THE ICF BUGLE

Volume 12, Number 1

February, 1986

World Center for the Study and Preservation of Cranes

Crane Researchers Meet in Hungary

by George Archibald, ICF Director

Each spring and autumn, more than 10,000 Common Cranes rest on the Hungarian Plains in transit from breeding grounds in eastern Baltic countries to wintering grounds in North Africa. Fringed by the Carpathian Mountains to the north and the Alps to the southwest, and crossed by the Danube River, the Plains are a little smaller than the state of Indiana. It is rich farmland sprinkled with villages, where many a roof is topped by the nest of the White Stork. Out on the grasslands several thousand Great Bustards, a cousin of the crane, still perform their elaborate mating rituals in a land where the seasons approximate those of Wisconsin. To keep company with the gathering cranes, the Working Group on European Cranes (WGEC) also met in Hungary, from October 21 to 26, 1985. I was able to attend and to work personally with our European colleagues.

WGEC had its beginning at the International Crane Workshop in India in 1983. Under the able and enthusiastic leadership of Dr. Joost van der Ven, 57 members of the group in 20 countries have received quarterly research reports and other news from loost's office in the Netherlands. Dr.



A Common Crane guards its nest in East Germany. Photo by Franz Robiller.

Atilla Bankovics and his office in Budapest, within Hungary's National Authority for Environment Protection and Nature Conservation, were the hosts of this first meeting of the WGEC in Europe.

Two species of cranes are native to western Eurasia: the Common Crane (Grus grus) and the Demoiselle Crane (Anthropoides virgo). The Common Cranes breed in wetlands from northern Europe to east Asia and winter from Morocco to China. The Demoiselles are more suited to uplands, with a stronghold on the steppes of central Asia. They nest in semi-arid grasslands and winter from northeastern Africa to India. In India they occur in company with Common Cranes foraging on gleanings in agricultural fields and resting at night in shallow water of nearby lakes.

Neither species is endangered and flocks of thousands can still be observed at staging

Continued on page 2



Main migration routes of the Common Crane over Europe. Drawn by Patti Fisher.

Crane Researchers

Continued from page 1

and wintering areas. Cranes, however, have been extirpated from several European countries in recent centuries. Nesting Common Cranes disappeared from England about 1650, for example, and from Spain in 1954. Countries bordering the Baltic Sea remain the European stronghold for the Common Crane, while Demoiselles only survive in countries bordering the Black Sea.

Eleven Countries Represented

For the conference, thirty delegates from eleven countries met in a former school-house beside cornfields where Common Cranes feed outside the town of Orashaza. Lengthy conversations followed the research reports, as participants took this unequalled opportunity to compare their information with that from neighboring nations. After all, it is the same Common Cranes that breed in Sweden, stage in East Germany, migrate over West Germany, the

Netherlands, and France to winter in Spain and Morocco; and it is their neighbors that breed from Finland to Poland, then gather in Hungary in transit to Tunisia. The migrating cranes unite Europe.

The meeting inspired fascinating discussions. Cranes formerly nested in Hungary, for example, and their elaborate inner wing feathers adorned the crests of the nobility. Although the nesting cranes have vanished, Hungarian paleontologist Dr. D. Janossy has examined bones from the Middle Ages. Common Cranes of that period measured 10 to 15 percent larger than they are today. Once the cranes were widely hunted throughout Europe. Could it be that more efficient weapons removed the larger cranes and favored the survival of smaller cranes? But today, there is no crane hunting in Europe and the Common Cranes are expanding their breeding range into western Europe. Perhaps they will eventually reoccupy their former distribution and assume their former size. More comprehensive research is needed.

Goals for the Future

The delegates identified several future

directions for WGEC. As the workshop advanced it became increasingly apparent that unless significant numbers of Common Cranes were captured and color-marked on their wintering grounds in Spain, researchers would be unable to answer some fundamental biological questions about the western flock, that now numbers more than 30,000 birds. Color-marking would provide insight both on population dynamics (age of first breeding, reproductive rates, length of life) and social dynamics (the degree of mixing in winter and on migration of different crane populations). Catching and marking the cranes remains the challenge for our gifted colleagues in Spain.

