

THE BROLGA BUGLE

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THE WHOOPERS ARRIVE

MAKING TRACKS - news of the foundation

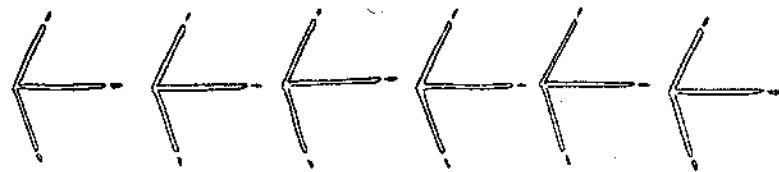
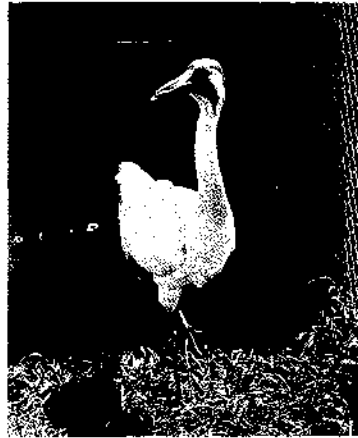


Photo by Lucille Thompson



MEET TEX

Tex, the Crane Foundation's new female Whooping Crane, just loves people. In fact, her transfer this spring from the Patuxent Wildlife Research Center in Maryland to the International Crane Foundation is an attempt to supply Tex with what she desires most in this world — human companionship.

Tex is a classic example of a behavioral phenomenon called imprinting. The process of imprinting was first described and analyzed in Gray-lag Geese by the great Austrian ethologist, Konrad Lorenz. Lorenz noticed that if he isolated very young goslings from contact with other geese, they readily accepted substitutes, including humans, as their proper parents. He also found that imprinting could include a "sexual response" in which a young bird learned what object would be the target of its later sexual behavior. Lorenz showed, for instance, a rooster could be sexually imprinted on ducks by exposing the rooster to ducks during a certain critical period of its life. Later the rooster would court and try to mate with

(Continued on page 3)

MEET TONY

"Tony" (alias Georgette, alias George II) is the latest in a string of names for a Whooping Crane that hatched in 1958 at the Audubon Park Zoo in New Orleans. The product of a long and famous romance between two Whoopers named Josephine and Crip, Tony was first thought to be a female and was christened "Georgette" after George Douglass, a former director of the zoo. Josephine and Crip produced eleven other chicks, only one of which is still living, a large male Whooper named "George" who resides at the Audubon Park Zoo.

Tony and his brother George are unique Whoopers. Their mother, Josephine, was the last of the Louisiana Whooping Cranes, a now extinct population of Whoopers that once resided along coastal marshes of Louisiana. In the early 1940s, nearly the entire population of Louisiana Whoopers disappeared after a hurricane hit the coast. Josephine became the sole survivor. She was captured and later taken to Audubon Park Zoo where she began her celebrated 16-year romance

(Continued on page 4)

A full orchestra playing Edward William Elgar's "Pomp and Circumstance March No. 1 in D" would have been the perfect final touch. As a hushed but excited group of reporters and well-wishers looked on, the two back doors of a large panelled van were swung open, and out into the warm Wisconsin spring stepped a Whooping Crane. Like a travel-weary monarch, the Whooper's fierce yellow eyes glared irritation at all the fuss. After all, he wasn't the first Whooper to arrive at ICF. Tex, a female Whooping Crane, had arrived in Baraboo on April 15, six days earlier, from the Patuxent Wildlife Research Center in Maryland.

But a Whooping Crane is a Whooping Crane, and the gathered spectators watched with awe as an ICF staff member gently escorted the new arrival to his pen. "Imagine," someone remarked, "that bird is one of 84 left on the planet!"

