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SPECIALIST GROUP ON STORKS, IBISES AND SPOONBILLS

NEWSLETTER

Volume 4, Number 2

October, 1991

LETTER FROM THE CO-CHAIRS

We have been very busy during the last six months, both with SIS work and with our other obligations. We are very pleased with the responses to the questionnaires that we sent out in May. We have used this information to upgrade the SIS address list that will allow us to identify interests and expertise of the membership.

The Stork, Ibis and Spoonbill Bibliography is at the printer and will be available in mid-October. This will be available to everyone who is interested.

A meeting was held in June in Wuppertal Zoological Gardens to develop a conservation strategy for the Waldrapp Ibis *Geronticus eremita*. The meeting was a success. We hope that this effort and the communication will develop into strong conservation initiatives for the species.

We are looking forward to the October meeting in Hungary on the conservation of the European White Stork *Ciconia ciconia*. Many people will attend. This will be a very important meeting.

In August Malcolm visited Professor Ma Yiqing in Heilongjiang Province in northern China to discuss conservation of the Oriental White Stork *Ciconia boyciana*. A trip was made to Honghe Nature Reserve. More than 100 pairs of storks nested here in the 1960's according to Professor Fu Chengzhao. However, many of the large nesting trees were cut down and the

numbers of breeding storks decreased. Fewer than ten pairs of storks breed there today. Professor Ma will lead a project to provide artificial nesting platforms this winter. We hope that the numbers of storks will increase.

During this visit, Malcolm spoke with officials in Beijing about the Oriental Crested Ibis. There are only about 30 birds left in the world. Certainly, this is a species that will require considerable attention.

Koen is presently attending meetings in Southeast Asia. During his travels he will be in touch with many SIS researchers and conservationists.

-- Malcolm C. Coulter, Koen Brouwer

HISTOPLASMOSIS, A DISEASE SOMETIMES ASSOCIATED WITH BIRDS

During the last few years, researchers on storks, ibises and spoonbills have requested information on a disease called histoplasmosis. There is no evidence to suggest that working in colonies of breeding wading birds constitutes a risk of exposure to histoplasmosis. However, the disease is common in certain areas, and 80% to 90% of the people living in these areas have antibodies that indicated previous infection with histoplasmosis. The following article that describes the disease was contributed by James A. Comer of the Southeastern Cooperative Wildlife Disease Study.

HISTOPLASMOSIS

Histoplasmosis is a disease of man and other animals caused by the fungus *Histoplasma capsulatum*. Histoplasmosis is not transmitted directly from person to person or from animals to man, although the disease may occur in both animals and man. When the disease appears in man and animals at the same time, it represents a common exposure to a source of the fungus in nature.

Two distinct types of infections are known as histoplasmosis because the organisms that cause the infections cannot be separated on morphological grounds when they are grown on culture media. Classic histoplasmosis is the most common type of the infection. *Histoplasma capsulatum* variety *capsulatum* is the causative agent and is widely distributed throughout the world. Classic histoplasmosis is a respiratory disease, and pulmonary and/or reticuloendothelial involvement is the major feature. African histoplasmosis is clinically distinct from classic histoplasmosis and occurs only in the African continent between the Sahara and Kalahari deserts. It is caused by *H. capsulatum* variety *duboisii* which causes lesions of the skin, in the tissue beneath the skin, and in the bones. The term histoplasmosis usually refers to the more common classic histoplasmosis, and the following discussion will be restricted to that form.

Histoplasma capsulatum is a dimorphic fungus, meaning that it can occur in two different forms. It is normally found in the environment in the soil, where it exists as a mold that lives on dead or decaying organic matter. A parasitic stage of *H. capsulatum* occurs in human and animal tissues as a yeast infection.

Infection with *H. capsulatum* results from the inhalation of the spores of the fungus. The lungs are the site of primary lesions in most cases, and infection is usually restricted to them. In rare cases, infection can result from accidental introduction of spores through a break in the skin.

