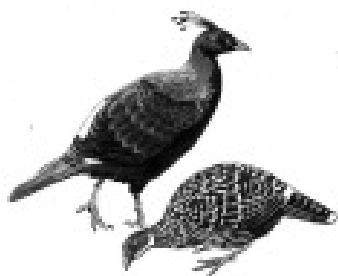


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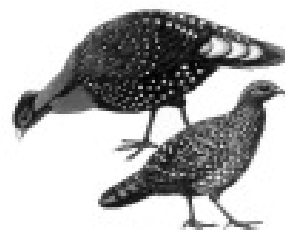
Newsletter of World Pheasant Association - India



Indian Peafowl
Pavo cristatus
National Bird
&
Odisha State Bird



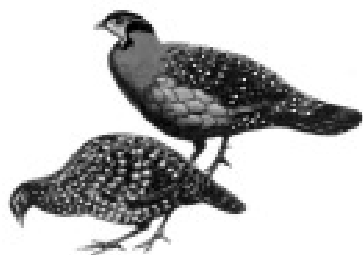
Himalayan Monal
Lophophorus impejanus
Uttarakhand State Bird



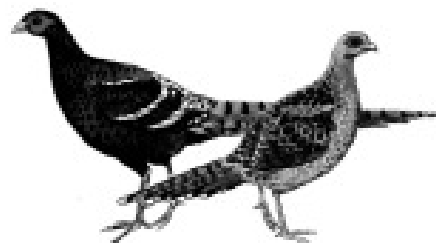
Western Tragopan
Tragopan melanocephalus
Himachal Pradesh State Bird



Blood Pheasant
Ithaginis cruentus
Sikkim State Bird



Blyth's Tragopan
Tragopan blythii
Nagaland State Bird



Hume's Pheasant
Syrmaticus humiae
Manipur and Mizoram
State Bird

Pheasants as National & State Birds

Mor is the newsletter of WPA-India for private circulation. Its publication is being supported by the Duleep Matthai Nature Conservation Trust.

Editorial

Dear Readers,

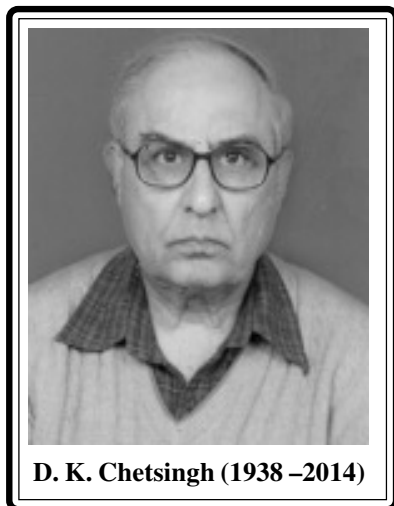
It is with a degree of sadness that we present this issue of MOR. WPA India's long time supporter, Governing Body Member and past Honorary Vice President & Honorary Treasurer Mr. D. K. Chetsingh left us for his heavenly abode on the 31st May, 2014. An obituary in his memory follows this Editorial.

This issue brings you some highlights of the Indian Biodiversity Information System (IBIS), a pioneering attempt of the Foundation for Ecological Security (FES) to create an authentic, web-based information platform on India's flora, fauna and natural history. This initiative has been supported by The Duleep Matthai Nature Conservation Trust (DMNCT). Among other animal and bird groups, scientific and taxonomically organized information on the pheasant families and species of India is also available on this system and our members are welcome to connect with it and contribute in its "citizen science" approach.

Similarly supported by DMNCT is WPA-India's new project on Long Term Conservation of Pheasants in Western Arunachal Pradesh, also being reported in this issue. Preparatory work has begun and detailed survey visits are now being planned. The same Project Investigator had, in the year 2009, carried out a detailed field study of the red-breasted hill partridge in the Singalila National Park, West Bengal. Important recommendations for the conservation of this endangered species were brought out, which are being reiterated through another article. There is also an interesting archival write up on the behaviour of the Indian peafowl, by renowned naturalist researcher George B. Schaller, based on his observations in Kanha National Park during the 1960s.

