Newsletter for Birdwatchers

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RESEARCH GROUP NEWS

SEADUCK TRAINING COURSE - Denmark

From 12-15 November 1990, a training course in aerial and ship survey techniques for the counting of seaducks was arranged by the National Environmental Research Institute at Kalö (Denmark), in collaboration with IWRB and the Nature Conservancy Council (GB). The course, held at the Wildlife Ecology Division, covered the different methods, species identification, estimation of flock size, data recording and presentation, and was focused on practical guidelines. The 14 participants, from all regions around the Baltic Sea, were divided into groups to carry out practical surveys from aircraft and ship with trained observers. Because of the bad weather circumstances (a lot of fog!), the aerial counts had to be delayed and were carried out on the 17 November in between the following joint meeting.

The training course was perfectly organised, with good accommodation at the Wildlife Management School, and all participants were happy that good weather was arranged at the end, at last. Proposals were made to arrange a similar training course in the Mediterranean region.

Joint Meeting

A joint meeting of IWRB's Western Palearctic Seaduck Database and Nordic/Baltic Duck Survey Group was also organised by the National Environmental Research Institute of Kalö and held at the Fuglso Conference Center at Knebel (Denmark), on 16 and 17 November 1990; following the training course, and was attended by 40 participants. The meeting focused on duck monitoring programs and included 24 talks, reporting results from 10 different countries/republics, including the Baltic republics. Besides this an introduction was given on the "Task Force on Seaducks", to be launched in 1991, throughout the Western Palearctic and which will fill in the currently existing gaps. There was time for a demonstration of the Western Palearctic Seaduck Database as well as for profound discussions on the plans to increase the coverage of Seaduck surveys within the region. Overall a very well organised, interesting and stimulating meeting. The next meeting will be held in Lithuania, in October 1991.

WOODCOCK AND SNIPE RESEARCH GROUP

From 29 October to 2 November 1990 the Eighth American Woodcock Symposium took place in Lafayette, Indiana (USA). It was organised by the Office of Migratory Bird Management of the US Fish and Wildlife Service, and mainly sponsored by the Ruffed Grouse Society. The Coordinator of the IWRB Woodcock and Snipe Research Group participated, also on behalf of the Migratory Bird Commission of CIC.

Though primarily devoted to the American Woodcock *Scolopax minor* the programme also comprised one paper and three poster presentations on the European species *S. rusticola* representing the results of French research projects.

Since more than two decades American Woodcock populations are monitored by counting singing males along transect lines. The slight, but constant decline is thought to be a consequence of changing habitat quality: idle farmland, providing the highest amount of earthworms as well as clearings for singing males has been altered to dense forests or other forms of human landuse. This assumption has been proven in several projects where the negative population trends were reversed after relevant management practices such as clearings and special plantings to create cover and increase earthworm densities. A contract with forestry authorities was signed to enhance larger-scale habitat improvement. It was further decided to employ a full-time coordinator for woodcock research.

Herby Kalchreuter
Coordinator
Woodcock and Snipe Research Group

WILD GEESE POPULATIONS IN NORTHERN ASIA

Under this title an international conference was organised in Magadan (USSR) by Dr A.V. Andreev of the Institute for Biological Problems of the North (IBPN) during September 1990. The aim was to identify the magnitude of the decrease in goose numbers breeding in northern Asia, and to analyze its causes. Participants came from the countries where these geese breed and winter (USSR, China, South Korea and Japan) with the addition of goose experts from Çanada, the Netherlands, Germany, and Austria. Detailed reports on breeding populations of White-fronted Geese *Anser albifrons* and Bean Geese *Anser fabalis serrirostris* from Kolyma, Anadyr and Kamtchatka illustrated a tenfold decrease over the period 1975-1990. No information was available on the breeding status of *Anser fabalis middendorfii.*

Reindeer herds

Detailed studies on the breeding grounds along the Lower Kolyma showed that the potential carrying capacity for Bean Geese is far from being reached. There is an increase in Reindeer herds, which cause some disturbance and nest losses, but cannot account for the observed decline. Wintering populations of these goose species in South Korea and Japan are fairly stable, but in China a tremendous decline has occurred.

In the sixties the obligatory central market in Shanghai still processed 300,000 to 400,000 captured geese annually. Nowadays captured geese can be sold everywhere, which makes it hard to assess the annual bag. Recently the number of reserves in China has been increased from 10 to 92, and all geese winter within these reserves. Two recent censuses are available: in 1987-88 about 300,000 geese wintered in China, of which about 150,000 were captured; in 1989-90 only 50,000 could be counted, of which an estimated 5,000 were killed for consumption. In China there are no hunting regulations whatsoever, and by hunting waterfowl a Chinese man can increase his annual income tenfold. In the USSR there is still a considerable amount of hunting on migrating geese, particularly in spring. Near Vladivostok where numbers during migration peak at 110,000 - 130,000, approximately 20,000 - 25,000 are shot each year.

Conclusions

The conference concluded that the international research network "Eastern Palearctic Wetlands" should be called into being with participants from all the Pacific Rim countries (USSR, China, North and South Korea, Japan, Canada and the US), which the IBPN is willing to host.

Barwolt S. Ebbinge
IWRB Goose Research Group
The Netherlands

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EDITORIAL

Correspondence

May I again appeal to contributors to take the trouble to write neatly in the case of handwritten pieces. I am afraid much good material may lie unused in my files because of incomprehensibility. There are several interesting letters from young people, one from N.R. Swami (age 16) who is excited about a swarm of bees being chased and devoured by bee-eaters and drongos. "One of the drongos just keeps its mouth open, and in one flight it devoured about 6-12 bees" One of the most exciting sights about birds chasing flying food is when drongos, bee-eaters, crows and others go after termites on their wedding nights. This was a wonderful sight in Dodda-Gubbi after the first rain in June.

Hindi Names of Birds

Mr. L. Balasubramaniam, Centre for Environment Education, Thaltej Tekra, Ahmedabad 380 054, has written several powerful letters suggesting that our Newsletter should initiate the use of Hindi names of birds. "The greatest hurdle we face in preparing educational material in these languages is the problem of nomenclature. It is not to say no scientific nomenclature exists in Hindi.. but as you pointed out (Editorial Nov/Dec 90) perhaps due to an insistence on regional linguism much of it is too complicated for practical use... Consider the wasted efforts that went into the translation of Salim Ali's popular Book of Indian Birds into Hindi by the Haryana Hindi Academy. Instead of attempting to collect existing Hindi names for the birds mentioned in the book, the translators have very stupidly gone and translated, yes translated, the English names very meticulously into incomprehensible Sanskritized jargon...." I quote from his letters in this issue and invite a response from readers.

Bird Flight by S. Dhawan

In the Nov/Dec 90 issue we reproduced the introduction to Prof Satish Dhawan's Raman Memorial Lecture, and I said that I would carry an abstract of the rest in a subsequent issue. I find that the illustrations do not reproduce well and without them the text would be difficult and uninteresting. I therefore reproduce only the Conclusion in this issue. So I have given you the head and the tail, and I hope it makes sense.

Bird Perches

The note on Owl Perches in this issue reminds me of a note that I read in a book published by the former Imperial Institute of Agriculture in Pusa (Bihar). The authors, Mason and Lefroy did a lot of work on insect control, and they mentioned that in rice fields farmers put up stakes on which the Black Drongo could rest. Apparently the Drongo kept the flying insect population in check. What a nice way of keeping pests in their place.

PARENTAL CARE IN THE PURPLERUMPED SUNBIRD

H. DANIEL WESLEY, 126, Ramalinganagar South, Tiruchirapalli 17

I observed a pair of the Purplerumped Sunbird *Nectarinia zeylonica* for their parental activities from 24 November 1986, the day the second egg was laid and the clutch completed. The warming of the eggs was observed fully for 30 November 1986 and 7 December 1986, the feeding frequency was followed thoroughly for two days 18 and 21 December 1986. About faecal removal, information was gathered for the afternoon only on 18 December '86 and for the entire day on 19 December '86. Observations on other days were not continuous, break in recording ranging from 90mts to 3 hrs.

Egg Warming

The clutch was started on 23 December '86 and the bird started incubating only from that night and sat regularly during the day from the next day only. The female bird alone incubated the eggs and I found that the bird remained on the eggs more than she was away from them, the number of coverings and exposures in the two days of observation being 17:18 and 23:24 and in time duration 18.55:13.85mts, and 14.34:15.95 mts respectively. For the entire period the time durations of warming and exposure were 14.01 and 12.93 mts (Table 1).

