

We also noted the weather conditions against the calendar dates during the months of observation. It seems that except perhaps for some extreme cases of bad weather the inner clock is more important than the external conditions. If light were the most important factor, on dark overcast days the birds would have called earlier and on bright sunny days the intensity of light would have decreased to that degree at a much later time. Our data show no such correlation between screeching time and weather. The variation in screeching within any month is not due to any such weather conditions. For example, on 13-x-67 the screeching time was 17:20 while the very next day it was 16:35 (the earliest call in this month). On both these days the sky was absolutely clear. During the three months of November, December and January the sky was absolutely clear on all the days of observation so that the daily variations could not be due to weather conditions. On the other hand, the progressive seasonal shortening of days is obviously correlated with the progressively advancing screeching time. This is perfectly understandable because substantial evidence has been collected suggesting that there is an endogenous clock which is regulated by exogenous signals.

INDIAN STATISTICAL INSTITUTE,
CALCUTTA-35,
April 12, 1971.

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7. BLACK BULBULS *HYPSIPETES MADAGASCARIENSIS* (P.L.S. MÜLLER) IN DELHI

During February and March 1972 I recorded Black Bulbuls (*Hypsipetes madagascariensis*) on several occasions in natural woodland on the outskirts of Delhi. On February 12th and 14th, and on March 7th two birds were seen, and on March 9th a party of three. All these records were within an area of about 1 sq km. The fact that three birds were together on the last occasion suggests that several groups may have been involved.

According to the HANDBOOK OF THE BIRDS OF INDIA AND PAKISTAN 6, this species does not normally enter the plains in the western part of its range. No records are mentioned further from the hills than Karnal in Haryana.

The first record occurred only a few days after heavy, and unseasonally late snowfalls in the hills of Himachal and Uttar Pradesh, and this may have been the cause of the unusual influx. Large numbers of Blackthroated Thrushes (*Turdus ruficollis*) also appeared at the same time.

DEPT. OF ZOOLOGY,
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April 2, 1972.

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8. PIED GROUND THRUSH *ZOOTHERA WARDII* (BLYTH) IN KERALA STATE

On 14th March 1972 I was staying at Lower Surianalle Estate, Surianalle P.O., High Range, Kerala (elevation 1676 metres a.s.l.). This tea estate lies on the south-eastern slopes of the High Range, some 20 miles from Munnar. My host Mr. C. R. Brown told me that he had seen, that morning, a party of about six speckled back and white birds about the size of blackbirds which he could not identify.

So on the following morning, 15th March 1972, he and I went to the same shola in which he had observed the birds the day before and we were fortunate enough to see in the very same area about half-a-dozen feeding off small black berries, similar to elder berries. A clear view through binoculars soon revealed that this was a party of Pied Ground Thrush *Zoothera wardii* (Blyth) presumably on their northward passage. Because of the thick undergrowth it was not easy to assess the exact number of birds in the party but I estimate that there were not less than six out of which males and females were in equal numbers.

As the Pied Ground Thrush is apparently rare in this part of Kerala, I have seen only two in the past thirty-seven years, I think this note may be of interest and worth placing on record.

PANDAVARMEDU,
VANDIPERIYAR P.O.,
KERALA STATE,
April 1, 1972.

M. C. A. JACKSON



Gaston, Anthony J. 1972. "Black Bulbuls *Hypsipetes Madagascariensis* (P.l.s. Muller) in Delhi." *The journal of the Bombay Natural History Society* 69, 651–652.

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