

2. Miscellaneous Bulbul Field Notes (Aves: Pycnonotidae) from Thailand

Casual observations of bulbuls (Family Pycnonotidae) at and away from nests were made intermittently over the years 1974 to 1976, predominantly within the grounds of the Phuket Marine Biological Center, Phuket Island, western peninsular Thailand. I lived at the Marine Biological Center for most of this time, and it was here that all nesting recorded below was observed. Additional odd 1977 observations are included.

Despite the extensive distributional range and abundance of many species of bulbul little is known about very many of the family members. In particular, very little of nestling growth rates is recorded, even for some of the most common species, and some such data are presented here. In recent years attention has been drawn to the overlooked or unrecorded fact that a number of bulbul species habitually catch flying insects in flight (MERIWANI, 1973; BROOKE, 1973; STANFIELD, 1973; MARKUS, 1974; FRITH, 1979) as a result of a statement to the contrary (IVANOV, 1964). SEVERINGHAUS (1978) subsequently reviewed reports of this feeding behaviour by Asian bulbuls. Fragmentary and brief though these observations are they appear worthy of publication in view of the general lack of information concerning many members of this large and homogeneous assemblage. Names used are those of RAND & DEIGNAN (1960). With respect to aerial feeding by bulbuls these data add records for Thai populations of *Pycnonotus atriceps*, *P. melanicterus* and *P. goiavier* to those of SEVERINGHAUS (1978) from elsewhere and provide the first such records for the species *P. finlaysoni* and *P. blandfordi*. I should here point out that WILKINSON (1929), not cited by SEVERINGHAUS (1978), as a result of five years' bird watching in the Shanghai area noted that bulbuls catch flies on the wing and described *P. sinensis* as skillful in this respect.

Pycnonotus atriceps, Black-headed Bulbul

Two adult individuals netted on 9 October were in fine fresh plumage and weighed 25.1 and 25.2 g. This species was repeatedly seen on numerous occasions to hunt and catch insects in flight. Birds would perch on a

horizontal twig and fly out to catch an insect on the wing and return to their original perch. A most conspicuous and rather flycatcher-like performance.

Pycnonotus melanicturus, Black-crested Bulbul

Two birds were watched at length at Khao Yai National Park on 9 December 1976. One bird was of the black-throated form and the other of the red-throated form of the species. Both were seen feeding upon insects by flying up to upper and outer bare twiglets of forest trees and picking prey off them whilst hovering briefly before returning to their original perch to eat them. Infrequently a flying insect was chased and snatched in flight.

Pycnonotus jocosus, Red-whiskered Bulbul

Whilst watching a flock feeding and flying about river-side forest trees at Khao Yai National Park on 9 December 1976 a brief display by two birds was observed. The display was started by one bird perching on a bare horizontal branch. It held its body and tail on a horizontal plane, fanning the tail open to full extent whilst lifting it gently up and down irregularly and fluttering the closed but slowly downward-drooping wings held away from the sides of the body. A second bird alighted directly beside the displaying one and performed exactly the same behaviour whilst moving even closer to the original performer until the near wing of one bird was fluttering over the wing and body of the other and one fanned tail was over another. Throughout this the birds' heads were mostly lowered down and forward, but were lifted and lowered again rhythmically irregularly. This mutual display was concluded by both birds suddenly flying off.

Pycnonotus finlaysoni, Stripe-throated Bulbul

A nest was found on 6 April 1976 containing two eggs, measuring 22.1×15.2 and 20.3×14.6 mm, which were subsequently predated. The nest was less than a meter above ground in the fork of a small broad-leaved bush.

I have often seen species catch insects in flight, and on one particular occasion I watched one bird chase a pale diurnal moth at great length in order to catch and eat it. On the evening of 9 July 1977 at 1800 hours two individuals were seen attending a termite eruption or nuptial flight (see also *P. blandfordi*, and FRITH in this issue) and to take at least thirty flying termites in full fluttering flight.

Pycnonotus goiavier, Yellow-vented Bulbul

Found actively nesting during April, May, July and August 1974; nests being less than 1 m above the ground in a fork of small garden bushes. Two egg clutches were laid. The eggs of a subsequently predated clutch measured 22.3×16.8 and 21.1×16.6 mm and weighed 3.1 and 3.0 g respectively. Eggs of another, also predated, clutch measured 22.8×16.3 and 18.9×15.6 mm and both weighed 3.2 g.

Pycnonotus blandfordi, Blandford's Bulbul

Nesting was observed during the months February, April, May, July and August.

A nest construction, observed from the very first foundation in the fork of a bush, took 4 days before the first egg was laid in it on 28 April 1974. Three eggs were laid in this nest, on successive days. All three hatched on 12 May 1974 during early morning and were thus incubated for 11 to 12 days, incubation commencing with laying of the third egg. All three young successfully fledged on 22 May 1974, at 10 days old. A parent was seen to pick up and swallow nestling faeces the day before the nestlings fledged.