In truth, ICF's two new Whoopers could be considered special even for Whooping Cranes — sort of rava aves among rava aves. The birds are among the three living Whoopers that were produced entirely in captivity. In fact, Tex, the female, and Tony, the male, share the same father, the famous Whooper called Crip. A Crane Casanova of sorts, Crip has fathered nearly every Whooping Crane produced in captivity. Now over 30 years old, Crip is alive and well at the San Antonio Zoo and has just recently received a third wife, a Whooper named Ektu. Ektu, a nine-year-old, was presented to Crip with much fanfare in February.

We are hoping that some of Crip's lusty spirit runs in the veins of his two progeny, Tex and Tony. Although it is a bit premature to make forecasts on Tex and Tony's future, George Archibald, Director of Propagation, is very optimistic about the chances of getting offspring from the two birds. Tex in particular seems very stimulated by her new surroundings and all the special attention she's been receiving lately (see individual stories on Tex and Tony).

ICF extends its deepest thanks to the Patuxent Wildlife Research Center, the U. S. Department of the Interior, and the Audubon Park Zoo in New Orleans for the wonderful spirit of cooperation that has brought Tex and Tony together.

(Editor's note: We have just received word that on May 4 a Whooper chick hatched at Patuxent. Congratulations to Patuxent! Tex and Tony, get busy!)

Cranes of Saurashtra

by R. S. Dharmakumarsinhji

(Editor's note: R. S. Dharmakumarsinhji is one of India's foremost ornithologists. His best known publication, *60 Indian Birds*, is a delightful and informative account of the 60 most common or conspicuous birds in India. The book's informal, and occasionally anecdotal style, and Mr. Dharmakumarsinhji's attention to detail, make the book unique among the popular ornithological literature of India.)

In India's western state of Gujarat, there is a triangular peninsula of land which juts out into the Arabian Sea and is bordered by two great gulfs, the Gulf of Cambay on the east, and the Gulf of Kutch on the north. This 23,500 square miles of fertile soils and littoral landscapes is known as Saurashtra or Kathiawar. During the tertiary and part of the post-tertiary period, Saurashtra was an island. Even now, India's hold on this land is tenuous, for Saurashtra's principal connection with the mainland is in the form of a great saline marsh known as the Little Rann of Kutch. To the east, on Gujarat proper, two great river systems, the Narmada and the Tapi, dump their accumulated silt and debris into the Gulf of Cambay and so create ideal habitat for shorebirds along the coastline. The terrain of Saurashtra itself is flat, but it is highly intersected with innumerable streams. Most of these waterways have been dammed for agricultural purposes and crops of milo, millet, wheat, sugar cane, linseed, cotton, ground nut (peanut), and a variety of vegetables are grown. Along the littoral zone, coconut and mango plantations are common. The interior forests are mostly of the thorn and scrub type although one dry deciduous forest remains in the south-central highlands. This is the home of the last Asiatic lions and is known as the Gir Forest.

During the winter months, Saurashtra harbors three different species of cranes, the Demoiselle (*Anthropoides virgo*), the Common Crane (*Grus grus*), the Sarus Crane (*G. antigone*). While the last species is a year-round resident in Saurashtra, the first two, the Demoiselle and the Common Crane, are strictly migratory, appearing in huge numbers in October and leaving again in February or March after the crops have been harvested.

The Demoiselle and the Common Crane enter Saurashtra in the fall by flying over the great Rajasthan Desert. Some Demoiselle Cranes may continue on as far south as Karnataka in southern India, but Common Cranes seldom migrate beyond Saurashtra, even though there is abundant plantings of ground nuts to the southeast in the state of Andhra Pradesh. Crane migrations take place during the early morning hours and at night when the evenings are moonlit. In flight, cranes are recognizable by their calls even when the birds are at great altitudes.

