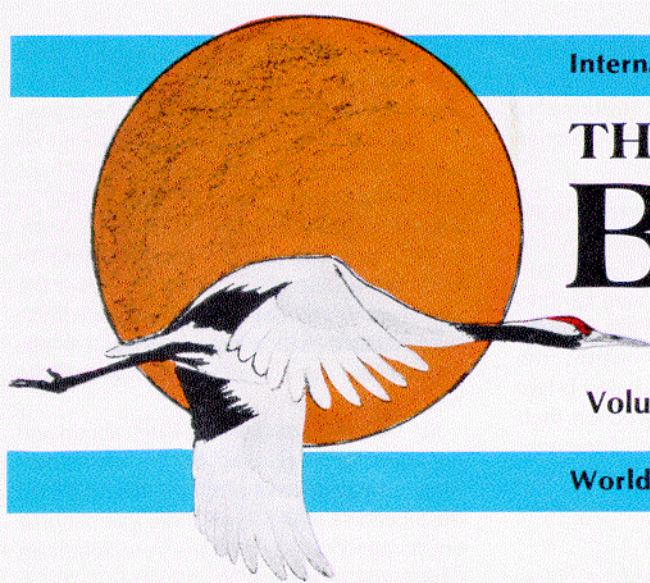


THE ICF BUGLE

Volume 17, Number 1

February, 1991

World Center for the Study and Preservation of Cranes



Satellite Monitors Cranes Migrating from Siberia

By David H. Ellis and Yuri Markin

Most people, Russian or American, would not be pleased to receive an invitation to go to Siberia. For us, however, it was a dream come true. When Sasha Sorokin and George Archibald invited us to participate in tracing the migration route of the highly endangered western population of the Siberian Crane, they little knew how important the project would become to each of us.

For 15 years, Yuri had studied the ecology of the Eurasian Crane *Grus grus*, the surrogate species that would be involved in the first year of the project. He had long hoped for a way to follow the movements of cranes from northern Europe and Asia to and from their wintering grounds. For David, the opportunity was the realization of efforts, begun 20 years earlier, to learn Russian in hopes of studying birds in Siberia.

Although our interests in the project drew us quickly into a team, our contributions were divergent. Yuri applied his skills acquired in capturing cranes in Kazakhstan and European Russia. Similarly, David took responsibility for arranging equipment and financial support for the project. Because satellite telemetry offered the only hope for following the birds in the vastness of the Siberian wilderness, it was crucial for the project when Charles Vermillion of the National Aeronautics and Space Administration (NASA) arranged for satellite transmitters (PTTs) and provided a team to receive and translate the data.

In addition, Phil Effinger of Clairson Enterprises became involved in manufacturing the feather guard, a plastic shield that prevents

the bird's feathers from covering the solar panel on the PTT backpack. Next, the University of Maryland volunteered space, equipment, and expertise in the design and construction of a four-barrel capture-gun for use in shooting a net over the cranes. Finally, we involved the captive crane colonies at the Patuxent Wildlife Research Center in testing harness and attachment designs. Almost over-

night, the project blossomed from an unexpected invitation to a full-blown research project. Literally months of preparation preceded our brief four-week stay in the marshes along the Kunovat River (a tributary of the Ob River —see map, page four) in northwestern Siberia.

An icy plunge

Although Yuri had previously worked in
continued on page 4



On the lonely wetlands of western Siberia, Yuri Markin releases a Eurasian crane named Ivan just fitted with a radio transmitter. Tracked by satellite during migration, Ivan will help us develop techniques to save endangered Siberian Cranes. Photo by David Ellis.

Yakutians Begin Banding Program

by George Archibald, Director

While the western population of Siberian Cranes teeters on the brink of extinction, the population that breeds in Yakutia in eastern Siberia numbers over 2,500. Nevertheless, Siberian Cranes are still one of the most endangered species of crane because of low numbers, concentration of the birds in a few wintering areas, and the unpredictable effects of a proposed "Three Gorges Dam" on their principal wintering area at Poyang Lake in China. Much remains to be discovered about their range, migration routes, and population biology before we can make truly informed decisions about their conservation.

Since the mid 1960s, Professor Vladimir Flint and his close associate, Dr. Alexander (Sasha) Sorokin, have made many pilgrimages to the Yakutian tundra in eastern Siberia to study nesting Siberian Cranes. This Moscow team wrote the first comprehensive papers on the breeding biology of the Siberian Cranes, and initiated an ambitious captive breeding plan.

