
Short Notes

Associations between nesting Village Weavers, *Ploceus cucullatus*, and other animal species in The Gambia

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Various associations that exist between African birds and other species at their nesting sites were documented in Moreau (1942). The colonial-nesting Village Weaver, *Ploceus cucullatus cucullatus*, is described as nesting in close proximity to raptors and man in West Africa, and to wasps in the Caribbean, where this bird has been introduced (Moreau 1942). These associations were explained in terms of predator avoidance.

In July and August 1999 we recorded observations of any animals discovered nesting or resting for over one hour within nesting aggregations of Village Weavers. We spent an estimated 500 man-hours observing 35 aggregations, which involved examining over 800 nests. Observations were conducted on and around Janjangbureh (Georgetown) Island in The Gambia. This island is approximately 18 km², and is located on the Gambia River 300 km east of Banjul and the Atlantic coast. The habitat on the island and in the surrounding mainland was Sahel scrub-savanna and gallery forest, interspersed with a small town, a few villages and numerous plantations of rice, maize, bananas and mangos.

Wasps

One old Village Weaver nest, 1 m high in a palm at the river's edge, was occupied by 15–20 wasps (cf. Moreau 1943). It was at least 2 m away from the nearest active nest, and in an area relatively sparse of nests. Other arthropods are also known to nest in association with weavers (Grimes 1973; Sharma 1991).

Black cobra, *Naja melanoleuca*

Cobras were sometimes found in the centre of winterthorn acacias where Village Weavers were nesting (cf. Maclean 1973). Two small overlapping acacias in the shallows of the river contained 30 Village Weaver nests near the periphery, and a 2-m-long cobra in the centre (<2 m from most nests). A few nests contained

eggs, and some others were in the process of being lined by the females, which they generally do 2–3 days before laying their first egg. Two days later the cobra was killed. Two days after that, no eggs were found in any of eight nests that were examined, although all were lined. Whether this was a result of snake predation or human disturbance cannot be determined. Neighbouring acacias contained several weaver nests with undamaged eggs.

Green mamba, *Dendroaspis viridis*

A thin, 0.7-m-long yellow-green to straw-coloured snake was found in a Village Weaver nest, 1.5 m above the ground at the edge of the river in a palm. Green snakes of the genus *Philothamnus* are very difficult to distinguish from a young mamba on sight (Villiers 1963), but even young green snakes are generally darker dorsally than the snake we saw. The green mamba has been known to eat weaver birds (Cansdale 1961). There were no active weaver nests within 2.5 m, but two abandoned unlined nests were within 0.2 m of it. The nest with the snake was at one end of a 20-m stretch of about 80 nests loosely aggregated in three palms and an acacia.

Boomslang, *Dispholidus typus*

A small (0.6–0.7 m) snake was discovered coiled in a weaver nest, and two local guides identified it as this notoriously poisonous but common species. The alternative would be an unusually slender egg-eating snake *Dasyptis fasciata*. The boomslang is known to prey on weaver colonies (Collias & Collias 1971), as is the egg-eating snake (Cansdale 1961).

Green-backed Heron, *Butorides striatus*

One winterthorn acacia in the shallows of the river housed 25–30 new Village Weaver nests, including some under construction. These were built around the

perimeter of the tree, as is usual. In the centre of the tree (0.5–1 m from the nearest nests) were four Green-backed Heron nests, all with eggs. The adult herons were often in the tree among the Village Weaver nests. Four days later, three of the four heron clutches had hatched. A week after this, some of the neighboring Village Weavers had begun laying. Green-backed Herons or their nests were found in several other trees containing Village Weaver nests, but none of these birds were observed breeding. Observations by Skead (1995) in South Africa suggest that in these associations Village Weavers may follow and preferentially nest near breeding herons rather than *vice versa*.

Yellow-backed Weaver, *Ploceus melanocephalus*

Yellow-backed Weaver nests are smaller and of finer materials than those of the Village Weaver, as described in Barlow & Wacher (1997). In our study area they were always found within 5 m of the river and less than 1.5 m above ground, and were usually in the same low palms and acacias on the river's edge that the Village Weavers occupied. They were not found in dense Village Weaver colonies, nor in aggregations of more than 50 Village Weaver nests.

