

SPECIALIST GROUP ON STORKS, IBISES AND SPOONBILLS

NEWSLETTER

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LETTER FROM THE CO-CHAIRS

Important developments continue for the conservation of Storks, Ibises and Spoonbills. We are very pleased with the level of communication and the sharing of information within the group. This is making us increasingly effective in our efforts.

With this newsletter, we will begin producing two newsletters a year. We had expected that if we sent out two newsletters, each would be a little slimmer. But there seems to be as much news as ever. We hope that this will increase our communication in a timely fashion.

A few developments should be highlighted:

1. A great deal of attention has surrounded the Waldrapp Ibis *Geronticus eremita* which is now all but extinct in Turkey and doing poorly in Morocco (see article in this newsletter), while the species has reproduced well in captivity. A June meeting is planned to bring together all interested parties to discuss strategies for wild and captive birds. In preparation, a few of the key people gathered for an informal discussion on 20 March, 1991 hosted by Dr. Christian Schmidt of Zurich Zoo. Specialists represented at this meeting included Prof. Ellen Thaler, Karin Pagararo, Udo Hirsch, Cindy Tomlinson and Ralf Massanes. The Jersey Wildlife Preservation Trust was represented by Dr. David Waugh; Koen Brouwer represented the ICBP/IWRB Specialist Group.

SIS (and its sponsoring organizations) believes that highest priority for the

conservation of the Waldrapp Ibis must be assuring the survival of the remaining wild population, despite the immense political, legal and socio-economic problems encountered so far. The creation and long-term management of a self-sustaining captive population should assured.

The June meeting will be important. Plans to organize a Population Viability Analysis for this species are forthcoming. The goals are to bring together all the available information, evaluate risks of extinction, discuss alternative scenarios and organize actions to reduce the risk of extinction.

2. Two large projects to protect the Greater Adjutant Stork *Leptoptilos dubius* are getting started in India. A nation-wide study will be carried out under Asad Rahmani of the Bombay Natural History Society. A more localized effort is being carried out by P. C. Bhattacharjee and P. Saikia in Assam where most birds occur. This involves a large public education effort which has already had strong positive effects.

3. A conference to discuss conservation of storks and cranes in the Soviet Far East and China will be hosted by the Soviet Union at the Chingansky Natural Reserve in 1992. This will increase the communication and cooperation among researchers and conservationists in preserving the species in these areas.

4. While we have tried to facilitate conservation efforts for the most endangered of the storks, ibises and spoonbills, there are many species that deserve more attention. This includes species of ibis that are poorly understood and whose status is almost unknown. Within the

hope to increase our attention to these species. We hope to evaluate their situation and to facilitate protective measures as needed.

5. Finally, the SIS Bibliography will shortly be sent to the printer. We continue to add to the computer file and will continue to need copies of your articles. We will let you know as the method of distributing the bibliography is worked out.

As you become aware of conservation problems, please let us know. In the ways that are available to us, we would like to help your conservation efforts.

-- Malcolm C. Coulter, Koen Brouwer

EUROPEAN WHITE STORKS AND OTHER CICONIIFORMES IN THE ARMENIAN REPUBLIC

The European White Stork *Ciconia ciconia* population in the Armenian Republic has increased over the last 20 years. In 1988, the total population in Armenia was estimated at 668 pairs. Storks are found in many parts of the country. In the higher regions, small numbers of pairs breed. In the Edheknadzors region of the eastern Araks River valley (above 1000 m), eight nests were found; and in the high regions of the north (above 2000 m) 25 nests were counted in the village of Kalinio and four in the village of Ghukasian. But the most important area for White Storks is the Araks River Valley, in areas that border Turkey.

In six regions of this valley (Araks, Ararat, Masis, Artasbiat, Echmiadzin and Hoktemberian), 631 nests were counted. Although this is an arid region, it has been developed for agriculture and aquaculture. Eighty percent of the area is cultivated with grapes and other fruit, and there are 2500 ha of artificial ponds used for fish culture. The storks live well in association with the human development. In four regions of the Araks valley, they have increased from 10 pairs in 1970 to 156 pairs in 1988 (Table 1).

