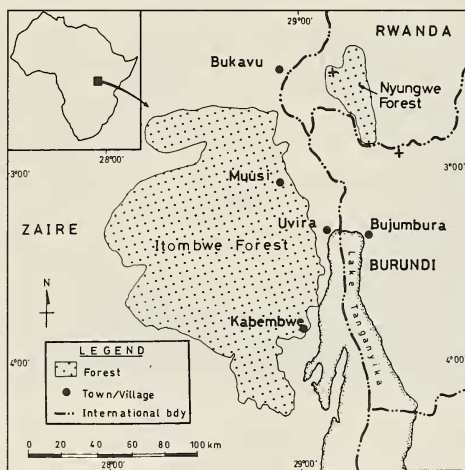


Rediscovery of the Congo Bay (Itombwe) Owl *Phodilus prigoginei*

Thomas M. Butynski, Upoki Agenonga, Bagurubumwe Ndera & John F. Hart

Identified from just a single skin obtained 45 years ago and not collected since, the Congo Bay Owl *Phodilus prigoginei* is one of Africa's least known birds. The type specimen, a female, was obtained in 1951 by Alexandre Prigogine's collectors at Muusi (3°04'S; 28°48'E, 2,430 m asl) on the Itombwe Massif off the north-west corner of Lake Tanganyika in eastern Zaire (see Map 1)^{14,18}. This discovery is remarkable since it represents the only bay owl in Africa.



Map 1. Location of Itombwe forest.

Sometimes referred to as the Itombwe or Prigogine's Owl, the Congo Bay Owl, is one of only two species in the genus *Phodilus*, the other being the Oriental Bay Owl *P. badius*, a widespread but little-known lowland forest bird with a distribution from northern India to Borneo^{1,2,8}.

In addition to the Congo Bay Owl there are at least three other species of bird, all in monotypic genera, which are endemic to the Albertine Rift Afromontane Region and which are also believed to have their closest relatives in Asia¹². These are the African Green Broadbill *Pseudocalyptomena graueri*, Grauer's Warbler *Graueria vittata* and Neumann's Short-tailed Warbler *Hemitesia neumanni*. Two other species with Asian affinities, the Congo Peacock *Afropavo congensis* and Latham's Forest Francolin *Francolinus lathamii*, occur in the north-west part of Itombwe in transition forest^{6,9,12,13}. The presence of these six species would seem to establish clear links with the Oriental avifauna — links that were broken during, if not earlier than, the Miocene⁶.

Prigogine's collectors searched in vain from 1952 to 1964 for additional specimens of the Congo Bay Owl at Itombwe and in several other montane forests of the Albertine (Western) Rift. Many other attempts to locate it have also been unsuccessful. In 1974 L. and P. Browne sighted what may have been the species at 2,500 m in a small patch of forest on the Rwegura Tea Estate in Burundi^{4,7}. In 1990, while in the Nyungwe Forest of south-west Rwanda at 2,000 m, R.J. Dowsett and F. Dowsett-Lemaire recorded what they strongly suspect to be the call of this owl⁷. Both of these records are from localities which are roughly 50 km across the Rift Valley from where the type was obtained (see Map 1).

Owing largely to the remoteness of the area and political disturbances, there has been little scientific work at Itombwe since the early 1960s. For four weeks in April and May 1996 we participated on The Wildlife Conservation Society's biological survey of southern Itombwe. The focus of this survey was on the birds and larger mammals, particularly Grauer's Gorillas *Gorilla gorilla graueri* and Chimpanzees *Pan troglodytes schweinfurthi*. Most of the work was conducted in grassland, gallery montane forest, montane forest and bamboo forest at elevations ranging from 1,130 to 2,350 m.

Three weeks after entering Itombwe and sampling montane forest and bamboo forest, we established a camp about 1 km west of Kabembwe Village (see Map) (3°52'S; 28°56'E, 1,840 m) on the extreme south-east corner of Itombwe. This is an area of extensive gallery montane forest. To the north is a 400–500 km² tract of montane forest and to the south the gallery forest gives way to highland grassland and pasture. The area, to at least 1 km around the camp, was lightly to moderately disturbed as a result of the activities of wood-cutters, hunters, farmers and pastoralists. Most large trees suitable for lumber had been removed and few, if any, large mammals remained, cattle grazed the grasslands, fires were probably fairly frequently set in attempts to improve grazing, and a light scattering of old and new agricultural clearings was present.

On 1 May, a small owl was captured at 1,830 m in a mist-net placed about 50 m within fairly dense, slightly degraded forest. The owl was apparently flying about 1.3 m above the ground when it entered the net. The bird matched closely the description and

measurements of the Congo Bay Owl^{14,18,19}. Six photographs were sent to M. Louette in Tervuren, who examined them against the type specimen and confirmed that the captured bird was indeed the Congo Bay Owl.

The extremely beautiful, rich chestnut, buff, black and white bird had a well-developed brood patch and was presumably a female (the male of this species remains unknown). It was measured, weighed, described in detail, photographed, banded and released. The owl was 24 cm in length, had a wing-span of 63 cm, and weighed 195 g.

