

Preliminary survey of the avifauna of Mt Tchabal Mbabo, west-central Cameroon

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Summary

The montane forests of western Cameroon are well known for their endemic birds. The most northerly such forests probably occur on Mt Tchabal Mbabo, where a preliminary survey of the avifauna in 1990 found 12 montane species, of which six represented significant range extensions, among them the threatened *Ploceus bannermani*. Given the increasing human pressures on other montane forests in Cameroon, Mt Tchabal Mbabo may be attractive for future conservation because of its comparative lack of human disturbance. Densities of indigenous people are low and there is a lack of significant hunting and firewood-gathering, the precipitous nature of the northern slope makes human intrusions difficult, and the lack of human disturbance may mean that local animal populations are stable.

Les forêts d'altitude de l'ouest du Cameroun sont bien connues pour leurs populations endémiques d'oiseaux. Les forêts les plus au nord sont celles du Mont Tchabal Mbabo, où un recensement préliminaire de la faune aviaire en 1990 a révélé 12 espèces, dont six avaient une aire de répartition relativement grande, y compris l'espèce menacée *Ploceus bannermani*. Étant donné l'accroissement des pressions humaines sur les autres forêts d'altitude au Cameroun, le Mont Tchabal Mbabo pourrait se révéler intéressant pour des programmes de conservation futurs, compte tenu d'une perturbation humaine relativement inexistante. Les densités de population indigène y sont faibles, et la chasse ainsi que le ramassage du bois pour les besoins domestiques ne sont pas significatifs. Les pentes abruptes du nord rendent difficile toute intrusion humaine, et l'absence de perturbations dues à l'homme pourrait signifier la stabilité des populations animales locales.

Introduction

Endemism among montane birds is widespread in western Cameroon and includes some of the rarest and most threatened species in Africa (Louette 1981, Collar and Stuart 1985). Since the early 1980s many of the major mountain peaks in Cameroon have been surveyed (Collar and Stuart 1985, 1988, Stuart 1986). In this paper we report results of a preliminary ornithological survey of Mt Tchabal Mbabo, probably the northernmost point where montane forest may be found in Cameroon (Figure 1). Despite being among the highest mountains in Cameroon there have apparently been no attempts to survey the wet montane forests of Mt Tchabal Mbabo for birds. The avifauna is poorly known although several authors have identified biotic similarities of the region with montane regions to the south (Reichenow 1910, Bates 1924, Bannerman and Bates 1924).