The storks formerly built their nests in trees, on buildings and on the cupolas of the churches. With recent development in the area, storks are increasingly using the modern structures. Among 616 nests, 326 (53%) were

Table 1. Numbers of European White Stork nests in four regions of the Araks Valley in the Armenian Republic.

Region	1970	1974	1978	1981	1986	1988
Hoktembrian	3	13	15	15	19	25
Echmiadzin	0	2	5	11	16	27
Masis	7	17	22	53	62	65
Arazdaian	0	0	18	27	33	39
TOTAL	10	32	60	106	130	156

on telegraph poles and on iron and concrete supports of high voltage wires, 179 (29%) were on traditional structures (buildings, churches, trees), and 111 (18%) were on modern buildings. Large colonies, up to 70 nests, are found at railroad stations. The large and massive nests are constructed from dead grape vines and also many man-made items: paper, cellophane, rubber, animal skins, wire, etc.

The storks eat primarily aquatic prey: fish (*Carassices carassices*, *Cyprinus carpio*, *Rutilus rutilus*), amphibians (*Rana ridibunda*, *Hyla arborea*) and reptiles (*Tatrix natrix*, *Natrix tessellata*). In addition, large numbers of insects (*Gryllotalpa gryllotalpa*) have been regurgitated by storks chicks in April.

The storks have few natural enemies and are legally protected from hunting or destruction of their nests. Perhaps most important, the birds are highly valued for bringing happiness by the Armenian people who ensure that they are protected. However, there have been cases of young found dead in the nests. These chicks may have died from pesticide poisoning.

Other members of the Ciconiiformes are less common. The Glossy Ibis *Plegadis falcinellus* is found in the Araks River valley and in Sedan Lake. In the Araks valley, they nest in mixed colonies with Squacco Herons *Ardeola ralloides* and Night Herons *Nycticorax nycticorax*, but not more than five to eight pairs of ibises per colony. The Eurasian White Spoonbill *Platalea leucorodia* are also found in small numbers in the Araks valley and on Lake Sedan.

Conservation measures for the European White Stork

In order to ensure adequate nesting places for the storks, the establishment of nesting platforms on the corners of sloping roofs is recommended. These should be constructed in such a way that they do not impede the flow of water from the rooves. A few of these platforms have already been erected and proven successful.

It will also be important to establish a Bird Preserve for the protection of storks and other waterbirds away from the artificial fish-breeding ponds. The most promising area for the preserve is the south of the Ararat Valley in the Araks River Valley System, on the border with Turkey. In this area there are 1500 ha of ponds that could become a promising preserve.

-- M. S. Adamian

STATUS OF IBISES AND SPOONBILLS IN ASSAM

Three species of ibises and one species of spoonbill (Family Threskiornithidae) are found in India. These are the White Ibis *Threskornis aethiopicus*, Black Ibis *Pseudibis papillosa*, Glossy Ibis *Plegadis falcinellus* and the Eurasian White Spoonbill *Platalea leucorodia*. All have been recorded in Assam. The first two species are resident and breed in Assam; the populations of the other two species include residents and non-breeding birds from outside the region. From 1986 through 1990 we surveyed wading birds in Assam. We covered the wetland sanctuaries and national parks as well as all the wetlands outside the natural reserves.

We recorded only Glossy Ibises among the four species of this family found in India. We saw the ibises in the wetlands outside the natural reserves, but none within the sanctuaries or national parks of Assam. We recorded them in only two districts in eastern Assam: Jorhat and Sibsagar. During the early 1980's the population of Glossy Ibises in Assam was substantial. But the habitat has been degraded through agricultural practices, embankments and fishing. The population has declined. In November 1987, only 30 birds were observed in Misamari beel (wetland) of Jhanjimukh in Jorhat district. On 17 November, 1990, only seven individuals were observed in the same wetland. On 14 February, 1989 and 18 January, 1990, 35 and 205 Glossy Ibises, respectively, were observed in Panidihing of Sibsagar district. In the Dighali beel of

Jhanjimukh area, 11 were observed on 15 January, 1990; five were observed on the same day in Missamari.

Threats

Habitat alteration and destruction, hunting and extensive fishing in the wetlands are the major factors that have led to decline of ibises and spoonbills. Most of the wetlands have become shallower and many of the permanent wetlands have become temporary wetlands. The grasses and aquatic weeds have increased, reducing the feeding areas. The increase of grasses and aquatic weeds have drastically reduced the feeding areas. The nesting and roosting trees within the wetlands are also increasingly being lost. In addition the construction of embankments along rivers for protection against flooding has been detrimental to permanent wetlands.