Winter counts increase dramatically

In the 1960s and 70s, Flint and Sorokin estimated there were but several hundred Siberian Cranes in the eastern flock. Then the flock's wintering area was discovered at Poyang Lake by Zhou Fuchang and Ding Wenning. Zhou and Ding reported 400 wintering Siberian Cranes, a number that seemed to match Flint and Sorokin's estimates for the breeding population. Soon after Poyang Lake Nature Reserve was established, however, the numbers of Siberian Cranes observed there increased far beyond the rate possible by natural reproduction. In 1985 an ICF team counted 1,350 cranes, and in 1988 Japanese crane experts Hiroyuki Masatomi and Kiyooki Ozaki counted 2,626!

These crane counts in China astonished the Russians. Where were these missing cranes in summer? Scattered small groups of non-breeding Siberian Cranes are occasionally seen at wetlands on the Daurian Steppes (eastern Mongolia and adjacent areas of China and the USSR), thousands of miles south of the known nesting grounds on the tundra. In captivity, female Siberian Cranes do not breed until 7-9 years of age. If wild birds also begin breeding at 7-9 years, then perhaps hundreds of non-breeders are scattered across the wilderness from Mongolia to Yakutia.

Yakutians join the effort

At the September, 1989, joint meeting of

the European and Soviet Working Groups in Tallinn, Estonia, Sasha introduced me to Dr. Yuri Labutin of the Yakutsk Institute of Biology. I encouraged Yuri to study Siberian Cranes in Yakutia.

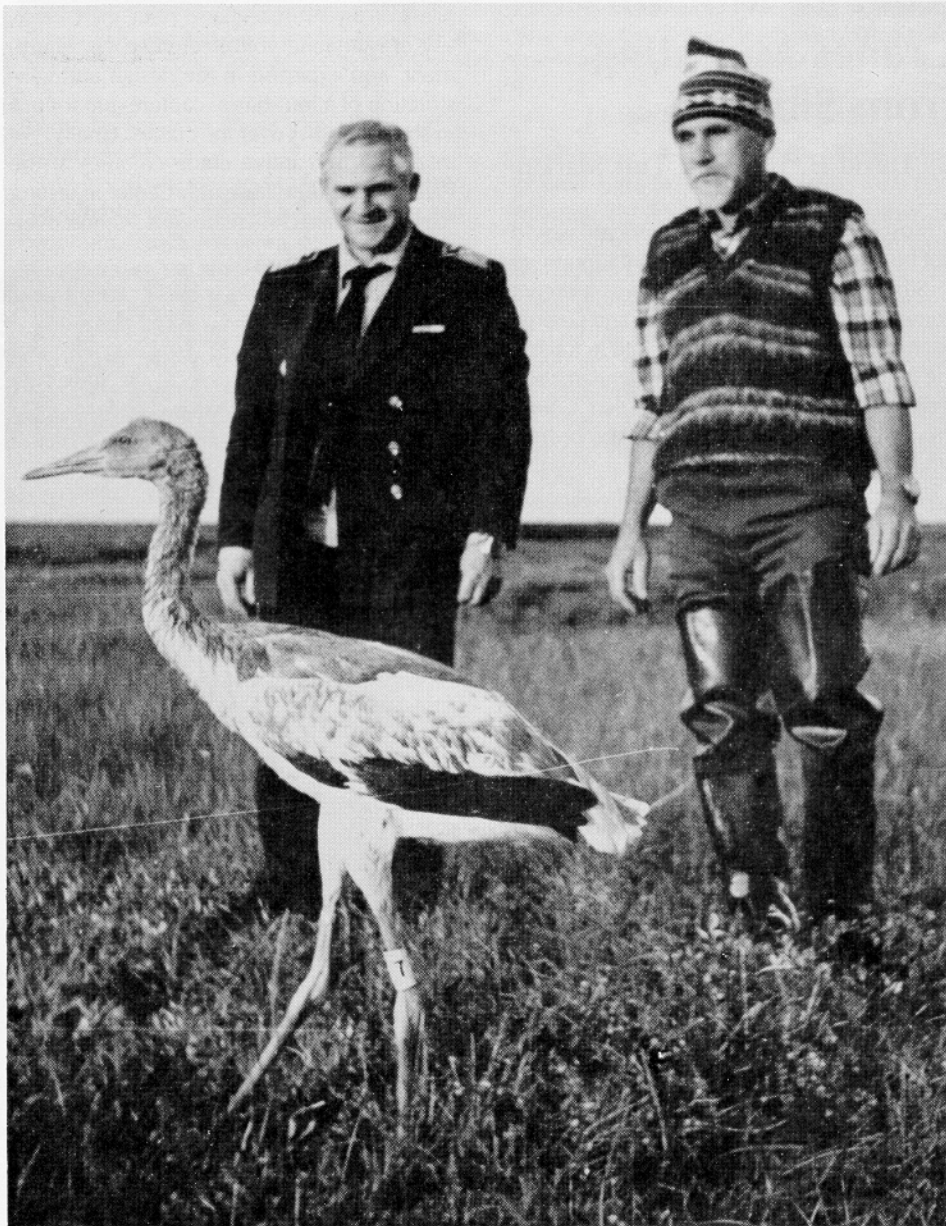
This August, Yuri led a research team to the tundra. Using a helicopter handled by the same pilot who helped Flint and Sorokin collect eggs in the 1970s, Yuri located families of Siberian Cranes with their tall, brown, flightless chicks. By landing nearby, the juveniles were readily captured, and bright yellow plastic bands were placed on their legs above the hock (knee joint). Soon after the helicopter departed, the crane families reunited. Nine chicks were color marked in this manner.

