

**Records of the bushdog, *Speothos venaticus*  
(Lund, 1842), from Guyana**

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The 1996 IUCN Red List categorizes the bushdog as VU C2a (Vulnerable. Small population size. Continuing decline. Fragmented populations: see Baillie and Groombridge 1996). Though the species is widespread, fieldguides frequently note that it is rare and difficult to see (e.g. Husson 1978; Eisenberg 1989; Emmons 1997), a view often shared by local hunters (see Strahl *et al.* 1992 and below). Though generally recorded from closed-canopy forest (e.g. Deutsch 1983; Peres 1991; Strahl *et al.* 1992), bushdog also use forest edge habitats and scrubby savannas (e.g. Sanderson 1949; Husson 1978; Defler 1986; Silveira *et al.* 1998). According to the IUCN/SSC Canid Action Plan, « Little is known, but the bushdog is rare throughout its range » (Ginsburg and Macdonald 1990, p. 32). The Action Plan considers the species a priority for census data for distribution and abundance. In Guyana, the only known specimens of *S. venaticus* are three individuals from the former Rupununi District (Engstrom and Lim, in press and see below). Here we report sightings of this elusive and enigmatic mammal from two localities in Guyana and record previously unreported collection localities for the country.

At 05:32 am on 3 August 1998, while watching white-collared swifts (*Streptoprocne zonaris*) roosting on the sandstone walls of Kaieteur Falls, Potaro Plateau, western Guyana, AB saw two bushdogs at a distance of approximately 7 m. Crouched in short grass at the base of a wall of *Clusia* (Clusiaceae) bushes and large terrestrial bromeliads (*Brocchinia micrantha*), they were clearly visible and were studied through binoculars. Contact time was less than 40 seconds, but the short tail and legs and the lack of contrasting head colouration separated them from other candidate small carnivore species of a similar size (i.e. jaguarundi, *Herpailurus yagouaroundi* and tayra, *Eira barbara*). Though aware of the observer's presence, the animals moved off unhurriedly across bare conglomerate rock towards denser vegetation. No vocalizations were heard. The site was subsequently examined. Although a beaten down patch of grass was found, there was no scat and, as expected on the naked rock, there were no prints. Prints had, however, been seen two days before in sand along a nearby creek. Though

6-10 appears to be a normal group size for the species (Bibden 1982; Eisenberg 1989; Peres 1991; Emmons 1997), there was no evidence of additional individuals in the observed group. The location's position close to the Potaro River is in line with the frequently-made assertion (see Langguth 1975; Peres 1991; Strahl *et al.* 1992) that the species is never found far from water. The presence of bushdog at Kaieteur Falls validates the assertion of Tate (1939) that this species would eventually be recorded in the Guyanese highlands.

The site (5°10'43 N, 59°28'47 W, location 3 of Figure 1) is within the Kaieteur National Park. The Chief Warden, Michael Phang reported (Phang, pers. comm. to AB and RS, 1998) that a pair of bushdog had been resident in the area adjacent to the falls for nearly a year. Carol Kelloff (Smithsonian Institution) saw these animals several times during her botanical studies at Kaieteur (Kelloff, pers. comm. to AB and RS, 1998). Several months before AB's observation, however, they had departed, following an encounter with stone-throwing tourists (Phang, pers. comm. to AB, 1998). In a recent mammal survey of the south-west of the Potaro Plateau adjacent to the National Park (Barnett and Shapley 1999), bushdog was known to all but 4 of 27 interviewees (all either Patamona indigenous people or other long-term residents). In all cases it was considered rare; most older hunters recalled having seen it on less than a dozen occasions in their lifetimes.