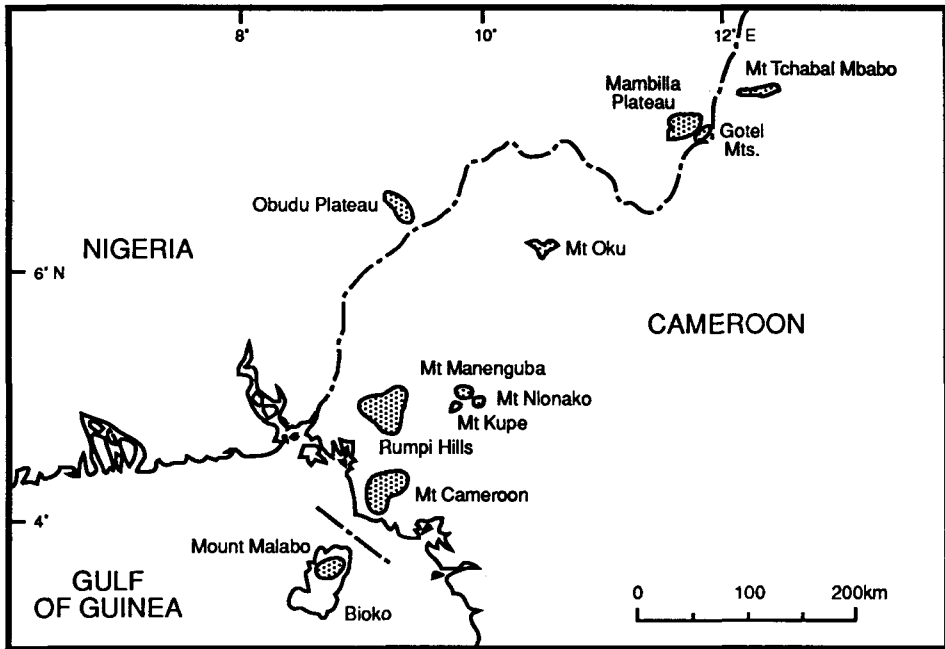


Figure 1. Major montane regions of western Cameroon showing the location of Mt Tchabal Mbabo.

Mt Tchabal Mbabo lies along the border with Nigeria ($7^{\circ}16'N$ $12^{\circ}09'E$) and forms an approximate 30 km east–west ridge reaching a maximum elevation of 2,400 m toward its central point. From the south the mountain rises gradually from an elevation of 1,200 m and has a habitat characterized by heavily grazed savanna transected by small streams and small gallery forests. There is little agricultural activity with the exception of grazing and some maize grown near villages. Human densities are low, with most villages widely dispersed and consisting of a few huts. In contrast, the uninhabited north slope of the mountain is extremely steep, rising 1,700 m in less than 8 km and under a rainshadow, with wet montane forest extending up drainages formed by knife-edge volcanic ridges (Figure 2). Wooded savanna at the northern base of the mountain joins the boundary with Faro Fauna Reserve 65 km to the north-west.

Methods

We conducted the survey from 1 to 5 September 1990, during the major rainy season. Two of the days were spent ascending and descending the south side of the mountain and recording the species seen between the altitudes of 1,300 m and 2,200 m. Intensive surveys were conducted for three days on the north-facing slope in the montane forest and forest edge at elevations between 1,500 m and 1,840 m. Surveys were conducted by slowly walking through the forest or savanna/forest edge, and recording all birds seen and heard. In addition, mist-netting was also conducted for three consecutive days in the forest



Figure 2. The montane forests on the northern slope of Tchabal Mbabo. (Photo: T. B. Smith)

at an elevation of 1,840 m. Nets were opened at sunrise (06h00) and closed at sunset (17h30) or during rains. Four nylon nets, 12 m long, 3 m high and with 30 mm \times 30 mm mesh, were employed. A total of 624 metre-hours (metres \times number of hours open) of netting was conducted. Captured individuals were measured (with a blood and feather sample being collected), banded and released following the techniques described by Smith (1990).

Results and discussion

The montane forests of western Cameroon and adjacent Nigeria, including the Obudu and Mambilla Plateaus, are noted for their high degree of endemism (Serle 1950, 1957, 1965, Elgood 1981, Louette 1981). Of the 53 montane forest bird species which occur in this region, 20 are endemic (Stuart 1986). Table 1 summarizes the species found on Tchabal Mbabo during this survey and includes 12 montane species. Six montane species are recorded for the first time from Tchabal Mbabo and represent considerable northerly extensions of their known range. These species are: *Bradypterus cinnamomeus*, *Cisticola hunteri*, *Apalis cinerea*, *Nectarinia oritis*, *Nesocharis ansorgei*, and *Ploceus bannermani*. Of these, Collar and Stuart (1985) cite *P. bannermani* as Vulnerable with numbers declining due primarily to habitat destruction. We found it along montane forest edge, in habitat similar to that from which it has previously been recorded (Serle, 1950, 1965, Elgood 1981). The occurrence of this species on Mt Tchabal Mbabo extends its range in Cameroon by approximately 200 km. Sixteen montane bird

species are now known from the Tchabal Mbabo region. In addition to the 12 species in Table 1, there are records of *Aplopelia larvata*, *Pogoniulus coryphaeus*, *Alcippe abyssinica* and *Muscicapa adusta* (Reichenow 1910, Bannerman and Bates 1924, Louette 1981). The presence of these montane species on Tchabal Mbabo is perhaps to be expected in the light of recent ornithological surveys of the Mambilla Plateau and Gotel Mountains (Figure 1) in neighbouring Nigeria and the apparent physiographic and vegetational similarities with those regions (Ash *et al.* 1989, Dowsett-Lemaire 1989, Dowsett-Lemaire and Dowsett 1989).