If our colleagues in China spot the color-

marked juvenile cranes at Poyang Lake, it will confirm that the Yakutia and the Poyang Lake Siberian Cranes are the same birds. Next year, we hope Yuri will mark the pre-fledglings with white bands. In addition, perhaps satellite radios can be attached to several of these cranes.

Color banding allows easy recognition of both age groups and individuals. Over the next few years, data collected from these marked cranes will reveal the mortality of age classes, the age of first breeding and the reproductive rate.

ICF wishes to congratulate Yuri Labutin and his team for embarking on this ambitious, long-term project—a program that will help the Siberian Crane and promote international cooperation between crane researchers in China and in the USSR.



In northern Yakutia, Siberian Cranes rear their chicks on vast expanses of open tundra. Using a helicopter, Soviet researchers were able to capture, mark, and release pre-fledglings last August. Left: pilot L. Bazov; right: ornithologist Yuri Labutin. Photo by S. Slepsov.

Thank You, Joost

by George Archibald, Director

Outstanding individuals move mountains. Joost Van der Ven of the Netherlands is such an individual. During the time when Europe was divided into East and West, this charismatic Dutchman's dedication to cranes and his remarkable sense of humor served to unite crane researchers throughout Europe.

The boy and the dike

Somehow, it seems appropriate that the primary European advocate for cranes should have been a Dutchman. The Netherlands is a lowland nation, where encroachment by the North Sea is prevented by hundreds of miles of massive dikes, and much of the country's fertile farmlands have been reclaimed from wetlands. But in spite of this massive disturbance to natural habitats, the nation has a remarkable conservation history. Like the legendary little boy who plugged a hole in the dike with his hand, Joost has led efforts to hold back the waves of development that continue to threaten wetlands.

Born in Utrecht in 1940, Joost credits his initial interest in nature to a primary school teacher who had a large egg collection and many caged birds. Most of the birds were illegally held, and Joost is uncertain if his interest was primarily in the birds or in the illegal activity. His first contact with cranes was through a book by Swedish naturalist Bengt Berg, who wrote of birds "tall as a man" that wintered along the Nile. Joost became an active member of the Dutch Youth Society for Nature Study, whose members ranged in age from 12 to 23. Joost reminisces: "The non-influence of older people was refreshing. It was the best 'school' to learn about nature and real life."

Teachers can either cultivate or kill an interest of students. A sour experience with a secondary school biology teacher influenced Joost to pursue economics, a choice which later gave him the financial freedom to pursue his interests in the outdoors. And so Joost studied economics at the University in Groningen, where he had "an excuse to be closer to geese in winter and meadow birds in spring."

A career in conservation

Finishing his formal education in 1970, Joost worked for several years with private research and conservation organizations. But he found pure research a bit tedious. He wanted to get things moving for conservation. His true calling was administration. Although Holland has few forests, the government's National Forestry Service has a Nature Conservation



Joost greets two friendly Crowned Cranes in Africa. Illustration by J. Van der Ven.

Department (NCD) with over 500 employees involved with the State Nature Reserves. In 1977 Joost became Director of the NCD, and in that capacity worked as an advisor to help the Hungarians with management ideas for Hortobagy National Park—a reserve frequented by thousands of migrant Eurasian Cranes. His work in Hungary in the late 1970s gave Joost the first "real meetings with cranes."

In his free time after his university years, Joost collaborated with German film maker and crane lover Henry Mahowski. Over two decades, they created 35 films for German television. Joost's favorite expeditions were to Japan and North America to film the Red-crowned Crane and the Whooping Crane. Joost also started a collection of crane stamps, and as far as we know, he maintains the most complete collection of crane stamps in the world.

In 1983, Joost founded the Working Group on European Cranes (WGEC). That year, ICF and the Government of India co-hosted our International Crane Workshop at Keoladeo National Park, the Indian wintering grounds of the Siberian Cranes. Joost was joined by researchers from half a dozen European nations, and many papers were presented on the biology and conservation of the Eurasian Crane. There was an obvious need for researchers interested in the species to join forces, and so, the WGEC was hatched in India.

