

Papers in the Biological Sciences

Cranes of the World, by Paul Johnsgard

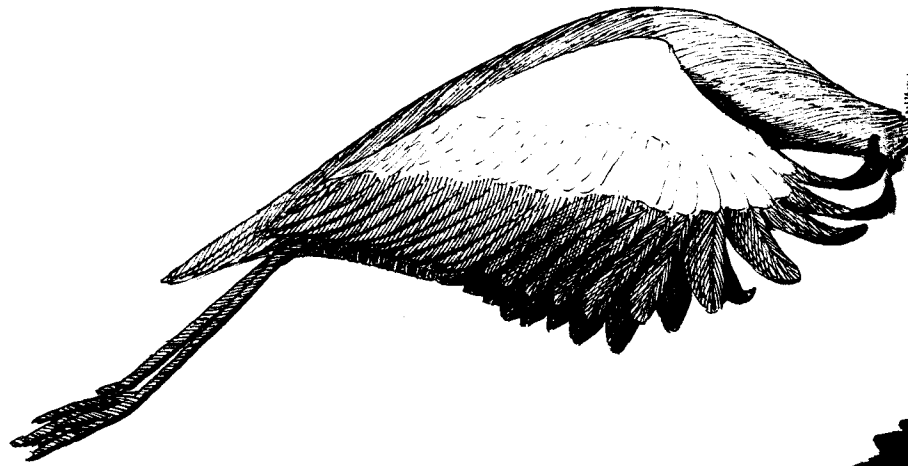
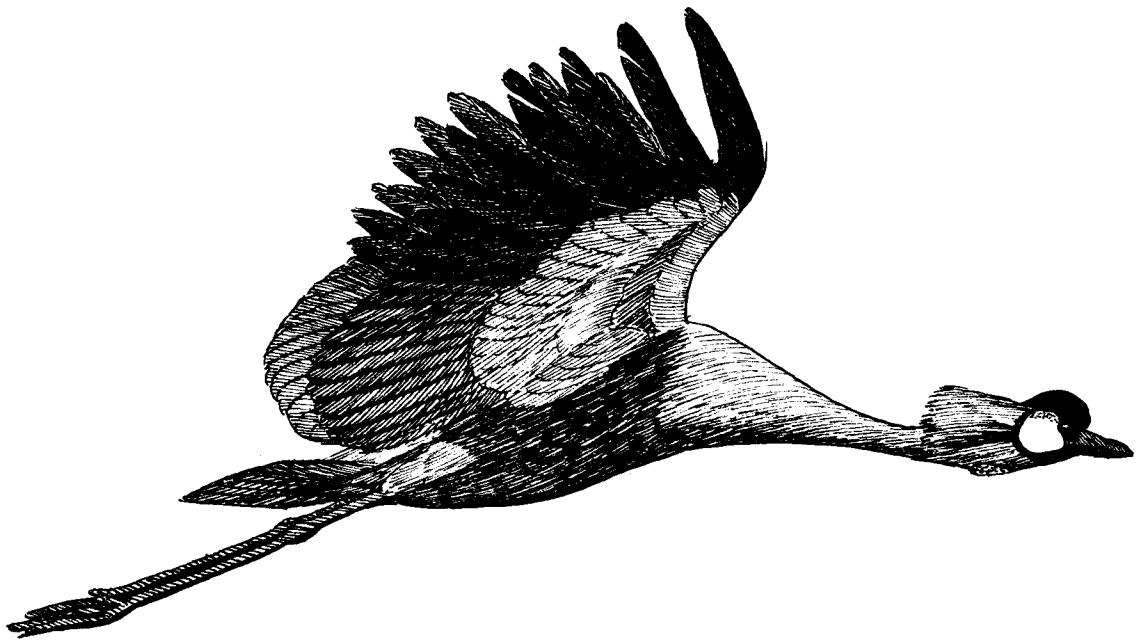
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Foreword – Preface