1. Three Yellow-backed Weaver nests were established along a 10-m stretch of broad-leaved woody vegetation unoccupied by Village Weavers, but bordered at each end by a palm, one with a dense colony of >100 Village Weaver nests, and the other with 12 Village Weaver nests.
2. One Yellow-backed Weaver nest was found in a palm containing 20 Village Weaver nests. The Yellow-backed Weaver nest was surrounded on all sides but below by Village Weaver nests, the closest being 1 m away.
3. Ten Yellow-backed Weaver nests were scattered over a 100-m stretch of riverbank in acacias, along with 12–15 Village Weaver nests. Over such a broad area, this grouping cannot even be called an aggregation. No single acacia held more than three nests, but at times both species were in the same tree (1–2 m apart).

Black-necked Weaver, *Ploceus nigricollis*

One palm on the river contained a pair

of Black-necked Weavers, among 10 old Village Weaver nests, some new constructions, and two Yellow-backed Weaver nests. All nests were within an 8 m² area. This and the Yellow-backed Weaver were the only two weaver species seen to nest with the Village Weaver at our study site. Elsewhere several other weavers have been observed in such an association with Village Weavers (Chapin 1954; Din 1992).

Other birds

Only once was a bird other than a Village Weaver observed coming out of a Village Weaver nest. Unfortunately the small drab bird (possibly an estrildid finch or sparrow) was not identified and did not return to the nest. Village Weavers and other African weavers are known to nest in association with raptors (Moreau 1942; Maclean 1973; Walsh & Walsh 1976), but we did not observe this association.

Mice

Occasionally an old Village Weaver nest was found stuffed with finer nesting materials which protruded in various places. One such nest was found 2 m above ground on the river bank, 2.5 m from water's edge, and another 1 m above that. The only nests within 2 m were four old abandoned nests, one new nest and one in construction. A brown mouse (probably *Mus* sp.) leapt from the lower nest to the ground. No animal was in the higher nest. In a riverside aggregation in a palm of nine Village Weaver nests and three constructions in progress, another mouse was found in an old nest. Like the previous mouse, it had filled the nest cavity with soft, fine materials, and left the nest when disturbed. The nest was 2.5 m above ground, 2 m from water's edge.

Bats

In one 50-m stretch of riverside thinly scattered with Village Weaver nests (many of them old and abandoned) and Yellow-backed Weaver nests, small (80–100 mm long) brown bats were found in two adjacent newer nests hanging from vines, three in one nest and one in the other. Another nest, 2 m above the water and 1.5 m from the shore, contained six bats, apparently of the same species.

Humans

The Village Weaver's well-known propensity to nest in large colonies (100–300 nests) in the centre of African towns and villages, despite man's predatory influence (Collias & Collias 1959), has given this bird its common name. In our study area, Village Weavers foraged on rice and other grains in flocks of hundreds. Accordingly, large numbers of nests are built in the trees which border grain fields, along adjacent stretches of river, and along the irrigation ditches between the river and the fields.

Our observations suggest that Village Weaver aggressive displays and alarm calls are not likely to be reliable indicators of a negative (parasitic or predatory) relationship. No Village Weaver aggression was observed towards any species within their colonies, even known nest predators of Village Weavers. This indifference was particularly remarkable when weavers would incubate their eggs and engage in mating displays with a 2-m-long cobra in their midst. Maclean (1973) suggested that sociable weavers become quickly habituated to snakes in their nest mass, probably because the occurrence is so common. This habituation may be the case with Village Weavers as well. However, aggression was commonly observed among Village Weaver males towards each other, and to dummy models of Village Weavers and other birds placed so as to appear to be coming out of their nests (Lahti & Lahti, unpubl. data). Moreover, the use of a Village Weaver nest by another species does not necessarily indicate an eviction or predation of the Village Weavers by that species. Village Weaver aggregations almost always contain nests, especially on their periphery, which are never accepted by females (see also Collias & Collias 1964). Often entire aggregations are abandoned with no further construction or destruction of nests.

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