

# THE ICF BUGLE

Volume 18, Number 2

May, 1992

World Center for the Study and Preservation of Cranes

# A Bird's Eye View of Cambodia

by George Archibald, Director

I could almost hear Owen Gromme exclaiming: "There's lots of stuff down there, George, lots of stuff!" That's how Owen used to sum up his response to a Wisconsin marsh in spring. But now, even Wisconsin's Horicon Marsh seemed dwarfed by a mosaic of forest and wetland that stretched to the horizon beneath our Cessna aircraft.

We were flying around Cambodia's Tonle Sap, the largest lake on the Indochina Peninsula, and ornithologically speaking, one of the most important wetlands on earth. As we flew over verdant forest canopy or shallows of the lake, four pairs of eyes searched for large birds in a land where almost a half-century of conflict has blocked wildlife conservation.

Cambodia covers a Missouri-sized basin (70,238 square miles) bordered by Thailand, Laos, and Vietnam. Eastern Cambodia is traversed by the mighty Mekong River whose summer floods help fill Tonle Sap. "In the wet season, Cambodia becomes one enormous lake," explained our pilot, Bertrand LeMalvilain, who came to Cambodia to fly aid missions for Aviation Sans Frontiers.

Recent analysis of photographs taken by satellite indicates that 69 percent of Cambodia is still covered by forest. Although detailed surveys have never been conducted, it is hoped that beneath the canopy of this tropical wilderness a colorful fauna may flourish, including many endangered species. My initial interest, however, concerned the 5.2 percent of the nation covered by wetlands and grasslands. Here we hoped to find the Sarus Crane, five species of stork, four species

of ibis, and the Bengal Florican—a little-known bustard.

The Cambodian year is divided into the rainy season (May through November) and the dry season (December through April). During the rainy season, all Cambodian rivers swell and Tonle Sap fills. This is the season when the Sarus Crane breeds.

In contrast, much of Cambodia is bone dry during the dry season. The cranes migrate to the Mekong Delta of Vietnam, and many other water birds gather along the remaining wetlands that border Tonle Sap. It was on a hot dry morning in March that we looked down on the swamps around the great lake.

During the dry season, Open-billed Storks,

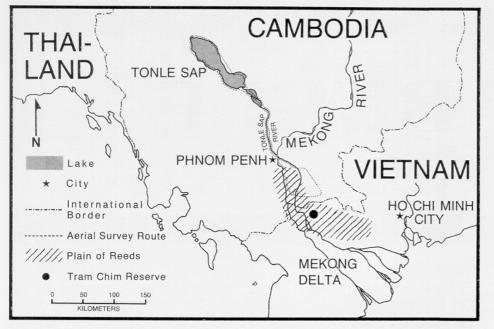
Lesser Adjutant Storks, Spot-billed Pelicans and Little Cormorants apparently find an abundance of fish trapped in shrinking wetlands. We were delighted to discover three major colonies of these species in the trees on the southwest side of the lake. Almost everywhere, thousands of white egrets dotted the trees and shallows. Purple Swamphens, Anhingas, and rafts of Whistling Tree Ducks colored the grassy fringe where forest meets the open water.

Our Cessna joined the colorful Brahminy Kites and Pallas's Fish-eagles in looking down into a feast of biodiversity. Aware of the scarcity of natural wetlands in over-populated Thailand and Vietnam, I realized the major significance Tonle Sap has for the survival of

continued on page 2



About 79 percent of Cambodia's surface is covered by natural habitats—forest, savannah, grassland, open water, and rivers. Thanks to this abundance of relatively undisturbed ecosystems, Cambodia is southeast Asia's last stonghold for the Eastern Sarus Crane and a variety of other endangered wildlife. Photo by Eleanor Briggs.



Tonle Sap, nearly 75 miles long, is the largest lake on the Indochina Peninsula. On March 5, 1992, Thai and ICF specialists conducted an aerial survey of wetlands that surround Tonle Sap, and wetlands of the Mekong Delta within Cambodia.

#### Cambodia continued from page 1

the large wetland birds in Indochina. However, the Black-necked Stork, the Giant Ibis, the White-necked Ibis, the Black-headed Ibis and the Glossy Ibis were not in view. Perhaps they had moved elsewhere for the dry season.

#### The Thailand connnection

Wildlife specialists from Thailand's Royal Forestry Department, Bubphar Amget and Parntep Ratanakorn, and American photographer/conservationist, Eleanor Briggs, were fellow members of the Cambodian expedition.