Table 1. Egg warming frequency and pattern in Nectarinia zeylonica

Sl. No.	Day	Observed no. of Egg warming n	Egg warming mean ± SD (mts)	Egg exposure n	Egg exposure mean ±SD (mts)
1.	24 Nov.'86	4	12.75 ± 9.21	4	25.05 ± 19.73
2.	25	11	13.00 ± 9.56	12	18.41 ± 11.94
3.	26	9	12.22 ± 7.12	9	13.66 ± 5.29
4.	27	16	17.50 ± 11.07	16	11.75 ± 7.28
5.	28	9	11.77 ± 4.32	9	9.66 ± 4.82
6.	29	20	13.90 ± 8.27	20	12.90± 11.74
7.	30	17	18.55 ± 12.15	18	13.83 ± 10.25
8.	01 Dec.'86	7	18.42 ± 17.27	8	9.62 ± 3.15
9.	02	5	20.40 ± 18.49	5	7.6 0± 1.67
*10.07		23	14.34 ± 9.34	24	15.95 ± 9.76
11.08		5	11.20 ± 9.44	5	12.60 ± 3.28
12. 09		20	7.75 ± 3.29	21	7.90 ± 4.19
Total		146	14.01 ± 10.03	151	12.93 ± 9.33

* Discontinuity in observation

Feeding of the Nestlings

The two eggs hatched within an interval of 5 hrs between them on 9 December '86 one hatching at 6.36 a.m. On the day of hatching the female bird fed the nestlings 22 times while the male parent did so only twice with a gap of 302 mts between the two feeds. For the entire period of observation, the feeding rhythm increased sharply for the male and at times outnumbered that of the female parent, the interval varying between 8.04 and 17.44 mts for the one and 8.31 and 16.17 mts for the other. The shortest intervals between feeds for the two parent birds were on the tenth day of hatching. The male adult often displaced the female parent either lying in on the young or in the act of feeding them herself. However the feeding instinct in the male parent waned towards the close of the period (Table 2). The accelerated feeding rhythm may be correlated to the increasing demand for energy by the growing young. The male parent withrew himself as the young reached fledging state and demand for food was relatively reduced.

Table 2. No. of feeds (n), intervals between feeds (mts) and mean + SD (mts) between feeds for female and male N. zeylonica

	Sl. No.	Day	Female n	Female (mts)	Female mean ± SD	Male n	Male (mts)	Male mean ± SD
	1.	9 Dec '86	22	250	13.83 ± 6.89	3	310*	There was a gap of 302 mts between feeds
	2.	10	17	163	14.81 ± 8.19	5	76	25.33 ± 10.69
	3.	11	11	157	17.44 ± 13.22	5	67	16.75 ± 8.05
**	4.	13	28	362	16.45 ± 9.84	21	249	13.83 ± 13.11
	5.	14	10	87	9.66 ± 8.27	5	34	8.50 ± 7.04
	6.	16	15	182	13.00 ± 6.49	19	154	8.55 ± 9.00
	7.	17	14	140	10.76 ± 9.64	17	167	10.43 ± 10.81
	8.	18	24	177	8.04 ± 5.14	24	183	8.31 ± 8.13
	9.	19	51	487	10.14 ± 6.89	65	590	9.67 ± 8.89
	10.	20	12	108	10.00 ± 12.00	15	97	6.92 ± 6.45
***	11.	21	37	428	12.90 ± 9.28	32	469	16.17 ± 13.88
	Total			2541	12.09 ± 8.64		2094	11.02 ± 13.88

* 302 mts not considered for calculation of the total.
** Discontinuity in observation.
*** Last day of observation due to the death of the chicks.

Defecation and nest Sanitation

No faeces was observed to be removed on the day of hatching. The faecal sacs were removed from the second day of hatching. Actually, with progressive feeding, the female parent was seen 'eating' at intervals from the nest after some feeding, collecting small tit-bits from the outer wall and the inside of the nest. Whether or not those were left-over or regurgitations of the young was not known. A thought is that the raising successfully of the two young to fledging requires constant care with energy supply and, the female parent alone incapable of coping with the situation, a way to gain the cooperation of the male parent is to attract him to the nest with material obtained without much effort. I found the feeding of the young being followed by the parent birds probing into the nest or waiting for a few moments at the entrance perhaps for any left-overs or faeces. Donald F. Thomson (1935) and Welty (1979) report that many passerines are known instinctively to remove the faecal sacs they seize as they are expelled by the young and either eat them or carry them from the nest site. I could not confirm the observation that for the first few days after hatching the capsules are swallowed by the parents (Yapp, 1970). What I observed may offer some indirect evidence for it; the parent bird made repeated bill contacts with the nestlings after some feedings and were rewarded with faecal sacs being voided right into their bills. On 19 December '86, of the sixteen sacs voided by the young ten were snatched away by the male parent. The two young are assumed to have ejected equal number of sacs.

Nest sanitation was strictly followed. The female checked the nest and removed the last sacs that she suspected that there should be or kept count of, before she sat on the young for the nights. A point that makes itself felt is that the number of faecal sac voidings tends to be reduced with advance in age of the young and the relaxation in the feeding rhythm.

SOME COMMENTS ON INDIAN BARBETS

H.S.A. YAHYA, Centre of Wildlife Sc, A.M.U., Aligarh

With reference to J N Prasad query (NLBW Vol.XXXI-1&2) following comments are made for larger understanding :

Barbets *Megalaima* spp., having barbules around the nostril and hence the name, are a prominent group of hole nesting birds with a Pan tropical distribution. There are 72-78 species in the World belonging to 13-18 genera respectively. In Indian Sub- continent 10 species are found under the single genus *Megalaima*, 9 species occurring in the mainland and one species endemic to Sri Lanka—Yellowfronted Barbet *M.flavifrons*.

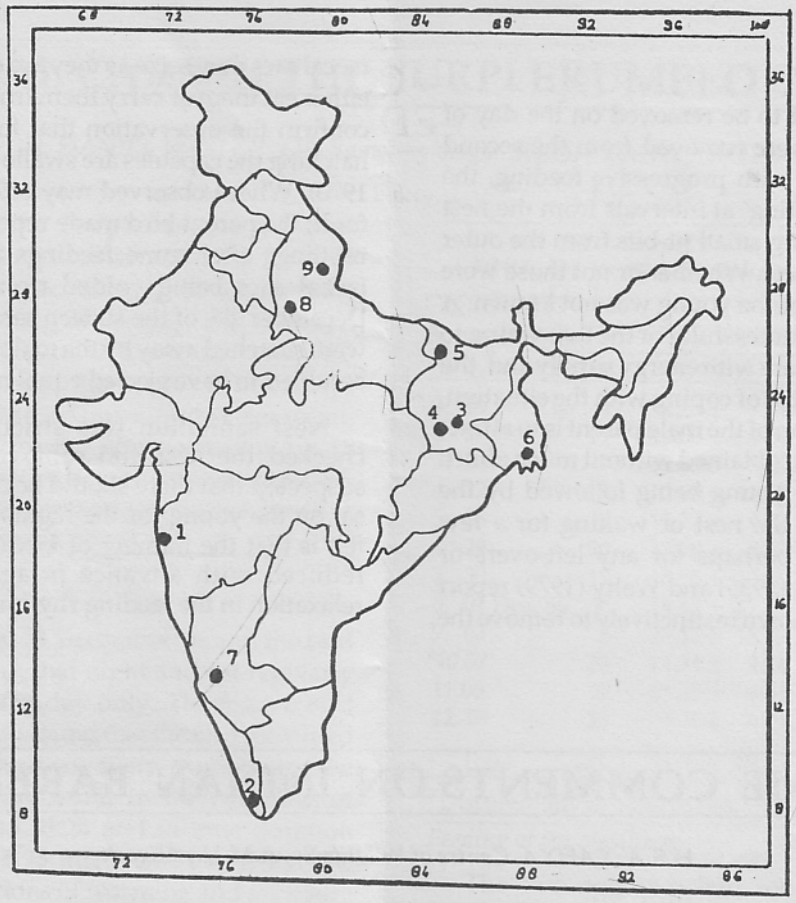
I am having the opportunity of studying 7 species of Indian barbets from 1977 onwards (Map 1). The study reveales an interesting point that at almost all places the barbets occur in 2-species set : one larger and one smaller; thereby supporting Huxley's hypothesis that size difference in congeneric sympatic species is an indirect means of ecological isolation. I also found that the vocalization of two successfully coexisting species also differ remarkably and this difference along with different feeding, roosting, breeding patterns (Yahya 1980, 82, 87, 88, 90 and 91 in press) help them in reducing competition.

So far as the problem of identifying the barbets is concerned, it is much less confusing to distinguish various species than any other group of birds. Barbets have remarkably bright colour markings on head, throat, wing, shoulders, etc. besides distinctly different vocalization.

Following points may be taken into account while distinguishing between the Large Green (LGB) and the Small Green (SGB) barbets in the field. (Table 1)

The LGB and SGB do not overlap at many places. I found them occurring together only at Lowercamp (TN) on some fruiting trees for a brief period. At Bangalore in 1979 I observed only SGB.

The more confusing two species of barbets when found together are the Lineated, *M. lineata* and the LGB. However, the former has a limited distribution and its orbital skin patch does not touch the nostril; breast and abdomen are more prominently streaked with more prominent white tips. The Lineated barbet settles down to *kuk-kroik, kuk-kroik* than to *kukroo ..... kukroo .... kutoo* of LGB. The Crimsonthroated and Crimsonbreasted barbets have almost similar vocalization but they rarely occur together.