Since 1983, Joost has been the tireless leader of the WGEC, promoting the study and welfare of his favorite species, *Grus grus*, the

Eurasian Crane. As well as tackling all conservation issues pertinent to cranes and wetlands in Europe, Joost has faithfully mailed reprints of papers on cranes, the latest crane news in Europe, and the quarterly *ICF Bugle* to more than 100 WGEC members. In 1985 he helped organize a meeting of WGEC in Hungary, and in 1987 he led the European delegation to the International Crane Workshop in Qiqihar, China. In 1989 the WGEC and the Soviet Working Group on Cranes held an historic joint meeting in Tallinn, Estonia.

In the late 1980s, Joost was granted leave from the Dutch Government to work with the International Waterfowl and Wetlands Research Bureau (IWRB) in England, where he assisted in expanding that organization's scope to Asia. He was particularly interested in the cranes and wetlands of India, and subsequently became close friends with his Indian counterpart, the leader of the India Crane Study Group, Prakash Gole.

Last year, Joost retired as leader of WGEC to assume a post at the Netherlands Embassy in Abidjan as Agriculture Attache for west and central Africa. West Africa is the home of the Black Crowned Crane, a species that in recent years has lost much of its wetland habitat to droughts and irrigation projects. We look forward to following Joost as he applies his energy and talent to helping cranes in Africa.

Dr. Hartwig Prange of Germany has now assumed the leadership of the WGEC. ICF will be maintaining close contact with Joost and Hartwig during the 1990s as the cranes and their wetlands face mounting challenges.

Satellite Monitors Cranes

continued from page 1

the area, no one could have anticipated the problems we would encounter. First, although a Siberian Crane nest lay within a mile of our camp, short forays failed to locate Eurasian Cranes nearby. We then made a three-day hike to locate a pair suitable for study. After hours of sloshing through bogs freezing on the surface and underlain with ice, David plunged neck deep through a hole in the submerged root mat that provided our highway. He floundered out of the morass and Yuri immediately produced dry socks, shirt and pants to forestall hypothermia. Putting first things first, David emptied the water out of his camera before changing clothes. After two hours by the bonfire, David and most of his equipment were back in working condition.

After this visit to the more distant pairs, we decided that we must leave our comrades at base camp and move nearer to the cranes. On June 8, 15 days after our arrival, we moved to our new camp and began in earnest to capture adult cranes. For the next two days, we alternated watches from our perch in a Siberian pine about 300 meters from the first crane nest. We waited, trying to pick the best moment for placing our anesthetic-laced bait on the crane nest to maximize our chances of capturing the male. (The larger bird, normally the male, should be better able to carry a 150 gram or 5.4 ounce backpack.)

Unfortunately, the birds refused to eat our bait—first a generous dose of pike and then a sandpiper egg.

Avian Interference

Finally, we decided to try another pair nesting about two hours across the marshes. As we approached this pair, we found a place from which we could observe the pair hidden in the forest and, after only two hours, we decided to capture the male. After the cranes flushed, Yuri quickly placed the bait egg on the nest, then slogged back to our makeshift blind. Almost immediately, a large gull swooped to the nest and, unbelievable as it may sound, began to incubate our bait, the sandpiper egg. The male crane returned, drove the gull away, then swallowed what we suspected was not the bait, but rather the contents of his own egg that we believed had been broken by the gull.

Yuri and I wrung our hands as we waited, wondering. Soon the male left the nest and wandered into the marsh, reinforcing our fears that the crane egg might have been broken. The nest was now unguarded and our spirits sank as we contemplated the scene unfolding before us.

Finally Yuri, with confidence that comes from a decade of observing this species, spoke: "I assure you, that the bird is not well." Our spirits soared, because... YES... the male was definitely beginning to stagger! Cautiously, we began our approach,

sometimes stepping quietly through the water when the crane dozed off, or alternately, posing statue-like with arms and legs splayed when he, at intervals, looked up. Yuri soon pounced on the groggy bird, and while his mate distress-called overhead, we carried him back to the forest to attach the backpack.

Our elation at this first success was tempered by tragedy at the nest. We learned, while slogging into the marsh to retrieve the half-sleeping male, that the crane egg was still intact. However, during the disturbance associated with retrieving and handling the male, crows slipped in, lured the female away, and destroyed the egg.

The season was far advanced, so it was not likely that this male (later named Boris) and his mate would produce more eggs or rear a chick. It therefore became our goal to compare Boris' migration (without chicks) to the migration of other birds that would have chicks.