President, WPA-India

Remembrance



Dilawar – as many of us addressed him by his first name affectionately – was truly a man gifted with a large heart. Unlike many other people of his age, he did not simply hang up his gloves after retirement from a long and fulfilling career in the Government. Instead, he devoted many years actively working in honorary capacity, serving a number of causes close to his heart. Education, AIDS relief, leprosy control, employment, self help, community service with several Church missions, nature protection especially bird conservation, and many more. The debilitating stroke that he suffered a few years ago was no deterrent for him. While anyone else in that condition would justifiably take to a sedentary "retired" life of rest, Dilawar made a determined recovery and got right back to his routine of work, completely honorary in nature.

Among the many hats he wore post retirement, he was Honorary Vice President, Honorary Treasurer and Governing Body member of WPA-India for several years. In particular his work in recent years with the Lott Carey Baptist Mission, including the administration of four schools, besides AIDS and leprosy clinics, will be remembered for a long time. Many of us have in our Inboxes, his emails sent just two days before his unexpected departure on the 31st May 2014, exchanging bird pictures and field notes from the Delhi Bird Group. Indeed, birdwatching and natural history remained his lifelong passions, and we are sure his spirit of giving and voluntarism will continue to inspire us in our work.

Indian Biodiversity Information System (IBIS)

Conservation science involves dealing with heaps of information on status and degradation of biodiversity and prioritizing future conservation strategies. One fundamental issue in conservation is the non-availability of adequate and reliable information on a single platform. Though experts and researchers have contributed largely to the study of flora and fauna in India, much of the data is not easily accessible in user friendly format at a single location. This gap necessitates the need for an authentic web based taxonomical information system that would -

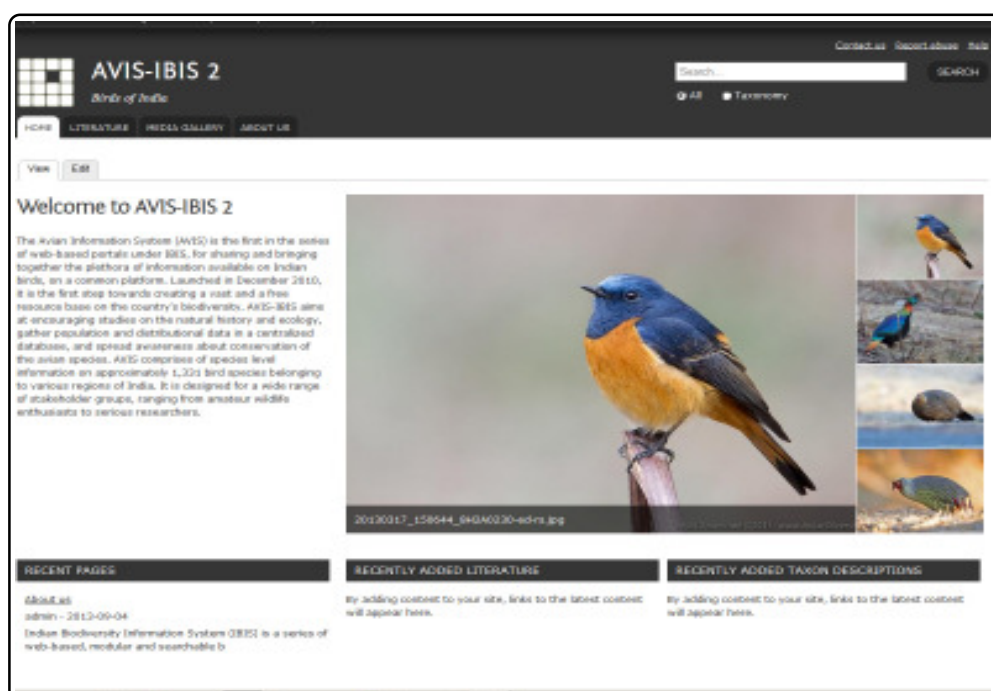
- a) collate comprehensive information on Indian flora and fauna;
- b) encourage researchers to study their natural history and ecology;
- c) gather population and distribution data in a centralised database; and
- d) spread awareness about conservation of species.