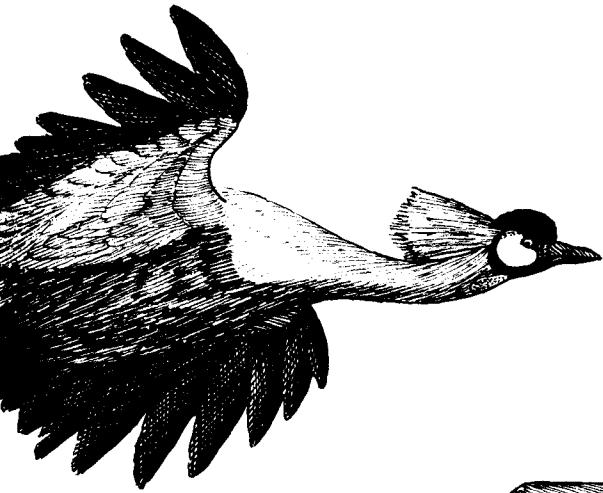
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CRANES
of the
WORLD



CRANES of the WORLD

Paul A. Johnsgard



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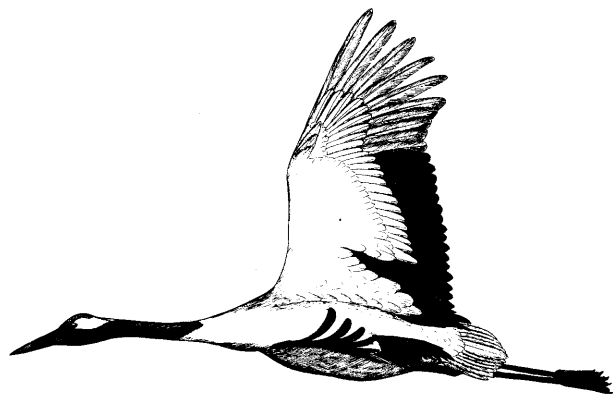
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FOREWORD

Cranes have stalked earth's wetlands for some 60 million years. Since time untold mankind has been inspired by their primeval calls, elaborate dances, impressive migrations, and graceful beauty. Demoiselle cranes adorn the walls of ancient Egyptian tombs, statues of red-crowned cranes guard the Imperial Throne in Beijing's Forbidden City, and native Africans, Australians, and North Americans still mimic crane movements in their rituals. Paradoxically, modern man is threatening the demise of seven crane species. The proliferation of humanity has devastated the shallow wetlands in which cranes breed, and in some regions human ignorance and hunger continue to haunt these majestic creatures.

Settlers in North America obliterated the whooping cranes from the heart of the continent. By 1941 only 15 birds survived. Through decades of cooperative efforts among private organizations and the Canadian and U.S. governments, whoopers were protected and slowly increased to 72 birds by 1983 in the Aransas flock. Likewise, in Japan and West Germany remnant flocks of Japanese and Eurasian cranes are now recovering from perilously low numbers as a result of widespread conservation initiatives. In Asia and Africa, however, six crane species are in peril. Worst hit is the Siberian crane, which is now reduced to fewer than 200 birds and in continued decline. Their survival rests on conservation initiatives in Afghanistan, China, India, Iran, Pakistan, and the USSR. One flock is still hunted while

traversing the Hindu Kush mountains of Afghanistan and Pakistan. In addition, the Siberian cranes are specialized aquatic vegetarians and have made a rapid retreat before the destruction of wetlands in south Asia. Likewise, in Africa many of the great floodplains that provide sanctuary for the wattled cranes are being destroyed by various development projects—and the range of the cranes contracts. And political and socioeconomic difficulties in Asia and Africa compound the threats facing these birds, which regularly move across tense political boundaries.

We are faced with the challenge of protecting relict habitats, educating local peoples to protect the cranes, developing cooperative conservation efforts among politically polarized nations, and breeding cranes in captivity as a safeguard against extinction in the wild. Encouragingly, efforts are expanding to help the wild cranes, and all endangered species except the black-necked cranes are now well established in captivity.

Paul Johnsgard's excellent book brings us a comprehensive and current account of crane biology. His sketches, range maps, photographs, and informative text will help to improve man's understanding of these remarkable birds and thereby enhance their chances for survival.

GEORGE ARCHIBALD
Director
International Crane Foundation

PREFACE

It has now been little more than a decade since Lawrence Walkinshaw published his *Cranes of the World*, the only monograph on the family Gruidae to appear in the twentieth century. That being the case, it might seem premature to consider the publication of another book covering the same group of birds. However, the precarious state of all the crane species of the world, including no less than five endangered or vulnerable species and another of indeterminate status, according to the most recent assessment by the International Council for Bird Preservation, makes an up-to-date summary of the biology, distributions, and status of the Gruidae an important issue. Furthermore, Walkinshaw did not attempt to undertake comparative biological analyses, nor did he include range maps or recent population data for most species.