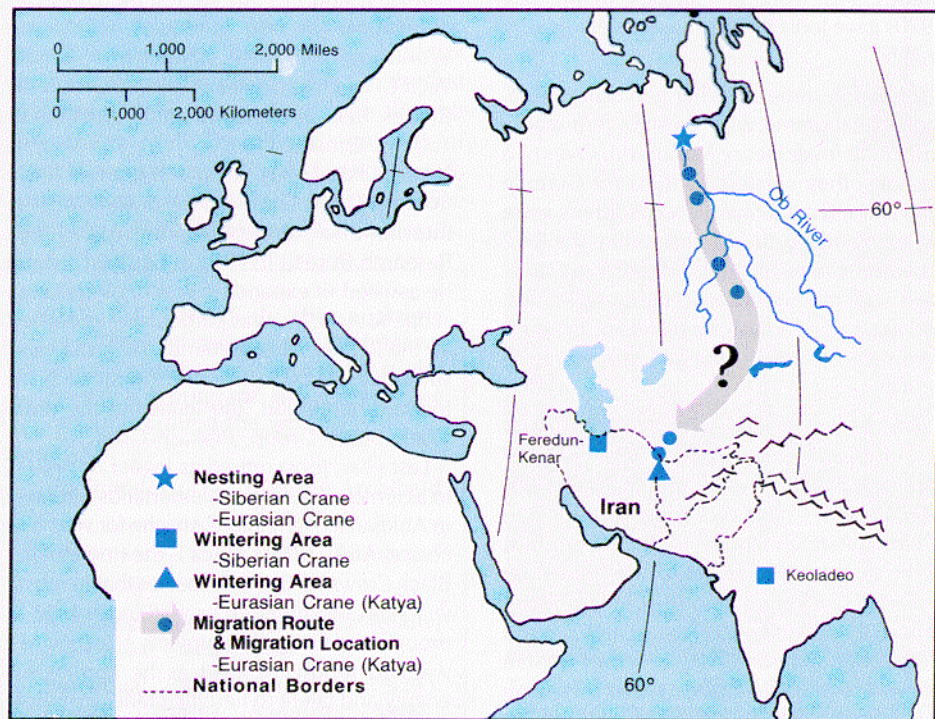
Success with Ivan

Yuri and I splashed back to camp encouraged by our partial success with Boris, and determined that on our next attempt we would not cause the pair to fail in their nesting attempt. A few hours later we tried again with the uncooperative pair near our camp. This time when Yuri placed the bait, he noticed that one of the eggs was beginning to hatch. Once again the pair seemed to ignore the bait. We watched until 9:50 p.m. and debated moving on to another pair, but decided to check for groggy birds a few hours later. At midnight, both birds were seen, but neither was groggy.

What to do? What to do? We resolved to get some rest and then decide whether to try more with this pair or to move on. When we checked again in the morning, the male (soon to be known as Ivan) stood sleeping on wobbly legs, not far from the nest. When we sloshed out to retrieve him, we were in for another surprise: one egg had already hatched and the chick was gone (presumably with the female). The second chick was peeping from a hole in the shell, so now we had a drugged male and a hatching egg that needed attention.

Not knowing how long Ivan had been drugged, we rushed to get him harnessed and back to the marsh to take over care of the hatching chick. Seventy-five minutes later, Ivan was wearing a brand new harness and a \$3500 backpack. The anesthetic was already wearing off and in only 17 minutes, he took his first wobbly flight.

Knowing that the survival of the chicks was now out of our hands and that Ivan's family would be best served if we left the area, we crossed the marshes to check on Boris and his mate. For seven and a half hours, we searched the area but failed to hear or see the



The two western flocks of Siberian Cranes are declining rapidly, probably due in part to dangers encountered during migration. Steps to ensure their safety cannot be undertaken until we know details of their migration route. Last spring, transmitters were attached to Eurasian Cranes, in order to test techniques that soon may be used to trace the movements of Siberian Cranes.

pair. It would not be until David's return to the U.S.A. that the good news came from System Argos through NASA that Boris was alive and well.

Next day we returned to check on Ivan's family. Ivan was sitting attentively (if nervously) on the nest and was paying absolutely no attention to his new apparatus. But was the egg beneath him still alive? It was three days before we would know with certainty. On June 17, while searching the marshes for the pair from separate vantage points, we observed Ivan, his mate, and not one but two chicks scampering about the marsh's edge. Imagine our delight as we watched the family for nearly an hour. During this time, Ivan again totally ignored his harness and backpack.

Aerial pursuit

From radio contacts, we knew that tomorrow a helicopter would lift us from our camp in the marshes just south of the Kunovat River and return us to base camp along the Hoolyooogan River. With these successes behind us, we energetically packed our gear, anxious to report our adventures to our comrades. Right on schedule, we heard the fluttering roar as the Aeroflot helicopter neared our camp.