On 25 March 1998 members of a joint survey team from Philadelphia Zoo, the Karanambo Trust and the Iwokrama International Centre for Rain Forest Conservation and Development observed a male bushdog pup (estimated at approximately 2 months old) being kept as a pet at an Amerindian's home near Annai village (03°57'N, 59°06'W, and location 5 of Figure 1) (Reginald Hoyt, pers. comm. to AB 1998 and unpublished data). The pup had been captured recently near a small pond not far from the home, after the accompanying adult had been chased away as it was getting a drink (this was during a severe drought; see Anon. 1998a,b). There was reportedly a second pup, but it had died (Eisenberg 1989 gives three to five as the litter size). The surviving pup was being kept with a group of domestic dogs and appeared to be in poor health (possibly suffering from internal parasites). The home was located in savanna habitat, but lay close to hills containing tree cover. Elsewhere in Guyana, the species has been recorded from the Berbice and Corentyne Districts (Quelch 1901), Iwokrama (H. ter Steege, pers. comm. to AB, 1998), the Kanuku Mountains (Parker *et al.* 1993), Mabura Hill (ter Steege *et al.* 1996) and Timberhead (Richard Ryan, pers. comm. to AB, 1998) (see Figure 1 for site locations). Bushdog is also listed (as *Icticyon venaticus*) by Beebe (1919) in his paper on the vertebrates of the Bartica District, Guyana. However, Beebe did not collect the species in Bartica (see Anthony 1921) and is, in fact, reporting the record(s) of Quelch (1901).

Taken together, these sightings indicate that, though rarely encountered, bushdog is widely spread in Guyana and occupies a variety of habitats ranging from the scrub forest around Kaieteur Falls, and the 'Medium, Evergreen Montane Forest' that occurs over much of the rest of the Potaro Plateau and Kanukus to the 'Lowland Scrub Savanna' around Annai (see Huber *et al.* 1995, and Figure 1), the white-sand savanna around Timberhead (location 1, Figure 1) and the lowland rainforest of Mabura Hill (location 2, Figure 1). Most sightings appear to have been close to water and, though this may represent sampling bias (see Funk *et al.* 1999), it may also reflect the known habitat preferences of *S. venaticus* (see above).

Three specimens of young *S. venaticus*, obtained by Stanley E. Brock, are deposited at the Royal Ontario Museum, Toronto. These represent previously unpublished locality records for the species and are the only records of this species from Guyana

documented by voucher specimens (Engstrom and Lim in press). One female (ROM 44532) approximately 8 weeks of age was captured along the Kuitaro River in south-western Guyana in November, 1967. Two other captive born females (ROM 51652, 51653), one stillborn neonate and one 12-day old juvenile were obtained in February 1969. The captive parent was from the former Rupununi District (southwestern