In the lungs, spores are taken up by cells of the body's defense system (macrophages). Germination occurs, and the parasitic yeast form cells of the macrophage system. The development of the parasitic stage within the vertebrate host takes from 5 to 18 days.

Approximately 95% of infections with *H. capsulatum* are inapparent or mild. The most

common symptom is an influenza-like illness of two days to two weeks' duration, and recovery normally follows without treatment. Healing occurs by fibrous encapsulation of the yeast cells followed by contraction and calcification. Rarely, infection spreads throughout the body and may be fatal if not treated. The clinical signs of histoplasmosis mimic those of tuberculosis, and histoplasmosis has often been confused with the latter disease.

Sporadic or epidemic cases of histoplasmosis have been associated with soils that contain the droppings of birds or bats that roost in large aggregations. The distribution of *H. capsulatum* in the soil is uneven and localized. It normally grows in the top two inches and prefers moist soil that is high in nitrogen content. It can survive in a wide range of temperatures and humidity conditions.

Birds do not become infected with *H. capsulatum*, but their droppings may create an environment that allows the fungus to compete successfully with other microorganisms in the soil. The droppings of chickens, grackles, blackbirds, oil birds, gulls and pigeons are known to support *H. capsulatum* growth. Large starling roosts provide especially suitable conditions for *H. capsulatum*, and large-scale epidemics of histoplasmosis have been associated with these sites. Although *H. capsulatum* has not been associated with colonially breeding wading birds, the accumulation of feces and other organic matter beneath nest trees suggests that these sites are potential sources of infection.

Certain species of bats become infected with *H. capsulatum*, eliminate the organism in their droppings and may spread it from location to location. Infection with histoplasmosis is common among people who explore caves, tunnels and abandoned mines in which there are large quantities of bat guano.

As a mold, *H. capsulatum* may persist in the soil associated with bird droppings for several years following heavy use by birds. Persons who clean out silos, church towers, basements, or attics, clean or demolish chicken houses, explore caves, or clear underbrush or cut trees where birds or bats have roosted for three or more years in areas where *H. capsulatum* is likely to occur are at risk of infection.

Elimination of *H. capsulatum* from the soil is difficult and not practical under field conditions. Prevention of infection is best

attained by minimizing exposure. Prevention of infection is best attained by minimizing exposure in areas where the organism is known or is likely to occur. Contact with such areas should be limited to persons who have been exposed to *Histoplasma* and have acquired a degree of immunity to infection that is lacking in others.

Infection with *H. capsulatum* is often associated with activity that disturbs bird or bat droppings in the soil and creates dust that contains the spores. Such activities should be avoided or be done when the soil is wet. Wetting areas by spraying with water may reduce the opportunity of the spores to become airborne. A self-contained breathing apparatus or a protective mask capable of filtering out particulate matter greater than 1 millimicron in diameter should be worn by individuals who must work in areas known or likely to harbor *Histoplasma* and who have a negative histoplasmin skin test. Protective clothing such as coveralls that can be bagged and drenched with formaldehyde until washed with detergent should be worn. Boots should be washed to remove soil before leaving the site to prevent the spread of *Histoplasma* to uninfected sites.

SELECTED REFERENCES FOR ADDITIONAL INFORMATION

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-- James A Comer

ORIENTAL WHITE STORKS WINTERING IN HONG KONG, 1990/1991

Prior to 1990, there were only four records of single or paired Oriental White Storks *Ciconia boyciana* from Hong Kong. This species does not seem to be common in the southeast Chinese provinces of Fujian and Guangdong.

On 28 November, 1990, field workers at Mai Po Marshes Nature Reserve, consisting of about 300 ha of coastal reserve in northwest Hong Kong, observed approximately six Oriental White Storks in tidal shrimp ponds. The following day about 80 storks were counted, and on 30 November there were 97 storks, accompanied by a juvenile Black Stork *Ciconia nigra*. The maximum count of 121 Oriental White Storks was made in January during the mid-winter waterfowl count. It is surprising that no storks were reported at the Futien Nature Reserve in Shenzhen, just north of the Mai Po reserve. The storks left Mai Po on 9 March, 1991.

