

15. NESTING IN ANCHOR-PIPE BY BRAHMINY MYNA, *STURNUS PAGODARUM* (GMELIN) (With a text-figure)

On 6.6.1994 at about 12 hr. I was waiting for an Alwar-bound bus at the bus-station at Khairthal

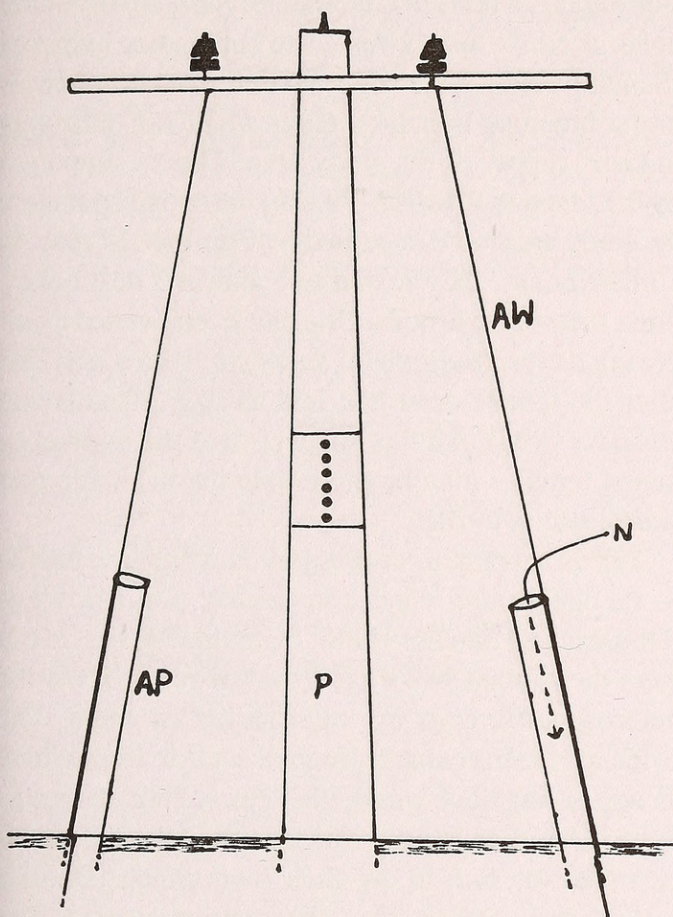


Fig. 1. Nesting site of Brahminy Myna (*Sturnus pagodarum*) in an anchor-pipe. AW-Anchor-wire, AP-Anchor-pipe, P-Telephone pole, N-Nesting site.

in Alwar district when I observed a pair of Brahminy myna (*Sturnus pagodarum*) carrying small insects to feed their chicks in an anchor-pipe, made of steel that was placed to support the anchor-wire of a telephone pole (Fig 1). The length of the pipe was nearly 2 metres. Its lower end was buried in the earth and the upper end was available to the birds to move in and out. The diameter of the pipe was nearly 62 mm posing no problem to the bird's entry. Since summers are very hot in Rajasthan, steel becomes very hot during the day time, specially at noon, even then such a hot site was selected by the birds for nesting. On the date of observation, the maximum temperature was nearly 45°C in the locality. I could see one bird (perhaps female) frequently sitting at the mouth of the pipe in the wing spread posture.

According to Ali and Ripley (HANDBOOK 1983) *S. pagodarum* nests in holes in tree trunks or boughs, in a wall or roof of houses. Nesting in steel anchor-pipes is a new site and hence worth placing on record.

January 12, 1995 SATISH KUMAR SHARMA
Range Forest Officer,
Aravalli Afforestation Programme,
Jhadol (F.),
Dist. Udaipur (Raj.) 313 702.

16. INTRASPECIFIC BROOD PARASITISM IN THE COMMON MYNA *ACRIDOTHERES TRISTIS* (LINN.)

Intraspecific brood parasitism (IBP) refers to a female laying one or more eggs in a conspecific nest. It is much more common in birds that have self-feeding young than in those where young are fed by parents. Among the latter, it is more common in colonial than in solitary nesting species (Rohwer and Freeman 1987). IBP occurs in 28 passerine species all of which have parentally fed young (Rohwer and Freeman 1987, MacWhirter 1989, Dhindsa 1990). Among Indian birds, this behaviour has been reported in four passerines, all belonging to family Ploceidae (Dhindsa 1983a, b; 1990). In this paper, we describe

evidence of IBP in the Common Myna *Acridotheres tristis*, a passerine species of the family Sturnidae in which the young are fed by parents.