Discussions also focused on North-Africa, linked to Europe by both cranes. Together with Europe, North Africa forms a biogeographic unit called the western Palaearctic Zone where similar animals and plant species are distributed around the Mediterranean Sea. Consequently, it is appropriate for the WGEC to expand and include members from North Africa.

Demoiselle Cranes once nested on the high plateau of the Atlas Mountains, that span Morocco, Algeria, and Tunisia. Probably as a consequence of human activity in recent decades, the cranes declined and were believed gone until the recent discovery of a few pairs on the rocky grasslands south of Fez, Morocco. Unfortunately, little information has been forthcoming from ornithologists in Morocco on the status of the Demoiselles, a population that may well be genetically distinct from those that breed in central Asia. WGEC will try to encourage research and conservation for the northwestern Africa Demoiselles.

Finally, delegates decided that more meetings were vital to the growth of our collaboration. Dr. Olaf Swanberg from Sweden suggested that 1988 be the Year of the Crane and that each country conduct intensive research that year with reports presented at a meeting of WGEC in Spain early in 1989.

The meeting concluded with a late afternoon ride in horse drawn carts over the grasslands of Hortobagy National Park. East and West Germans, Finns and Hungarians, Britons and Spaniards all perched on bales of hay, laughing and talking in multiple languages as we searched for birds and sipped a local brew.

That afternoon, we could not help but reflect on the glorious yet tragic history of Europe. Ancestors of these cranes flew over the battles of our ancestors. Our dream is that future generations can join together in appreciating each other and the wonders of nature as we did this past October on the Hungarian Plains.

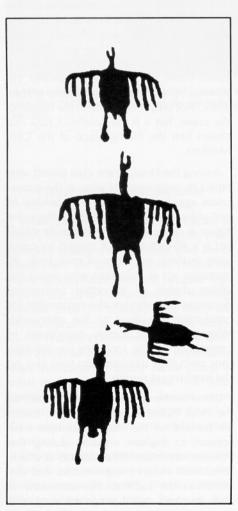
Southwestern Indians and Cranes

by Theodore R. Frisbie

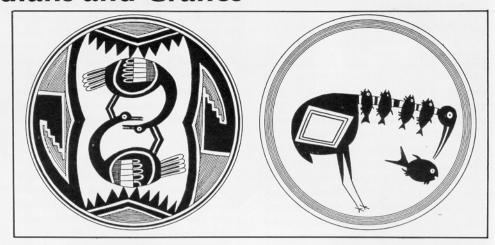
[Dr. Frisbie is a Professor of Anthropology and Director of the Anthropology Teaching Museum at Southern Illinois University at Edwardsville.]

Native Americans share a closeness with nature that few of us can fully comprehend. This is because they consider the earth and everything associated with it sacred, all fitting into an interlocking system that must operate in balance and harmony. The proper practice of religion is the means for maintaining this balance.

Following a visit I made to ICF in 1984, I began studying crane art and lore among the Pueblo and Navajo Indians of New Mexico and Arizona. I found cranes to be remarkably important among these rich cultures. For most ICF members, cranes have aesthetic and scientific values. But among the Indians where religion retains a practical urgency, cranes are necessary to life.



This pictograph shows cranes in flight; from the Nogales Cliffhouse, Gallina area. Courtesy of Stewart Peckham.



Intricate designs fill the interiors of ceramic bowls made by the Mimbres people between A.D. 1050 to 1200 in New Mexico. Left: cranes stand on each other's necks. Right: a crane eats fish. Redrawn by H. S. Cosgrove.