Map 1: Study sites (in chronological order) and species of barbets observed

References:

1. Borivli National Park, Bombay (b & g)
2. Periyar Tiger Reserve, Kerala (d & f)
3. Hazaribagh National Park, Bihar (b & g)
4. Betla Tiger Reserve, Bihar (b & g)
5. Betia Forest Ranges, Bihar (b & g)
6) Botanical Garden, Calcutta (e & g)
7) Coffee Estates, Chikamagalur,Kkarnataka (d & f)
8) Aligarh, U.P. (b & g)
9) Ranikhet-Nainital U.P. (a & e)

a. *M. virens*
b. *M. zeylanica*
c. *M. lineata*
d. *M. viridis*
e. *M. asiatica*
f. *M. rubricapilla*
g. *M. haemacephala*

Table 1. Distinguishing between large green and small green Barbets

Barbet	Length in cm	Colour of eye patch	Streaks on breast and abdomen	Bill	Vocalization
LGB	Myna + c.27	Orbital skin patch orange	Less brown	Orange, darker at tip	Begins with kar..rr and settles down to kuroo ... kutoo 30-50/m
SGB	Myna c.23	No naked orbital patch. White cheek-stipe diagnostic	Brown with wider white tips	Brownish flesh colour at tip	Begins with karr..r but settles down to kutra . .kutra or kutarr . . kutarr. . normally 1 call/sec

FLAMINGO BREEDING – CONSERVATION ACTION NEEDED

S.A. HUSSAIN, Bombay Natural History Society, Hornbill House, Shaheed Bhagat Singh Road, Bombay 400 023

The main "Flamingo city" which is situated about 12 km from the Nir Bet outpost is approached on camel back. Almost the entire distance is water-logged with an average depth of about 2 ft. The trip can be attempted only on camels having previous experience of the treacherous and slippery area, and the journey takes almost five hours each way. The "island" of HUNJ bet* is roughly 2 km long and about 500 m wide at its widest point. About 1000-1500 nests (old & new) were seen of which about 300-400 were occupied by brooding birds/eggs. About 900-1000 "mobile" chicks of various age class were also seen in the island. These were attended to by adult birds. These chicks were too small to fly or wade through deeper water. The estimated number of the birds (including adults and chicks of all ages) was c.10,000. This number appeared to be far less than reported earlier in January by a local party, and we believe that the decline in numbers may be due to some disturbances.

PROBLEM

There are some serious problems which need immediate attention of the concerned authorities. Ever since the information of the breeding of the Flamingos appeared in the national press, several individuals and groups seem to have made visits to the nesting colony causing a great deal of disturbance to the birds/chicks. According to our information these parties went there to see/photograph/videofilm the birds/chicks/nests. Most of these people were ignorant of the conservation needs and were careless in their approach and conduct at the highly vulnerable nesting site. Flamingos are ground nesting birds and as such are very sensitive to alien presence in their nesting domain. The place and the timing of their nesting is delicately dependent on several factors and unless all these factors occur concurrently the birds do not attempt breeding at all. Thus due to such reasons there has not been any reports of these birds breeding in the Great Rann of Kutch for past ten years. Dr. Salim Ali last surveyed the area to assess their breeding profile as well as to explore the possibility of 'banding' fully grown chicks to study their migratory behaviour, in 1979. He had found that the birds were not breeding at that time due to some reason or the other. In the present circumstances the birds seem to have found the environment just right to breed. One of the reasons for this, according Mr.M.K. Himmatsinhji of Kutch, is the good rainfall in Rajasthan area which had resulted in most of the dams on the rivers draining into the Rann overflowing thus providing right amount and kind of water regime essential for the Flamingos to breed.

The presence of aliens in their breeding ground (every party going to the area consists about 5-10 camels and twice the number of people) and their activities cause a great deal of disturbance. The chicks are highly stressed as they run helter-skelter due to panic - some even venturing into deeper waters thereby vulnerable to drowning. We were told by the local camelmen that the video-shooting parties had the chicks and adults chased in order to record "action" shots! Some eggs and smaller chicks were also manipulated to "shoot" close ups of "chicks emerging from the eggs"! The proximity of people near the nests for prolonged periods caused the birds to leave the nests thereby leading to possible deterioration of eggs due to absence of incubation. We found several broken eggs with spoiled contents as well as dead chicks even as far as over 100m from main nesting colony. We believe that both chick mortality and the destruction of eggs were due to human interference in the area. The major possible cause for *natural* mortality among chicks, such as salt encrustation of chicks' feet, was not noticed by us at all. This happens when as the water around the island dries rapidly and the salinity of the area shoots up. The chicks then have to traverse longer distances to reach the water and in the course of their sojourn their feet get heavily encrusted.

Not having had the right condition to breed for a long time the Flamingos have at last found the current season conducive to breed and it is absolutely essential that they get the utmost protection at their breeding site. If the breeding site is open to disturbance from human activities it is likely that they may abandon the site altogether and future breeding activities in the area may be totally given up. An urgent and immediate action should be taken to see that no further disturbance is caused at the colony.

SUGGESTED PLAN OF ACTION

1. The Director General of Border Security Force should be apprised of the problems and be asked to issue instruction to concerned units not to allow *anyone* to approach the breeding site of the Flamingos especially during their nesting time. Permission, if at all to be given, should be considered

* M K Himmatsinhji writes to say that HUNJ is the Kutchi name for Flamingo, and the breeding site was first discovered by his grandfather in 1893,

only after consulting the State Wildlife Department and the Director, Wildlife, Ministry of Environment, Govt. of India.

2. The District administration should be asked to monitor the villages from where the camels are hired and instruct the village headmen not to allow anyone to hire out their camels without prior clearance from the administration/Wildlife dept./BSF.
3. A watch and ward staff of the Forest Department should be posted immediately at Khavda/Thuga who will be responsible for not only reconnoitering the nesting island as well as movement of people in the area, and to report to the higher authorities.
4. BSF units at Bhuj, Khavda, Thuga, Nir bet, Kuar bet and Beria bet should be thoroughly briefed on the course of action to be taken by the personnel of the respective posts.
5. All "official" visits by concerned authorities should be kept to absolute minimum and should be totally avoided during early stages of the nesting periods. Such visits should not approach the nests closer than at least 1000 m., and should not remain in the area more than an hours' duration.
6. All ecological monitoring activities such as population estimations, ecological studies and banding - if allowed - should be carried out towards the end of a successful nesting season and necessary permission should be given only after a careful assessment is made by experts in the field.

Possible action by:

Ministry of Environment & Forests, Govt. of India
Army HQ and units in Kutch
D.G. BSF and units in Kutch
Chief Wildlife Warden Gujara.
District Collector Kutch
Conservator of Forests Kutch

CORRESPONDENCE

THE REARING OF LESSER WHISTLING TEALS.

MANIDEEP RAJ, Lecturer, Dept. of Zoology, Darrang College, Tezpur 784 001, Assam

Lesser whistling teals are reared by hunters in Assam to serve as live decoys. To add to the knowledge of teals from direct observation, I took to rearing teals last year. The breeding season of teals in Assam extends from May to September. We start with the collection of eggs, since it becomes very difficult to trap chicks once they hatch in the wild. For this, once a nest is located, eggs are removed continuously from the nest taking care to leave at least one egg in the nest, or else the teal stops laying at the site. Though the natural clutch size is 10-12 the hunters claim that by this process they are able to collect 30 eggs from a single nest. Next, one has to look for a suitable domestic hen in the process of incubating her eggs with which to keep the teals eggs. In case no such hen can be found the eggs are gradually incubated by using the heat of the sun and the shade. In some cases hunters keep an egg at their navel and tie a cloth around the waist, while they go for work in the field. They say this serves as a good substitute for incubation. With the eggs starting to turn mottled brown they hatch after 22-24 days of incubation. The first egg in captivity hatched on 26th June 1990. The first crack in the egg generally appears in the evening. All night then the rearers sit with the eggs, near the fire applying heat to them with cotton wrapped in a piece of soft cloth heated over the fire. All eggs hath within a period on 24 hours from the first hatching. The average weight of the freshly hatched chicks was 17.50 grams. During the first two weeks the chicks are fed exclusively on the roots of *Pistia minor*, Hydrilla plants and boiled rice. The first feathers with the shedding of natal down began to develop with the chicks attaining six weeks of age and a weight average of around 200 gm. After that the chicks began to rely heavily on the animal food mainly earthworms provided to them. During this period a single chick may require upto 70 earthworms of 6-8 inches length during a single day. They took another 7 weeks for the complete attainment of flight. There thus appear to be three distinct steps in the development of teals: (1) From hatching to the development of first feathers. (2) From emergence of first feathers to the attainment of flight. (3) After the chicks started flying, it became increasingly difficult to restrain them as they started responding actively to the calls of the teals flying over our house every morning and evening. And on the fateful evening of 4th October, I let them fly off with their wild relatives.

THE BROWNHEADED BARBET.

