korzendorfer, Claude LeRoy, Stephen McNabb, Pat McNichols, Mrs. Harold Nelson, Jeanne Popovich, Ellen Rasch, Burton Russman, Mrs. Ted Scharfenberg, and Yours Truly all pitched in to help the cause.

Sandy Utech discovered an atlas for us, Kathy and Roger Rigerink sent in a German dictionary, and Mr. Frederick MacMillin filled our aquarium wish. An anonymous California donor sent us a Russian dictionary. Thank you one and all, good members.

Last issue's response has truly humbled your humble editor. Our one wish for this issue is that all of you will call for an appointment and tour ICF sometime this season. Bring your friends, your relatives, and all potential members you know!

Recent Publications

compiled by Sharon Lantis,
ICF Researcher

Subsequent issues of the *Brolga Bugle* will contain this short column featuring recent publications relevant to crane researchers and conservationists. *Bugle* readers who find interesting publications are encouraged to send ICF bibliographic information, so the work may be advertised in the next issue.

Binkley, Clark S. and Richard S. Miller. 1980. Survivorship of the Whooping Crane, *Grus americana*. *Ecology*. 61(2).

Maroldo, Georgette K. 1980. Crip: the Constant Dancer. *Blue Jay*. 38(3):147-161.

Errata

Dr. P. O. Swanberg reports that the article in the August, 1980, issue titled "Brood Patches in Cranes" was in error when it stated that ICF researchers were the first to discover brood patches in cranes. Dr. Swanberg has a Swedish ornithological manual published in 1856 which mentions brood patches in cranes. We regret this error, and thank Dr. Swanberg for calling it to our attention.