Cranes undoubtedly migrated through southwestern North America for untold centuries. But apparently they were not associated with prehistoric cultures until after A.D. 900. Crane bones first appear at sites in Chaco Canyon, New Mexico. In many instances these bones had been modified. By cutting, splitting, and polishing, the Indians made awls, tubes, and quite possibly beads, whistles, and needles.

The "Chacoan Phenomenon," as it is called by archaeologists, represents the highest level of cultural attainment reached by the Pueblo people. Why crane bones should appear here is a mystery: possibly cranes were one of the numerous traits adopted at this time from a Mesoamerican source (the Aztecs, whose civilization fell to the Spanish Conquistadores in 1519, considered themselves to be "The Crane People").

Oddly, crane bones also first appear in eastern and midwestern United States during the "cultural high," or Mississippian period at approximately the same time as in the Southwest. Whether or not there is a tie of some kind between Mississippian, Chacoan, and Mesoamerican cultures is a subject of considerable interest and debate.

Pueblo art features cranes

Graphic representations of cranes are numerous within the Southwest and, again, appear to postdate A.D. 900. Rock art (including both petroglyphs and pictographs), ceramic vessel decoration, and mural painting on ceremonial chamber walls all depict cranes. These artworks indicate cranes were important to native peoples in the past, just as they are today.

It would be impossible to provide a figure for the number of petroglyphs and pictographs showing cranes. Let me simply say that there are *many* more than anyone seemed to realize before I began to survey the literature and query colleagues.

Cranes appear in three ways. Rarest are cranes in flight. One pictograph in white paint on the cliffs of Nogales Cliffhouse near Llaves, New Mexico, depicts what are reputed to be three cranes flying in the same direction with a fourth intersecting them at a right angle. Occasionally not the cranes themselves but their tracks appear, in petroglyphs of both Zuni and the Hopi Pueblos. Elders interpret these to be clan symbols. But by far the most common are standing cranes in profile.

Without question the paintings inside ceramic bowls made between A.D. 1050 and 1200 offer the greatest variety of prehistoric crane illustrations. Cranes, as well as other birds, animals, and insects, played an important role within Mimbres culture. My cursory search of the literature has provided well over a dozen cranes. They are extraordinarily beautiful.

Some bowls show individual cranes in profile, and others incorporate fanciful features, particularly extremely long necks. Further examples include cranes in more proper perspective and commonly interacting with insects, fish, reptiles, mammals, and humans.

Mimbres bowls bring upwards of \$25,000 on the "open antiquities market" and have inspired pothunting professionals to bull-doze Mimbres sites. Some sites have been purchased for "pot mining" with no attempt to preserve the archaeological record. Other sites have been simply ravaged, even on federally protected land. Currently the Mimbres Foundation is working to protect what is left.

During Pueblo IV, ca. 1300-1540, the painting of kiva (or ceremonial chamber)

Continued on page 4

Southwestern Indians and Cranes

Continued from page 3

walls with murals provided yet another glimpse of the religious life of Pueblo Indians. Among the most complete series of murals are those found at Pottery Mound located 45 miles southwest of Albuquerque along the Puerco River. One of the murals shows a religious scene within a kiva. A woman and a man are seated upon the kiva floor. She wears a typical manta or black dress, sashed at the waist, and her hairdo indicates she is married. The man wears a ceremonial kilt and an elaborate headdress. Between them appears to be an individual squatting over a bowl filled with coiled beads, a second empty bowl, and a magnificently painted Whooping Crane with its throat sac fully distended. Above the crane hanging from a "pole shelf" are blankets and many strings of beads that are still commonly used by Puebloan people.

Cranes in Pueblo lore

The symbolism associated with cranes combines a number of traits that are of extreme importance to Puebloan culture. Hamilton Tyler's *Pueblo Birds and Myths*, published by the University of Oklahoma Press in 1979, includes much of what is currently known.

Cranes, of course, are associated with water. They eat frogs and fish (water sym-

bols), and are also fond of seeds, particularly corn. Additionally, they are well known as guardians. All of these traits — as well as the fact that cranes announce their presence long before they are seen via their voices, and that they descend from the sky/clouds to the water and proceed to eat water creatures and seeds — suggest why they figure so prominently in everything from children's tales to secretive religious ceremonies.