Sarus Cranes used to breed in Thailand, but for several decades cranes have not been sighted. Bubphar and Parntep are involved in a project to reintroduce Sarus Cranes to Thailand. Studying nesting habitats of the Sarus in Cambodia will help Thai conservationists select and prepare good homes for cranes in Thailand.

During the past decade, ICF has sent 12 captive-reared Sarus to Thailand to start a Thai captive-breeding program. ICF stock had originated from cranes collected in northeastern Australia. In addition to these cranes, during the past three years, the Thai crane population has been augmented by 23 birds confiscated from animal dealers who had secured crane chicks in northern Cambodia. But to our surprise, measurements showed that Cambodian Sarus were significantly larger than Australian Sarus. In the future, the captive Australian Sarus will be used as foster

parents for Cambodian Sarus and the resulting chicks will be released into the wild.

If Sarus chicks were collected in Cambodia, Sarus must be breeding in Cambodia! Prior to the aerial survey, we had met with Cambodia's Vice Minister of Agriculture, Dr. Mok Mareth, a wildlife enthusiast. He knew the Sarus well, but felt that arming of the populace as a consequence of civil wars has caused the demise of much of Cambodia's wildlife. He had the impression that cranes perhaps survived along the northern side of Tonle Sap where the local people collected and reared crane chicks. Pre-fledged cranes

make a tasty meal! But not a crane was seen from the Cessna on March 5. Perhaps they were all on dry season wintering grounds in Vietnam. After all, just nine days earlier, I had counted 283 Sarus at Vietnam's Tram Chim Nature Reserve near the Cambodian border.

When the Sarus return to Cambodia during the rainy season, however, our Thai friends will be there to find them. The joint Thai-Cambodian team will plot the distribution and numbers of nesting cranes and will start a conservation campaign directed towards the local people who savor cranes in their cuisine.

#### The Vietnam connection

Since 1988, ICF has helped Vietnamese colleagues at the Tram Chim Nature Reserve on the Mekong Delta. The Reserve is located on a former crescent-shaped wetland basin that stretched almost from Phnom Penh to Ho Chi Minh City. During the Vietnam War, Vietnam's portion of the basin was drained and burned in an effort to manage Viet Cong forces then hiding in the impassable wilderness.

In 1983, under the guidance of the governor of Dong Thap Province, Mr. Muoi Nhe, the Vietnamese built 26 miles of dikes to retain water over 35,000 acres of land through the dry season. The initial objective was to restore a safe habitat for the commercially valuable *Melaleuca* trees. Late in 1986, when ornithologists from the University of Hanoi discovered Sarus Cranes wintering in and near the impoundment, the wetland was named Tram Chim Nature Reserve. In 1991, through support from the MacArthur Foundation and the Brehm Fund For International



Flocks of Eastern Sarus Cranes gather during the dry season at Vietnam's Tram Chim Nature Reserve. They probably move northwest into Cambodia to breed during the rainy season.

Bird Conservation, four water gates were installed in the dikes and now efforts are underway to simulate former water levels of the wetland basin.

During our years of work in Vietnam, we have often wondered what the wetland basin must have been like, before the whole environment was transformed by war. Might similar untouched wetland habitat still survive in nearby regions of Cambodia?

Having circled Tonle Sap and observed the colonies of birds, we flew along the Tonle Sap River east to its junction with the Mekong at Phnom Penh. Then we followed the Mekong south toward the border with Vietnam.

It was one of the most thrilling moments of my life to look down and see vast expanses of natural wetlands with widely-scattered, thatched homes perched on stilts, a scene in Cambodia that must be quite similar to what once existed in Vietnam. Pristine habitat for cranes still survives!

Next winter, ICF and Vietnamese colleagues hope to join our Cambodian friends in a study of that unspoiled wetland. Now we have a living model upon which to base our habitat restoration efforts in Vietnam!

#### New hope for Cambodia's wildlife

Leaders of Cambodia's Department of Forestry realize that wildlife conservation is an important responsibility. Although the French had established eight forest reserves where the trees and the wildlife were protected, the integrity of the reserves has not been recognized since 1945. Considering that much of Cambodia is forested, and that lumber is one of the primary assets of the nation, the Department of Forestry, now part of the Ministry of Agriculture, may soon become a separate ministry. Within this ministry there are hopes for a Department of Wildlife. It is now crucial that expertise be developed in Cambodia to staff such a department.