The meat of ibises is preferred above that of other animals, and these birds are sought by hunters over other species.

Conservation measures

As of 1990, no conservation measures have been implemented for these species. Within 30 years three of the four species have been eliminated from the region, and the Glossy Ibis is presently at great risk. Immediate protection, scientific investigations and an increase in public awareness of the needs for conserving these species are needed.

The management practices in sanctuaries and national parks have neglected wetland birds while the rich mammalian fauna have received have received a great deal of attention and concern from the authorities. A number of wetlands outside the reserves and protected areas still exist. These must be conserved. Other wetlands should also be restored and protected.

Acknowledgments

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-- Prasanta Saikia and P. C. Bhattacharjee

STORKS IN THE BALTIC STATES AND THE USSR

The first symposium on *The Biology, Distribution, Census and Conservation of the Storks of the Baltic States and the U.S.S.R.* was held in Tallinn, Estonia, from 25-27 July 1989 (organized and hosted by the Institute of Zoology and Botany of Estonian Academy of Sciences). This symposium attracted 26 participants representing Estonia, Armenia, Georgia, Latvia, Russia and the Ukraine. Seventeen presentations were given.

The second symposium of the Stork Research Group of the National Section of the U.S.S.R. and of the Stork Research Group of the Baltic States was held in Minsk, Byelorussia, from 24-26 October 1990. This was organized and hosted by the Institute of Zoology of the Academy of Sciences of the Byelorussian S.S.R. The symposium attracted 28 participants representing Byelorussia, Estonia, Latvia, Poland, Russia and the Ukraine. Twenty-one presentations were made.

All papers of both symposia (in Tallinn as well as in Minsk) have now been published and are available (Savitzky and Samusenko 1990). The publication is written in Russian and contains 48 papers on the results of research on the biology, censuses, distribution and conservation of the storks, including the European White Stork *Ciconia ciconia*, the Oriental White Stork *Ciconia boyciana*, and the Black Stork *Ciconia nigra*.

The next (third) symposium will be held in Kiev, the Ukraine, in August or September, 1991. For information on this meeting contact: Irina E. Samusenko, Vice-Chairman of S.W.G., Inst. Zoology, Byelorussian Academy of Sciences, F. Skoriny Stree 27, Minsk - 220733, Byelorussia, USSR.

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-- Heinrich Veromann

STORK, IBIS AND SPOONBILL BIBLIOGRAPHY

The SIS Bibliography will shortly be sent to the printer. There will be two volumes: Storks, ibises and spoonbills with the exception of the European White Stork, and the European White Stork. The method of distributing this is being worked out. We hope to let you know the details shortly.

We continue to maintain the computer files (which will also be available), as well as copies of over 1000 articles. We will send out copies of important articles that are unavailable on a limited basis (limited only by our time constraints). However, in order to maintain this collection for SIS **WE WILL VERY MUCH APPRECIATE CONTINUING TO RECEIVE YOUR ARTICLES AS THEY ARE PUBLISHED.** Thank you for your cooperation.

-- Malcolm C. Coulter

CAPTIVE ORIENTAL WHITE STORK WORKSHOP IN JAPAN

An Oriental White Stork Conservation Workshop was held in Toyooka Hyogo prefecture in Japan from 10 to 11 December, 1990. The aim of the meeting was to bring together people to discuss ways to increase the captive breeding population and maintain genetic diversity among the captive storks. There are currently 21.22.4 (males.females.birds of unknown sex) *Ciconia boyciana* in seven Japanese zoos and one stork center. Four breeding pairs have been established at the Tama Zoo (Tokyo) and at the Toyooka Stork Center (Hyogo). Participants at the meeting set a goal of establishing at least 10 breeding pairs in Japan. In order to avoid inbreeding, the members of the pairs should be unrelated. During 1990, 15 chicks were hatched in Japan of which nine were successfully reared.