Indian Biodiversity Information System (IBIS) is an initiative of the **Foundation for Ecological Security (FES)** supported by “The DuleepMatthai Nature Conservation Trust” to fill the information gap and provide adequate and reliable species information on a single platform.

IBIS is a group of web-based, modular and searchable biodiversity portals, conceptualized as an effort to collect the large amount of information available on the Indian flora and fauna and to assist its effective and comprehensive use for planning and developing conservation strategies for long-term protection of Indian biodiversity. It is modeled on the concept of ‘citizen science’, aspiring to enable participation of amateurs in gathering scientific data and building a free resource on Indian biodiversity.

Avian Information System (AVIS)

The IBIS portal on birds - the Avian Information System (AVIS) is an interactive platform where the users have access to the world of India avifauna covering approximately 1329 species in terms of various informative data. AVIS comprises of general species profiles of birds, which is time to time by scholars. It acts as a platform for public participation on exchange of research and ideas which are peer reviewed and then the information is absorbed in form of a scientific database.



AVIS-IBIS supports a huge amount of information accumulated from old literature and in line with the new inputs generated. It arranges the nomenclature in a simple manner, making the task of referencing quicker and also minimizes the confusion that may occur at the user end by the frequently changing taxonomical data.

Authentic Taxonomic modules such as Clements's checklist, International Ornithological Congress (IOC) checklist, Birdlife International checklist, and Oriental Bird Club checklist have been used to create a scientifically approved classification system for Aves, to avoid any conflict in the research community.

AVIS has:

- 42 + copyright free books on birds and natural history.
- Taxonomic modules which incorporate various checklist of avian taxonomical authorities and also keeps track of taxonomical changes.
- 23,000 + number of excerpts from literature and links to external data and 2,20,000 + number of GBIF data on museum collections.
- An added feature of sound and calls (multimedia) data for the bird species available in the system, in collaboration with Xeno-Canto (www.xeno-canto.org).
- Bibliography of 1,00,000+ citations from across the world.

<http://avis.indianbiodiversity.org>

AVIS-IBIS and Galliformes

“Galliformes” is a large and diverse group comprising about 70 genera and more than 250 species. Taxa within Galliformes are commonly referred to as ‘gallinaceous birds’ (meaning chicken-like) or game birds (as many species are hunted).

In the first phase, AVIS-IBIS has more than 15 Orders of avian species available in India, with data on each family and species in it. Information on Galliformes is species-wise with detailed information on their habit and habitat, research articles, photographs, GBIF database on museum collections, an exclusive database collection of sound/calls and conservational aspects. A total number of 46 species were described, including 1 species of Megapodes and 45 species of Pheasants and Partridges.

A wide range of information on Galliformes in the form of General Species Profile, excerpts from 37 books, major ornithological Publications have been covered which include The Fauna of British India (1st and 2nd Editions - 12 volumes), Nest and Eggs of Indian birds (3 volumes), The Birds Of India (3 volumes), The Avifauna of British India and its dependencies (2 volumes), Bibliography, and about 1359 Museum collections. The portal features link to other dedicated databases.

In the next phase, i.e. AVIS II will have data about the Aves around the Indian subcontinent, including Nepal, Bangladesh, Bhutan, Burma, Pakistan, Myanmar and Sri Lanka. AVIS II has been redesigned from scratch to enhance the user experience and cater database updates. Currently, AVIS II comprises data for 126 numbers of Galliformes, including 2 species of Megapodes and the rest for Pheasants and Partridges. The information comprises book excerpts of 52 books, Regional Level Museum Collections and Major Avian Checklists updated to recent editions.

Foundation for Ecological Security (FES) is also working on similar portal on Flora, Amphibians, Reptiles, Spiders and Mammals.