THOMAS F MARTIN, 12/16, Edward Road, Bangalore 560 052

The Brownheaded Barbet *Megalaima zeylanica* is chiefly a fruit-eating bird and belongs to the family Capitonidae and the genus Megalaima, which consists of 7 species known to inhabit our country. The bird is very common in peninsular India, particularly in Tamil Nadu and Karnataka. *Megalaima zeylanica*, like the other species, is a poor flier but trades very quickly over short distances, and its flight pattern is typical of alternating bursts of wing beats with coasting on stiff outstretched wings, which gives

the effect of a rising and falling motion in flight. The habit of keeping to the top of trees, where it perches for long periods, does not help in observing the species, but the call of these birds usually pinpoint their location and eventually the species is identified. The bird emits a two syllable note which sounds not unlike "ko-tao", which it repeats rapidly from 5 to 20 times at intervals of roughly 1 second. While thus calling, the bird keeps its bill almost closed and at the same time noticeably inflating its throat.

The species are not only found in forests but also in suburban gardens and even in city parks and, as evident from many an observation, never hesitate to go into towns. In the cantonment area of Bangalore and some of its suburbs, the brownheaded barbet is a common sight and the intonations of a family group in antiphonal responses at near sundown is verily a treat for the attentive ear of the observer. Family groups, which consist of a mated pair with several of their offspring, advertise their territory by calling together, usually in the morning and evening, and this display is often answered by other groups in the vicinity.

On the 26th February 1991 I was treated to a lengthy display of the bird's calling while it perched high up on the branch of a mango tree in my neighbour's garden, and noted the number of times it repeated "ko-tao" with the usual 1 second intervals and the longer pauses in between each series of call. The bird repeated "ko-tao" 43, 5, 14, 12, 7, 5, 4, 2 and 8 times, with the longer pauses of 5, 5, 4, 4, 8, 2, 5 and 4 seconds respectively.

The sprawling tree-laden grounds of Cubbon Park present a true nature reserve for a variety of bird life, in the confines of which I identified 3 species of barbet - the Crimson-throated Barbet *Megalaima rubricapilla*, the Small Green barbet *Megalaima viridis* and the Brownheaded Barbet *Megalaima zeylanica*. Another factor which caught my attention was the preponderance of the species during my several visits to the park over the last fortnight, whereas during the closing months of last year I could only spot the occasional few which I believe are resident birds of the park. It would therefore seem that with the advent of springtime the species flock in their numbers to feed on the wild berries that many of the trees yield at this time of the year, and that this seasonal influx to the park would suggest that though the species are non-migratory they do move locally with the seasons, or with changes in the food supply.

The colouration of *Megalaima zeylanica* is mainly greyish-brown striated at the nape, crown, chin, cheeks, throat and breast, with the cheeks having a greyish-white stripe below the eyes which extends from the base of the bill to the nape. The primary wing feathers together with the primary coverts, mantle, rump and upper tail feathers are green, but with scattered traces of greenish-blue in some parts when reflected by the rays of the sun. The belly and flank are a light yellowish-green. The bird sports a large heavily built bristly bill of dullish-pink colour. The tarsus and feet are near slate-grey. The bird is known to hollow out a nest in some rotten tree trunk or branch and lays from 2 to 3 eggs. But I am not aware of the colouration and incubation period of the eggs, nor the special characteristics of the male and female during the period of incubation and the tending of the clutch.

YELLOW THROATED BULBUL AT NANDI HILL.

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Nandi Hill is a popular picnic spot about 60 km north of Bangalore. Nandi Hill (also referred to as Nandi Drug) falls within the 28.37 sq.km. Nandi State Forest comprising of three main hillocks (over 1400m) with about seven peaks in all. Of these, Nandi Hill is the tallest (1435m) formed partly out of a giant tor that juts our vertically from the ground. The hill slopes and valleys are covered with open scrub which at places is planted with *Eucalyptus* and *Shorea talura*. The flattened top has a crater-like depression and harbours a small patch of moist evergreen growth which seems to be man-made.

Though we have a fairly good knowledge of the avifauna of Nandi Hill, unfortunately during none of our previous six visits to the hillock between 1983 - 1989 have we come across the Yellowthroated Bulbuls *Pycnonotus xantholaemus* (YTB). Even Dr. Salim Ali who paid a visit to this hillock on 19 December 1939 (JBNHS:42,43) during his Birds of Mysore survey did not come across this species. Also, two previous visits to this hillock by Ghorpade and others [NLBW:14 (5): 1-5, 1974] have failed to record this uncommon bulbul.

On 18 October 1990, we made a trip to Nandi as a part of our six month long survey in Karnataka to learn more about the bulbul's distribution and life habits. On reaching the top by bus, we searched the top for nearly two hours and neither we sighted any individuals of the species nor we heard their calls. Later as we started to climb down scouring the slopes, we sighted a lone YTB sheltered from rain within a dense *Fiscus montana* bush projecting from between two boulders. We observed the bird for nearly 15 minutes as it moved about within the canopy and preened itself as the rain stopped. In the next hour and a half we sighted eight more birds and heard half a dozen more.

Subsequently when the members of Birdwatcher's Field Club of Bangalore made a trip to Nandi on 11 November 1990, we sighted two more pairs.

During his Birds of Mysore Survey (JBNHS 43:325) Salim Ali records that the bird inhabits 'sparse thorny scrub interspersed with some large trees among broken stony hillocks.' At Nandi and elsewhere we observed that YTB very freely takes to the near vertical slopes of giant rocky knobs dotted at places with dense canopies of stunted trees such as *Ficus montana* growing out of cracks and crevices.

The probable reasons why others (except Mr Richard Fitter of course, NLBW: 30, 11 & 12: 1) and we ourselves have missed seeing the species is that (a) YTB though more arboreal is a habitual skulker like the Whitebrowed Bulbul *Pycnonotus luteolus*. Even if heard, the species is easily overlooked as its call resembles that of Whitebrowed species. Only when one is familiar with YTB call does one find that its call is louder, less harsh and more long drawn than Whitebrowed's. (b) Most birdwatchers restrict themselves to the top of Nandi and rarely traverse the steep slopes, where it is likely to be met with.

NOCTURNAL FEEDING BY BLACK DRONGO.

SATISH KUMAR SHARMA, Arboriculturist, World Forestry Arboretum, Jhalana Dungri, Jaipur 302 004

I read the article "Feeding habits of the Black Drongo" by Mr Asif R Khan, which has recently appeared in XXX (10-11) issue of the Newsletter. I have also come across a similar incident during last year in Jaipur city.

On 8.6.1990, while I was crossing a street inside the city during the night at about 10.30 p.m., I observed a single Black Drongo *Dicrurus adsimilis* which was perching on a twig of *Azadirachta indica*, repeatedly darting at the insects, hovering around an electric bulb on a street pole. I observed the bird for 15 minutes and left it at about 10.45 p.m., engaged in the same job. It seems that the gradual destruction of forest and agricultural land around the periphery of our growing city, is creating a condition of 'homelessness' and perhaps food sources are also decreasing simultaneously due to habitat destruction. Perhaps to avoid these difficulties brids, like Black Drongos are turning to a city roosting, and nocturnal feeding behaviour.

DEMOISELLE CRANES IN MIDWINTER CENSUS 1991 IN MADHAV NATIONAL PARK.

RAJIV SAXENA, Hanuman Nagar, Phalka Bazar, Gwalior 474 009, M.P.

I did midwinter waterfowl census 1991 on 12 Jan 1991 in Madhav National Park siutated in Shivpuri District of north Madhya Pradesh. Among other species of birds I counted only 11 Demoiselle cranes. I sent the census report on 15 Jan 1991.

During my visit to park on 20 Jan 1991, I found about 600 Demoiselle cranes. As the dates of my both visits to Madhav National Park fall within the official census period [from 4 to 21 Jan 1991], what am I expected to do in this situation? I saw similar increase in some other species of waterfowl, notably in Barheaded goose and Spoonbill. Before writing this note I visited the park on 23 Feb 1991 when I found 156 Demoiselle cranes still there.

Similarly, the Demoiselle cranes were not seen in Jan 1989 while in Feb 1989, about 200 of them had arrived here.

This year the period of 18 days permitted to conduct the census was a long one, and the increased population of Demoiselle cranes that arrived late in Madhav National Park, might have or have not been counted elsewhere before their arrival here.

After the population increase, 5 Demoiselle cranes and 4 Barheaded geese were found dead near Sakhya Sagar in the park. There was no sign of external injury. The post-mortem revealed that the cause of death was an overdose of pesticide in the food. The cranes and geese of this park feed at night in Bhagora Farms situated at an aerial distance of about four kilometres.

OWL PERCHES.

K. GUNATHILAGARAJ, Dept. of Agricultural Entomology, Agricultural College, Madurai 625104

During my survey trip to Ramanathapuram district (not for bird survey), I came across a few OWL PERCHES erected in rice fields in and around the village of *Uthirakosamangai* for *rat control*. It is a small rod with a ball of straw in the top, pegged in a few places at random in the field for *owls to perch*. Farmers say that it effectively repels the rats. They also have claimed that the spotted owlets actually perch on this rod during night time.