We still needed to capture a crane to wear our third satellite transmitter, so before delivering us to base camp, the big machine wended its way back and forth over the marshes searching for a crane. Our hope was to find a molting (and therefore flightless) crane or capture a flighted crane with the net gun from the helicopter door. Nowadays mammals and even some birds are routinely netted from small two- or four-passenger helicopters. We feared, however, that the huge Soviet chopper would be unable to match a crane's evasive maneuvers.

For three hours, we sought and pursued cranes. It was a beautiful but nerve-wracking experience for David as he sat with legs dangling from the helicopter door, while the chopper tried in vain to match the cranes' twists and turns. The net gun trajectory required that he shoot from 15 meters or less. Twice he loaded the gun in preparation for a shot, but the birds were never in range and eventually eluded the behemoth chopper.

Finally, Sasha and Yuri spotted a flightless female and we closed in for a shot. Unfortunately the running crane, aware of its vulnerability, kept to the strands of forest where the tree tops kept us just out of range. Twice David shot, when opportunities were almost good enough. On the second attempt, the net brushed over the crane's shoulders, but she ran from beneath it and escaped. When at length she tired, three of us jumped from the helicopter and pursued her into the



In the subarctic taiga of the USSR, the last of west Asia's Siberian Cranes nest on open wetlands that they share with cranberries, mosquitoes, reindeer, moose, and brown bears.

woods, where Yuri pounced on her.

Now the rush was on to harness the bird (dubbed Katya by NASA) before the helicopter ran out of fuel. In this soggy environment there was literally no safe place for the big chopper to land. In only 45 minutes, we had Katya ready to go. As half of our crew raced to attach the harness, Sasha took the helicopter in search of the two nets David had shot. No luck! It was the most expensive shooting David had ever done—\$274 worth of nets in two shots.

Satellite tracks migration

When the day of June 18 was finally over, we had the satisfaction of having deployed all three PTTs. It only remained to fight the mosquitoes, enjoy our few remaining days, and then hope for a successful migration for Boris, Ivan and Katya as the Tiros satellites monitored their autumn passage south from their Siberian homeland.

Upon David's return to Washington, D.C. on June 25, he was greeted with the good news that all three cranes were indeed moving about their native marshes. Until the end of July, the three birds were relatively sedentary. Then in mid-August, Boris (the male who lost his egg) abandoned his home range and moved about 80 miles south to the marshes immediately adjacent to the Ob River. With Boris' move, we experienced a surge of excitement, believing the migration was underway, but Boris again remained sedentary for the next two weeks.

In mid-August, Ivan and Katya also began to wander more. By the end of August, all three had moved southwest to the marshes

near the Ob. Ivan moved the least distance, perhaps indicating that he still had his chicks with him. Slowly the days rolled by as we waited for the NASA computer to reveal further movement. Finally, in the second week of September, Katya took the lead by heading straight south. Ivan and Boris lingered along the northern Ob until mid-September, but then moved steadily south, not in a single flight but in spurts, with the birds flying 100 miles or so, then lingering a few days before moving on.

Signals were received from Ivan for four months, but on October 10 he went off the air 600 miles into his migration. Boris traveled 500 miles south along the Ob to a location not far from Tyumen, the capital of the region, but since September 24 all of his signals have come from the same location, indicating either his death or the loss of his PTT. Katya's PTT fared better, and although her signal became intermittent after October 10, we still occasionally hear from her. She has traveled over 2,000 miles and is wintering along the Hari River on the Iranian-Afghan border. At the time of this writing, Katya is the only Eurasian crane from western Siberia for which we know the winter home. Next summer, we will search again for all three birds on their nesting ground.

As you read this account, we hope you share in the excitement we felt as this odyssey unfolds, revealing for the first time the migration route of cranes from Siberia. Just as tantalizing, we are learning about the capabilities of satellite telemetry in hopes that, in 1991, it will prove suitable for work with the even more precious Siberian Crane.

Planning To Visit ICF? Here's What's New!

See ALL the cranes!

This coming season for almost the first time, visitors will be able to see all fifteen species of crane on display at ICF. Last July 10, ICF achieved a first for North America with the hatch of "Trung Trung," a rare Black-necked Crane. Trung was briefly placed on display, but was then raised in isolation to ensure that she would not imprint on humans, which would make her more difficult to breed. This spring, Trung will be exhibited next to "Bugs," a Eurasian Crane that was raised last year by his parents while they were on display.