-- Simba Chan

ORIENTAL WHITE STORK IN JAPAN

The Oriental White Stork *Ciconia boyciana* has not bred in Japan since 1965. However between 1972 and 1988 there were 23 records of wintering or migrating storks from Hokkaido, the northernmost island of Japan. Although some of these records probably represent the same individuals, at least 12 birds have occurred in Hokkaido since 1972.

-- Source: Fujimaki, Yuzo. 1990. Records of *Ciconia ciconia boyciana* from Hokkaido, Japan. *Jap. J. Ornithol.* 37(1): 37-38.

ADDITIONAL RECORDS OF ORIENTAL WHITE STORKS FROM LAKE UTONAITO, JAPAN

Since 1987, one to three Oriental White Storks *Ciconia boyciana* have visited Lake Utonaito, Hokkaido in Japan. A single stork was sighted from 3-29 April 1987, 9-28 November 1987, 4-5 April 1988 and from 2 November to 21 December 1988. One to three birds were seen from 24 February to 30 March 1989 and a single stork was recorded from 29 October to 9 November 1989. Various display behaviors were observed in March 1989. Two birds were spotted between 11-28 March 1990 and a single bird was observed from 23-25 March 1991. The Oriental

White Storks roosted in a grey heron colony, approximately 1 km from the lake. They left the roosting site every day between 0700 and 0900 hours to forage at the lake throughout the day.

-- Koji Ohata, Wild Bird Society of Japan

ORIENTAL WHITE STORKS BANDED IN THE SOVIET FAR EAST

This summer, four Oriental White Storks *Ciconia boyciana* chicks were banded in the Soviet Far East. A nest with five chicks was found in a small oak tree near the village of Murayevka, Tomlovsky District, Amurskaya Oblast. One of the chicks disappeared. The remaining chicks were banded with metal rings on their left legs and red plastic rings with white letters on their right legs. The combinations are:

<u>Left leg</u> (metal ring)	<u>Right leg</u> (red color ring)
A 253201	P 04
A 253202	P 05
A 253203	P 06
A 253205	P 07

If you see these birds or would like more information, please contact: Sergei Smirenskii, Laboratory of Ornithology, Biology Department, Moscow State University, Lenin Hills, 119899 USSR.

-- Sergei Smirenskii

EUROPEAN WHITE STORKS IN MALI

European White Storks *Ciconia ciconia* winter in Mali. About 52% are those that breed in Spain, 38% from northwest Europe, the rest from northwest Africa. The main wintering area is the central Niger River delta, but the areas visited and numbers of birds vary considerably according to availability of food. Hunting is a major cause of mortality, resulting in the deaths of hundreds of birds in some years. Shooting has increased in recent years with greater availability of guns and use of motorcycles.

-- M. Thaurant & M. Duquet, *Alauda* 59:101-110.

WHITE STORKS WITH COLORED RINGS SEEN IN THE NETHERLANDS

A CALL FOR INFORMATION

Every year in the Netherlands White Storks *Ciconia ciconia* with colored rings on their legs are reported. Some of the rings have inscriptions, but most rings are only colored metal or plastic rings. The origin of these storks is unknown. None of the ringing centers in Europe has any information on these birds. We speculate that these rings were put on the birds by private people or organizations who have not yet passed their information to the ringing centers.

It is important for the observers, the ringers and the coordinating ringing centers to know which colors are used, where this is being done and when.

The SIS newsletter is an appropriate place to make this information available. We encourage anyone who uses or has used color rings to send the information to the editors of the newsletter. We hope that a complete list can be available in 1992.

-- Dick A. Jonkers

The editors will make this information available in a future newsletter.

BLACK STORK PROJECT

Black stork specialist and member of the SIS Specialist Group Maris Strazds of Riga in Latvia has informed us of his plans to publish a book on the biology, ecology, distribution and status of the Black Stork *Ciconia nigra* in the territories of the former Soviet Union. Many data have already been collected, and an editorial board of stork specialists is being formed to prepare this valuable volume.