Consequently, our group signed a Memorandum with the Cambodians at the end of our brief visit. For two months in 1992, five Cambodians will be trained in wildlife management in Thailand. In 1993, Cambodians will train in the United States for a similar period. ICF, along with our colleagues in Thailand and Vietnam, looks forward to helping Cambodia assure a sound future for her remarkable wildlife.

In the meantime, the effectiveness of the United Nations in administering the peace, and the success of upcoming elections in March of 1993, are both crucial elements in molding a future where the people and the wildlife of Cambodia can coexist in harmony.



Storyteller Bob Kann performs at Waunakee Middle School. Thanks to a grant from ICF Trustee Abigail Avery, Dr. Kann brought his message about cranes and conservation to approximately 10,000 school children in and around Madison, Wisconsin this spring. Photo by David Thompson.

# Extincto Foiled Again! Storyteller tells all about cranes

David Thompson, Education Director

When I went to Bob Kann's performance at Waunakee Elementary School, I expected to be pleased. But after the 45-minute presentation to 400 children from grades 1-5, my face was tired from smiling too much. Bob has an energetic aproach to storytelling that captures the interest of children. Today's performance was entitled "Save the Cranes."

The funniest moment for me came when Bob rhetorically asked his audience: "And how do you make a wetland? Here's how...!" Suddenly, he pulled out a giant water pistol and sprayed the crowd, teachers and students alike.

The first story was about Extincto, a slimy character who has been assigned the task of exterminating all Whooping Cranes. At first Extincto thinks it's going to be an easy job, but soon the wily cranes, with the help of the International Crane Foundation (ICF) and others, prove him wrong.

Whenever Extincto thinks he has finally finished them off, he pauses to listen, then he asks: "What's that I hear?" And the audience, by prearrangement, gives a defiant response: "Kerloo! Kerloo!," the call of the Whooping Crane. It's a clever way to engage an audience in the struggle for survival.

The next story is about two feuding farmers and how they are able to reestablish friendly relations through the efforts of a kindly

carpenter, who builds a bridge across a stream dividing their properties. Kann points out how ICF helps improve relations between feuding countries by using cranes as a cultural "bridge." Next, Kann tells how ICF colleagues have pioneered methods to raise crane chicks for reintroduction efforts. Finally, Kann shows how children can help.

And help they do. Shortly after a performance, this hand-printed letter arrived: "Dear Crane Foundation: Amber and Kelly have collected some money to donate to you after seeing the wonderful performance by Bob Kann. We hope it will help some to encourage others to do the same. We have also been to the Crane Foundation and it is very beautiful. \$13.10 is not a lot of money, but we hope it will help a little. Sincerely, Kelly and Amber."

Storytelling is an age-old way of conveying information. It works beautifully with young children, who have little patience for abstract concepts. Through techniques like juggling, play on words, magic, and drama, Kann introduces a surprising number of facts, and gives concrete illustrations of hard-tograsp concepts like "endangered species."

Kann's performance is also a fine example of the art of storytelling. In the words of one teacher, "The word picture of the bridge is something that can be expanded upon throughout the year."

Next year, Kann will take his show to Chicago and Milwaukee, where part of his fees will be paid by the Frances R. Dewing Foundation. Your contribution of \$275 will allow Kann to present to an extra school. That's only about \$.80 per child.

# A Sacred Home for the Sarus Crane

by Jim Harris, Deputy Director

During the night, a thick mist came. At dawn, the voices of babblers and sunbirds awakened me, but outside the land was veiled, the trees silhouetted and dim against gray. I walked among fallen stones and odd hills raised to support foundations vanished centuries ago. The calls of cranes always sound ancient, as if from another world. This time I stopped when I heard them, lifting my face to the mist.

On this same spot, in 623 B.C., Queen Maya Devi had likewise walked. She had been traveling east with her attendants through the Sakyan Kingdom to visit Devadaha, the city of her childhood. She paused to rest near the edge of the Sakyan lands, in a garden at Lumbini. She had bathed in a pool of water. After, standing with her hand holding onto the trunk of a Sal tree, she gave birth to a child who would become famous throughout the world—the Lord Buddha.

Listening to the cranes, I thought of this land as it was millennia ago. Sacred Buddhist texts indicate that what is now southern Nepal and northern India held a wonderful diversity of plants and animals at the time of Buddha's birth. As Maya Devi traveled to the sacred garden at Lumbini, she passed through endless gardens of natural beauty.