The mountain may also hold considerable numbers of primate species. During surveys we encountered troops of black-and-white colobus *Colobus polykomos* daily. In contrast to the majority of forested regions in southern Cameroon these primates showed little fear of humans (T. Smith unpublished data). Local inhabitants indicated the presence of several other primate species in the montane forest.

Table 1. Habitat use and relative species abundance for species observed and/or mist-netted on Mt Tchabal Mbabo.

Species	Habitat	abundance
White-headed Vulture <i>Trigonoceps occipitalis</i>	S	1
Rüppell's Griffon <i>Gyps rueppellii</i>	S	2
White-backed Vulture <i>Gyps (bengalensis) africanus</i>	S	1
Hooded Vulture <i>Necrosyrtes monachus</i>	S	3
Palm-nut Vulture <i>Gypohierax angolensis</i>	S	1
Bateleur <i>Terathopius ecaudatus</i>	S	1
Red-necked Buzzard <i>Buteo auguralis</i>	S	1
Long-crested Eagle <i>Lophoaelus occipitalis</i>	S-F	1
Wahlberg's Eagle <i>Aquila wahlbergi</i>	S	1
Black-shouldered Kite <i>Elanus caeruleus</i>	S	1
Common Kestrel <i>Falco tinnunculus</i>	S	1
Double-spurred Francolin <i>Francolinus bicalcaratus</i>	S	3
Scaly Francolin <i>Francolinus squamatus</i>	S-F	1
Tambourine Dove <i>Turtur tympanistris</i> ⁴	F	1
Guinea Turaco <i>Tauraco persa</i>	F	2
Klaas's Cuckoo <i>Chrysococcyx klaas</i>	S-F	2
Senegal Coucal <i>Centropus senegalensis</i>	S-F	1
Fraser's Eagle Owl <i>Bubo poensis</i>	F	1
Common Swift <i>Apus apus</i>	S	2
Little Swift <i>Apus affinis</i>	S, F	2
Bates's Swift <i>Apus batesi</i>	F	1
Speckled Mousebird <i>Colius striatus</i>	S-F	3
Little Bee-eater <i>Merops pusillus</i>	S	1
Red-throated Bee-eater <i>Merops bullocki</i>	S,S-F	2
Double-toothed Barbet <i>Lybius bidentatus</i>	S-F	3
Grey Woodpecker <i>Mesopicos goertae</i>	F	1
Banded Martin <i>Riparia cincta</i>	S,S-F	1
Mosque Swallow <i>Hirundo senegalensis</i>	S,S-F	2
Red-rumped Swallow <i>Hirundo daurica</i>	S	2
Petit's Sawwing <i>Psalidoprocne petiti</i>	S,S-F	3
Yellow-throated Long-claw <i>Macromyx croceus</i>	S	2
Petit's Cuckoo-shrike <i>Campephaga petiti</i>	S-F	1
Garden Bulbul <i>Pycnonotus barbatus</i> ⁴	S,S-F,F	3

Table 1 (cont.)