Source: Indian Biodiversity Information System (IBIS), the Foundation for Ecological Security (FES)

Long Term Conservation of Pheasants in Western Arunachal Pradesh

The project on Long Term Conservation of Pheasants in Western Arunachal Pradesh, with financial support from **the Duleep Matthai Nature Conservation Trust (DMCT)**, has been initiated by WPA-India. One reconnaissance trip of 6 days duration has been undertaken. The trip was earlier scheduled to be a 21 days trip. But the Parliament Election dates of Assam & Arunachal coincided with the prescheduled program. For this and also due to other unforeseen circumstances the trip had to be shortened. This trip was done to get acquainted with the area and to initiate groundwork for the study. Another 15 days reconnaissance/survey trip will be carried out within the month of September-October to compensate for the prescribed duration.

During the 1st trip, the WPA-India team visited a number of places of both West Kameng and Tawang districts. The eco-tourism set up at Thembang village was also visited. The team met people from different sectors to gather as much as information possible on the target species. The team also met a senior leader of the Buddhist community to explore the possibility of working on awareness generation directly in association with the spiritual community leadership.

The trip was much fruitful as this exposure was essential to fix up the logistics for the entire survey. Basic observations from the trip are as follows:

- * To increase sighting chance and good opportunity for scientific study the team will have to work in areas closer to Bhutan and China border.
- * Larger part of the area reportedly frequented with pheasants is not under Protected Area Network of Arunachal Pradesh.
- * Most pheasant species are frequently hunted by the local tribes. So it is difficult to get closer to them, unless in remote areas away from habitation.
- * The entire area is suffering highly from the negative impacts of tourism, random garbage disposal for example. So it will be priority to highlight these impacts and involve public sector and local community to take immediate measures.
- * Indian Army cooperation may be requested for, which if approved will be much helpful for the project.
- * Though no specific bird watching trip was conducted during the survey, between general activities and movement the team recorded and documented about 50 bird species and three mammalian species. This gives an idea on the faunal richness of the area.
- * The first quarter period under reporting was aimed at establishing working linkages with local institutions and familiarizing the field team with the project area through a recce visit. No targeted work was done in this phase regarding observing pheasant species or carrying out any field studies about them except background literature reference. The absence of pheasant sightings in this first report is therefore not indicative of the absence of pheasants in the area. Actual field work for observing pheasant species, their microhabitats, and their conservation status, will be commenced from the second quarter onwards.

Proposed activities in the next quarter:

- * In the 2nd Quarter a field visit is planned during September 2014. But due to monsoon we may have to postpone the trip for a month or so. This will be intimated to DMCT at least two months before we start.
- * Literature survey will continue.
- * Preparation of field reference materials (e.g. Set of photographs of different pheasant species as aid to communication with local people).

- * All permissions from the Arunachal Pradesh Government and other authorities (if any) will be obtained within this quarter.
- * Possibility of field cooperation from Indian Army and or other institutions will be explored during this quarter.
- * Purchase of remaining equipment.

Awareness material will be generated to make people aware of this study.

Pheasants in Arunachal Pradesh (11)



Himalayan Monal



Slater's Monal



Tibetan Eared Pheasant



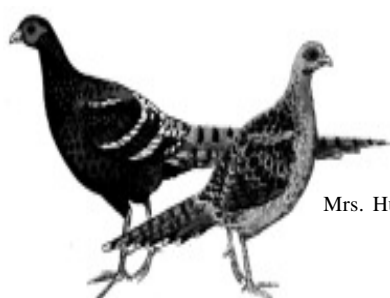
Temminck's Tragopan



Blyth's Tragopan



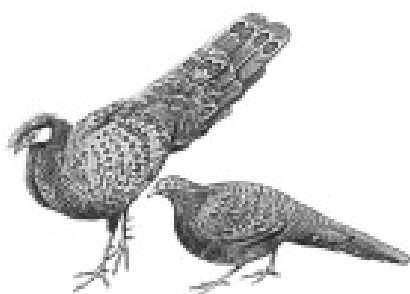
Satyr Tragopan



Mrs. Hume's Pheasant



Blood Pheasant



Grey Peacock Pheasant



Red Junglefowl



Kaleej Pheasant

Field Study of Red-Breasted Hill Partridge or Chestnut-Breasted Partridge in Singalila National Park, West Bengal