For 2,500 years, these lands remained little changed. Then in the 1960s, international development agencies assisted the Nepalese government in eradicating malaria from the Tarai, or Nepalese lowland. This particularly virulent strain of malaria had limited the human population to a few tribes resistant to the disease. But in recent decades, large numbers of people have moved their livestock down from the hills. Many wetlands of the Tarai had been destroyed to eradicate malarial mosquitos. Now farmlands replaced grasslands, and the Sal forests were cut or overgrazed.

The wildlife of this upper rim of the Ganges Plain also declined. The Nepalese government established several national parks and game reserves to protect tiger, rhinoceros, and water buffalo, but cranes and other water birds received little attention.

#### Crane work in Nepal begins

In 1987, a young naturalist, Rajendra Suwal, from the Gaida Wildlife Camp at Royal Chitwan National Park wrote and asked to visit ICF for training in crane research and conservation. Gaida Wildlife Camp provided his air ticket, while his training costs were supported under a grant from the Pew Charitable Trusts. At the time of Raj's visit to ICF, no one knew how many Sarus Cranes survived in the lowlands of Nepal; no one knew whether the species had any future in Nepal. Sarus had already disappeared from several south Asian countries.

Raj is one of several young Nepalese who became interested in conservation through the Nepalese Bird Watching Club, organized by the dedicated amateur ornithologist from Kathmandu, Hara Sharan Nepali. ICF encouraged him to initiate crane surveys in Nepal, and later Raj obtained research support from the U.S. AID program and from the King Mahendra Trust for Nature Conservation.

Together with Mehendra Shrestha of the Nepal Department of National Parks and Wildlife Conservation, Raj has surveyed portions of the Tarai regularly since 1988, covering the entire breadth of the country by bus, motorcycle, and elephant.

Raj and Mahendra have discovered small and declining populations of cranes, storks, ibises, and spoonbills. Of particular concern are Greater Adjutant, Painted, and Blacknecked Storks, White Spoonbills, and Sarus Cranes. The surveys found less than 100 Sarus, although some individuals may have been missed. More alarming, reproduction was poor; the cranes nested in highly degraded wetlands or among rice paddies,

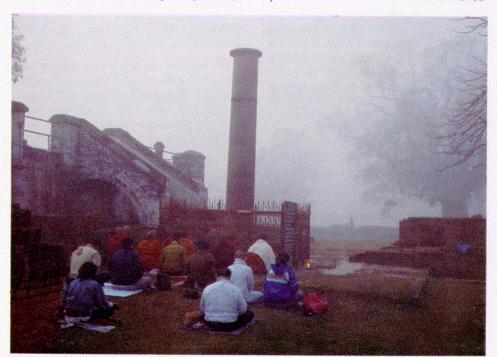
with eggs and chicks often lost to disturbance. The most important area for cranes centered around Lumbini.

#### Lumbini's gardens draw birds

It was for this reason that Raj brought me to the sacred shrine in 1989. Gaida Wildlife Camp provided a car, so we drove down from the Himalayan foothills to an abruptly flat plain, colorful with villages, busy with livestock, and rich with croplands. As we approached Lumbini, small ponds and river edges held White-necked and lesser Adjutant Storks, and we stopped at an almost dry wetland where a herder grazed his sheep amidst rice paddies. A pair of Sarus circled and landed, immensely tall. Sacred to the predominantly Hindu population, the cranes still live closely among the villagers. But the improved roads bring people with guns from the towns; the tame Sarus make easy targets.

We came to Lumbini under a late afternoon sun. The place was quiet, a serenity restored in recent years by the Lumbini Development Trust. The birthplace site, despite its importance in the Buddhist religion, had been neglected through recent centuries, so that pilgrims found access difficult and accommodations poor. Then beginning in the late 1960s, the Buddhist community, working through the United Nations, developed a program for preserving the Lumbini site and creating an international shrine to peace and harmony.

The Development Trust purchased three square miles of lowland Tarai and moved



An ancient pillar stands in southern Nepal at Lumbini, the birthplace of Buddha. Pilgrims meditate here, and large numbers of birds live within this three-square-mile shrine to international peace and harmony. Lumbini, and the farmlands surrounding it, are the most important areas left for Sarus Cranes in Nepal. Photo by Jim Harris.

villages and farms out. While the Trust is constructing a cultural center, library, and accommodations for pilgrims, most of the site remains in natural condition. On our arrival, we found abundant birds, some of them rare in Nepal—Large Gray Babblers, Purple Sunbirds, Brahminy Mynah, egrets of three species, and White-eyed Buzzards. Raj has seen as many as 500 Open-billed Storks at Lumbini, and as many as 500 Pied Harriers at a single time!

