BOTHROPS ATROX (Common Lancehead). FORAGING BEHAVIOR and OPHIOPHAGY. Recently, Martins and Gordo (1993, Herpetol. Rev. 24:151-152) reported finding colubrid snakes in the stomachs of B. atrox collected in disturbed areas in
Pará, eastern Amazonian Brazil. Snakes were found only in juvenile B. atrox and comprised 7% of 44 prey items. Observations on snakes feeding under natural conditions are scarce in the literature. Here we describe an observation of a subadult female B. atrox eating a colubrid snake in primary forest in Central Amazonia, Brazil.

The observations were made during a radio-tracking study of B. atrox begun in December 1993 at Reserva Florestal Adolpho Ducke, a 10,000 ha tract of primary forest under protection situated 26 km north of Manaus, State of Amazonas, Central Amazonia, Brazil. On 2 December 1993, a subadult female (900 mm SVL, 137 mm Tl, 230 g) was surgically implanted with a 14-g radio transmitter (SI-2, Holohill Systems Ltd.) and released 21 h following capture. Within several days the snake seemed normal in its behavior and was tracked 2–3 times weekly thereafter. All observations reported here were made at distances of 2–5 m and did not appear to affect behavior even during close approaches by the observer (2 m). Voucher photographs of the predation are in the authors’ diapositive files.

On most occasions the tagged snake was found, both during the day and at night, to be tightly coiled on the leaf litter, either exposed or in retreats. However, at 1230 h on 17 April 1994, it was found moving through leaf litter on the forest floor. The snake was not followed at this time, but when relocated 2 h later, it was crawling slowly on the margin of a small stream (ca. 80 cm wide), and stopped upon our approach. One of us (MM) followed it from 1435–1525 h while it moved about 10 m on the stream margin, consistently probing the substrate (fallen leaves, branches, low plants, the bases of tree trunks) with frequent tongue flicks. At 1525 h it began to climb a hill and stopped on a fallen tree trunk (ca. 10 x 60 cm), 1.5 m from the stream. Three minutes later it was observed grasping and pulling an already immobile snake (Atractus torquatus, TBL ca. 600 mm) from behind the log (the strike was not witnessed because the snake’s head and prey were behind the log). The head and neck of prey were in the ground with three fourths of the body exposed. The B. atrox failed to pull the prey from underground and lost its grasp. The prey was grasped again near the cloaca, immediately released, and the pitviper’s mouth rubbed on the substrate (an apparent aversion by the predator to cloacal secretions of the prey). The prey was nosed several times in an apparent attempt to locate the head, and at 1535 h the anterior fifth of the body was grasped, pulled from the soil while moving 1.5 m backwards, and released. The body was probed in both directions until the head was seized and swallowing begun at 1539 h. At 1610 h the tip of the prey’s tail was hanging from the pitviper’s mouth and it had resumed tongue flicking. By 1613 h swallowing was complete and the pitviper remained still for 24 min before moving away.

Based on our records for A. torquatus, the prey’s mass was 40–60 g and using the initial weight of the B. atrox, the prey/predator mass ratio of this event would be 0.17–0.26. The observation described above corroborates our impression (unpubl. data) that although a primarily nocturnal, thermally oriented, sit-and-wait predator, B. atrox also forages actively during daytime for ectothermic prey using chemoreception.

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