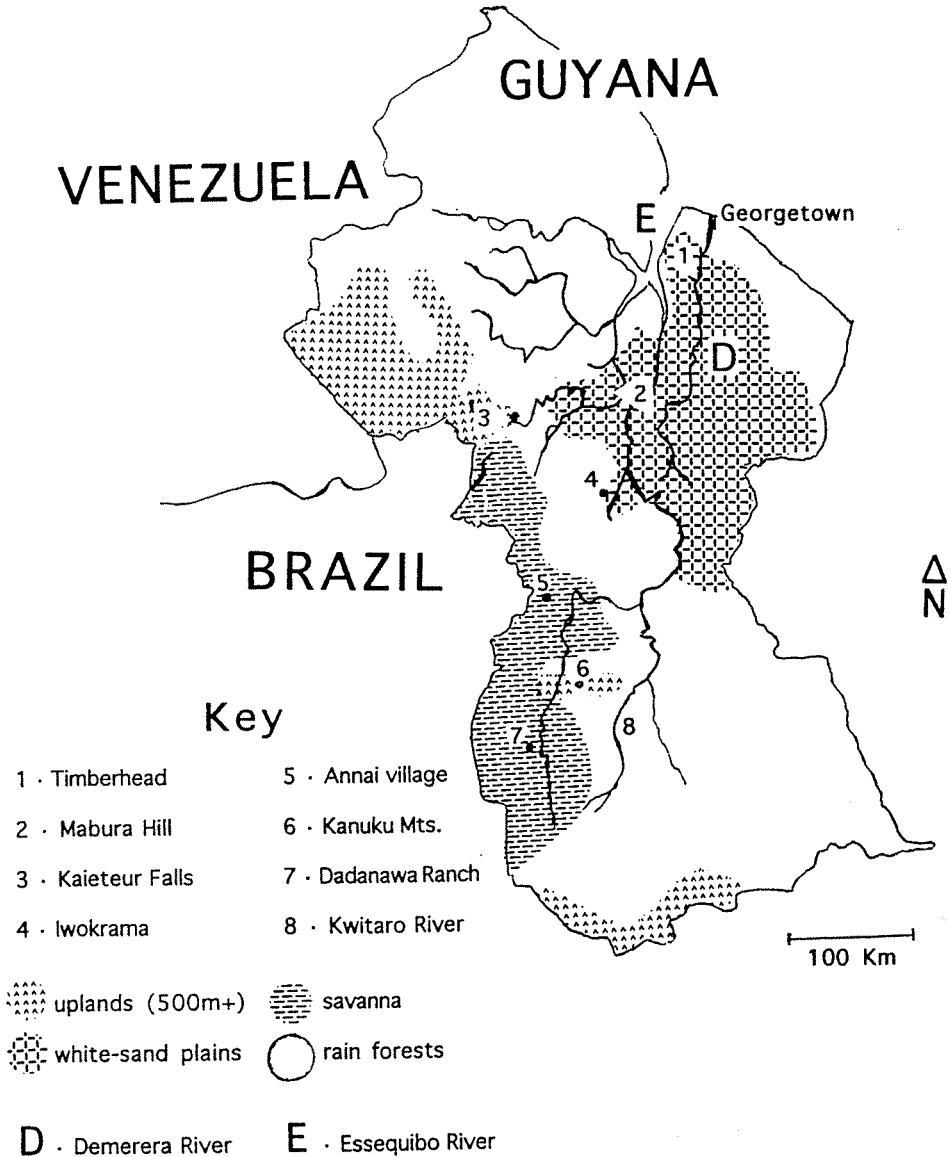


Fig. 1. - Locations mentioned in the text and habitat distributions within Guyana (simplified from Huber *et al.* 1995).

Guyana), and was probably held near the Dadanawa Ranch. The Kuitaro River runs through tall, evergreen hill-land forest and low, semi-deciduous, seasonal forest near the edge of the southwestern savanna (Huber *et al.* 1995). Dadanawa Ranch is located in riparian, gallery forest along the Rupununi River within the southwestern savanna, although the exact original location of the parents of the individuals born near Dadanawa is unknown.

Brisbal (1987) and Strahl *et al.* (1992) report *S. venaticus* from the highland areas of Venezuela adjacent to the Potaro Plateau. Ochoa *et al.* (1993) report the species from lowland forest and montane forest in the Canaima National Park, Bolivar State, Venezuela (see Figure 1). Reported group sizes vary widely from 2 to 10 (Kleinman 1972; Fonseca and Redford 1984; Defler 1986).

Studies of wild hunting dog are considered a priority by Ginsburg and Macdonald (1990). We suggest that the Kaieteur National Park would make a good site for such work. The National Park provides legal protection for both bushdog and paca (*Agouti paca*), a prime bushdog prey species (see Tate 1931, Bibden 1982; Deutsch 1983; Peres 1991, Strahl *et al.* 1992) that has suffered much from over-hunting in other parts of its range (Grimwood 1969; Redford and Padoch 1992). Such studies could possibly include the use of the remote camera techniques that have elsewhere proved so useful in surveying elusive small carnivores (e.g. Mudappa 1998). If successful, the survey could be up-graded to include detailed studies using video surveillance (see Stewart *et al.* 1997). Such research could provide valuable information to assist in the conservation of this rare and enigmatic canid.

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### **New altitudinal record for *Lontra longicaudis* (Carnivora : Mustelidae) in Ecuador**

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The Neotropical otter, *Lontra longicaudis* (Olfers, 1818), is widely distributed in the Neotropic, from northern Mexico to southeastern Argentina (Parera 1993 ; Emmons 1997 ; Larivière 1999 ; Eisenberg and Redford 1999). In Ecuador, *L. longicaudis* was known to occur only in the western and eastern lowlands and mountain slopes on both