Observations were recorded while studying breeding biology of the Common Myna during its 1992 breeding season in the Punjab Agricultural University campus at Ludhiana (30° 56' N, 75° 52' E, 247 m above msl). Thirty (15 wooden and 15 polyvinyl chloride) nest boxes were put up in different parts of the University Campus. Two boxes were lost while 22 of the remaining 28 boxes were occupied by the common Myna. The nest boxes were checked

twice a week during nest building and daily from the initiation of egg laying till three days after the clutch was completed. To avoid disturbance to the incubating female, nest boxes were not checked for one week after making sure that the clutches were complete. After this, however, boxes were again checked daily.

Evidence of IBP was recorded in one of 22 (4.5%) nest boxes in which Common Mynas bred. The first egg of the clutch in this box was laid on 22 April, followed by three more eggs on 23, 24 and 25 April, respectively. The nest was examined daily up to 28 April but no more egg was found in it. The clutch of 4 eggs was, therefore, completed on 25 April. When checked after a week, i.e. on 5 May, there were five eggs in the box instead of a clutch of four. The fifth egg was thus laid after 28 April, i.e. at least 4 days after the clutch was completed. The size of the fifth egg (28.3 x 21.0 mm) was smaller than the average size of four eggs of the clutch (29.9 x 22.0 mm). Hatching commenced on 7 May when two eggs hatched simultaneously. This suggests that the incubation had started after second egg of the clutch was laid. The remaining three eggs did not hatch and remained intact in the box till 21 May when the young were 14 days old. Both young fledged successfully on 28 May, i.e. 21 days after hatching.

Like most passerines, Common Mynas lay eggs at one day intervals. In the present study, no eggs were ever laid after the completion of clutches in 21 of 22 nest boxes. The eggs in all the boxes were laid at regular interval of 24 hrs except in three cases where one egg of the clutch was laid at 48 hrs interval. In most passerine species, females start incubating just after the penultimate or last egg of the clutch is laid. The eggs appearing in the nest thereafter cannot be taken as laid by the owner female because ovaries and related reproductive organs regress soon after the completion of clutch. Moreover, the usual interval of 24 hr. (rarely 48 hr.) between successive eggs of a clutch of the Common Myna also suggests that the egg laid 96 hr. after clutch completion in this nest box was a parasitic egg.

The reasons of IBP recorded in this study are not clear. However, the smaller size of parasitic egg as compared to the average egg size in the host clutch suggests that this egg might have been laid by a young

female (Yom-Tov 1980). The second possibility may be the shortage of suitable nesting sites. This factor is important in species which lay in holes, cavities, burrows and similar places (Yom-Tov 1980). In our study area, 28 nests of Common Myna were in natural holes in trees while the rest were built in tree branches (Sandhu 1993). This suggests that Common Mynas prefer breeding in natural holes which are definitely in short supply in the study area. This is supported by the fact that 22 of 28 (78.6%) nest boxes put up in the study area were occupied by Common Mynas. In 10 nest boxes, they reared two and in 3 nest boxes, three successive broods. One pair even evicted a pair of ring doves *Streptopelia decaocto* from a nest box after the female dove had laid an egg (Dhanda and Dhindsa 1993). All this suggests that the number of mated females may be more than the available nest sites, leading to IBP.

IBP is successful in those birds which are unable to recognize and eject conspecific parasitic eggs (Dhindsa and Sandhu 1988). Common Mynas do not eject their unhatched eggs from the nests. Even the heterospecific eggs are not ejected by them. The evidence of this came from the nest box from where an egg of ring dove was neither ejected nor destroyed by the Common Mynas which evicted the doves and occupied the box to lay their own clutch (Dhanda and Dhindsa 1993). This observation suggests that even interspecific brood parasitism can be successful in Common Myna.

ACKNOWLEDGEMENTS

We are grateful to Ram Parshad and Lal Bahadur for help in field work. This study was supported by the University Grants Commission, New Delhi through a fellowship under the Faculty Improvement Programme to Satwant K. Dhanda and by the Indian Council of Agricultural Research through the All India Network Project on Agricultural Ornithology.

14 October 1994

SATWANT K. DHANDA

MANJIT S. DHINDSA

Department of Zoology,

Punjab Agricultural University,

Ludhiana-141 004, Punjab (India).