The Red-breasted Hill-Partridge or Chestnut-breasted Partridge (*Arborophila mandellii* Hume), one of the lesser known Galliform species found in the Eastern Himalayas and adjoining areas of South-East Tibet, has been categorized as 'Vulnerable' in the IUCN Red List (IUCN 2010). Singalila National Park (SNP) lies within the 'Kanchenjunga-Singalila Complex' corridor, as defined by the Critical Ecosystem Partnership Fund's revised background notes on the Eastern Himalayas in India under their Small Grant Program. In the year 2009, WPA-India took up a study with support from CEPF & ATREE, aimed at determining the status and distribution of the Red-breasted Hill-Partridge *Arborophila mandellii* in the SNP located in Darjeeling district of West Bengal, India. Other objectives were to assess the key threats to the survival of the species and a gross assessment of the conservation status of its habitat. The study commenced from October 15, 2009 and despite socio-political disturbances in the Darjeeling hill district, the field work could be successfully completed by the end of March, 2011.

During the study period, five study trips have been conducted. In all, 52 days were spent in the field. Total man-distance covered during the survey was 520 km (approx.).

Arborophila mandellii was sighted only once during the study, on 21st November, 2009, at around 11.15 a.m.. A recognizable photograph of the target species could not be taken.

During the survey, a number of calls of Hill-Partridges (of different species) could be recorded from different locations. None could be ascertained to be the call of *A. mandellii*.

It could be conclusively gathered from the local people that Hill-Partridges are occasionally trapped and consumed. The species has no market demand as a cage bird. The bird as a whole or any of its body parts does not possess any claimed medicinal or otherwise social value.

Most favorable habitat for Hill-Partridges in SNP extends from Gairibas downward to almost up to a line joining Maneybhanjang to Palmajua. The key threats at the habitat of SNP are – (i) Exploitation of forest for fodder & firewood. (ii) Grazing at certain places. (iii) Pollution & disturbance due to vehicular movement. (iv) Pollution due to garbage disposal by tourists including trekkers, local villagers and SSB staff. (v) Lack of machinery for proper disposal of garbage is a big problem in SNP.

The WPA-India team created a representative illustration of the species for use in different awareness materials. This illustration was used to produce wall-calendars, pocket calendars, back-gumming stickers and front-gumming stickers and all these materials were distributed widely in the study area. Primarily the purposes of distribution were: (a) to make people aware about the then ongoing project, (b) to arouse their inquisitiveness about the species and (c) to keep a long-run impression of the target species among the local people. School children were interacted with the aid of pictorial guides and

stickers were given to them. Four low-cost binoculars and a few books on bird identification were distributed among four school teachers, two guides, two interested youths and one hotelier from the study area.

To protect the existing habitat, following actions have been recommended:

- (i) To effectively reduce extraction and consumption of firewood and fodder.
- (ii) Control grazing.
- (iii) To have a clear account of the number of hotels/home-stays and to restrict the number of accommodation to its present number.
- (iv) To discourage and control disposal of non-biodegradable garbage within forest area.

Furthermore, to minimize future habitat loss and to secure long term survival of the target species, following actions have been recommended:

- (i) Taking up and implementation of long term trans-border program to elevate the livelihood status and living quality of the local residents.
- (ii) To encourage alternate income generation of local villagers.
- (iii) To expand and boost revenue generating controlled eco-tourism, keeping stringent check on disposal of additional garbage and additional firewood consumption.
- (iv) Taking up large scale plantation program for fast-growing firewood producing plants. Joint Forest Management practices may help.
- (v) Developing a properly functioning income generating garbage disposal system involving local villagers.
- (vi) Large scale awareness generation programs to be taken up to induce school children in disposing garbage at proper dumping points and learn to observe animals.

Also (vi) To divert the vehicular traffic passing through National Park area via alternate routes through Nepal. (Vii) To enforce existing rule of cooking in LPG in tourist accommodations within the National Park area. (Viii) Inclusion of as much reserved forest areas as possible contiguous to the National Park towards the eastern side of the National Park. (iX) Awareness generation campaign to be designed and taken up involving Satyr Tragopan, Blood Pheasant, Red-breasted Hill-Partridge and Red Panda as flagship species.