Based on a Tewa tale from San Juan, it would appear that both the sacred clowns and kachinas are controlled and guarded by a personage who is none other than Crane Old Man. Similarly, at San Ildefonso, another Tewa Pueblo, a Rain Bird kachina appears during Holy Week with a Seeds kachina who scatters seeds within the Turquoise kiva. The bird's description fits that of the Sandhill Crane that migrates north in spring, perhaps seeking rain, and then returns in the fall bringing seeds.

The guardian aspect is seen in another guise at the Keresan pueblo of Laguna where a crane protects the doorway of a mythical monster. Sun sends his son, Fire-Brand Youth, to subdue the monster and free the incarcerated people. Because of his brightness the boy blinds the crane and is able to accomplish his mission. Sun Father is associated in yet another way, in this instance a more direct one; his movement on the horizon from north to south foretells the solstices that are of extreme importance to Puebloan people. Crane migrations parallel Sun's movements.

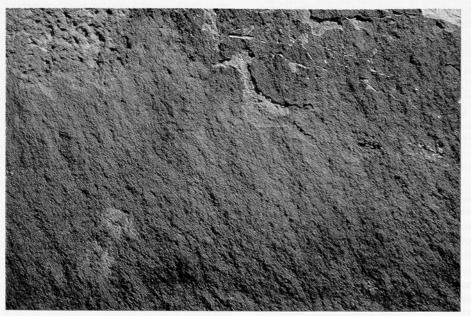
Coming from the north has implications extending to winter. Cranes (as well as bears) are associated with this season that is further tied to the migration of people from the north. In the course of their movements, the Divine ones decided the people should be divided into clans. Among the Zuni, the Sandhill Crane was adopted as the clan name simply because cranes happened to be flying overhead at the time. Later the Divine ones organized religious societies. The head of the Zuni Galaxy Fraternity was appointed from the Sandhill Crane clan, as he continues to be.

This society or fraternity is associated with clowning, and crane feathers may only be used by them. Each member carries a personal fetish consisting of a wand-like emblem having two crane wing feathers attached to its upper end. If other individuals handle cranes or their feathers during times of ceremonial retreats, they must become Galaxy Fraternity members. At other times anyone may procure feathers and present them (or the entire dead crane) to any initiated member of the society.

A further association is related in a myth wherein the Corn Maidens departed from Zuni with all of the corn following ill-treatment by the people. They are ultimately found by a personage, Galaxy Youth who is called Bitsisi, the leader of the society. His home is Ashes Spring, located in a marshy place. Not only is his home in the habitat of the crane, but it is the Sandhill Crane that shows him the hiding place of the Corn Maidens.

Among the Hopi, Crane clan joined with others to initiate youths who, at the appropriate age, had to choose membership in one of four religious societies. Of these the Agave is of significance because its standard is a 40-inch tall stick topped by crane wing feathers and strips of corn husk. Its members act as guardians who patrol the village during all important ceremonial occasions and who are also responsible for conducting the dead to the afterworld. When the Agave society participates in ceremonial activity, including the initiation, they erect their standard atop their kiva on the hatchway at sunrise.

Crane feather usage may be restricted to the Hopi Agave society. But crane tracks are painted on the mask of an ogre who appears to frighten children during the Powamu ceremony (Bean Dance) at which time small children are initiated into the secrets of the kachlina. The ceremony is also involved with prognosticating the coming year's crops and assuring the passage of winter.



The crane in this petroglyph bears blue stain on its lower body and legs; from the Newton site, New Mexico. Photo by T. R. Frisbie.



A Whooping Crane has been painted upon the mural wall of Kiva 2, a ceremonial chamber at Pottery Mound, located 45 miles southwest of Albuquerque. The "U"-shape at center is the doorway connecting Kiva 2 with Kiva 3. Photo courtesy of Maxwell Museum of Anthropology, University of New Mexico.