Unlike the resident Sarus Cranes which rarely congregate in large numbers and cause, consequently, little damage to crops, the Demoiselle and Common Cranes often descend in great flocks on cultivated fields and consume or destroy large areas of cropland. The feeding strategies of these two species differ. Flocks of Common Cranes usually break up into small troupes or into pairs and family trios and move about separately, looking for food. The Demoiselles, on the other hand, keep closer formations and move along rapidly and noisily as large spreading flocks. A group of Demoiselles, if left undisturbed, can completely devastate a field of ground nuts in a very short time. Farmers must maintain constant vigilance and be ready to scare off any flock of cranes which may land on their fields.

The winter of 1975-76 was one of abnormality in the numbers and distribution of cranes in Saurashtra. Despite very good rains and an abundant ground nut crop, crane numbers were extremely low. There seemed to be several reasons for this situation. First, the 1975-76 winter in northwestern India was unusually warm and wet. Good rains to the north, in Rajasthan, the district of Kutch, and along the peninsula left irrigation ponds full and crops plentiful. Even areas which were normally desert in the winter attracted waterfowl. These favorable conditions may have halted crane migrations further north

than usual and some reports I have gathered seem to corroborate this theory.

A second explanation for reduced numbers of cranes in Saurashtra may lie in the severe bout of weather which occurred over part of the Saurashtran peninsula during crane migrations in November. An area from Junagadh to Porbandar and Jamnagar was hit by a 120 km/hr hurricane which caused tremendous damage to crops, buildings and communications. It is said that thousands of cranes and many kinds of smaller birds were dashed to their death by the storm. This untimely interference may have prevented the normal migration of cranes to the south. Only in central Saurashtra near the town of Bhader did I see large groups of Common Cranes. Demoiselles were in considerably smaller numbers than normal.

There are several additional factors that have influenced crane numbers not only this last winter, but other winters as well, and may in the future severely limit the numbers of cranes wintering in Saurashtra. The first of these is the spread of mesquite, *Prosopis juliflora*. This leguminous shrub is eliminating crane roosting areas in more saline areas of Saurashtra. A second influencing factor is the presence of poor human nomads who are allowed access to harvested fields to glean for missed ground nuts. These people deprive migratory cranes of one of their principal food items during winter. Farmers are also ploughing up grasslands and eliminating grass seeds on which cranes occasionally feed.

Thirdly, there seems to be an increase in the amount of human disturbance of cranes on their wintering grounds. Although crane hunting is illegal (many Indian states ban all hunting), village folk with a taste for meat are now hunting cranes. Vehicular traffic is also increasing and causing disturbance among crane flocks. In the past, I could often approach within 25 yards of cranes in a motorized vehicle; now, I see their heads raised 100 yds. and even longer distances. This increased wariness will prevent, I believe, any great reduction in crane numbers through hunting since large bags will be difficult to achieve. The Sarus Crane, by the way, is completely protected, not by law, but by public sentiment. It is believed by peasants that if a Sarus Crane is destroyed, its mate will pine to death. Such love is highly honored in India!

From an overall view, the winter of 1975-76 has been the poorest season for migratory cranes in Saurashtra in memory, despite favorable conditions of food and water. Many missing birds apparently wintered further north, although a goodly number may have perished in the great hurricane of November, 1975. Although these two factors are weather-related and consequently

(Continued on page 4)

GUJARAT (STATE OF)

GULF OF KUTCH

SAURASHTRA (KATHIAWAR)

ARABIAN SEA

GULF OF CAMBAY

INDIA

Map of Saurashtra. Smaller insert to left shows location of Saurashtra (boxed portion) relative to the rest of the Indian subcontinent.

MILE-
STONES

Lulu Meets Ueno - A Match in the Making?

Spring is here, and Lulu, ICF's female Japanese Crane, is once again churning out eggs. Fondly known as "Leghorn" by ICF staff, Lulu is the most productive crane at the Foundation. Last year, she laid six eggs; this year, she has already produced four and there is every indication that Lulu will continue to lay until sometime in June.

