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Short Notes — Notes Courtes

Nest defence by Senegal Lapwings *Vanellus lugubris* against Night Adder *Causus maculatus*, in Gabon

The nest of a pair of Senegal Lapwings *Vanellus lugubris* was followed from the date of laying onwards, in the northern, savanna sector of the Lopé National Park, central Gabon. The habitat of the nest and its surroundings was a very short native grass sward that had been mown, which made observations very clear.

On 14 Aug 2008, both birds, which had been incubating three eggs for 24 days, were observed defending their nest against a small Night Adder *Causus maculatus* measuring *c.* 30 cm long. The lapwings had previously been seen to defend the nest successfully against a dog, and to drive a Common Bulbul *Pycnonotus barbatus* away from the nest area.

The two birds were normally seen together only when changing turns at incubating the eggs. However, at 6h30 (about 10 min. after sunrise), both parents were present around the nest. With binoculars it was seen that the eggs had not yet hatched, and that a small Night Adder was *c.* 5 m from the nest. Whenever the snake was motionless, one bird remained close by and watched it constantly while the other (larger, and presumably the male, after Urban *et al.* 1986) remained on the nest. Each time the snake moved, both birds attacked, often vocalising. The behaviour of the birds included squatting with both wings stretched out to the side, facing the snake, which had the double impact of displaying the boldly patterned wings and increasing the bird's apparent size. This behaviour was often followed by pecking at the snake's body. At times both birds stood side by side between the snake and the nest. They repeatedly pecked at the snake, despite it trying to bite them; the snake struck many times at the birds, which always successfully jumped out of the way. They also repeatedly picked it up and carried it, in a multiple series of "pick-up, walk a few paces, drop" steps, until about 10h30, when they had moved it *c.* 30 m away from the nest. The snake then left the nest area. It was examined from a distance of 1 m and did not have any visible injuries despite several hours of being pecked at. A few days after the attack all three eggs hatched successfully.

This and other species of plover are known to defend their nests and young vigorously and to display different types of anti-predator behaviour (Kis *et al.* 2000, Urban *et al.* 1986, Yasué & Dearden 2006). A study of Southern Lapwings *V. chilensis* showed a reptile-specific "pecking attack" similar to the one we observed (Walters 1990). Finally, evidence from a study of Killdeer *Charadrius vociferus* (Brunton 1990) suggests that the longer the eggs have been incubating, the more intense will be the parent's defence of the nest, and that males were more likely to be the most energetic defenders. Our sample size of one precludes any discussion of this.

It is likely that the eggs of *V. lugubris*, in their typical nesting sites on recently burned savanna or on very short grass (Urban *et al.* 1986), are preyed on by *C. maculatus* and other snakes. *C. maculatus* is typically found in the savannas of Lopé (Pauwels & Vandeweghe 2008) and throughout West and central Africa (Cansdale 1961). A recent review of studies that used video cameras to record events at bird's nests, revealed that snakes were often the most important type of nest predator (Weatherhead & Blouin-Demers 2004).

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