Cranes remain significant today

While cranes are generally significant to Native Americans, there is a deeper, more personal relationship for those who are of crane clan. For these persons, cranes become synonymous with self because individuals are, by birth, equated with the magnificent birds. As children they learn the mythological ties by which they are bound to the cranes. Within native society one's clan affiliation is of far greater importance than the common family name found in tribal records or phone books. Not infrequently their homes will feature crane images in any media that can be found from plastic knicknacks and sculptures to paintings.

The most recent example known to me of artistic depictions of cranes among the Pueblos appears in an acrylic painting "Going Home," by Joann Peina, a Zuni Pueblo high school senior (1984). The combination of elements chosen for this compo-

sition fit exceedingly well with crane lore: a large, bright sun symbolic of Sun Father; cattails representing a marshy place, seeds and plants; and lastly, a pair of cranes that are in the process of migrating to the north, ie., "home." While it is quite likely Ms. Peina is a member of the Sandhill Crane clan, and her painting relates to clan mythology, I was unable to locate her to inquire when I bought the painting at the high school art sale.

Although usage of entire stuffed birds for ceremonial purposes may be cited for parrots, coots, and a few other birds, nothing of this nature is known among the Pueblos concerning cranes. Among the Navajo, however, pouches for medicine were (and are) made from Sandhill Crane bills with complete head and portions of the neck left intact. Small portions of the crane's heart, lungs and stomach were also dried and these, as well as "chips of jewels" were placed in the bill. Reeds obtained from both the Hopi and Taos areas were inserted in the neck. These held the medi-

cine for use in Flintway and Shootingway rites. Interestingly, the medicine contained a variety of Pueblo foods, and was sealed in the reed tubes with red ochre and the pitch from a lightening-struck tree. Crane bills may also be used as medicine spoons.

Among Southwestern Indian cultures, cranes are not merely thought of as beautiful birds. Their very presence is associated with the continuation of life itself, through a maze of symbolism wherein the past combines with the present.

Today there are those who hold the Sandhill Crane as their clan totem. There are also those who through traditional rights use crane feathers and other parts of these birds for religious purposes. These rights have been subsumed under federal law through the passage of the American Indian Religious Freedom Act in 1978. As indicated, the use of cranes appears to be highly restricted within Native American cultures, a situation that minimizes conflict with the conservation of these wetland birds



Thousands of Hooded and White-naped Cranes gather near Izumi in southern Japan each winter. The Japanese, who revere cranes, feed them grain through the cold months. Photo by G. Archibald.



Loyal friends to cranes, and an inspiration to man, Dr. and Mrs. S. Satsuki in Hokkaido.

Groups Join Hands to Protect Cranes in Japan

by Yumi Goto, ICF-Japan

On January 12, 1985, the Japan Wild Bird Society convened the first meeting of its Special Committee for Protection of Cranes in Japan. The committee has 22 members representing such organizations as World Wildlife Fund - Japan; Japan Ornithological Institute; Japan Association for Protection of Birds; and Japan offices of IUCN, ICBP, and the International Crane Foundation.

The Committee is joined by crane wardens and researchers in the areas where major flocks of cranes occur — Kushiro in northern Hokkaido, Yashiro in southern

The ICF BUGLE is the quarterly newsletter for members of the International Crane Foundation (ICF). Production and mailing costs are being met by a special grant from Clairson International of Ocala, Florida. Articles review ICF programs as well as crane research around the world.

Co-Founders: Geor

George Archibald Ron Sauey

Editor:

Jim Harris

ICF offers memberships at the following annual rates:

Individual \$15 Foreign \$20 Family \$25 Sponsor \$500 Associate \$100 Patron \$1,000 Honshu, and Izumi in southern Kagoshima. It was the first meeting ever convened of all groups concerned about cranes.