Unfortunately, Lulu's past efforts to bolster her species' dwindling numbers — there are an estimated 300 Japanese Cranes in the world — have been in vain. Four of last year's six eggs

(Continued on page 3)



Photo by Baraboo News Republic, Rich Maciejewski

Lulu, a female Japanese crane (right), turns her head away from her new mate, Yukio, as if blushing. Actually, the motion is a form of threat behavior: "Get lost!"



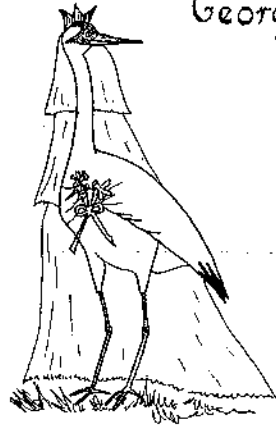
Tex receives a lot of attention on her TWA flight to Chicago's O'Hare Field. Here the flight crew poses around Tex's crate after arrival in Chicago. TWA is to be commended for their diligence and care in handling the rare bird.

The Travels of Tex and Tony

ICF's Whoopers Fly 1st Class

Congratulations

George



Tex new relationship with George Archibald (see "Meet Tex" article in this issue) is humorously treated in this card sent by the Patuxent Wildlife Research Center, Tex's former keepers. The card was designed by Dr. Kay Kepler.

of Ueno's pen informing him in no uncertain terms that he was "gruid non grata."

Since then, the air has cleared a bit, and Lulu's initial antipathy to Ueno has turned to interest. She built her nest this year next to their adjoining fence.

Thanks to Ueno, Lulu's first four eggs of 1976 may be fertile. All were laid after a period of artificial insemination with semen from Ueno. If they are fertile, and we will know by the first week in June, Ueno and Lulu could have a long and productive career ahead of them at ICF.

Meet Tex . . .

(Continued from page 1)

ducks rather than with females of his own species.

Tex spent the first "impressionable" period of her life with people. She was hatched at the San Antonio Zoo in 1967, the daughter of a pair of Whoopers named Crip and Rosie. Tex was hatched by her parents but she was immediately removed from them and raised in the living room of Fred Stark, the Zoo's superintendent. She never saw another Whooping Crane until she was over two months old.

Tex, consequently, is imprinted on humans and believes that they are the proper recipients of her sexual favors. At Patuxent she became a favorite of the staff because she responded to the sight of humans with frantic dancing and courtship displays. She was repeatedly penned with other Whoopers, but she spurned them all; true to her early imprinting period, her heart belonged to man.

Early last fall, ICF's George Archibald proposed to Patuxent that Tex be sent to Baraboo on breeding loan. He reasoned that Tex would be more likely to breed in captivity if she were allowed to "pair" with a human. He offered to become Tex's constant companion during the breeding season and so stimulate her to become



Photo by Ron Brayer

George Archibald offers a fresh smelt while Tex whoops it up. George is currently sharing part of Tex's pen as his office and bedroom in an effort to "pair" this human-imprinted Whooper. Dr. Cameron Kepler, who is studying Whooper behavior at Patuxent, believes that this "odd-couple" relationship may be the only way to induce Tex to lay eggs in the future. Although Tex will be nine this July, she has never laid a single egg.

sexually active and produce, through artificial insemination, more of her rare breed.

So far, the experiment has succeeded beyond everyone's expectations. Tex has readily accepted George as her mate and she shows initial signs that she may lay yet this year. We are hoping that our male Whooper, Tony, will be producing viable semen in time to artificially fertilize Tex's eggs.

As one can appreciate, George has taken a bit of kidding about his relationship with a Whooping Crane. In a recent tour, a visitor asked how long George planned on maintaining his bond with Tex. "Well," the tour leader replied, "Whooping Cranes pair for life." "How long do they live?" asked the visitor. "40 to 50 years, at least," replied the tour leader.

