

RESEARCH NOTES

(I)

BREEDING OF HUME'S PHEASANT (*SYRMATICUS HUMIAE*) AT AIZAWL ZOOLOGICAL PARK, MIZORAM

The Hume's pheasant, also known as bartailed pheasant or barredback pheasant, is a large bird (male 90cm and female 60cm), which is endemic to Northeast India, Myanmar, Thailand and China (Ali and Ripley, 1987). It is locally known as 'vavu' and due to its wide scale occurrence in Mizoram; it has been notified as the State bird. It has been declared as a globally threatened (Vulnerable) species due to destruction and fragmentation of its habitats (Choudhury, 2005). Katju (1996), Ghose (2000) and BirdLife International (2001) have studied its distribution in Mizoram. Recently, Choudhury (2005) surveyed this species in Mizoram and reported its distribution at higher altitudes in east Mizoram especially in Champhai and Saiha districts. The present paper describes the observations recorded during the captive breeding programme of this species at the Aizawl Zoological Park, Mizoram.

The Aizawl Zoological Park was established in 2006. It is located at Sakawrtuichhun village, which is 15 km from Aizawl on Aizawl to Lengpui Road. The Hume's pheasants were introduced in the zoo in 2005, and at present there are 11 birds in the zoo. Out of these, 4 are males and 7 are females. The Aizawl Zoological Park has the distinction of being the only zoo in the country, which is having the Hume's pheasants (CZA, 2010). Earlier these pheasants were kept in a small enclosure, which was later on improved as per the suggestion and guidelines of the Central Zoo Authority and they were shifted to the new enclosure during January 2009. The total area of the new enclosure is 498 m². It is divided into three equal compartments. The top is covered by the Netlon (50 per cent) and some herbs, shrubs, climbers and bamboo, e.g. *Ficus hispida*, *Melocanna baccifera*, *Mikania micrantha*, *Thysanolaena maxima*, etc. are growing inside the enclosure to provide natural environmental conditions to these pheasants.

The breeding programme for Hume's pheasant was started in 2007 when 3 eggs were hatched. Out of this, one female has survived and is in good condition. There was no hatching of eggs in 2008; while in 2009 again, six chicks were born consisting of three males and females each. Out of these, all male chicks died due to

some reasons or other but the females are still surviving.

During this year, action was initiated from the beginning of the breeding season to ensure successful breeding and survival of the chicks. One breeding pair each was kept in the compartment one and two from 15th January, 2011 and the area was closed for the visitors to minimize disturbance. The females were provided with rich protein and high energy diet in the form of poultry concentrated layer feed, more peanuts than usual, green vegetables as well as minerals to improve the breeding capacity and for the production of healthy and fertile eggs. Since the males become over excited during breeding season with pronounced sex drive and as such have the habit of chasing the female aggressively, keeping this in mind the males were fed with less proteinous feed and no overwhelming aggression was noticed this year. The details of the observations recorded in each compartment are mentioned below:

Compartment One

The first two eggs were observed on 13th March, and the female laid a total of 10 eggs by 5th April, 2011. On 7th April morning, the pheasants were found disturbed as a monocled cobra somehow managed to enter the enclosure. When caught, the cobra regurgitated 5 swallowed eggs. Due to this disturbance, the hen abandoned the remaining eggs. These eggs were then taken for artificial incubation at Animal Husbandry and Veterinary Farm, Tanhril, Aizawl and later on these eggs were found to be infertile.

After this setback, the female laid another clutch of three eggs on 8th, 10th and 12th April, and another two eggs were observed on 16th morning. The female started incubating the eggs from 18th April onwards. Three chicks were hatched out on 16th May i.e. after about 28 days, which indicated that the incubation period varied from 25 to 28 days as observed from 2007 onwards, which is in accordance as reported by Delacour (1977) and Howman (1993). The remaining two eggs were found to be fertile but perished due to embryonic death. All the chicks (2 male and 1 female) are healthy and doing well in the enclosure.

Compartment Two

The first egg was laid on 14th March and a total of nine eggs were laid by the female by 3rd April 2011. Out of these, one egg got broken. The female started incubating the eggs from 4th April. After that the male pheasant was shifted to the third enclosure with an idea that the female is not disturbed while incubating the eggs. Thereafter no hatching of eggs was observed in this compartment. Out of the 8 eggs, 2 eggs were found to be

fertile with embryonic death and the remaining 6 eggs were infertile.

Compartment Three

Three zoo bred females were kept in this compartment and the male was transferred to this compartment from compartment No. 2 on 4th April 2011. One of the hens laid three eggs and hatched one chick, which survived for a couple of days only.

Acknowledgements

The authors express their sincere thanks to Pu Latinkhuma and Pu Rajesh for recording all observations during the period of this study. Thanks are also due to all other staff of the zoo for extending all possible help to make breeding programme of these pheasant successful. Thanks are also due to the Central Zoo Authority for providing financial support to renovate Hume's pheasant enclosure during 2009 to 2011.

References

- Arnett, Ali, S. and S. D. Ripley (1987). *Compact handbook of the birds of Indian subcontinent*. Bombay: Oxford University Press.
- Bird Life International (2001). *Threatened birds of Asia: The Bird Life International Red Data Book*. Cambridge, U.K.
- Choudhury, A. (2005). New sites for Mrs Hume's pheasant *Syrmaticus humiae* in North-east India based on hunters' specimens and local reports. *Forktail*, 21: 183-186.
- CZA (2010). Inventory of Animals in Indian Zoos and Animal Profile of Identified individuals of Endangered wild animal species. Central Zoo Authority, New Delhi, p. 598.
- Delacour, J. (1977). The pheasants of the World. *Second Edition*- Spur publication, England. 395 p.
- Ghose, D. (2000). Hume's pheasant sightings in Mizoram, India. *Tragopan*, 12: 14.
- Howman, Keith (1993). Pheasant of the World : their breeding and management. Hancock House Publishers Ltd., Canada and USA. p 184.
- Katju, D. (1996). Pheasants in Mizoram, India; an impression. *Tragopan*, 5: 9-10.

N. S. Bisht, F. Laltanpuia*, L. Lailung
and C. Lalengliana

State Forest Department,
Wild life Division, Aizawal (Mizoram).

* Aizawal Zoological Park, Aizawal (Mizoram)