Remarkably, the birds have responded to the peace and harmony at Lumbini. They have gathered in great numbers and variety—over 100 species—into this small island within the crowded Tarai. Their songs lured me into the mists early the morning after our arrival. I walked alone. A simple pillar stands at the birthplace, erected four centuries after Buddha, in 236 B.C., by the Emperor Ashoka of India.

I saw ruins of ancient temples and an immense Bo Tree (a kind of fig) spreading over a rectangular pool. I was remembering Maya Devi and the Sal tree, when I heard the Sarus voice. Two adults and their full grown chick flew nearby through the mist, just as in Buddha's day. The cranes looked as old as the pillar itself. But now their future in Nepal may depend on the religious shrine.

#### Restoring the lands Buddha knew

Nepal guides the development of Lumbini as a religious shrine. Both Hindu and Buddhist leaders have been delighted to learn that wild birds have discovered the peace at Lumbini and have prospered. The presence of wild birds extends the spiritual meaning of the site to encompass ecological harmony as well.

Lumbini thus has double importance. First, its three square miles provide critical habitat for rare birds. Second, it has the potential to strengthen the link between Buddhist teachings and effective conservation, not only in Nepal but in Buddhist countries as far-flung as Mongolia, Sri Lanka, Burma, and Japan. During his life, Buddha taught love for all forms of life, but today Buddhist communities are struggling to apply their religion to the fast paced challenges of environmental destruction. With its cranes, beautiful Lumbini could make ancient wisdom more accessible today.

The Lumbini site is a small area with multiple functions. Its development is guided by a Master Plan laboriously prepared with involvement of 13 nations. The Master Plan cannot be changed even with the discovery of cranes. But ample natural areas were left undeveloped in the plan, and these can be places for cranes, eagles, and all the other birds.



Small wetlands still support nesting Sarus Cranes at Lumbini. Farmers nearby believe the nesting cranes bring good harvests to the rice paddies. Photo by M. P. Kahl.

Raj, Mahendra, and I recently prepared proposals for bird conservation as a part of Lumbini. In this, we were greatly assisted by Gopal Manandhar, Acting Project Manager in charge of all construction and activities at the site. In the years since Raj began visiting Lumbini, Gopal has become a bird watcher also. An engineer by training, he has highly creative suggestions for the natural gardens of Lumbini.

Our idea is that the formal and sacred garden surrounding the birthplace will, in turn, be surrounded by natural gardens replicating the plant communities of Buddha's day. Wetlands, grasslands, and woodlands will provide habitat for a diversity of birds. During recent construction activities at Lumbini, the Sarus Cranes have nested each year, often in small wet areas actually created by construction. The birds need just small sites for their nests, and feed in neighboring farmlands.

We have prepared a seven-point conservation proposal for the committee guiding the Lumbini Development Trust. Our purpose is to incorporate ecological considerations into the project's management and public programs. For example, one exhibit in the newly constructed Cultural Center might be devoted to the theme "Buddha's Love for Nature." The exhibit would include selections from sacred Buddhist texts referring to the harmonious relationships with nature. and illustrating the meanings of selected plants and animals in Buddha's life. Outside, people would find these same species: the Sacred Bo and Sal trees, Green Peafowl, and the cranes.

Over 320 acres in the northwest portion of the site have been left as a natural area in the Master Plan. We have recommended that the soils and hydrology of this area be studied and a plan developed for managing a diversity of natural communities. This site would hold great beauty for pilgrims staying at nearby accommodations; here and in the sacred garden, visitors could meditate and feel the natural harmony.

The cranes at Lumbini move on and off the site. The importance of the district for wildlife arises in part from Lumbini itself, but also from the abundance of artesian water and the very long history of human settlement (old villages have a sensitivity and respect for cranes and nature).

Just as the Lumbini shrine seeks warm relations with the surrounding human communities, so conservation programs for birds must involve these peoples and their landscapes. The future for cranes and many other water birds in Nepal depends on developing strategies for conservation on private lands. These strategies must allow multiple uses—a very different approach from the big game reserves.

It seems odd, that the fate of cranes and the politics and histories of people intersect at so many places in the world. At the Ashoka pillar, dim in morning mist, I glimpsed these connections. I felt the gentleness and hope that Buddha Shakyamuni still offers us. I sensed that ancient harmony. I felt lucky to participate in the story of Lumbini, at a time when cranes still seem eternal.

\_

### Field Trips to Horicon

There's still space on both May 23 trips!