Tony shows little interest in a smelt offered by George Archibald. Tony's unique ancestry (see article "Meet Tony" in this issue) as a non-migratory Whooping Crane makes it doubly important that he produce young in the future.

Photo by Ron Brayer

Lulu Meets Ueno . . .

(Continued from page 2)

were infertile; two fertile eggs resulted from artificial insemination with semen from a White-naped Crane and the resulting chicks were hybrids

Lulu's past difficulties laying fertile eggs, of course, were not her fault. Her former mate, Phil, never produced viable semen during the period when Lulu was laying. After Phil's death in the fall of 1975, an all out effort was made to find a male Japanese Crane to replace him. Fortunately Tokyo's Ueno Zoo had a single male Japanese Crane they were willing to loan ICF. "Yukio Ueno," age 11, arrived at the Crane Foundation on March 10 and was promptly moved to a pen adjoining Lulu's. As expected, the two were initially hostile to each other and Lulu spent much of her time walking stiffly back and forth in front

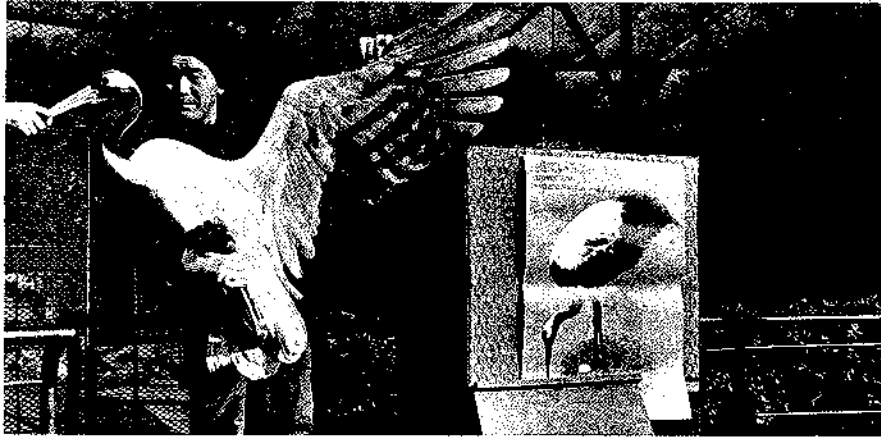
Tony emerges from the Partago Industries Corporation van which transported him from Chicago to ICF. Two ICF staff members, Ron Savoy (left) and John Baldwin look on as Tony takes his first careful steps on terra firma after a long and bumpy ride from Chicago. Tony was accompanied on the trip by John Moore, director of the Audubon Park Zoo.

Photo by Baraboo News Republic, Rich Maciejewski



International Crane Foundation

World Center for the Study and Preservation of Cranes



A Japanese zoo keeper loads Yukio into a crate for his journey to the U. S. ICF thanks the Ueno Zoo for their loan of this rare and beautiful bird.

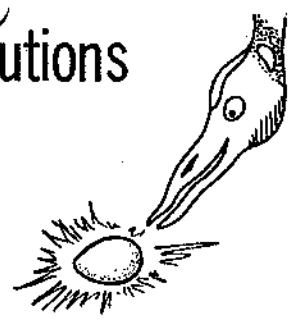
The International Crane Foundation is a registered, publicly-supported, non-profit organization which is dedicated to the study and conservation of cranes throughout the world. In its organizational charter, the International Crane Foundation sets forth its five principal goals:

1. Research—to determine the biological attributes and requirements of cranes both in the wild and in captivity.
2. Conservation—to protect cranes and their habitats throughout the world.
3. Captive Propagation—to establish a species bank of rare cranes to guard against extinction.
4. Restocking—to reestablish cranes within former habitat wherever feasible
5. Education—to act as a disseminator of information on cranes to the people of the world.