This project will lead to the first major publication providing us a review of the biology of the black stork in the former Soviet Union, an enormous part of the species' range.

Maris Strazds can be contacted for further details at: Project "Black Stork", the Gandra Fund, P.O. Box 677, 226047 Riga, Latvia. Organizations or individuals interested in providing material or financial support to this important project can also write to Koen

Brouwer, Co-Chairman of the SIS Specialist Group.

SCARLET IBIS IN FRENCH GUIANA

The Specialist Group recently received information from Jean-Luc Dujardin in French Guiana regarding the results of the 1990 and 1991 Scarlet Ibis *Eudocimus ruber* breeding seasons.

Two colonies were occupied in 1990: 1500 pairs nested at Karouabo and 300-400 pairs nested at Pointe Béhague. During the 1991 breeding season about 1200 pairs were present in Karouabo and 500 pairs at Pointe Béhague.

It is believed that large numbers of Scarlet Ibis are still taken illegally in the breeding colonies. Some action has been taken. Police confiscated a number of ibis in 1990. Less disturbance was recorded in the 1991 breeding season fortunately. Approximately 2500 birds were estimated to be present on 11 June 1991: 1335 were counted during an aerial survey and 600 pairs were still in the two breeding colonies.

Unfortunately, Scarlet Ibis are still poached in French Guiana, despite their official legal protection. Birds can be ordered for dinner in restaurants and feathers are collected for the preparation of artificial flowers. It is necessary that the authorities in French Guiana seriously attempt to protect the roosting and colony sites of the Scarlet Ibis. International pressure might once again be needed to facilitate this process.

WHITE-SHOULDERED IBIS REDISCOVERED

-- as the newsletter was going to press, we received the following positive news from Jonathan Eames, Project Investigator, ICBP:

In June 1991, whilst undertaking a survey for White-winged Duck *Cairina scutulata* in Nam Bai Cat Tien National Park, Dong Nai Province, Vietnam, a joint ICBP/Forest Birds Working Group team discovered three White-shouldered Ibis *Pseudibis davisoni*. Two ibis were discovered feeding along a small forest creek, and flew to a dead tree, located in a small patch of swamp forest, where they joined a third bird.

All three birds were recorded in the same area on subsequent days when they were observed engaged in loud vocal displays.

The species is well known to the local people and up to six birds were reported from the same area earlier in the year. The species is threatened in the park by hunting and disturbance from local fishermen.

Thorough surveys of the small wetlands in the east of the park may reveal the presence of more birds.

-- Jonathan Eames

WALDRAPP IBIS CONSERVATION MEETING: JUNE, 1991

A meeting was held in Wuppertal Zoological Gardens, 10-12 June 1991, to develop a conservation strategy for the Waldrapp Ibis *Geronticus eremita*. The meeting was organized by the Captive Breeding Specialist Group of IUCN/SSC. Waldrapp Specialists attended from many countries, including Morocco, where the only surviving breeding colonies can be found. The overall purpose was to develop a conservation strategy that will assure the continued survival of the Waldrapp Ibis in the wild.

The two major topics of the meeting were:

1. How to develop a successful recovery program for the Waldrapp Ibis in the wild?
2. How to develop and manage a viable captive population that could be used as a source for reintroduction programs?

Recommendations for long-term management of the captive population were developed in workshops during the meeting. Husbandry, behavior and genetics were all considered in these sessions. Recommendations were brought forward to set up a core population of captive Waldrapp Ibis. Genetically valuable birds will be selected for this purpose by the zoological gardens keeping these birds. Cindy Tomlinson, of the Durrell Institute of Ecology will be working in close cooperation with the zoos on this subject, as part of her PhD project.

A draft conservation strategy is currently being prepared and will be available soon. Further discussions will take place at a meeting to be held in Morocco in April 1992.