Now open Thursday evenings, July & August

Starting this May 1 and extending through October 31, ICF will be open daily for members and the general public from 9 a.m. to 5 p.m. During July and August, hours will be extended on Thursday evenings to 8:30 p.m. Guided tours are available at 10, 1, and 3 on weekends in May, September, and October, and daily from Memorial Day through Labor Day. On Thursday evenings in July and August, there also will be a tour at 6:30 p.m.

If you arrive when no tours are scheduled, you can borrow a tape recorder for self-guiding tours, see the birds, browse in the gift shop, picnic, or walk our trails.

Special Saturdays!

"Special Saturdays" offer extra incentive to spend a whole day exploring the world of cranes and conservation at ICF. On the first Saturday of the month from June through September, we'll be offering a number of special workshops and tours, in addition to our regular guided tours of the cranes. See the May *ICF Bugle* or write ICF for details.

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
Editor: David Thompson

ICF offers memberships at the following annual rates:

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

Fascinating field trips!

The long boardwalk at **Horicon Marsh** provides a unique perspective of this vast wetland. Join David Thompson on the boardwalk and nearby trails for birding and appreciation of springtime. Time: 8-12 a.m. Saturday, May 11. Send Thompson a check for \$25 payable to ICF—he'll reserve a space and send details about the trip.

Sandhill Wildlife Demonstration Area near Babcock, Wisconsin is a beautiful wetland that serves as a staging area for cranes during migration. DNR Biologist Dick Thiel has planned a special overnight "Crane Experience" for April 20-21. When Dick treated ICF staff to this unique opportunity last fall, we were enchanted.

You will meet at the Sandhill Wildlife Area at 2:00 p.m. on Saturday, tour the reserve, then drive to a rustic cabin on an exquisite wooded peninsula surrounded by wetlands. The cabin provides a place for warming up, for sharing a pot-luck supper, and for an informative evening program. Dick will provide meat and a grill. For sleeping, guests will set up their own tents around the cabin.

Before dawn the next morning, guests will drive and walk to five blinds near cranes. Next, you will breakfast together in a charming village restaurant (at your expense). Donation: \$40 for ICF members, \$45 for non-members. For a reservation and more information, write David Thompson at ICF, and enclose a check payable to ICF.

Plan Now For ICF's Third Annual Bird-A-Thon

Soon you will receive a mailing about ICF's third annual Bird-a-thon. Last year's Bird-a-thon raised over \$15,000 for ICF and the Ron Sauey Conservation Fund.

You can participate by making a direct donation, by pledging an amount per species observed by one of ICF's crack Bird-a-thon teams, or by forming a Bird-a-thon team of your own. A team's goal is to observe as many species as possible. You can obtain a higher "score" by selecting the best location and day—any date between April 15 and May 31 for your day in the field.

This year there will be more prizes for all who participate. And those who count birds and raise money for the Bird-a-thon will qualify for a half-day tour of both ICF and the Leopold Memorial Reserve, led by ICF's Director, George Archibald.

In March, we will mail detailed information to ICF members about the Bird-a-thon. All proceeds will be divided equally between ICF operations and the Ron Sauey Conservation Fund. The Bird-a-thon provides an opportunity to brush up on your "birding" skills, and to spread the word about ICF. We hope you will consider participating by making a direct donation, by sponsoring the ICF team, or by securing your own pledges.



Every spring, over 400,000 Sandhill Cranes stop along the Platte River during migration, representing the greatest concentration of cranes on earth. On March 15-17, two events open to the public in Nebraska will celebrate this gathering of cranes. The Audubon River Conference in Kearney will feature papers, speakers, and field trips for people who want to be involved in the conservation effort. "Wings Over the Platte" in Grand Island will provide workshops, guided field trips, a banquet, and an art/photography exhibit. For more information, call 800-652-9435 (Audubon) or 800-658-3178 ("Wings"). Photo by Dennis Grundman, Grand Island Independent.

New School Exercises

Now that environmental problems have been recognized as international in scope, students need to understand how conservation often requires a different approach in the Third World. So ICF's Education Department is busy finishing a new book of educational materials for grades six through ten entitled *Cranes and Wetlands; Showing the Way for International Conservation*. The book touches on crane and wetland biology, endangered species, geography, conflict resolution, wetland management, and what both governments and children are doing to help.

Modeled after "Project Wild," the 100-page book contains classroom exercises, background reading for students, and instructions and background readings for teachers. ICF is now looking for teachers to help evaluate parts of the book in return for a free copy. If you can help, write David Thompson.



Over the holidays, ICF opened its gift shop in downtown Baraboo. Peter Klemm (right), age 15, showed children and shoppers how to fold paper cranes for their Christmas trees. Manager Terry Brooks is visible behind the children. Staffed by Jo Cummings and Karen Klemm, the shop featured beautiful, distinctive, and exotic imports from around the world. Photo by D. Thompson.