-- Koichi Murata, Kobe Municipal Oji Zoo

SOME NOTES ON THE CICONIIFORMES IN THE PARAGUAYAN CHACO

The Chaco includes western Paraguay, southeastern Bolivia and northeastern Argentina. In Paraguay, the northern Chaco, bordered by the Paraguay River, forms the southwestern periphery of the vast wetland of Brazil's Pantanal. Few people live in this area. Towards the east and south in Paraguay, the Chaco wetlands are made up of small river,

riverbottoms and lagoons. Ten species of Ciconiiformes have been recorded in Paraguay, including 3 storks, 6 ibises and 1 spoonbill. While stationed at Estancia Toledo from August 1989 to August 1990, I made brief surveys of wading birds at the station and during surveys elsewhere in the Chaco. As there is little information available about the wading birds in this area, I have summarized my observations.

Jabiru Stork *Jabiru mycteria*. Undoubtedly the rarest of the three storks. Jabirus are sensitive to human disturbance, and were most abundant in areas with least human activity. I saw the majority of Jabirus in Devensores del Chaco National Park (Departamento Chaco) in early July. The birds were in a variety of wetlands from thorn-forest marsh to open salty lagoon. Most sightings consisted of pairs or individuals, although one group of 20-25 birds was reported in early June. During a trip in July, 1990, from Filadelfia through northern Departamento de Chaco to Bolivia and back to Estancia Toledo (390 kilometers), I counted 8 Jabirus within 45 m of the road, and calculated a density of 1 bird/4.38km².

Maguari Stork *Ciconia maguari*. The Maguari Stork is more common than the Jabiru. Maguaris are also more tolerant of human disturbance than Jabirus, but still avoid areas under development. I saw Maguaris throughout the Chaco, mostly in open wetlands. Most sightings were of individuals or pairs, although I did record a flock of six and a flock of 14 birds. I surveyed density of Maguari Storks in July, 1990, along 58 km of road at Estancia San Jose along the Bolivian border where the seasonally inundated savannah seemed to be ideal habitat. I counted 5 storks within 50 m of the road and calculated a density of 1 stork/1.16km².

Wood Stork *Mycteria americana*. This is the most common of the neotropical storks and the most tolerant of human activity. I saw Wood Storks throughout the Chaco. Among nine sightings, five were of individuals or pairs, one sighting was of three birds, two of six birds and one of fourteen birds. During the survey made for Jabiru Storks (390 km), I counted 24 Wood Storks and calculated a density of 1 Wood Stork/1.46km².

Buff-necked Ibis *Theristicus caudatus*. Buff-necked ibises have been recorded throughout the Chaco, but are most abundant in the central Chaco where the forest has been cut for the development of cattleland. Insects which are found in high densities in cattleland form a large

portion of the ibis' diet. Pairs of Buff-necked ibises were seen throughout the year at Estancia Toledo, with greatest numbers counted in December, March and May. I estimated that breeding territories ranged from 0.65-1.15km².

Plumbeous Ibis *Harpiprion caerulescens*. Plumbeous ibises are common in grasslands and savannahs. However, unlike the Buff-necked Ibis, the Plumbeous Ibis also feeds on aquatic prey, often in small seasonal ponds and gullies. This ibis is more globally restricted than other other Paraguayan ciconiiformes, but where found in Paraguay it is locally abundant. There has been a confirmed increase towards the northern and western borders of Paraguay. At Estancia Toledo, pairs were observed throughout the year with greatest numbers in October and July. Most sightings were of pairs, although at Estancia San Jose a group of more than 40 birds was seen. The territories are considerably smaller than those of the Buff-necked ibises.

Bare-faced Ibis *Phimosus infuscatus*. The Bare-faced Ibis is the smallest and most locally abundant of the ciconiiformes in the Chaco. Populations are scattered in the upper Chaco. I recorded these ibises in flocks of 8 to 15 or more birds throughout the year in various parts of the Chaco.

During the course of this study I did not see any of the other three species of ibis that have been recorded in Paraguay: Green Ibis *Mesembrinibis cayennensis*, White-faced Ibis *Plegadis chihi* and Puna Ibis *Plegadis ridgwayi*.

Roseate Spoonbill *Ajaia ajaja*. Although not as common in the Chaco as other ciconiiformes, the Roseate Spoonbill has a larger geographic range than the other species. A flock of 17 spoonbills was recorded at Estancia Amalia during September, but not in October or November. Single individuals were recorded in November at Estancia Toledo and Estancia Monika.