The International Crane Foundation currently holds the world's most complete collection of captive cranes. These birds are used as breeding stock and as subjects for behavioral and physiological research. Tours of the Crane Foundation are welcomed but only on an appointment basis. Tours can be scheduled from May 15 until Nov. 15. Saturdays are the best days, but alternate days can be specially arranged on occasion. For more information, contact the International Crane Foundation in Baraboo, Wisconsin.

The International Crane Foundation is completely supported by public donations. Memberships in the Foundation are the usual way of contributing to the organization. Information on memberships, bequests, and alternate ways of donating funds to the Crane Foundation can be obtained by writing directly to the International Crane Foundation, City View Road, Baraboo, Wisconsin 53913 or telephone: 608-356-3553.

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GIFT OR LOAN OF BIRDS

Audubon Park Zoo, Patuxent Wildlife Research Center, Ueno Zoological Park.

Cranes of Saurashtra . . .

(Continued from page 2)

represent natural fluctuations in crane populations, I strongly recommend that the World Working Group on Cranes of I.C.B.P. and the International Crane Foundation take stock of the populations of these migratory species in the future. Saurashtra has been experiencing periodical droughts since 1972, and this and the rising amount of human interference with crane habitat could cause major reductions in numbers of Demoiselle and Common Cranes in the years ahead.

also a continuing hope that the tall, majestic Whooper will not follow Martha and her kind to oblivion.

MAKING TRACKS

ICF ON RUSSIAN TV

This spring, an estimated 120 million Russians will become acquainted with the work and goals of the International Crane Foundation on their television sets. A 35 minute TV program which covers the history of ICF and shows photographs of the Baraboo headquarters will be aired three times over the Soviet national television network in April and May. Russian viewers will also be asked to look for wild cranes marked with bright green wing tags, the result of George Archibald's trapping efforts in Iran last winter. Confirmed sightings of marked cranes will lead Soviet and ICF scientists to the nesting grounds of these birds and prepare the way for the reintroduction of the rare Siberian Crane.

The TV program was only part of a series of historic meetings between ICF researchers and Russian scientists in Moscow and Leningrad during late March. George Archibald and Elizabeth Anderson, ICF's specialist on Russian affairs, represented ICF during talks with the Soviet Government over future cooperative programs on rare Russian cranes. As a result of these discussions, it appears likely that the first project on the Siberian Crane will begin in the spring of 1977. At that time, ICF Director Ron Sauey and Elizabeth Anderson will fly to the Soviet Union for a four month study of the Siberian Crane in the vast wilderness of eastern Siberia. Elizabeth will return to the U. S. in late June with six crane eggs and Ron will remain until September when the cranes depart for their wintering grounds.

Meet Tony . . .

(Continued from page 1)

with Crip, a male migratory Whooper. Some 50 eggs and 12 chicks later in 1965, the fruitful liaison of Crip and Josephine ended tragically when a helicopter flew too low over their pen and frightened the birds. Josephine died of injuries she sustained trying to escape the sight and sound of the man-made bird.

Tony's new life at ICF will be quite a change from his days at New Orleans. Except for a brief period when he shared a pen with his sister Peewee (they didn't get along), Tony has been a bachelor all his life. He is in excellent health, however, and we are confident that Tony will be ready and able to fertilize Tex's eggs in the future. Tony and Tex are presently separated to avoid possible fighting, but the two have been seen dancing and calling together. This may or may not indicate a growing romance, but such displays are always encouraging because they can stimulate hormonal changes in the birds and the production of semen and eggs.

Tony is a fascinating bird. Like Martha, the last Passenger Pigeon who lingered on at the Cincinnati Zoo long after the rest of her kind had disappeared forever, Tony is a living relict. He possesses the genes of an extinct race of birds, the Louisiana Whooping Cranes. But unlike Martha, Tony also carries the genes of a small but viable population of birds, the migratory Whoopers, who have continued to survive to the present day. Tony symbolizes, therefore, not only the final, overwhelming tragedy of extinction, but