Walkinshaw's monograph appeared at about the time that the International Crane Foundation was being established, and together they provided a new source of interest in and centralized concern for the conservation and understanding of the cranes of the world. The growth of the Foundation's activities, including the sponsorship and publication of several workshops on crane biology, has provided a rich source of recent information on the cranes of the world and their biology.

In North America, the endangered whooping crane has been in the public eye for many decades. Its large size, its magnificent appearance, its well-publicized annual migrations between its Canadian breeding grounds and its Gulf Coast wintering area, its near brush with extinction, and its long and painfully slow population recovery since the 1940s have made the whooping crane the symbol for wildlife conservation in the minds of many people. In many areas too the smaller sandhill crane was extirpated as a breeding species early in the present century, and it is still absent as a breeding species in some of these regions. However, sandhill cranes have generally responded well to protection, and they now provide some of the most spectacular concentrations of large birds to be found in all of North America on some of their migratory staging areas and wintering grounds.

Cranes are a group of birds that can lift the human spirit as few other wild animals can do; their great size, marvelous soaring abilities, humanoid traits such as "dancing," and penetrating voices, all strike deep into the human psyche and forcefully remind us of the beauty and mystery of the natural world around us. We cannot lose even a single species of crane without seriously rendering our own existence that much poorer. It is in that spirit that I decided to write the present book, which I hope will be of value to ecologists, ethologists, conservationists, aviculturalists, and anyone else who has any interest in this splendid group of birds.

In the course of writing the book I had to rely on the help of various persons. One of the most important of these was Elizabeth C. Anderson, who provided me with a considerable number of Russian translations that she had produced for the International Crane Foundation; she also translated one or two additional items at my suggestion. Inasmuch as several of the rare or endangered cranes are largely or entirely associated with the USSR during the breeding season, access to this information was of particular value to me. Library facilities of the Edward Grey Institute, Oxford, England, and the ornithological library of the Peabody Museum of Natural History at Yale University were made available to me, and were of particular value in locating obscure citations. I was also given access to the reprint files of the International Crane Foundation, and was provided advice by Dr. George Archibald, Ronald Sauey, and others of their staff. Similarly, Dr. Lawrence Walkinshaw provided me with reprints, unpublished information, and a large number of photographs that he encouraged me to use in whatever manner might be desired. Dr. Walkinshaw's lifetime commitment to cranes and their conservation has been a source of great admiration for me, and I am pleased and honored that I am able to follow his landmark publications with a contribution of my own. Other persons who have aided me by providing unpublished information, supplying photographs, or offering other assistance include Joseph Blossom, Gregory Brown, Paul Conrad, William Conway, Prakash Gole, Guy

PREFACE

Greenwell, Tom Mangelsen, Christopher Marler, Kenneth Newman, Yuri Pukinskii, Christine Shepard, David Skead, Warwick Tarboton, Stephen R. Wylie, and Donald Young. Dr. Myra Mergler Niemeier

contributed a section on tracheal development and syringeal function for the chapter on crane vocalizations. To all of these people I offer my sincere thanks and appreciation.



*** * IMPORTANT NOTICE * ***

The International Crane Foundation, Baraboo, Wisconsin, is the world center for the study and preservation of cranes. Incorporated as a non-profit institution in 1973, ICF has distinguished itself as a vigorous force in the coordination of international efforts to save these regal and most endangered birds. Research in captive breeding techniques at ICF is enabling establishment of a "species bank" in which genetic resources will be secure, and from which cranes may eventually be released back into the wild as local conditions become favorable. ICF has made major advances in raising public awareness in many parts of the world, and has been influential in decisions to save tracts of wetlands for wildlife habitat in parts of Asia and Africa. An active education program at home provides tours for a growing number of school children, garden clubs, senior citizen groups, families, and bird lovers from all over the world. People wishing to participate in the effort to save cranes should get in touch with ICF (Route 1, Box 230C, Shady Lane Road, Baraboo, Wisconsin 53913, U.S.A.).

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