With this background informations, I started testing the assessing the activities of rats in both fields - fields with owl perch and without owl perch, since middle of December 1990. *There is no rat damage in rice fields with owl perches* compared to the plots without perches. I have also been observing the activities of spotted owlets during night time daily from 6p.m. to 12 midnight. Except *one day*, I couldn't see any owlets perching on the field during the past 2 1/2 months. I need your guidance only on this aspect. I may be enlightened on the following :

1) Time of observation for owls/owlets count
2) Materials needed for observation
3) Suitable name for the device owl perch.

I shall be extremely grateful, if you could guide me on the above lines. Based on your suggestions and guidelines, I would like to enlarge this into a regular research programme in my university.

SWALLOWS AS BIOLOGICAL INDICATORS OF APHID INFESTATION IN FIELD CROPS.

DR.S.THIRUMURTHI and MRS. C.P. BHANUMATHI, 4, University Quarters, Agricultural Research Station, Bhavanisagar 638 451, Tamilnadu

The tobacco crop in Periyar and Coimbatore districts of Tamil Nadu was severely infested with the green peach aphid, *Myzus persicae* Sulz., during 1988-89 and 1989-90 seasons. During the current tobacco season, an intensive survey was undertaken to estimate the level of incidence of this pest. Surprisingly the aphid was relatively absent in most parts of the districts. However in certain isolated areas scores of house swallows *Hirundo rustica* Linn. were found to be making continuous sorties over tobacco crop in a strange manner frequently flying close to canopy. When such fields were closely examined, heavy aphid infestation was detected with full of alate (winged) aphids themselves making short abortive flights around the infested leaves. During further surveys it was found that these birds forayed only above the infested fields, suggesting them as possible biological indicators of heavy aphid infestation. This fact has been verified with far located infested tobacco fields invaded by the swallows.

A similar inundating foray of swallows was recently noticed over a field of cowpeas. A close examination has revealed heavy infestation of black aphids *Aphis craccivora* Koch.

SIGHTING OF LONGTAIL OR OLD SQUAW DUCK AFTER 52 YEARS IN INDIA.

ARUN PRATAP SINGH, 301, II Vasant Vihar, New Forest, Forest Research Institute, Dehra Dun

Very recently I had gone for midwinter Asian waterfowl census '91 on DHALIPUR LAKE (Area 4 sq.km) situated besides Shiwaliks on the river Arson and Yamuna Canal, 8 km from Harbatpur near Dehra Dun, U.P. from 18th Jan. '91 to 23rd Jan. '91.

Here I came across two males of Old Squaw or Longtail duck *Clangula hyemalis* wading along with other ducks i.e., Mallard *Anas platyrhynchos* and Gadwall *Anas strepera*, etc. This duck has a broad black breast band, black cheeks, a long tail, rest of the body white, and is a good diver often vanishing below the water-surface for 30 to 40 seconds.

This duck can be confused with Pintail duck *Anas acuta* but the latter lacks the broad black breast band and is not a diver.

This sighting deserves attention as there are only five records of this duck from India dating back to 1933 to 1939 from Pakistan (3), Kashmir (1) and Assam (1) as given in Ali, Salim and S. Dillon Riply, 1987 edition (Compact handbook of the birds of India and Pakistan).

EYE COLOUR OF THE YELLOW-EYED BABBLER.

SANTOSH GUPTA, CEE- Alwar field office, 4/9, Housing Board Colony, Aravali Vihar, Alwar 301 001

This letter is about the colour of the *iris* of the yellow eyed babbler. It seems to be very dark in the photo which has appeared on the cover of Jan-Feb issue although it is supposed to be yellowish to orange yellow. Is this because of bad light that it seems to be darker?

REDVENTED BULBULS and SMALL BLUE KINGFISHER.

R. JAYAPAL, Final B.Sc., Agri, 28, Agri. Hostel, Annamalainagar, Tamil Nadu 608 002

In the course of the "Village stay programme", a part of our graduation, at Sivayam, a tiny, verdant village located 10km off Annamalainagar, I made the following observations during my bird-watching which I think are noteworthy.

On 5.10.90 while I was reposing under the shade of a hefty banyan tree *Ficus bengalensis* in the wake of an hour's birding through sultry weather at noon, I was attracted by a pair of Redvented Bulbuls *Pyonotus cafer* which had just arrived on the tree for its delicious red berries. The weird thing which interested me in them was the curious pattern of their rectrices which was remarkably distinct and contrary to one which an ordinary RVB has.

The underside of the tail observed was as follows :

whereas that of an ordinary one would appear as :

Curiously, both the sexes possessed the same droll tail pattern. [But the other morphological features like the size of the tail, etc. were identical to that of an ordinary one] After about 10 minutes of my watching, they flew away.

At this juncture, I wish to draw your attention to the editorial in NLBW Vol. XXIX, No. 9&10 (Sep/Oct 1989) "Birds of Kodai" in which you have written that one of the Redvented Bulbuls had most extra-ordinary white cross-bands on the underside of the tail.

What could it be attributed to? I think it is indispensable to study this freak of nature to reveal whether it is an outcome of ecological disturbance or just a part of their moulting.

I also request the readers to write to me or communicate to the NLBW if they have noticed any such phenomenon.

On 12.10.90, I had rather an unusual opportunity of watching a pair of Small Blue Kingfishers *Alcedo atthis* digging their nest hole by turns on the earthern bank of a canal in which was flushing the irrigation water. It was really an uncommon event in the bird-calendar to see the Small Blue Kingfisher nesting in the month of October.

G.M. Henry has written that this bird usually breeds in the first half of the year in Ceylon which is invariably suited to Tamil Nadu also.

Dr. Salim Ali in his "Book of Indian Birds" has said that the nesting season is principally from March to June.

In a similar way, K. Ratnam in his "South Indian Birds" (Tamil Edition) has stated that the breeding season ranges from March up to May.

I think these two kinds of variations might have stemmed from some sort of ecological disturbance, which looms large to the bird-lovers, these days.

And as far as our "Asian Midwinter Waterfowl Census, 1991" is concerned, I have sent the count form of waterfowl of Annamalainagar Experimental Farm already to Mr. S.A. Hussain.

INFORMATION ON BIRDS OF KERALA.

C.SASHIKUMAR, 9, Subhash Nagar, Kannur 670 002, Kerala

Hope you remember our "Appeal for information on Birds of Kerala". On the whole, we had a reasonably good response. It seems that more than 40 species will have to be added to Dr. Salim Alis' original list of the "Birds of Kerala" (1969). Prof. K.K. Neelakantan is now busy processing the data collected and compiling his own data which spans over five decades. We hope to bring out the "Supplement" this year itself.

LISTS SHOULD BE SYSTEMATIC.

AASHEESH PITTIE, 14-7-370 Begum Bazar, Hyderabad 500 012

The Newsletter is much improved in its get-up now that it is being printed. There is however one thing that bothered me a bit in the last issue. Bird lists are not arranged systematically. I think that this is quite essential as it helps in locating species quickly in a list.

THE STONE CURLEWS.

ANWARKHAN BABI, Fauzia Bungalow, Nr. Amrapali Cinema, Rajkot 360 001, Gujarat

The Rajkot Race Course has at least one pair of stone curlews *Burhinus oedicnemus*. I saw a pair yesterday after many years. I had been hearing their 'pickwick', pickwick calls at night but only on the 22nd of Feb. could I locate their daytime roost under a shrub size accacia. This bird is more heard than seen and on account of its near perfect camouflage very often goes unnoticed. Two birds in excellent plumage : Dark brown with blackish patches and streaks, white underparts, white lines over and below the large yellow iris eyes, creamish white throat and forehead, olive-grey legs (thick knees) and in flight half dark and half white upper wings with a distinct black patch in the white; a little like the Houbara Bustard wings pattern though not so stately in flight, this curlew flies only when hard pressed.

For about half an hour, these birds froze, often sat down on the ground, played hide and seek with me by going round the accacia tree and flew for very short distances (20 mts or so) and when finally about 100 mts away from their roosting accacia, flew back to the tree, leaving me in no doubt about their roosting site. If they breed on the Race Course, I doubt if they will be able to raise the brood. For one thing there are too many dogs, cattle and even careless public. In the Gir Forest once Dr. M.U. Malik of Dasada and I while filming "Why Protect Wildlife And Habitats" for the Nehru Foundation, Ahmedabad, came across trampled nest of Stone Curlews. The birds were there for us to see.

The Stone Curlews appear to be uncommon now here. These years I saw a pair of Large Stone Plovers *Esacus magnirostris* on the Nion lake and wrote about it to the Newspapers. A fortnight back I saw a pair of the Large Stone Plovers near 'Vidi Bhojapura' near Wonkoner in gum arabica scrub forest.

I think their status seems to be undetermined and a census would bring out very interesting data. I think, the Large Stone Plover is drastically on the decline. Another reason why I say this is because, known as 'chakvas' or 'Moon-chasers', these can be easily trapped live at night even with a torch-light and being like the female Florican, are hunted for food; like curlews all over the world!

If anyone has base-line data on the Stone Curlews, I would be glad to get in touch with him. I hope the Stone Curlews can breed successfully on the Race Course this year!

THE WILDLIFE REHABILITATION TRUST.