-- Koen Brouwer

CENSUS OF STORKS IN CAPTIVITY

A census of storks in captivity, first distributed in 1988, updated in 1989 and included in the *Conservation and Captive Management of Storks* is available on request. We are attempting to keep this information as up-to-date as possible. Any additions and/or changes in the census information would be greatly appreciated. Please send information and census requests to:

Catherine E. King
Rotterdam Zoo
Postbus 532
3000 AM Rotterdam
The Netherlands

Koen Brouwer
National Foundation
for Research in
Zoological Parks
c/o Artis (Amsterdam
Zoo)
Postbus 20164
1000 HD Amsterdam
The Netherlands

NEW BOOK ON WALDRAPP IBIS

Only a few years ago Waldrapp Ibis *Geronticus eremita* nested on the cliff edges in the small town of Birecik, Turkey. Unfortunately the ibis have ceased to breed there. The last Waldrapp ibises returned to this area in 1989, but failed to make any breeding attempts.

Heinz Peter has recently written a book (in German) that describes the history of the Birecik Waldrapp Ibis up until the arrival of the last three birds in 1989. *Waldrappdämmerung am Euphrat* contains 106 pages and includes a selection of black-and-white photographs of Waldrapp Ibis at the Birecik breeding station and in their natural habitat. It can be ordered from the publisher: Kasperek Verlag, Bleichstrasse 1, 6900 Heidelberg, Germany.

AAZPA TAXONOMIC ADVISORY GROUP ON IBISES, SPOONBILLS AND HERONS

The American Association of Zoological Parks and Aquariums (AAZPA) has approved the formation of a Taxon Advisory Group (TAG) on Ibises, Spoonbills and Herons. A similar group on storks already exists.

AAZPA TAGs develop criteria and provide advise on selection of species for captive breeding programs. Criteria for taxa choice can include current status in captivity, current status in the wild, current knowledge of the a species' biology, educational value, attractiveness, etc. Related species often have common husbandry problems and spatial requirements, and therefore these species can be managed more efficiently as a group. Expertise can be pooled through the Taxon Advisory Group, which can issue recommendations for captive management and research.

The TAG on Ibises, Spoonbills and Herons will be chaired by Dr. A. Lyles of the Bronx Zoo, New York. Various experts on the captive management of these birds as well as a number of field biologists have been invited to be members of this committee. The Chairmen of the Specialist Group will also take part in the activities of this group.

-- Koen Brouwer

BIBLIOGRAPHY FOR STORKS, IBISES AND SPOONBILLS

The *Bibliography for Storks, Ibises and Spoonbills* is now at the publishers and will be available by mid- to late October. It contains approximately 3,500 references. It will be available at no charge. You can obtain a copy by writing to: **Malcolm C. Coulter, Savannah River Ecology Laboratory, Drawer E, Aiken, South Carolina 29802, USA.**

We very much appreciate your sending us your articles as they appear. This has been very important in keeping our list of references up to date and letting others know of your articles. Thank you very much.

CHANGE OF ADDRESS

MALCOLM C. COULTER, CO-CHAIR

As of 1 January, 1991, I will have a new address. This will be

Malcolm C. Coulter
Chocorua, New Hampshire 03817
U.S.A.

Please send your letters and other material to me at that address.

BIOLOGY AND CONSERVATION OF THE ORIENTAL WHITE STORK

AVAILABLE SOON

This volume contains many articles on the biology and conservation of the Oriental White Stork *Ciconia boyciana*. It is based on articles received after the 1985 White Stork Symposium at Vogelpark Walsrode, Germany, and the 1987 International Crane Workshop in Qiqihar, Heilongjiang Province, People's Republic of China, and has been expanded with other articles subsequently received. It will be available in early November. Copies will be sent directly to researchers and conservationists involved with the species. A limited number of other copies will be available from Malcolm Coulter (SREL, Drawer E, Aiken, South Carolina 29802, USA) or from the International Waterfowl and Wetlands Research Bureau (IWRB)(Slimbridge, Glos. GL2 7B6, UK).

