

On day 9, we observed a red squirrel (*Tamiasciurus hudsonicus*) prey upon the nestlings in nest B. In most Black-throated Blue Warbler nests, nestlings fledge prematurely if disturbed after day 7. The fact that the nestlings could not escape the squirrel's attack indicates their retarded state of growth.

A second clutch (nest C) was initiated by F1 and the polygynous male on 29 June. Four eggs in this third nest hatched on 14 July and feeding duties appeared to be shared equally by the male and female. The four young in nest C fledged on 24 July. Thus, this male was presumably responsible for fertilizing 13 eggs, 12 of which hatched, and seven of which resulted in fledged young.

Of 20 Black-throated Blue Warbler pairs closely monitored at Hubbard Brook in 1986, this was the only case of polygyny we found. Monogamy is thought to occur in birds when parental care is needed to successfully raise the young (Lack, *Ecological Adaptations for Breeding in Birds*, Methuen, New York, New York, 1968). Our observations of the failure of nest B support this contention. Additional work is required to explain the proximate causes of this reproductive strategy.

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Two nests of the Azure-hooded Jay with notes on nest attendance.—The Azure-hooded Jay (*Cyanolyca cucullata*) inhabits humid montane forests and forest edges from south-central Mexico to western Panama (Carriker 1910, Miller et al. 1957, Slud 1964, A.O.U. 1983). In Costa Rica the species occurs mainly on the Caribbean slope of the central highlands, but it is also common at Monteverde, on the Pacific slope of the Cordillera de Tilaran (Slud 1964), where we discovered two active Azure-hooded Jay nests. This report is apparently the first published nesting record for the species.

We discovered the first nest on 14 April 1983 when one adult came to feed a small, naked nestling that was barely able to lift its head. The nest was 7 m high in a tree (*Saurauia veraguensis*; approximately 8 cm dbh) overhanging the bank of a dirt road that bisects the Monteverde Cloud Forest Reserve, Puntarenas Province, Costa Rica (1510 m elevation; Lower Montane Rain Forest life zone [Holdridge 1967]). On 2 and 3 May, we saw two adults bring katydids (Orthoptera: Tettigoniidae) to at least two nestlings, now with well-feathered heads. The young fledged between 3 and 7 May, and thus spent at least 20 days in the nest. On 7 May an adult visited the nest several times without food, and the young had left.

On 15 May, we found two adults and two fledglings calling near the nest, and KGM easily captured a fledgling by hand. The color pattern of the plumage was similar to the adults' except that the hood was duller blue and the back feathers were a duller, less shiny black. Both the bill and the body were noticeably smaller than those of the adults. The fledgling "squawked" repeatedly for 4 min while held, eliciting alarm calls from the other fledgling and the two adults.

On 22 July 1983, we collected the nest (Florida State Museum No. UF 13159). The foundation is coarsely constructed of 2–3 mm diameter twigs. The inside diameter of the nest cup is 11 cm, and the outside diameter varies from 19–33 cm due to the various lengths of the outer twigs. The inside cup is 5 cm deep and woven of thin fibrils and twigs (averaging about 0.5–1.0 mm in diameter) but contains no feathers or other soft material. It was lodged over side branches next to the main trunk of the tree which was 3 cm in diameter at this height. Although the nest was partly obscured (in the tree) by bamboo, it was easily visible from the road below; the nest material contained very little moss or other concealing material. In general, the construction and materials are similar to those of other jay nests (Goodwin 1976).

On 4 June 1987, we found a second nest of similar construction in almost exactly the same location as the first. The second nest was 5 m high in the crown of a small tree (*Oreopanax xalapensis*; approximately 8 cm dbh) that also overhung the road in the Monteverde Cloud Forest Reserve. We observed two adults regurgitate food to chicks at the nest between 10 and 27 June; on 2 July the nest was empty. During 7 h of observations on 23, 25, and 27 June, we saw only 8 feeding trips by the adults; intervals between feedings were long (20, 37, ≥ 78 , and ≥ 87 mins). The adults typically foraged together and were observed frequently by KGM, who was conducting other studies in the area every morning and never saw more than two at one time.

Jays of the genus *Cyanolyca* are secretive dwellers of humid montane forest throughout Central and South America; the nesting habits of most species are virtually unknown (Hardy 1964, Goodwin 1976). The Central American species of *Cyanolyca*, at least, appear to be relatively nonsocial (Hardy 1964). Our limited observations suggest that only two adults attended the Azure-hooded Jay nests at Monteverde.

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