K.S.ANWARKHAN Z. BABI

Hundreds of small birds and animals are daily injured in road accidents, causing traumatic shock to these animals and often to their human counterparts. Some of these are killed outright. Most of these casualities inevitably die to the great consternation of all those who vainly try to rescue them. Motorists take a heavy toll of hedgehogs, foxes,

wolves, badgers and civet cats, as well as peacocks and many other birds such as doves and song birds. Deer and larger animals are also killed in the accidents. Some of these are purely accidental and in no way avoidable but, with a certain amount of care in driving, many a wildlife can be saved.

Some of us conservationists are getting together to form the Wildlife Rehabilitation Trust to treat and rehabilitate injured, sick, shot or oiled birds and animals back into the wild. We earnestly appeal to Nature Lovers to help us save them!

FLAG WATCH 1991

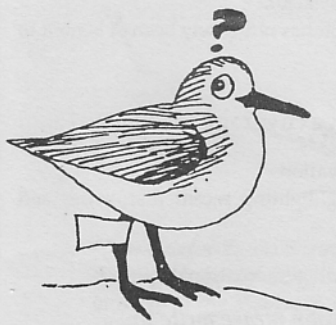
Australian wader banding groups have commenced placing coloured leg flags on a variety of species caught in south-eastern Australia and Java, Indonesia. This activity is part of a cooperative East Asia-Australia Flyway project, which has the objective of increasing knowledge of wader migration routes.

So far (mid-February) over 3200 birds have been flagged and we hope that a further thousand birds will be marked before the birds depart on northward migration in late March/early April.

Numbers of birds flagged to date are as follows :

Red-necked Stint	*Calidris ruficollis*	1443
Curlew Sandpiper	*C. ferruginea*	933
Oriental Pratincole	*Glareola maldivarum*	602
Ruddy Turnstone	*Arenaria interpres*	99
Red Knot	*C. canutus*	60
Bar-tailed Godwit	*Limosa lapponica*	40
Pacific Golden Plover	*Pluvialis dominica*	25
Sharp-tailed Sandpiper	*C. acuminata*	11

Other target species are Eastern Curlew *Numenius madagascariensis*, Grey Plover *P. squatarola*, Sanderling *C. alba*, Great Knot *C. tenuirostris* and Greenshank *Tringa nebularia*.



The flags are durable and should be visible as long as the marked bird remains alive. Therefore, a check should be made of any waders of the above species seen in the flyway for the next few years. We will keep you informed regularly concerning flagging activities and results through our bulletin *The Stilt*.

The flags consist of either *orange* or *dark green* plastic bands with a flap, at right angles to the band, which has a length of about twice the band diameter.

The great majority of flags have been placed on the *upper right leg* (tibia), but a few are on the *lower right leg (tarsus)* and on *the left leg*. The exact position is *not* important.

Would you and your colleagues keep a watch for leg-flagged birds, particularly during the migration periods in April-May and July/September and also in the breeding season. Reports of sightings should include species name, place (including latitude and longtitude), date and also approximate numbers and species of waders present. The information should be sent to :

Australian Bird Banding Scheme
GPO Box 8 Tel : (61)-(06)-2500321
Canberra ACT 2601, AUSTRALIA. Fax:(61)-(06)-2500399

USE OF HINDI NAMES.

L. BALASUBRAMANIAM, Centre for Environment Education, Thaltej Tekra, Ahmedabad 380 054

I have two suggestions to make, where the Newsletter can contribute to the important task of popularizing and standardizing Hindi names.

FIRSTLY, the Newsletter could adopt the practice of giving the Hindi names wherever available, (preferably in Devnagari script to avoid confusion in spelling arising out of transliteration) after each English name of a bird. Once Hindi bird names begin appearing in prestigious and widely read journals, they will gain respectability. Authors will get into the habit of quoting Hindi names and may ultimately begin to write in Hindi. By placing the Hindi names adjacent to its English equivalent, any ambiguity existing in Hindi names will be removed. (At present Hindi names are rather vaguely used and refer more to genus and family than to species.)

SECONDLY, you could consider accepting pieces written in Hindi for publication in the Newsletter. This will not only cultivate the habit of writing in Hindi among authors, but will also achieve all the advantages mentioned in the FIRST step.

To begin with, I am sending you a small piece in Hindi on the Jatinga Mystery and am very hopeful that I will have the pleasure of seeing it published in Hindi in the pages of the Newsletter. I also intend to keep you furnished with more pieces in Hindi in future. I am confident that you will not disappoint me by rejecting them. Once Newsletter starts accepting Hindi pieces, others more knowledgeable about birds than me will begin to contribute Hindi pieces, and thus help in the task of popularizing bird study in the vast section of our non-English knowing population.

I can see technical problems in accepting Hindi pieces. As far as proof-reading and Editing of Hindi pieces are considered, I volunteer my services, if you could arrange to send the proofs over.

BIRD FLIGHT. *S. DHAWAN, 7/11, Palace Road, Bangalore 560 020*

Flight in the atmosphere imposes limitations and restrictions on the shape, size and structure of flying animals as well as flying machines. If an animal like a bird has to fly, aerodynamic efficiency and power have to be combined with structural strength and muscular energy and the weight must be kept at a minimum. Such requirements have imposed a certain degree of uniformity of basic structure in all birds. Every part of the birds anatomy is attuned for its life in the air. A compact streamlined body combines strength with lightness and a versatile musculature controlling the unique feather covered wings provides the bird with an unequalled system for flight.

Over the 150 million years of evolution the anatomy and physiology of birds have changed not only to combine strength and lightness but also to enhance efficiency of body functions such as breathing and blood circulation. The senses have been very finely tuned to the flight environment. Like all vertebrates, birds sense their attitude changes by means of the semi-circular canal of the inner ear and their marvellous flight control systems depend on this information. Their eyesight provides them with the maximum possible amount of information at the fastest speed reaching a perfection not found in any other animal.

Second only to insects, the birds are the most biologically successful group of animals that have existed. This success, in which the ability to fly has played a vital part, has led to an extraordinary diversification into nearly 9000 species compared to about 4000 species of mammals. Birds cover virtually all regions of the earth, from the polar to the equator. In their quest for food and survival each species has evolved characteristic forms of flight which while conforming generally to broadly similar features, have specific attributes peculiar to it. Smaller birds have adapted their flying to escape threat. Apart from being highly manoeuvrable, some of them adopt assembly and flight in flocks; e.g. starlings. Another technique is the capability for very high speed spurts for a short time in order to escape. Pheasants and partridges have an almost rocket propelled take-off and fast curving flight for short distances before finding a shrub shelter. Often the special modifications of flight which adapt a bird species to one habitat prevent their switching to another. However, some birds are equally adept in several bio-habitats. Gulls fly over stormy seas as well as the reed masses of inland lakes. Pigeons and crows seem to survive in forests as well as in the concrete jungle of urban surroundings.

The song birds are particularly successful survivors because of their great manoeuvrability in flight. Natural forests, bushes and shrubs covered plains provide ample food supply but are full of obstructions which small birds can easily navigate through - and also find nesting and hiding places in! Despite their lack of endurance some small birds have to migrate before winter and frost. Arctic terns, golden plovers, snipe, geese and many shore birds migrate over long distances in quest for food. Each species has interesting and intriguing features of flight.

Much empirical data is needed to relate the flight characteristics of a particular bird species to its habitat and environment and habits. There is great scope for naturalists and scientists to pursue these studies in India.

We hand things on from generation to generation, and there's nothing more precious that we in the twentieth century can pass down to our children than a healthy environment. A healthy environment is quite simply the gift of life. But how many of us have looked at the skies or heard the weather reports in the past year and pondered the implications of global warming? How many oil spills do we think the seas can take? How many people are going to be our inheritors next century – so many that the earth cannot feed them?