Japan has three species — the Tancho (or Red-crowned Crane), Hooded Crane, and White-naped Crane — of the seven endangered cranes in the world. The Special Committee's immediate goals are: (1) to ensure survival in the wild of sufficient numbers of cranes; (2) to exert efforts toward protecting and expanding crane habitats; (3) to solicit national and international cooperation on behalf of cranes.

Tancho, the most beautiful of all cranes, is now found only in Kushiro along the eastern coastline of Hokkaido facing the Pacific. Historical records show that they used to live widely in Japan. There are also many legends and folktales about the beautiful crane, and the names of so many cities, towns, and villages reflect the love of the people toward the crane.

Nevertheless, there has been no concerted, research-based effort to protect cranes in Japan. It is hoped that the formation of the Special Committee will mark a major step toward happy co-existence of humans and cranes in this country.

Committee members discussed the status of cranes at the three major locations in Japan, and identified conservation concerns.

Kushiro: In 1952, there were only 33 Tancho at the feeding stations in Kushiro. That number has increased, to 384 in December of 1985, although the chick ratio remains at about 10 to 16 percent annually. In the past, collisions against electrical wires were the major cause of death, taking as many as 23 birds in 1947. Such mortality decreased significantly when the electric company took preventive steps with markers and cover-up of the wires.

The government allots 2.5 million yen for Tancho protection each year, There are three major feeding stations in the area. The current problems facing the cranes are the crows, sparrows, and doves that usurp the food; the risk of virus contamination from droppings of the doves; and especially deterioration of the nesting habitat.

Yashiro: The number of Hooded Cranes wintering at Yashiro has dropped from 100 to about 60 in recent years. An annual budget of 2 million yen is earmarked for feeding them.

Local industrialization has caused the decline in cranes, because of a loss of roosting areas. Since 1973, local chapters of the Japan Wild Bird Society have attempted to provide more roosting sites.

Izumi: As of January, 1986, 7,602 Hooded and White-naped Cranes were present at Izumi, slightly less than the previous year. The cranes are alarmingly concentrated, and in danger of great die-offs if an epidemic should occur. Although shortage of food has been making them disperse, collisions with wires and crop protection nets have increased. In 1984-85, 16 such cases were reported.

State ownership of the farmland is urgently needed, to eliminate disputes with the farmers who own the land where the cranes gather. The farmers are paid for the use of their fields as feeding stations, but they could make almost five times as much money if they grew crops. They are very dissatisfied. The national and prefectural governments must take appropriate measures so that the farmers understand and help the cranes.

But much has been gained to help the cranes in Japan over the past four decades. We Japanese continue to face the current challenges with optimism.

Dr. Soichiro Satsuki: Forever a Friend of Tancho

by George Archibald, ICF Director

The steam locomotive surged through a blinding blizzard that February afternoon in 1972 on Japan's northernmost island, Hokkaido. What would I do when I reached the end of the line? It was my first trip overseas. I couldn't speak Japanese. I had no interpreter, nor any idea how I might survive in the countryside where Japan's last Redcrowned cranes still gathered each winter.

Darkness fell as we chugged into the coastal town of Kushiro. When the door slid open, a blast of snow blew into the cabin as I struggled to move my motley assortment of suitcases and tripods. Suddenly a happy voice in broken English penetrated the wind, "Welcome. Come quickly. My family awaits you. You must be cold, hungry. Make haste, the sooner the better." It was the incomparable Dr. Soichiro Satsuki. My fears dissipated and an adventure with remarkable people and cranes began.

Dr. Satsuki, a curly haired, happy-golucky intellectual, was born in Kushiro in 1927. He always had a keen interest in culture, natural history, conservation, and medicine. While studying for his doctoral and medical degrees from Maebashi University in southern Japan, he met the gracious Yoshie Ohtani. They married in 1951 and subsequently raised two gifted daughters, Yulia and Rori. The Satsukis adopted me that winter and ever since I have considered them as family.