Species-specific ACTION PLAN suggested:

- (i) To design and conduct extensive survey on the present distribution, status and eco-behavior of *A. mandellii* in entire Eastern Himalayas, through its known range of distribution.
- (ii) To make people aware that the species is 'Vulnerable' and also data deficient.
- (iii) If in some pocket the number of *A. mandellii* is found to be above comfortable limit and density, capturing and captive rearing of the species can be tried out.
- (iv) It should be placed to the proper authority that *A. mandellii* with all due justifications deserves to be included in Schedule I, Part III of the Indian Wildlife (Protection) Act, 1972.

By: Heerak Nandy, 18/1/11 Golf Club Road (Golf Garden), Kolkata - 700033

Notes on the Behaviour of the Peafowl

GEORGE B. SCHALLER

George Schaller is well-known for his outstanding research on big wild animals, notably the Mountain Gorilla, African Lion, Indian Tiger and Tibetan Antelope. However, here are some insightful notes he recorded on the behaviour of the Indian Peafowl in Kanha National Park, Central India.

While studying the habits of the big game animals in the Kanha National Park, Madhya Pradesh, I saw Peafowl (*Pavo cristatus*) daily and took casual notes on their behaviour. Although my data include only seven months of observation, from 20 December 1963 to 20 July 1964, the period covers the major part of the breeding cycle of the peafowl, and the notes may thus be of interest for comparison with other areas in India.

Kanha National Park lies at an altitude of 533 to 884 metres in the Central Indian highlands. The main park area consists of a broad valley surrounded by hills on three sides. Extensive Sal (*Shorea robusta*) forests are found in the low-lying portions of the park, and mixed forest covers the hills. Peafowl occur throughout the park, but my observations are confined to a large grass meadow near Kanha village.

Peafowl remained inconspicuous until mid-January. The sexes were usually separated, both hens and cocks being found singly and in flocks of two to four individuals each. Most cocks were in full breeding plumage by the beginning of the year, but in a few the upper-tail coverts had not yet grown to their full length. There were also some cocks, presumably sub-adult, which had the iridescent blue neck and chest yet lacked the elongated upper-tail coverts. Such birds tended to stay in the company of hens. Cocks suddenly became prominent in the middle of January as they wandered around on the open meadow, especially in those areas where the grass had been burnt earlier in the month. Several cocks called loudly for the first time on 16 January, an activity which marked the beginning of the breeding season. The most conspicuous behavior of the cocks in the following months consisted first of establishing a territory and then of courting the hens.

Establishing of Territory: After an initial period of wandering, each adult cock chose by late January or early February a certain limited area, roughly 120 to 180 metres in diameter, that represented his exclusive territory from which other adult cocks were apparently excluded. Since most cocks favoured territories with one side bordering the forest and another side touching the territory of a neighbouring cock, there were marked concentrations of birds in some parts of the meadow and almost none in other parts. Within his territory each cock had a small area, often only about 15 metres in diameter, with the following attributions: (i) a prominent place, like a rock or termite mound, on which to stand; (ii) a tree providing shade and a roost for the night; and (iii) an open area, such as a road or patch of short grass, on which to court.

Cocks spent much of the day within this small area, often giving their raucous, two-toned screams with which they appeared to proclaim their territory to other males and perhaps to advertise their presence to distant hens. Calls were given throughout the day and sometimes at night at the height of the breeding season, and a call by one cock frequently brought a response from all others in the vicinity. Occasionally, two cocks met at the boundary of their territory. At such times they walked slowly parallel to each other and about 1.5 metres apart until suddenly one or the other turned away at a 90° angle, swinging his long tail abruptly towards the opponent. This seemed to be an intimidation display. Once two cocks were seen to fight by jumping at each other with slashing feet.