BODY MASS DATA NEEDED

I am compiling data for a handbook on avian body masses, to be published by CRC Press. The handbook will contain data for about 6000 species, and will be available in about a year. The format of the handbook allows the following information to be included for each species: mean, sample size, standard deviation, range, collecting locale and season, and source. Separate means are presented for males and females of dimorphic species.

I am currently searching for published or unpublished data on specific species to fill in gaps in the database. Storks, ibises, and spoonbills are badly represented in my files. I have no data for many species, and small sample sizes for most of the rest. I would be interested in corresponding with individuals that have raw data for the species listed below, and individuals that have a portion of the statistics described above, or all of the statistics. In other words, any information would be welcome. All data used in the handbook will be completely referenced to the original source, published or unpublished, to give credit where it is due. Individuals with data for the species listed below are encouraged to contact me at the following address: John B. Dunning, Jr., Department of Zoology, University of Georgia, Athens GA 30606 U.S.A.

Species of storks, ibises and spoonbills for which I have no body mass data: *Mycteria cinerea*, *Mycteria ibis*, *Mycteria leucocephala*,

Anastomus oscitans, *Anastomas lamelligerus*, *Ciconia stormii*, *Ciconia boyciana*, *Ephippiorhynchus senegalensis*, *Leptoptilos javanicus*, *Leptoptilos dubius*, *Balaeniceps rex*, *Threskiornis melanocephalus*, *Pseudibis papillosa*, *Pseudibis davisoni*, *Thaumatibis gigantea*, *Geronticus calvus*, *Nipponia nippon*, *Lampribus olivacea*, *Lampribus rara*, *Bostrychia carunculata*, *Harpiprion caerulescens*, *Theristicus melanopis*, *Geronticus eremita*, *Cercibis oxycera*, *Eudocimus ruber*, *Plegadis ridgwayi*, *Lophotibis cristata*, *Platalea minor*.

Species for which I have weights of less than 5 individuals: *Ciconia nigra*, *Ciconia episcopus*, *Ciconia abdimii*, *Ciconia maguari*, *Ephippiorhynchus asiaticus*, *Jabiru mycteria*, *Leptoptilos crumeniferus*, *Phimosus infuscatus*, *Hagedashia hagedash*, *Plegadis falcinellus*, *Theristicus caudatus*, *Mesembrinibus cayennensis*, *Threskiornis aethiopicus*, *Threskiornis molucca*, *Threskiornis spinicollis*, *Platalea regia*, *Platalea regia*, *Platalea alba*, *Platalea flavipes*.

UPCOMING MEETINGS

EUROPEAN WHITE STORK MEETING

Hungary: 18-23 October, 1991

We would like to remind you of the upcoming White Stork meeting in Nyirengyhaza, Hungary. This will continue the cooperation and work begun at the 1986 White Stork meeting at Vogelpark, Walsrode. For information, contact: the Hungarian Ornithological Society, Koltu u. 21, Budapest, Hungary.

WETLAND AND WATERFOWL CONSERVATION IN SOUTH AND WEST ASIA

Pakistan: 14-20 December, 1991

An important meeting will be held from 14-20 December, 1991, in Karachi, Pakistan, to discuss conservation of wetlands in south and west Asia. The objectives of the symposium are: to develop a strategy for addressing future wetland conservation priorities; to provide an international forum for improving the conservation of wetlands and their migratory species in west and south Asia; to evaluate the status of, and threats to, wetlands and

waterfowl in the region; to promote the Ramsar Convention, and to prepare for the forthcoming meeting of Ramsar Contracting Parties in Japan, 1993; and to investigate the potential for an agreement under the Bonn Convention, for the conservation of migratory waterfowl in Asia. The meeting is sponsored by the International Waterfowl and Wetlands Research Bureau (IWRB), the National Council for the Conservation of Wildlife, Pakistan, and the Asian Wetland Bureau at the invitation of the Government of Pakistan. For more information contact: IWRB, Karachi Conference, Slimbridge, Gloucester, GL2 7BX, United Kingdom.

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