Species	Habitat	abundance
Little Greenbul <i>Andropadus virens</i> ⁴	F	2
Grey-throated Greenbul <i>Andropadus tephrolaemus</i> ^{4,5}	F	3
Black-crowned Tchagra <i>Tchagra senegala</i>	S,S-F	1
Yellow-breasted Boubou <i>Laniarius atroflavus</i> ⁵	S-F,F	3
Fiscal Shrike <i>Lanius collaris</i>	S-F	1
Stonechat <i>Saxicola torquata</i>	S	2
White-crowned Cliff-chat <i>Thamnolaea coronata</i>	S	1
Grey-winged Robin-chat <i>Cossypha polioptera</i> ⁴	S-F	1
Snowy-crowned Robin-chat <i>Cossypha niveicapilla</i> ⁴	S-F	1
African Thrush <i>Turdus pelios</i> ⁴	S-F	2
Blackcap Babbler <i>Turdoides reinwardtii</i>	S,S-F	2
Cinnamon Bracken-warbler <i>Bradypterus cinnamomeus</i> ⁵	F,S-F	2
Brown-backed Cisticola <i>Cisticola (hunteri) discolor</i> ⁵	F	3
Black-collared Apalis <i>Apalis pulchra</i> ^{4,5}	F	3
Grey Apalis <i>Apalis cinerea</i> ⁵	F	2
Brown-throated Wattle-eye <i>Platysteira cyanea</i>	S-F,F	3
African Blue-flycatcher <i>Elminia longicauda</i> ⁴	S-F	3
Cameroon Sunbird <i>Nectarinia oritis</i> ^{4,5}	F	2
Northern Double-collared Sunbird <i>Nectarinia preussi</i> ^{4,5}	F	3
African Yellow White-eye <i>Zosterops senegalensis</i>	S-F,F	2
Thick-billed Seed-eater <i>Serinus burtoni</i> ⁵	F	1
Oriole Finch <i>Linurgus olivaceus</i> ⁵	S-F,F	3
Brown Twinspot <i>Clytospiza monteiri</i>	S-F,F	1
Dybowski's Twinspot <i>Euschistospiza dybowski</i>	S-F,F	1
Fernando Po Olive-back <i>Nesocharis (ansorgei) shelleyi</i> ⁵	S-F	3
Black-crowned Waxbill <i>Estrilda nonnula</i>	S,S-F	3
Baglafaecht Weaver <i>Ploceus baglafaecht</i>	S,S-F	2
Bannerman's Weaver <i>Ploceus bannermani</i> ⁵	S-F	2
Village Weaver <i>Ploceus cucullatus</i>	S,S-F	1
Red-collared Widowbird <i>Euplectes ardens</i>	S	3
Yellow Bishop <i>Euplectes capensis</i>	S,S-F	3
Pin-tailed Whydah <i>Vidua macroura</i>	S	1
Yellow-billed Oxpecker <i>Buphagus africanus</i>	S	3
Square-tailed Drongo <i>Dicrurus ludwigii</i> ⁴	S-F,F	2

1, observed once or rarely; 2, observed more than once but not common; 3, observed daily, common; 4, mist-netted in montane forest; 5, montane species. S, savanna; S-F, savanna/montane forest edge; F, montane forest.

Conservation

Although the data presented here are preliminary and additional surveys of both plants and animals are necessary, we believe Mt Tchabal Mbabo holds considerable potential for future conservation efforts. The region encompassing the mountain is sparsely populated, with human activities limited to cultivation of crops and cattle-grazing. Areas of cultivation are small and restricted to the southern slope far from the forest and generally near habitations. While cattle-grazing extends to the border of the forest, there was no evidence of destruction by cattle within the forest and there appears to be little or no hunting or wood-cutting. Additionally, the rough and precipitous nature of the forest makes

human intrusion difficult and dangerous, and in fact many of the local inhabitants were wary of venturing into the forest. This is in contrast to many of the montane forests to the south, including Mts Cameroon, Kupe and Oku (Kilum), which are well known for their endemics but where agricultural encroachment, overgrazing and hunting pressure have been intense (Collar and Stuart 1988).

Considerable pristine habitat could be conserved if the north slope of Tchabal Mbabo could be combined with the lower wooded savanna to the north, extending to encompass Faro Game Reserve. Local inhabitants indicated that some savanna species (including lion *Panthera leo*), which are common in the reserve, utilize the montane forest during the dry season. Therefore, combining protection for the mountain with the reserve would protect a diverse array of organisms in the varied habitats and potentially an important altitudinal migration corridor.

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