#### Birding at Horicon Marsh

Observe birds by sight and sound while walking the trails and boardwalk at Horicon's north end. WHEN: Saturday 8-10 a.m., May 23. INSTRUCTOR: David Thompson. FEE: \$10/non-member, \$5/member. Call to register.

#### Natural & Human History of Horicon Marsh

Lecture and field tour including geologic origins, Indian pre-history and settlement history, efforts to restore and maintain the wetland, opportunities to view wildlife and discussions of their ecologic status. WHEN: Saturday, May 23, 10:30 a.m.-5 p.m. INSTRUCTOR: Bill Volkert. FEE: \$25 nonmember, \$20 member. Call ICF to register.

### **Special Saturdays Expanded**

This summer, on June 27, July 25, August 29, and September 26, ICF is offering "Special Saturdays" featuring out-of-the-ordinary tours and workshops.

FEES: These workshops and special tours cost \$5.00 (\$8.00 for non-members), plus the normal admission charge to the site of \$5.00 for adults or \$4.50 for seniors (members free). But there is no special charge for Leopold Reserve workshops or the Archibald tour on Whooping Cranes. Advance registration is required for the special workshops, tours and field trips. Please call Rose Blada at 608/356-9462.

#### How Aldo Leopold Restored the Land

Auto tour, educational hike, and work party to understand his unique approach to restoring the land. WHEN: Saturdays, 8:45 a.m.-12:45 p.m., June 27 and July 25. WHERE: Leopold Memorial Reserve (meet at ICF). INSTRUCTOR: Matthew Bremer.

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: Geor

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 |

#### Prairie Tales and Trails

Covers folklore and so-called "powers" of some of the prairie plants and flowers. WHEN: Saturdays, 9:15-11:45 a.m., June 27 & August 29. INSTRUCTOR: LuAnne Ashley.

#### **Breeding Cranes and Raising Chicks**

Includes techniques & the meaning of behaviors. WHEN: Saturdays, 9:15-11:30 a.m., June 27 & July 25. INSTRUCTOR: ICF staff.

#### Crane Communication

Birds have a simple system of signals based on calls and postures. Find out about crane personalities. WHEN: Saturdays, 12-1 p.m., June 27 & July 25. INSTRUCTOR: Scott Swengel.

#### **Butterflies and Their Plants**

Covers identification, habitat needs, how to get close. Learn to recognize when butterflies are nectaring, drinking, courting, and defending territories. WHEN: Saturdays, 1:30-4 p.m., June 27 & August 29. INSTRUCTOR: Ann Swengel.

#### What Makes a Wetland Tick?

An introduction to the basic processes that make wetlands unique through field measurements and a model demonstrating groundwater flow. WHEN: Saturday, 1:30-4 p.m., June 27. INSTRUCTOR: ICF staff.

#### Amazing World of Insects

A look at the things that creep & crawl, fly & burrow. Probe prairie plants to find the little things that run the world. WHEN: Saturday, 1:30-4 p.m., July 25. INSTRUCTOR: Ann Swengel.

#### **Prairie Restoration**

Habitat is the key to wildlife. Practical information about the values and methods of restoring our native prairies.

WHEN: Saturday, 1:30-4 p.m., July 25. INSTRUCTOR: Jeb Barzen.

#### Soils: The Earth Beneath Our Feet

An indoor presentation with music, poetry, and displays, followed by an outdoor walk to see landscapes and soils. WHEN: Saturday, 9:15-11:45 a.m., August 29, & Saturday, 1:30-4 p.m., Septmber 26. INSTRUCTOR: Francis Hole.

#### Whooping Cranes

See one of North America's rarest birds, and hear about management of the species from a member of the Whooping Crane Recovery Team. WHEN: Saturday, 12:00-1 p.m., August 29. INSTRUCTOR: Archibald.

#### Inside Crane City

A rare opportunity to tour ICF's breeding center with ICF staff, meet some of our special birds, and learn about techniques.

WHEN: Saturday, 1:30-3 p.m., August 29 & Saturday, 9:15-10:45 a.m. and 1:30-3 p.m., September 26.

#### New Tractor Needed

Recent completion of the library at ICF has added new lawns to mow and a new driveway to plow. Site Manager Dave Chesky expects the tractor will cost \$7,500, including attachments such as a mower deck and plow blade. If you can help, please send your gift to Terry Brooks at ICF with a note signifying "Tractor Fund."