-- Daniel Brooks

MAGUARI STORKS HATCH AT DISCOVERY ISLAND, FLORIDA

Discovery Island at Walt Disney World, Florida, has hatched four Maguari Storks *Ciconia maguari* on March 27 and 29 and April 3 and 19, 1991. This represents a first for the island and only the second recorded captive hatch, the first being at a zoo in Buenos Aires over 30 years ago. The chick at Buenos Aires did not survive.

The island's pair of Maguaris is pinioned and has been in the collection for over ten years. The female has laid a total of fourteen eggs. All of the eggs were artificially incubated. In this last attempt, they were given two Common Peafowl eggs which they incubated. It was only after they started incubating that they made any serious attempts to build a nest. They continued to build during the first two weeks of incubation. The nest reached a height of over 50 cm.

Three other eggs were fertile and developed nearly to full term before dying in the shell. Two more eggs (as of 27 April, 1991) are still pending.

The four chicks were fed a diet of pinky mice, grubs and Bird of Prey diet supplemented with dicalcium phosphorus powder. The first two at 32 and 30 days appear healthy and are acquiring their juvenile black plumage. The third chick at 25 days is guarded at this time. The nine-day-old chick appears to be developing normally and is losing its first plumage of white down.

-- Mary Healy

P.S. A sad update 2 May, 1991

On 28 April, the first chick died suddenly at 33 days old. Initial examination revealed the cause of death. The second chick also seems have some problems. On a positive note, a fifth chick hatched on 29 April.

A RECORD OF THE MILKY STORK IN THAILAND

A good specimen of the Milky Stork *Mycteria cinerea* collected in Thailand was recently located at the Zoological Reference Collection, National University of Singapore. The bird was collected at Setul, peninsular Thailand on 19 August, 1935. The populations have decreased in southeast Asia and it is now quite rare. While this may be the first specimen taken in Thailand, it was probably also the last.

-- Morioka, H, and C. Yano. 1990.

A Record of the Milky Stork in Thailand. Jap. J. Ornithol. 38:149.

MARABOU STORKS BREED SUCCESSFULLY AT THE JACKSONVILLE ZOO

Although many Marabous *Leptoptilos crumeniferus* are kept by zoos, only very few zoos have managed to breed this species successfully. The Jacksonville Zoo in Florida, USA, recently reported that their pair bred successfully in 1990. The pair is kept fully-winged in a large aviary (30 x 35 x 10 m). The nest was built at a height of 7 m in an oak tree. The chick hatched on 9 April and fledged 113 days later.

INDIVIDUAL-ORIENTED MODEL OF A WADING BIRD COLONY

Wading bird populations in the Florida Everglades have undergone a severe decline in the past years. To understand the causes affecting reproductive success and the dynamics of populations Don DeAngelis and Wilfried Wolff (Environmental Sciences Division, Oak Ridge National Laboratory, P.O. Box 2008, Oak Ridge, TN 37831) have developed and tested an individual-oriented prototype model for a wood stork colony during one breeding season. The model can be easily adapted to other wading bird species.

In individual-oriented models a population, such as a breeding colony, is modeled as an assemblage of individuals. The movements, foraging, bioenergetics and growth, mortality, interactions with conspecifics (e.g. flock feeding, aggression, and cannibalism), and reproduction of many individuals are followed simultaneously, thereby offering a unique way to incorporate a high degree of realism in the model. The dynamics of the population as a whole emerges from the actions of the individuals.

One of the appealing features of individual-oriented models is the possibility to incorporate highly heterogeneous environments, such as landscapes or climatic conditions, which vary both in space and time. The environment, in addition to some of the behavioral rules of the birds, can be changed from within the model, making it easily applicable to different environmental scenarios.

The model has been implemented on Macintosh II personal computers and can be obtained from the authors (please include a blank formatted 3.25" diskette).

-- Wilfried Wolff

NEW ZEALAND'S POPULATION OF ROYAL SPOONBILLS ON THE INCREASE

An increase in the number of nesting colonies and the appearance of more birds than in previous years at several localities indicate an increase in the Royal Spoonbill *Platalea regia* population in New Zealand. For many years the only breeding colony in the country was among the Great White Egrets at Okarito, on the west coast of the South Island. In 1979, four pairs were found on small islands off the Otago coast. Three of colonies flourished in 1989, although one site used in 1988 was occupied only briefly in 1989.