Courting: While the cocks remained in their territories, the hens travelled around in flocks of 2 to 10 individuals each. If such a flock entered the territory of a cock, he advertised his presence with a characteristic display. He dashed back and forth in his courting area with chest thrown out and with head and neck bobbing up and down, all the while emitting a call that began with a trumpet-like honk and was followed by a series of nasal *ca-ca-ca-a-a*. As often as not, the hens ignored him and drifted into the territory of another cock which then displayed in a similar manner. These observations indicate that the cock does not possess a harem of hens, as has often been stated, but that he courts any transitory flock that enters his territory.

If the hens approach a cock to within 24 metres or less, he displays his well-known courtship dance. He minces towards the hens with rapidly treading feet and with tail fanned out, then slowly revolves before them with lowered wings quivering violently, showing off the rusty-brown primaries and grey-barred scapulars, only to turn away, still treading and quivering, to reveal his grayish under-tail coverts and black rump surmounted by the white radiating shafts of his fanned tail feathers. Occasionally the hens then too displayed like the cock, pirouetting in front of his with quivering wings, spread tail, and treading feet.

As one peahen left the forest in the direction of a cock and several hens that were displaying to each other, a Crested Hawk-Eagle (*Spizetus cirrhatus*) landed on her back. She squawked loudly and ran into a patch of grass where she cowered. However, the Hawk-Eagle once more attacked her back, rolled off when she jumped ahead, then tried to follow her on foot. Both entered some high grass and after a brief scuffle all was silent. Five minutes later the Hawk-Eagle emerged and flew into a tree. I checked the site and found the peahen dead, talons having punctured both sides of her body. Five minutes later the raptor returned to his kill and fed for 50 minutes on the head and neck. The other peafowl, 90 metres away, ceased to display and sought cover at the beginning of the attack.

The first courtship display of the season was seen on 31 January, and the peak of the activity occurred between mid-February and mid-March, spring time at Kanha when temperatures were in transition from cool January to hot April. Some cocks abandoned their territories in early April, but others retained their until the middle of the month. Cocks sometimes courted hens after having left their territory. The last courtship display of the season was seen on 21 June, the day after the monsoon began, but a few birds were still calling intermittently in the latter part of July.

Courting behavior occurred in atypical situations in a few instances. Both adult and sub-adult cocks sometimes displayed to each other. One cock courted a Chital deer (*Axis axis*). On 28 March, four hens inadvertently approached the nest of a Stone Curlew (*Burhinus oedipnemos*). The incubating curlew left its nest and advanced on the peahens with its stubby tail in a fan and with wings extended laterally – a distraction display designed to lure away the intruders from the vicinity of the nest. One peahen, apparently stimulated by the resemblance of the distraction display of curlew to the courtship display of the peacock, responded by dancing.

Many peafowl withdrew into the forest in May after calling and courtship had essentially ceased. The first moulted tail feather of a cock was found on 6 June, and a week later shed feathers were common. However, some cocks still had the upper-tail coverts in late July. The first young of the season were seen on 5 June, and on 8 June a shallow scrape with two newly hatched chicks and two pipped eggs was discovered.

Source: INDIA THROUGH ITS BIRDS (2007), edited by Zafar Futehally, (ISBN 81-89276-06-9).

Padmaja Naidu Himalayan Zoological Park to gift captive-bred animals to other Zoos

Darjeeling, 19 Feb 2014: As part of an expertise exchange and sharing programme, the Padmaja Naidu Himalayan Zoological Park of Darjeeling will gift captive-bred red pandas, blue sheep and pheasants to its Delhi, Nainital, Sikkim and Jhargram counterparts. The PNHZP, commonly known as Darjeeling zoo, will give blue sheep, ghoral and golden pheasants in pairs to the Gangtok zoo in exchange of a female red panda. The Delhi zoo will receive golden, silver and lady Amherst pheasants, also in pairs, along with a pair of langurs. Meanwhile, the Nainital zoo, which is being promoted as a new centre for breeding of the red panda apart from the Darjeeling and Gangtok zoos, will receive a red panda and blue sheep pair. Besides, the Darjeeling zoo will provide technical expertise. PNHZP director Alankar Kumar Jha said, "The exchange programme is part of the expertise sharing exercise on breeding of endangered animals among various zoos of the country. We conduct such programmes every year."