Another nest found on 24 July 1974 contained two eggs, one of which hatched on 2 August 1974. The second egg (measuring 22.6×15.8 mm and weighing 3.0 g) remained unhatched in the nest until 11 August when it was absent. The nestling was weighed daily at 1100 hours, and grew steadily as summarized in Table 1.

Table 1. Growth of a single-bird brood of *Pycnonotus blandfordi* from day of hatching.

Date August (g)	Weight	notes	Date August (g)	Weight	notes
2	3.4		8	14.0	eyes open, all feathers in pin
3	4.4		9	19.5	wing and contour feathers out of pin
4	6.6		10	18.6	
5	8.6	eyes closed	11	20.1	tail feathers out of pin
6	10.3	eyes closed	12	21.4	
7	13.2	eyes just open	13		Fledged, at 12 days old

Another nest found on 25 February 1975 contained two eggs, one of which hatched on 1 March 1975. The other egg (measuring 20.9×15.8 mm and weighing 2.5 g remained within the nest until the nestling fledged at 11 days old. The lone nestling was weighed daily at 1700 hours and grew steadily as summarized in Table 2.

Table 2. Growth of a second single-bird brood of *Pycnonotus blandfordi* from day of hatching.

Date March (g)	Weight	notes	Date March (g)	Weight	notes
1	3.5		7	17.9	a few flight feathers out of pin
2	5.4		8	19.2	all flight feathers out of pin
3	7.2		9	19.4	
4	10.4		10	19.8	
5	13.3	eyes closed	11		Fledged, at 11 days old
6	14.2	eyes open			

Another nest was found on 1 March 1975 containing two nestlings which weighed 20.3 and 16.5 g. Their respective weights on 2 March were 19.5 and 17.3 g; on 3 March 20.2 and 18.0 g; and on 4 March 18.9 and 18.7 g. These two fledged on 5 March 1975. An immature bird of this species netted on 29 July 1974 weighed 28.5 g; and two adults netted on 8 August 1974 weighed 32.7 and 28.3 g.

On 8 August 1974 an adult was seen feeding two fledglings perched in a tree by flying down to the ground and lifting small stones and leaves to return to the young with each individual prey caught.

This bulbul very commonly feeds aurally upon flying insects. On the evening of 9 July 1977 between 1745 and 1850 hours up to twelve individuals were observed taking hundreds of flying termites as they erupted from the ground after a wet day. The insects were taken in fast swerving, fluttering, flight from 1 to 15 feet above the ground. Birds also stood on the ground and leapt upward into flight after termites (see also *P. finlaysoni*, and FRITH this issue).

REFERENCES

- BROOKE, R.E. 1973. Aerial feeding by bulbuls. *Ibis* **115**: 606.
- FRITH, C.B. 1979. Feeding ecology of land birds on West Island, Aldabra Atoll, Indian Ocean: a preliminary survey. *Phil. Trans. Roy. Soc. Lond. B.* **286**: 195-210.
- FRITH, C.B. 1981. Utilization of a single brief termite eruption by predators. *Nat. Hist. Bull. Siam Soc.* **29**: 173-174.
- IVANOV, A.I. 1964. (Bulbul) In A.L. Thomson (ed.), *A new dictionary of birds*. London: Nelson.
- MARKUS, M.B. 1974. Aerial feeding by bulbuls. *Ibis* **116**: 232.
- MERIWANI, T.N. 1973. Aerial feeding by bulbuls. *Ibis* **115**: 285.
- RAND, A.L. & H.G. DEIGNAN 1960. (Pycnonotidae) In E. Mayr & J.C. Greenway, Jr. (ed.), *Checklist of birds of the world*, vol. 9 Boston: Mus. Comp. Zool. (Harvard).

SEVERINGHAUS, S.R. 1978. Aerial feeding by Asian bulbuls. *Ibis* 120 : 514-516.
 STANFIELD, J.P. 1973. Aerial feeding by bulbuls. *Ibis* 115 : 606.
 WILKINSON, E.S. 1929. *Shanghai birds*. Shanghai : North-China Daily News & Herald Limited.

C.B. Frith

"Prionodura"

Paluma via Townsville,
Queensland, 4816,
Australia.

REFERENCES

PROBERT, R.E. 1975. Aerial feeding by bulbuls. *Ibis* 117 : 606.
 PRITH, C.B. 1973. Feeding ecology of land birds on West Island, Aldabra Atoll, Indian Ocean: a preliminary survey. *Bull. Fauna Res. Soc. Lond.* 18 : 236-250.
 PRITH, C.B. 1981. Evidence of a single bird feeding on a single prey item. *Ibis* 123 : 117-119.
 PRITCHARD, A.L. 1948. (Revised) A.L. Thomson (ed.), *A Field Guide to Birds*. London : Nelson.
 MARRAS, M.B. 1978. Aerial feeding by bulbuls. *Ibis* 120 : 517.
 MARRAS, M.B. 1973. Aerial feeding by bulbuls. *Ibis* 115 : 583.
 RING, A.L. & H.S. DODD. 1980. (Revised) R.E. May & I.C. Grimmer, Jr. (ed.), *Checklist of birds of the world*, vol. 9. Boston : Mus. Comp. Zool. (Harvard).