One of Dr. Satsuki's best friends was Professor Hiroyuki Masatomi, Japan's foremost researcher of cranes. Masatomi had secretly tipped off the Satsukis that I would be on the train that blustery night. And over the years, we all have worked together to study the cranes and to promote their conservation.

One morning last April, I received a phone call from Dr. Masatomi. Without warning, Dr. Satsuki had passed away in his sleep.

Dr. Satsuki's optimism, his generosity, sense of humor, and scholarship were an inspiration to hundreds of people. And the increase in Hokkaido's Red-crowned Cranes from just 33 birds in 1953 to more than 300 today is a salute to the tireless conservation efforts of Dr. Satsuki and his colleagues. Although we have lost a beloved friend, the example of Dr. Satsuki lives on and his spiritual aura brightens the challenges as we try to help the people and cranes of many nations.

The Bottom Line

by Bob Hallam

GROWTH! GROWTH! GROWTH! ICF had another record year in attendance, income and membership. Out of our record 18, 226 visitors, 13,764 took guided tours. This represented an increase of 24% over 1984. School children participating in our on-site crane curriculum program totaled 4,315, and our off-site presentations reached an audience of almost 7,000.

ICF had a record year in unrestricted (operational) income which almost reached \$500,000. Sales and tour income jumped 28% to over \$73,000. Our membership grew to a new high of 3,609. This growth resulted in the hiring of a full time bookkeeper, Terry Brooks. Welcome aboard, Terry!

As a result of this growth, ICF received a challenge grant from the Janesville Foundation for the installation of an IBM-XT computer. Thanks to John and Mary Wickhem and the Alma Doten Fund, ICF successfully met the challenge grant, and we are currently programming the new computer.

We are very fortunate to have hired Terry, because she not only brings her accounting skills to ICF, but also her extensive computer experience. Later this year, we hope to put our membership on our own computer.

Once again, we wish to thank our invaluable volunteers, interns, membership, Board of Directors, and staff for their loyal support!

A Gift to the World

The capital fund drive "A Gift to the World" is rapidly gaining momentum. To date we have received gifts and pledges totalling over \$300,000. In the next issue of the *Bugle* we will have an expanded article about the campaign.

We wish to thank all of you for your support!

Waldo, Jr.; Washington High School; Peter A. Willmann; Winifred Woodmansee; Don & Carol Worel.

Contributions

Received October - December, 1985

Grants and Awards: Aid Association for Lutherans; George Archibald; Janet Balding; Elizabeth & Keith Boyle: Chicago Metallic Corp.; Francis R. Dewing Foundation; John Henry Dick: Alma Doten Fund: Janesville Foundation; H. J. Hagge Foundation; Hubbard Foundation: Institute of Museum Services: Kohler Co.: Iim Kuehn: Marshall & Ilslev Bank Foundation: John & Annette Martin; Dr. Josephine Murray; Oshkosh B'Gosh Foundation; Fred Ott; Mrs. Charles Pain; George Ranney; Schlumberger Foundation, Inc.; Maggie Seeger; Philip Shelton; J. R. Short Milling Co.; Stackner Family Foundation; Kim & Malcom Winter; Irvin Young Foundation.

Patrons: Mrs. Cecil Carpenter; Elizabeth O'Connor; Edwin & Victoria Cohen; Doris Huestis Spiers; Dr. Margaret C. Winston.

Sponsors: Anonymous; Jonathan & Rosemary Avery; Ralph & Gertrude Findley; *M/M* Kenneth Nebenzahl; Claude & Carolyn Stone.