REFERENCES

- DIHINDA, S.K. & M.S. DHINDSA (in press): Eviction of ring dove *Streptopelia decaocto* from a nest box by common myna *Acridotheres tristis*. *Pavo* 31.
- DHINDSA, M.S. (1983a): Intraspecific nest parasitism in two species of Indian weaverbirds (*Ploceus benghalensis* and *P. manyar*). *Ibis* 125: 243-245.
- DHINDSA, M.S. (1983b): Intraspecific nest parasitism in the white-throated munia. *Notornis* 30: 87-92.
- DHINDSA, M.S. (1990): Intraspecific brood parasitism in the baya weaverbird (*Ploceus philippinus*). *Bird Behav.* 8: 111-113.
- DHINDSA, M.S. & P.S. SANDHU (1988): Response of the baya weaverbird (*Ploceus philippinus*) to eggs of the white-throated munia (*Lonchura malabarica*): relation to possible incipient brood parasitism. *Zool. Anz.* 220: 216-222.
- MACWHIRTER, R.B. (1989): On the rarity of intraspecific brood parasitism. *Condor* 91: 485-492.
- ROHWER, F.C. & S. FREEMAN (1987): The distribution of conspecific nest parasitism in birds. *Can. J. Zool.* 67: 239-253.
- SANDHU, S.K. (1993): Ecological studies on the association of birds with trees with special reference to nest-site selection. Unpubl. Ph.D. thesis, Punjab Agricultural University, Ludhiana, India.
- YOM-TOV, Y. (1980): Intraspecific nest parasitism in birds. *Biol. Rev.* 55: 93-108.

17. SIDEWAYS LEAP-FROGGING BY THE LARGE GREY BABBLERS, *TURDOIDES MALCOLMI* (SYKES)

Leap-frogging in the Common Babblers (*Turdoides caudatus*) has been recorded by me earlier (*JBNHS* 89: 376), but not so far among the Large Grey Babbler (*Turdoides malcolmi*).

On 11 September 1991 in front of my residence at Sidhi, Madhya Pradesh, four birds were seen perched on an electric line. Suddenly two of them indulged in sideways leap-frogging by performing closely huddled sideways jumps, one over the other, in quick succession. In this manner,

they traversed a distance of about a metre on the electric line, thereafter indulged in caressing each other with bills. Before any more observations could be made, the pair flew away.

January 12, 1995

A.M.K. BHAROS
27, MIG, Indravati Colony,
Raipur 492 001,
Rajasthan.

18. PIPIT (*ANTHUS* SP.) PREYING ON LEECHES

Ponmudi (c. 1035 m above msl) is a spur hill of the Southern Western Ghats, about 56 km NE. of Trivandrum. I was watching birds there on 10.7.94 at the edge of an evergreen forest patch which abuts a steep grassy hill side with rocky outcrops and slippery sheet-rocks. Here a Pipit was observed to pick up and swallow a leech from the tip of a grass blade. Within the next thirty odd minutes while I watched it, the bird picked and gulped down two more leeches. Once it even jumped up with wings spread out to capture a leech which was moving at the tip of a leaf blade some 1 m above the ground. The characteristic undulating movement of the leeches might have attracted the bird's attention

leading to their predation. While several species of insects together with other arthropods are listed in the dietary of pipits, it seems that leeches have not been hitherto recorded. Moreover such an instance of avian predation on leeches is interesting and seemingly rare.

I was able to watch the bird very closely for a long time using a pair of 8 x 40 field glasses, and from the field characters and call, it was probably the Brown Rock Pipit (*Anthus similis* Jerdon).

October 18, 1994

MANOJ V. NAIR
34 Thoppil Nagar,
Trivandrum-695 011, Tamil Nadu.



Dhanda, Satwant K and Dhindsa, Manjit S. 1996. "Intraspecific brood parasitism in the common myna *Acridotheres tristis* (Linn.)." *The journal of the Bombay Natural History Society* 93, 91–93.

View This Item Online: <https://www.biodiversitylibrary.org/item/189680>

Permalink: <https://www.biodiversitylibrary.org/partpdf/156043>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: In Copyright. Digitized with the permission of the rights holder

License: <http://creativecommons.org/licenses/by-nc/3.0/>

Rights: <https://www.biodiversitylibrary.org/permissions/>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.