While the birds at Okarito nest in tall rainforest, those at the other colonies nest either on or very close to the ground. Birds disperse during autumn and winter, with the largest flocks being reported from Christchurch, Farewell Spit, Manawatu Estuary and the Ahuriri Estuary. Winter counts at the Ahuriri Estuary have increased from two in 1982 and 1983 to 22 in 1988 (there were 20 in 1989).

The establishment of two nesting colonies in Otago resulted in a census of Royal Spoonbills in the region on March 4, 1990, and the total of 157 birds was greater than expected. This prompted speculation about a possible influx of birds from Australia. There is likely to be a national count of Royal Spoonbills later this year.

-- RAOU New Newsletter No. 84, June 1990.

A BRIEF REVIEW OF PATAGIAL WING TAGS ON BIRDS

Perhaps the first use of patagial wing tags in North America, was by researchers studying waterfowl, principally ducks. With large masses of birds, the advantage of easily identifying conspicuously marked birds is obvious. However, in recent years more and more researchers have become cautious about using the technique, and negative impacts from such tags are now being reported.

Originally I became interested in the technique in 1972 when considering what type of marking to use on Maguari Storks *Ciconia maguari* in Venezuela. At that time I was advised against patagial tags for vague, but intuitive, reasons. I used leg bands below the intertarsal joint, and after I knew my study species far better, I am very glad that I made such a conservative decision (Thomas 1988).

Maguari Storks are extremely sensitive to abnormal visual stimuli such as a ladder left in the water under a nest tree. I now believe that a patagial tag would have seriously interfered with normal copulation. And, furthermore, that such a conspicuously marked bird might be sufficient cause to be selectively shot. I have received informal and unsubstantiated reports that some of my leg-banded Maguari Storks were killed out of curiosity about the band. One must recall that an early Danish stork ringing scheme was abandoned because Spanish marksmen collected the bands as the storks passed in migration. Patagial tags would make large birds even more conspicuous.

Because of the problem of uric acid build-up between the leg and bands of White Storks *Ciconia ciconia* causing high number of injuries and deaths (SIS 1989 (2):3), it is understandable that researchers are considering alternative marking methods. Uric acid build-up was not a problem with my Maguari Storks, although they do defecate on their legs, because they fed mostly in water thus bands are constantly cleaned (Thomas 1986).

I was unable to locate any references to patagial wing banding of storks, ibises or spoonbills. Perhaps our European colleagues, who have used this technique will soon evaluate and publish their results. In the meantime the following is a brief review of some recent reports in the literature. In addition to the following research cited, there are further references to patagial tagging in the AOU Supplement (1988).

Lank (1979) wing-marked 2935 Semipalmated Sandpipers *Calidris pusilla*. The tags were useful in receiving reports of distant migrating birds, however, results showed that tagged birds were selectively taken by predators. He suggests that color banding is nearly as effective as wing tagging. Howe (1980) reported probable interference with migration and returns of wing tagged Willets *Catoptrophorus semipalmatus*. Southern and Southern (1985) evaluated the results of

tags on breeding Ring-billed gulls *Larus delawarensis* and found that about 60% of tagged females were unable to acquire mates. Blokpoel et al. (1987) tagged 1772 Common Terns *Sterna hirundo* and reported that while tags increased the amount and rate of information received for this intercontinental migrant, their tags had limited durability.

Perhaps the best evaluation of wing tags was by Kinkel (1989), who found that tags negatively influenced Ring-billed Gulls up to four years after marking, in comparison to leg-banded birds. Blokpoel (in litt.) also found inversion of curling of the tag, callus formation with loss of a primary, increased mortality, and reduced reproductive success. He agrees with the conclusions of Kinkel (1989) that the potential negative results should be carefully evaluated before and during any study of avian behavior.