Contributions

Received October - December 1991

From the Estates of: Margaret E. Jones; Marjorie Luther.

Grants and Awards: George & Kyoko Archibald; Abigail Avery; Mrs. James Balding, Jr.; Baraboo Sysco Food Services; Robert & Mary Beard; Wolfgang & Margaret Bochler; Lady Dorothy Bouchier; Wolf Brehm; Buchanan Family Foundation; Chapman Foundation; Chicago Metallic Corp.; Dellwood Foundation; Arthur J. Donald Family Foundation; Thomas E. Donnelley, II, Foundation; Earthwatch Expeditions; Findley Adhesives, Inc.; Frieda & William Hunt Memorial Trust; Mary E. Griffith; Owen & Anne Gromme; Haffner Foundation; Hershey Foundation; Thomas Reps & Susan Horwitz; Institute of Museum Services; Mrs. Kenneth Jacobs, Jr.; Mr. & Mrs. Samuel C. Johnson; Mary Anne Klapat; Arthur C. Kootz Foundation; Charles A. Krause Foundation; Lange Memorial Foundation; Lux Foundation; Dr. & Mrs. Andrew Major; Marshall & Ilsley Foundation, Inc.; Chauncey & Marion Deering Mc Cormick Foundation; National Audubon Society; Neenah Foundry Foundation; Steven J. Oakland; Pew Charitable Trust; Mr. & Mrs. John E. Reeves; Mathilda Sauey; Walter Schroeder Foundation; Douglas Seaman Family Foundation; J. R. Short Milling Co.; Stackner Family Foundation; Mrs. John C. Stedman; Arthur W. Strelow Charitable Trust; R. Roberta Throne; U.S. Fish

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An Arranged Marriage

By Ann Burke, Aviculturist

I drew a deep breath, uttered a series of soft "purrs," and reached for another fish in my pocket. As the December wind and snow buffeted my jacket, I saw a crane's beak appear from around the building's corner. "Patience," I thought for the hundredth time, "just be patient, she won't be able to resist that fish much longer." This memory marks the beginning of Ginger and Napoleon's long journey to becoming a Whooping Crane couple.

On that stormy day, I had been using fish to lure Ginger into Napoleon's pen for their first "date." At first glance they seemed an improbable pair. Ginger was a tame, hand-reared bird, but Napoleon was extremely wary because he had been experimentally raised by a pair of Sandhill Cranes in the wild. ICF staff decided that he and Ginger would make a suitable pair, based on their family trees and the prediction that Ginger's confident personality would lessen Napoleon's fear of people. If they could be paired, we hoped that many offspring would be returned to the wild, helping the species' recovery.

Behavioral Management

The staff at ICF try to pair cranes by studying and then influencing their interactions. Females will not lay eggs unless they are coupled with a compatible mate who defends the territory and shares incubation and chick-rearing duties. To assist with the pairing, I became their "chaperon" in late 1989. This required placing them in the same pen and observing their interactions. But since cranes defend their territories from intruders, one bird of a new pair may view the other as a threat, leading to fights and injuries. So I was



Ginger (left) and Napoleon are solidly paired after a year of getting to know each other. Despite the loss of his left wing from an accident in the wild, Napoleon thrives in Wisconsin's cold winter.

ready to separate these rare birds on a moment's notice.

My first challenge was to lure Ginger into Napoleon's pen without his seeing me and becoming upset. My heart beat faster when she first stepped through the gate. Would Napoleon attack? Because Ginger was nervous about being in a new pen, she paid no attention to Napoleon. In contrast, Napoleon seemed interested, but being a wary bird, he took only a few shy steps towards her. Little interaction occurred over the first several weeks of dating and my only encouragement came when they called together.

After six weeks, I was so startled by an observation that I almost knocked over the canvas blind where I was hiding. Napoleon had attempted to strike the base of Ginger's neck with his beak. But after the initial surprise, I realized that instead of trying to hurt her, he was asserting his dominance. The male must be dominant over the female for the pair to be strong and work as a team.

Chaperon no longer needed

Following this encounter, there were positive signs of bonding—the two were now foraging, drinking and preening together. So I decided to begin leaving them unsupervised for short periods. Upon my return, I was greeted with their "unison call," a sure sign of pairing. Napoleon would also "threat walk" and point his crown towards me, a way of defending both his territory and new mate. By now, I felt confident enough to put them together during the day without supervision.

After 11 months of "dating," I left them together overnight. When I checked early the next morning, snow was falling as they stood together. The fresh snow seemed to speak of a lifetime together for this pair, and of hope for the species. I reflected upon my time as a chaperon and realized how much I had learned about patience. It was just a small part of the patience and determination that will be needed by all to bring this magnificent species back from the brink of extinction.

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