Commenting on the animals being gifted to the Delhi zoo, Jha referred to the World Aquarium and Zoo Associations (WAZA) conference scheduled this November in the national capital. "Stocks of endangered animals in the Delhi zoo are minimal and with the WAZA conference upcoming, it is crucial to present a positive picture amid a global audience," noted the director. Nearly 80 per cent of animals and birds at the PNHZP fall under the endangered list (Schedule I), and the zoo has successfully bred the red panda, snow leopard, Tibetan wolf and blue sheep.

The Jhargram zoo will also receive a pair each of kaleej pheasants and red jungle fowl from Darjeeling. "Another reason for gifting animals to other zoos is the concern for their mortality. Our space is small while animals are increasing. We do not want the animals to feel congested and cramped for space. Therefore, it is better to shift them to other centres," said Jha, adding the exchange will be completed within this month. The Darjeeling zoo has set up captive breeding centres for the blue sheep, snow leopard and satyr tragopans at Topgey Dara in 3rd Mile, 19km from Darjeeling town, while another centre was set up in Dow Hill in Kurseong last year. (EOIC)

Source: Darjeeling Times.

Debate settled: Egg came before the chicken

The key to the age-old question apparently lies in the fact that since genetic material does not change throughout an animal's life, the first bird that evolved into a chicken must have initially existed as an embryo inside an egg.

Professor John Brookfield, from England's University of Nottingham, concluded that because of this, the living organism inside the eggshell would have had the same DNA as the chicken it turned into.



BEATEN BY THE EGG

The specialist in evolutionary genetics was quoted in a number of newspapers as saying: "Therefore the first living thing which we could say unequivocally was a member of the species would be this first

egg. The egg came first."

Brookfield's conclusion was backed by Professor David Papineau, of King's College, London, and the chairman of the trade body Great British Chicken, Charies Bourns.

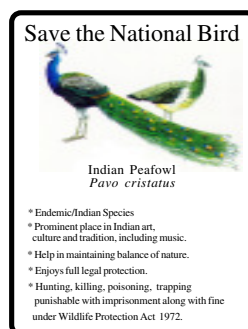
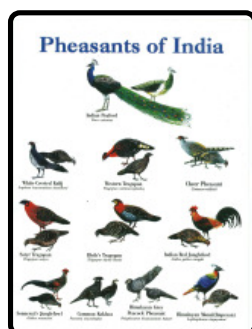
Papineau, an expert in the philosophy of science, argued that the first chicken must have emerged from an egg even though it was laid by a different species of bird, but it was still a chicken egg because it had a chicken in it.

"The conclusion therefore must be that the egg came first and the chicken afterwards," he stated. "Eggs were around long before the first chicken arrived," he affirmed.

Resource Material - available on request

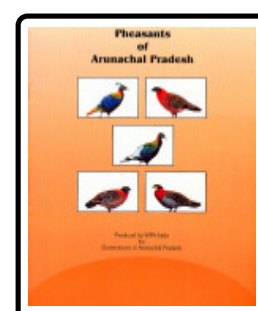
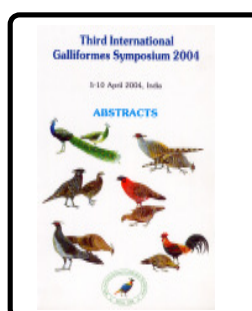
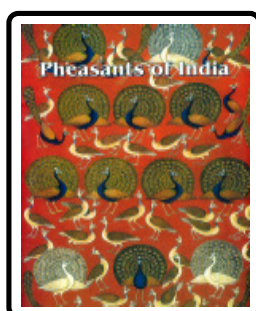
Posters

- Pheasants of India
- Pheasants of Arunachal Pradesh
- Pheasants of Himachal Pradesh
- Pheasants of Uttarakhand
- Pheasants of Assam
- Pheasants of J&K
- Pheasants of Sikkim
- Pheasants of Nagaland
- Pheasants of West Bengal
- National and State Birds
- Save the National Bird
- Himalayan Monal



Booklets

- Pheasants of India
- Pheasants of Arunachal Pradesh
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