Associates: Hope Anderson: Thomas Ashman; Audubon Society of Ohio: Reverdy & Helen Baldwin; Virginia Banta; Baraboo Optimist Club; Dr. Eva Bene; Len Bennet; Warwick Bonsal; Michael & Janet Brandt; Genevieve C. Brock; Mrs. Donald Bruckmann; C & S Rehabilitation Service Ltd.; Barbara & John Canfield: M/M Francis Carpenter; M/M Reed Coleman; Dennis Conway; Chester & Margaret Corson; Judd Day; Mary Donald; Thomas Fifield; David & Joan Fordham; M/M Volney Foster; Peter Frederick; Frank Freese; Karen Gallev: Virginia & James Hageman; Ben Hallam; William & Julie Hallam; F. Borden Hanes, Jr.; Yvonne Henze; Paul Hickie; Ruth & Ross Johnson; Dale & Davida Kalina; William Kieckhefer; M/M Scott Kittsley; Brian & Terrie Knox; M. Rosemary Lewis; James Lockhart; Dorothy Mc Ilroy; J. De Navarre Macomb, Jr.; Charles Merrill, Jr.; Donald & Margarita Messersmith; William Messinger; James Mooney; Marianna Oglesby; Carol C. Oleson; William Palmer; Martin & Linda Pavlovich; Eleanor Green Piel; Philip & Margaret Piper; Norman Quale; Racine Railroad Products, Inc.; Robert & Ellen Rasch; D. F. & Ruth Reinoehl; Mr. Joseph Rich; David Rorick, Jr.; Dr. & Mrs. Burton Russman; Gerard & Barbara St. George; Esther Schadde; Don & Dorothy Schultz; Dr. & Mrs. Richard Shannon; Connie Squire; Roxanne B. Steinman; Lois Thies; Richard Thompsen; R. Roberta Throne; Sandra F. Utech; M/M Jacque Vallier; William & Mary Van Evera; Versa Technologies; Mary Von Neumann; Dr. & Mrs. M. R. Vrtilek; Emily Wade; C. Ives & Marie S.

Field Trips and Crane News

ICF is offering two field trips this spring. Members and guests are welcome.

Sat., May 10 — Mud Lake and Grand River Marsh Wildlife Areas in central Wisconsin.

Mon., May 26 - Horicon Marsh.

Both trips are part of our training program for Chinese scientists visiting ICF. We'll discuss cranes and other wildlife, their wetlands, and wildlife management. We'll be exploring some of Wisconsin's finest marshes, and should see geese, herons, egrets, and many other waterbirds. The Horicon trip will be by canoe. We're asking for a donation of \$18 per person per trip — to support ICF's China programs.

Ron Sauey, ICF co-founder, will lead the first trip; Jim Harris, ICF's Education Coordinator, will lead the second. To reserve a place, send your full payment to ICF. Include name, address, phone number, and specify which trip you wish to make. We'll send out information in advance about meeting sites, what to bring, and other details. We'll also send out lists of participants to encourage car pooling and canoe sharing. We hope you can join us!

They are still alive in Vietnam! This August Dr. Vo Quy, a Vietnamese ornithologist, found 20 Eastern Sarus Cranes in Dong Thap near the Kampuchean border. This is the first authenticated sighting of this rare subspecies in southeast Asia in recent years.



Two Demoiselle Cranes await reintroduction into the wild in Pakistan's Northwest Frontier Province. The birds were live-caught in Baluchistan as part of a cooperative venture involving wildlife officials and hunters. The project provides incentives for crane hunters to participate in banding and migration studies as part of crane hunting laws introduced in the Spring of 1984. Photo by Steven E. Landfried.

 The Whooping Cranes have had another successful year at Wood Buffalo National Park in northwestern Canada. Twenty-eight pairs of cranes nested in 1985, hatching 21 eggs. Sixteen young were banded in August and all 16 reached Aransas National Wildlife Refuge on the Texas coast by mid November. The winter 1985-86 count at Aransas is 96 birds, the highest ever.



International Crane Foundation

Route I, Box 230C Shady Lane Road Baraboo, Wisconsin 53913

Address Correction Requested

Nonprofit Organization U.S. Postage PAID Permit No. 179 Baraboo, Wi 53913

WHETHING THE WAR TO THE WAR THE WAR THE WAR TO THE WAR THE WAR