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-- Betsy Trent Thomas

FAREWELL TO SEUB NAKHASATHIEN, GUARDIAN OF THE FOREST

Seub Nakhasathien died by his own hand in his house at the Huai Kha Khaeng Wildlife Sanctuary on 1 September, 1990. Those of us who were lucky enough to know Seub and to have worked with him understand what a tremendous loss his death has been. Seub was a great and hard working conservationist; he and his colleagues fought many battles over the years trying to save Thailand's forests and wildlife from eternal destruction. A few fights were won, many were lost.

Seub also developed a special relationship with the Specialist Group on Storks, Ibises and Spoonbills after having discovered a Storm's Stork *Ciconia stormi* nest with chicks in it on 27 September, 1986. He located these birds during his work capturing and translocating wildlife trapped by the rising waters of the newly constructed Chiew Larn Reservoir in southern Thailand. The Storm's Stork had never before been recorded in Thailand. His following publication in *Forktail* (Vol. 3:43-49, 1987) provided the first scientific description of an occupied Storm's Stork nest as well as information on the reproductive biology of this rare species. Sadly enough the chicks were stolen by villagers. However, Seub managed to recover them and they have been kept in an aviary at the Nature and Wildlife Center at Khao Tha Phet, Surat Thani ever since. As the primary lowland rainforest habitat was inundated by the Chiew Larn Reservoir soon after this discovery, the adults no longer had an opportunity to nest in the area again.

In Seub's memory a foundation has been set up to provide support to the underpaid forest rangers and other protectionists in Thailand. Seub's colleagues of the Forestry Department and a number of his other friends will administer the Seub Nakhasathien Foundation. Individuals or organizations who would like to support the foundation should contact the SIS Group chairmen for further information.

-- Koen Brouwer

WALDRAPP IBIS CONFERENCE

An International Workshop on the Conservation of the Waldrapp Ibis *Geronticus eremita* will be held at the Wuppertal Zoo from 10 to 12 June, 1991. The goals of the workshop are to bring together all available information, evaluate risks of extinction in the wild, evaluate alternative scenarios and organize actions to reduce the risk of extinction. The IUCN/SSC Captive Breeding Specialist Group, co-organizer of the meeting, will conduct a Population Viability Analysis for the Waldrapp Ibis, as has been done over the past few years for a number of other critically endangered species, such as the Mauritius Pink Pigeon and the Rothschild's Mynah.

WALDRAPP IBIS IN MOROCCO

We have received a Summary of the 1990 breeding season of the Waldrapp Ibis in Morocco from Udo Hirsch who has studied the species in the wild for many years. Distributed over six colonies, about 78 pairs nested in 1990. Many pairs laid two eggs and approximately 72 chicks fledged. According to Udo Hirsch the current Moroccan population totals only 300 birds.

INTERNATIONAL WALDRAPP IBIS MEETING, 20 MARCH, 1991, ZÜRICH, SWITZERLAND

The ICBP Secretariat is in close contact with WWF-International (Udo Hirsch) concerning conservation matters in Morocco and the Waldrapp Ibis *Geronticus eremita*, a globally endangered species.

The ICBP/IWRB Specialist Group on Storks, Ibises and Spoonbills and the ICBP Secretariat applaud the organization of the workshop, held in Zurich, and were pleased to notice that a number of key people and institutions currently engaged in conservation activities for the Waldrapp Ibis attended the meeting.

The eastern migratory population of this species (the last of which nested in Turkey) is stated to be extinct, and only a few small breeding colonies remain along the coast of Morocco.

We believe that highest priority for the conservation of the Waldrapp Ibis must be assuring the survival of the remaining wild population, despite the immense political, legal

and socio-economic problems encountered so far.

Captive management of the International Studbook population should be improved, and the creation and long-term management of a self-sustaining captive population should be aimed at.

Plans to organize a Population Viability Analysis for this species are forthcoming; goals being to bring together all the available information, evaluate risks of extinction, discuss alternative scenarios and organize actions to reduce the risk of extinction.

-- Koen Brouwer

EUROPEAN WHITE STORK CONFERENCE TO BE HELD IN HUNGARY IN 1991

The Hungarian Ornithological and Nature Conservation Society is organizing an International Symposium on the European White Stork *Ciconia ciconia*. The symposium will be held in Hungary from 18-23 October, 1991. Further details can be obtained from Tamas Pechy, White Stork Symposium Organizer, Hungarian Ornithological and Nature Conservation Society, Lolto u. 21, Budapest, Hungary.

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