Save Saturday Septemer 19, 1992 for ICF's Annual Meeting: See your next newsletter for details



In tribute to top-selling T-shirts, the staff of ICF's gift shop stand before the shirt display. From left: Karen Klemm, Linda Gerez, Jo Cummings, Nancy Bayer, and Financial Manager Terry Brooks. ICF's gift shop will offer a wide selection of new items this summer. Photo by D. Thompson.

## Contributions

Received January through March, 1992

Grants and Awards: David M. Abbott; Sally Arney; Audubon Naturalist Society; Baraboo National Bank; Brenda Bauer; Eugenie Mayer Bolz Family Foundation; Stephen H. Bouffard; Miller Brewing Co.; Eleanor Briggs; Robert Brumder; George & Judy Bush; Charles Carpenter; Kent Chandler; Ruth Daniels-Discount Travel; The Frances R. Dewing Foundation; Alma Doten Trust; Mrs. Emily Earley; Earthwatch Expeditions, Inc.; The Armand G. Erpf Fund; Judith Evenson; Henry Fuldner; Mr. & Mrs. J. W. Gromme; Mrs. N. B. Griswold; Grootemaat Foundation, Inc.; H. J. Hagge Foundation, Inc.; Edward & Yvonne Henze; William Hicklin; Hiroyoshi Higuchi; Institute of Museum Services; Thomas H. Jacob Foundation; Johnson Wax Fund; Johnson Wax, Japan; Frances Kaliher; Dr. Jill Kusba, D.V.M.; John D. & Catherine T. MacArthur Foundation; Marshall & Ilslev Bank; Victoria Krause Mayer; John & Victoria Mc Inerney; Menasha Corp. Foundation; Kunikazu Momose; Martilias Porreca; Campbell Read; Hank & Karen Rodemaker; Norm Sauey, Jr.; Mrs. John Stedman; Laurence & Natalie Stocking; Francis & Aurelia Strupp; U. S. Fish & Wildlife Service; Wausau Insurance Co.; Wisconsin Energy Corporation Foundation; Wicor Foundation; Wild Bird Society of Japan; Wild Bird Society of Japan-Research Center; World Nature Association-Donald Messersmith; World Wildlife Fund.

Patrons: Kenneth Elk; Mrs. James R. Getz; Jeff & Barbara Grumbeck; George & Carol Harmon; Peter Manigault; George Ranney, Sr.; Maggie Seeger; Mrs. John Stedman; Joanna Sturm; David Uihlein; Solomon & Marianne Weinstock; Mr. & Mrs. William Wessinger.

Sponsors: Jonathan & Rosemary Avery; Donald Bruckmann; Reed & Jane Coleman; Micki, Willie, Meg, Tom, & Matt Corley; R. G. & Marian Van Dellen.

Associates: Helen Adelt; Mrs. Don Anderson; Mr. & Mrs. S. S. Auchincloss; R. L. Austin; Paul & Ida Babington; Betty Bamforth; Martin & Kay Barrett; Rex Bates; Annette W. Beyer; Bill & Helen Birkemeier; Marcia Brehmer; Sue Mueller & Bob Brennan; Joyce Brink; Mary Brazeau Brown; Ray & Eleanor Brown; Steve Bubulka; Russel Kumai & Carol Cameron; Emily Campbell; John Canfield; Gertrude Carter; Central Ohio Anglers & Hunters Club; Citizens Natural Resources Association; Connie M. Clark; James R. Compton; Ernst & Jany Conrath; John Constable; William G. Conway; Louise Coumbe; George Covington; Frances Z. Cumbee; Ronald & Kathryn Curio; Edmund de Rothschild; Joan Dobberstein; Olivia Dodge; Gerri Doebelin; Marion Doherty;



As a child, Ann Burke (above) vacationed with her family in this trailer. Recently her parents, Joseph and Joann Burke, donated the trailer to house our newly installed video surveillance system. Now aviculturists can observe the cranes without disturbing them. The video has already helped us retrieve two eggs from a Whooper pair that last year destroyed their eggs. Photo: David Thompson.