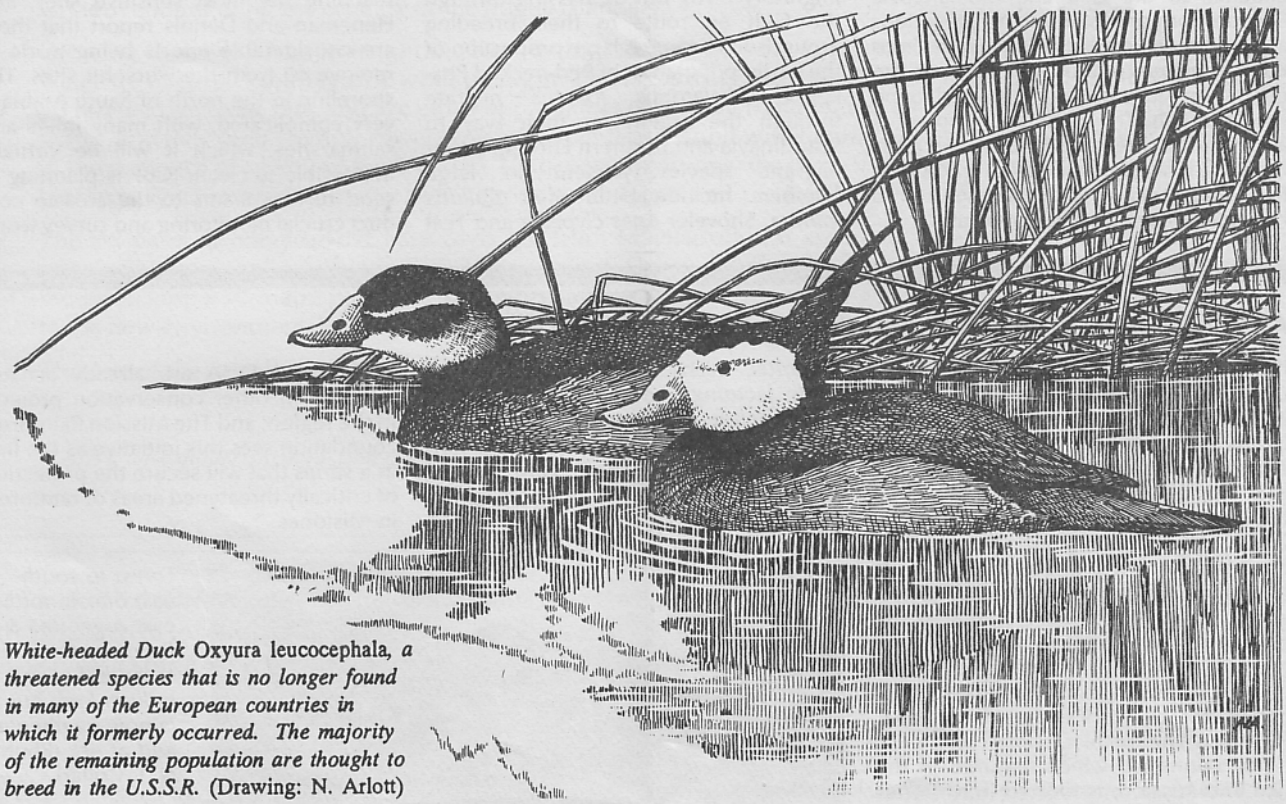
It's a depressing outlook. If only more people, more corporations and more governments took on board the wisdom of that old saying "we do not bequeath the earth to our children, we have it from them on loan", then there might be a chance that people in the twenty-first century will have the environment they need to survive.

Although most things pass from parent to child, sometimes the process is reversed. One of my children handed to me something for which I am eternally grateful: an interest in birds. I always had a strong interest in the natural world, but my son's birdwatching opened up that world with a new and abiding freshness. Birdwatching and bird study are a great way to keep in touch with nature, and they focus the mind on some of the crucial issues concerning our precious environment. I have no doubt that my late-developed interest in birds made me a better global citizen, and I strongly suspect that some of the key people who work towards solving our many environmental problems, now and in the future, will be motivated by quite specific personal attachments to wildlife. I certainly believe that the people who make up ICBP, and who are team-players in the long-term conservation of our global environment, prove my point.

I hand on the ICBP presidency this year, as the twentieth century moves into its last decade. I am proud to have served ICBP for eight years, during which time the organisation has grown to a new maturity and power. But this is no time for looking back. There is so much to be done on so many fronts in the coming decade. I wish my successor and ICBP the very best, and I will continue to do all I can to ensure that our common dream of a stable, secure world for both man and birds comes into being.

Russ Peterson

Russell W. Peterson



White-headed Duck Oxyura leucocephala, *a threatened species that is no longer found in many of the European countries in which it formerly occurred. The majority of the remaining population are thought to breed in the U.S.S.R.* (Drawing: N. Arlott)

ICBP SENDS EXPERTS TO GULF

ICBP has sent two environmental experts to the Gulf to assist with wildlife protection measures following the oil spills. The two are Burr Heneman, a director of ICBP U.S.A. who advised on the Exxon Valdez spill in Alaska, and Roy Dennis, seabird expert and head of the RSPB in North Scotland.

Since the oil spill occurred, the ICBP Secretariat has been in close contact with the Saudi National Commission for Wildlife Conservation and Development (NCWCD — ICBP's Saudi Arabian Section) who are providing the environmental input to the oil clean-up team. Heneman and Dennis, whose flights have been donated by British Airways, are providing key support to the NCWCD, in particular trying to minimise the long-term consequences of the oil. They are also identifying further equipment and training needs within Saudi Arabia, and will then attempt to locate appropriate resources from the ICBP network to meet these needs.

Thousands of birds have already been affected directly by the oil. One of the problems Heneman and Dennis are encountering is the lack of baseline information on populations and sites against which the long-term effects of the spill can be gauged. A monitoring system for birds in the Gulf is needed.

The species that is causing most concern is the Socotra Cormorant *Phalacrocorax nigrogularis*, a near-threatened species endemic to the Gulf and Arabian Sea. Socotra Cormorants are highly gregarious and enormous congregations, sometimes numbering tens of thousands of birds, are often seen far from the shore, feeding on shoals of fish. The Socotra Cormorant is also currently breeding. Knowledge of the breeding biology is limited, but it is known to be very sensitive to disturbance and to have a low reproductive potential.

Oiled Socotra Cormorant in the Gulf (Photo : Today Newspaper)

Other resident species in the Gulf include Kentish Plover *Charadrius alexandrinus* and Western Reef Heron *Egretta gularis*. Many more species winter in the region; waders such as Crab Plover *Dromas ardeola*, Lesser Sand Plover *Charadrius mongolus*, Dunlin *Calidris alpina* and Bar-tailed Godwit *Limosa lapponica* all use the productive mud-flats on the Saudi Arabian coast in large numbers. Black-necked Grebe *Podiceps nigricollis* and Slender-billed Gull *Larus genei* also winter in the region.

In March, the spring migration gets under way, and many thousands of migratory birds will be passing through the Gulf en route to their breeding grounds in Europe. A large proportion of the world population of Red-necked Phalarope *Phalaropus lobatus* migrate through the region on their way to Scandinavia and northern Europe. Other migrant species present in large numbers include Little Stint *Calidris minuta*, Shoveler *Anas clypeata* and Teal *Anas crecca*.

Perhaps of greatest significance for birds are the off-shore islands on which many species breed during the summer. A large proportion of the world population of Lesser-crested Tern *Sterna bengalensis* breed on the islands in the Gulf, and there are large colonies of White-cheeked Tern *Sterna repressa*, Bridled Tern *Sterna anaethetus* and Saunders' Little Tern *Sterna saundersi*.

NCWCD have produced a prioritised list of important areas for wildlife. Floating booms from Japan and Norway have already been deployed to prevent the oil reaching the most sensitive sites, and Heneman and Dennis report that there are considerable efforts being made to remove oil from the worst-hit sites. The shoreline in the north of Saudi Arabia is very complicated, with many inlets and saltmarshes, which it will be virtually impossible to clean. ICBP is planning to send further teams to the area to conduct crucial monitoring and survey work.

ARGENTINIAN RAINFOREST BOUGHT FOR CONSERVATION

ICBP is to help manage 10,000 acres of rainforest in north-east Argentina, which is being bought as a result of an appeal by the environmental charity, The Earth. The forest was on the verge of being sold to a logging company when the son of the owner alerted Fundacion Vida Silvestre Argentina (FVSA), the leading conservation body in Argentina, to its fate, and The Earth launched an emergency campaign to save it. Once the purchase is complete, a reserve will be created, which will be managed by the newly-formed Mission Rainforest Foundation, composed of experts from FVSA, ICBP and The Earth.

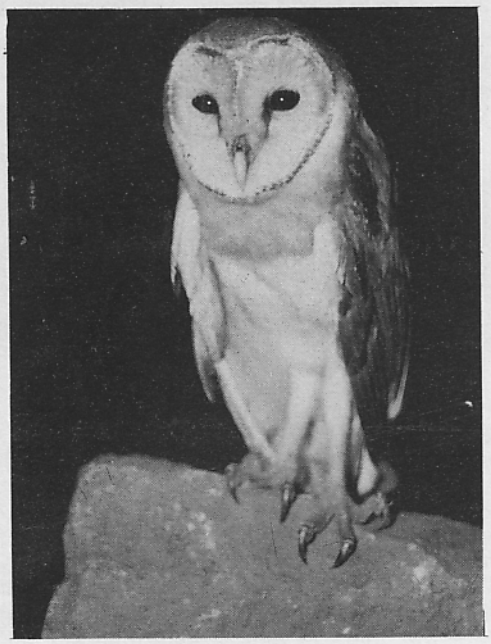
The rainforest, which featured in the film *The Mission*, is located in Misiones Province, biologically the richest area of Argentina, and supports at least three species of bird currently threatened with extinction (Solitary Tinnamou *Tinamous solitarius*, Black-fronted Piping Guan *Pipile jacutinga* and Azure Jay *Cyanocorax caeruleus*). Large areas of the land are very poorly known, and ICBP believes that further surveys are likely to reveal that as many as ten threatened birds actually occur.

ICBP and FVSA are already actively involved in other conservation projects in the region, and The Mission Rainforest Foundation sees this initiative as the first in a series that will secure the protection of critically threatened areas of rainforest in Misiones.