William & JoAnne Doppstadt; Dr. Margaret Draeger; Du Page Audubon Society; Mrs. Robert Emmett; Marshall Erdman; Elizabeth T. Foster; Mildred K. Gill; Ms. Mary Griffith; Beatrice Haemmerle; Charles C. Haffner, III; Mr & Mrs. Corwith Hamill; Joseph & Lola Hickey; Hatsue H. Higa; Margaret Hillenbrand; Mr. & Mrs. Thomas Hoffmann; Tom Hopgood & Mary Gordon; Clare F. Hutson; Lt. Col. J. E. Jacoby; H. Fisk Johnson; Steve & Elly Johnson; Barry & Jane Jones; Kettle Moraine Garden Club; Anne Mary Klaprat; Warren Knowles; Herbert H. Kohl Charities, Inc.; Dr. Elizabeth Keys MacManus; Madison Audubon Society; Mr. & Mrs. Harold N. Malmberg; J. P. & Huetta Manion; Dr. D. J. & Lynda Manning; Kate Marrs; Dr. Hiroyuki Mastomi; Ronald Mattox; Mabel McClanahan; F. Paul Mooring; Dorothy Nichols; Northland Cranberries; Charlotte Oglesby; Marianna Oglesby; Roy & Virginia Ollivier; Dr. Judith Patrick; Dr. Robert & Sonja Pavlik; Audrey Pertl; Charles S. Potter, Jr.; Mrs. Joseph Rich; Harold Rock & Margaret Jahnke; Anne Sands; F. Leon & Lucy Sanna; Richard Schmitt; Jim & Rose Sime; Randall Skiles; G. Kendall Smith; Natalie Soref; Don Spangenberg; Carol E. Steinhart; Doris Swartz; Len & Carlene Taylor; Terrytown Plumbing, Inc.; The First National Bank & Trust Co. of Baraboo; ThermcoInstrumentCo.—Dennis Richardson; Paul Thomas; Thorn Creek Audubon Society; Sally S. Tongren; Preston Torbert; Greg & Marla Turek; William P. Van Evera; Vivid, Inc.—Art Donaldson; Dorcas R. Volk; Martin & Karen Voss; Mrs. Robert Weinstock; Martin Weitzman; Dr. & Mrs. Wallace Wendt; Loretta Whipple; James & Georgeann Wicklund; William & Susan Wilder; Mary F. Willson; Carroll Winther; Winifred Woodmansee; Mary Wright.

# Bring a Friend to ICF

by Bob Hallam

One first-time visitor left this comment in our guest book: "Excellent guide, outstanding tour and displays. Before the tour, we saw the slide show and video—all were excellent. It's very impressive, in all respects!" Another visitor wrote: "Excellent tour guide. She was enthusiastic and spoke loud and clear, so all could hear. She knew her information—very enjoyable." Other typical comments: "Very proud of all your work!" "Wonderful place!"

Several years ago, the University of Wisconsin surveyed visitors to ICF. An astounding 99% rated their visit as either "excellent" (79%) or "good" (20%). What a tribute to our well-trained and enthusiastic guides (not to mention the cranes)!

But a visit to ICF is more than fun for the whole family—it helps the environment by educating and motivating people, and by providing significant support for ICF and its programs.

Membership support and involvement is the backbone of ICF. In 1991, approximately 46% of our operational support came from memberships, sales, and tour income. Last year, 257 of our 17,457 adult visitors became members of ICF. Over the past five years, over 1,000 visitors joined ICF!

We hope you will visit ICF this year and bring a friend. Out future growth depends on expanding our support and membership. If you live far from ICF, you can refer names to us; we will send them information about ICF. Remember, members and their guests visit our site for free.



ICF's restored prairie is a kaleidoscope of color. Come walk on our trails, or enroll in a workshop! Find out what biodiversity is all about!

# See the Flowers this Summer

"Biodiversity" refers to the incredible variety of plant and animal species enriching our environment. ICF's restored native prairie is an outstanding example of our rich natural heritage.

Early morning on the prairie is a treat. A spider web droops heavy with dew, catching the first rays in thousands of tiny droplets. As the sun warms the quiet scene, insects begin to stir. A spider, closely matching the color of its floral hideaway, silently waits for breakfast to arrive.

You have to look for the insects, but flowers aren't so shy. Throughout spring, summer, and fall, there's a constantly changing kaleidoscope of color. The insects and plants of a prairie have evolved together for millions of years. Together, they provide diversity unmatched by any domestic garden.

The prairie is also a symbol of renewal. As I write in early April, the pungent smell of fire lingers from yesterday's controlled burn, a yearly ritual that restores the prairie and combats invading woody or exotic (nonnative) plants. Fire has released nutrients and turned the ground black so sun can warm the soil. Soon countless spears of grass will transform black into green.

ICF's prairie is a delight to the eye and an example of restoration techniques that can be applied to damaged habitat around the world. By protecting and managing prairie communities, we ensure that our children will be able to experience firsthand what biodiversity really means.

# **International Crane Foundation**

E-11376 Shady Lane Road Baraboo, Wisconsin 53913

(608) 356-9462

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

Address Correction Requested