Forest in south-east Brazil, north-east Argentina & Paraguay once extended over 1 million km², but it is now fragmented and at risk (Photo: N. J. Collar)

Courtesy: World Birdwatch, Mar. 1991

NEW REMEDY FOR RODENT MENACE



Barn Owl (Tyto alba)
Photo : S. Sridhar, ARPS

Madras, April 8

Six pairs of hand-reared barn owls will fly from Madras to Port Blair by Indian Airlines tomorrow morning (Tuesday) as biological agents to control rodents in the Little Andaman islands.

"This is the first time the barn owls are employed for rodent control in the country, and we want to test its efficacy in the 1535-hectare oilpalm plantations of the Andaman and Niocobar Islands Forest and Plantation Development Corporation," said Mr K.S. Subiah, vice-president of the Pest Control(India) Limited, which sponsored the barn owl research programme at the AVC College, Mayiladuthurai, Tamil Nadu.

"Barn owl (Tyto alba) is a voracious feeder of rodents, and our studies showed that field rats and mice constituted 95 per cent of the feed of barn owls, and the rest is met by rhinocerous beetles and frogs. The large owl has distinct heart-shaped face, and it is a skilful hunter in the dark. A pair of nesting barn owls can gobble up upto 365 well grown rodents in two months," said Mr R. Santhanakrishnan, a scholar working on barn owls for the past five years at the AVC College.

The oilpalm plantation is infested with rodents, especially field rats, and the biological control has been found to be the best way to eliminate the vermins without endangering the ecology of the fragile islands.

Growing to about 30 cm in height the barn owls are endowed with specialised wings with velvety feathers, which do not produce any ruffle while on flight. This helps in its silent swoop on the rodents at night. The birds do not feed on dead rats, and are efficient predators of the live rodents. The owls are distributed all over the world, and they prefer temple towers and trees such as tamarind with natural holes for nesting. They proliferate in the presence of plenty of food, and in Thanjavur conditions, the birds breed twice annually. The breeding season is synchronised with that of the agricultural season and the maximum rodent activity in the district.

The six pairs of one-year-old barn owls got from Mayiladuthurai are being taken to the Andamans with permission from the Tamil Nadu Forest Department. They will first be let into specially designed wooden cages mounted atop a 10-metre platform. The entire facility will be enclosed by a nylon net till the birds adapt well to the new environment.

The cost of the pilot programme of biological control of rodents comes to Rs.90,000.

Courtesy : THE HINDU

Is this a wise move? Introduction of a new species in an environment can cause many problems.

– Editor

Cover : Tailor Bird *(Orthotomus sutorius)* is a vibrant little master that hops about with endless vitality among the shrubs and creepers in search of insects, calling *tuwwi-tuwwi-tuwwi*. The nest is placed in a funnel formed by stitching the edges of one or more leaves; a stunning piece of craftsmanship.

Photo: S. Sridhar ARPS

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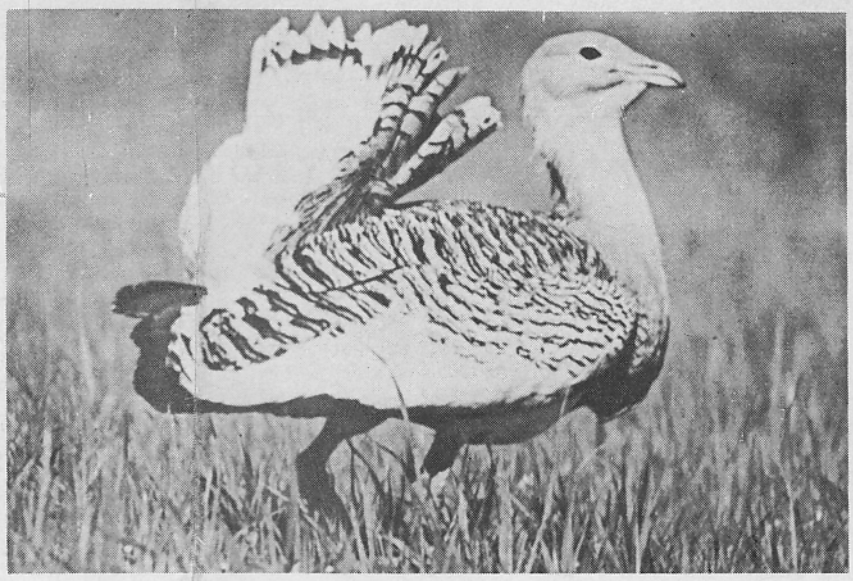
Red Data Bird

Great Bustard

by N. J. Collar



Great Bustard (Photo: N. J. Collar)

Is there a threatened bird with a bigger range than the Great Bustard *Otis tarda*? This is a species you can see as far west as southern Portugal and as far east as north-eastern China and Lake Khanka in the Soviet Union, the intervening distance being in the order of 12,000 km. Only the White-tailed Sea-eagle *Haliaeetus albicilla* occupies a broader area, but I now seriously doubt that it merits its status as a threatened species.

Can *any* creature with so massive a distribution really be regarded as at risk? Clearly it can, for what matters is not so much the size of its range as the fragmentation and the trends of the populations within it. We now know that the sea-eagle has not only a stable but a seemingly impregnable population in Norway, and is faring well in Iceland and Greenland: it is hard to see it in global danger.

The Great Bustard, however, is in disarray. Because it is a species of undeveloped grassland it is under extreme pressure from the universal intensification of agriculture: there are simply no hiding places. And because it is a "K-selected" species, i.e. long-lived and low in annual reproductive capacity (as opposed to "r-selected" partridges, for example), its scope for adaptation to or recolonisation of areas is negligible. K-selection itself is considered an adaptation to a stable environment: even modest levels of perturbation cause suffering among the K-selected. For the Great Bustard, the suffering began at least two centuries ago.

Paradoxically, however, the species's presence in Europe derives from early settlers' clearance of primary forest; it must be one of the very few threatened species that can claim such a benefit. At one stage it ranged throughout agricultural Europe, even into southernmost Scandinavia and Scotland. In parts of Germany it actually reached pest proportions: children were given time off school to drive flocks from precious crops.

But with the steady improvements in farming techniques, especially during the Industrial Revolution, the species went on the retreat. From Sweden, Great Britain, France, West Germany and Greece it had gone by the turn of this century, and there have been no records from Syria and Iraq for 30 years (ICBP's Bustard Group has planned surveys there for the past decade). In recent times it has bowed out of Poland and Bulgaria, and its isolated populations in Romania (100 birds), Yugoslavia (under 50), Austria (60-80), Czechoslovakia (280), Morocco (around 100) and Iran (under 200) offer small comfort.

If comfort should be found anywhere it is surely in the Soviet Union's famous steppes, once broader than the American prairies. But the steppes no longer exist, any more than do the prairies, and for the same reason. The Great Bustard, once a dominant feature of the avifauna of Russia's grasslands, has slithered to around 3,000 birds, only apparently holding its own in one area (Saratov). In China and Mongolia, there may be a similar number, but hard data have never been published; it is certain, however, that steep declines have taken place there, too.

In Turkey, a Bustard Group survey a decade ago counted 145, but considered possible as many as 4,000 birds; no work to confirm this latter figure has been done, and ICBP's recent *Important bird areas in Europe* only nominates two main sites for the species. In Hungary, where for years figures were published indicating a slow but steady increment in numbers owing to intensive management (3,442 was the mid-1980s' assertion), a recent reassessment showed only some 2,000 to be present. Meanwhile, in what was East Germany a population of 800 a decade ago has fallen to 460 now.

This leaves the Iberian peninsula. Here the story changes, for reasons that in part reflect the system of agriculture. Until recently, the land was worked in a labour-intensive manner. There was no spraying against weeds or pests, and crops were often still harvested largely by hand. The Great Bustard (and, for that matter, the Little Bustard *Tetrax tetrax*) survived in good numbers. Even today, the estimates are of 9,000 Great Bustards (8,000 of them in Spain).

Entry into the EEC has predictably turned things around. Several key sites in Portugal face ruination through Community-backed development projects. In Spain, too, investment in capital-intensive farming is transforming the landscape. ICBP's Guy Duke visited the peninsula in 1990 to consult with colleagues and authorities over remedial action. For perhaps the single most important locality for the species, Villafáfila, in Spain's Zamora, protection will hopefully soon be enforced. But even as we go to press the Spanish Ornithological Society has discovered national plans for water management which aim to use the major river basins to irrigate and hence transform 21 "IBAs". These sites hold 70% of Spain's (and hence very roughly 30% of the world's) Great Bustard population. This is clearly an issue of global significance, and one ICBP must play a lead role in tackling.

No-one in conservation likes to obstruct progress, especially when food production is concerned. But there has to be a balance. Already the Community is cutting back on production, and Paul Goriup, Bustard Group Chairman, hopes that new set-aside schemes in farming will allow the re-establishment of traditional grasslands in the northern Europe. With its imposing size, beautiful plumage, complex social system and remarkable display, there can hardly be a more deserving beneficiary of this initiative than the embattled Great Bustard.

STOP PRESS

A monograph on the Great Bustard, just published by ICONA, has reassessed the Spanish population at 12,000-14,000 birds.

Courtesy: World Birdwatch, Mar. 1991