This record dispels the notion that the Congo Bay Owl is extinct. It also extends the species' known range southwards for approximately 95 km and the altitudinal range downwards by about 600 m. Prior to this capture there was speculation on whether the Congo Bay Owl was a forest or grassland species. We now know that it, at least sometimes, uses both habitats. It should also be noted that, upon release, the specimen flew about 50 m over 1 m tall grass and into gallery forest.

While there is no detailed description of the habitat in which the type was collected, we know that it was found at 14.00 hr sleeping in the grass of a mountain forest clearing at 2,430 m¹³. In Itombwe, the vegetation at this elevation is grassland/bamboo forest mosaic. Our specimen was obtained in montane gallery forest where the hilltops and upper slopes are covered with grass and light bush, and the lower slopes and valleys with montane forest. It appears that the Congo Bay Owl may be a species that requires a mosaic of grassland and forest (montane forest or bamboo forest), perhaps resting during the day in the grassland and hunting by night within the forest or on the forest edge.

Itombwe is the only forest in central Africa with a large area of highland grassland/forest/bamboo mosaic vegetation. This may explain why this owl is, thus far, known only from Itombwe. That several thousand square kilometres of Itombwe are covered with these mosaic vegetation types is encouraging for the survival of this owl. It is also encouraging that we netted it in a lightly disturbed area, which indicates that the bird will tolerate at least some human activity. It should also be noted that the habitat in which the species was obtained is similar to that in Nyungwe forest, where R.J. Dowsett and F. Dowsett-Lemaire suspect they heard the owl⁷. This gives additional hope that it may indeed be present at that site.

Prigogine¹⁴ suggested that the Oriental Bay Owl and Congo Bay Owl are less closely related than was once thought. The Oriental Bay Owl is lighter in colour and has a less compressed bill, with larger feet

and talons. It nests in large hollows in trees, where adults also rest during the day^{1,2,8,11}. Unlike the Congo Bay Owl, it is apparently not known to occur above 1,500 m, to rest on the ground in grassland, or to be associated with grassland/forest mosaic vegetation types.

While working at Itombwe, one of us (TMB) searched most nights for nocturnal birds and mammals for 1–2 hours before dawn and 1–3 hours after dusk. Although several species of owl, nightjar and galago were heard and recorded, no calls were heard which might be attributed to the Congo Bay Owl.

Conservation importance of Itombwe

The part of Itombwe which is of conservation importance ranges in elevation from 600 to 3,470 m, covers roughly 16,000 km², and holds the largest tracts of transition forest, montane forest and bamboo in central Africa¹⁵. A total of 563 bird species are recorded for Itombwe^{3,13,15,16,17}. Of these, about 60 percent are 'forest dependent'^{13,17}. This makes Itombwe the richest single forest for birds in Africa²⁰. In addition, Itombwe holds about half (83) the total number of montane bird species in the whole of Africa, at least 94 percent (98 of 104) of the bird species characteristic of the transition and montane forests of the Albertine (Western) Rift, and no less than 89 percent (34 of 38) of montane and transition-forest bird species endemic to the Albertine Rift¹⁷. The birds in this last category include three species listed in the Red Data Book as being of 'Indeterminate' status: Congo Bay Owl, Schouteden's Swift *Schoutedenapus schoutedeni*, Prigogine's Nightjar *Caprimulgus prigoginei*; there are also five 'Rare' species and nine species listed as either 'Of special concern' or 'Near-threatened'^{4,10}. It is not surprising, therefore, that Itombwe is presently ranked as the single most important forest for bird conservation in continental Africa⁵. What is surprising, however, is that no part of Itombwe enjoys legal conservation status.

While large areas of all major vegetation types remain more or less intact in Itombwe, this forest is under increasing threat from pastoralists, farmers, pit-sawyers, miners and hunters. The human population in the region continues to grow rapidly and thousands of refugees from Burundi and Rwanda live in camps at the base of Itombwe's eastern escarpment and to the north. Of particular concern is the rapidly advancing agricultural front we observed all along the southern and western edges of the gallery montane forest system, in which we found the Congo Bay Owl. This is the favoured habitat for conversion to pasture and to maize fields. The rate of conversion has obviously accelerated enormously in the last two years as fam-

ine, related to failing corn crops, forces people to open up much larger areas than was formerly the case.

Conservation action

Conservation action is needed in order to minimise, and eventually halt, the damage to the Itombwe Massif and its wildlife. Possible approaches to such action have been outlined by Prigogine¹⁷ and Wilson and Catsis²⁰, and further discussions on this issue are now occurring in light of the current situation. Whatever approaches are chosen to help maintain the high conservation values of Itombwe, they must take into careful consideration the serious current political, economic, and security problems of the region, the needs of the dense human population which borders the Itombwe Massif, as well as those of the sparse human population within.

Regarding the particular needs of the Congo Bay Owl, the paucity of information on its distribution, numbers, ecology and behaviour remains one of the more serious obstacles to its conservation. The search for, and study of, this species in Itombwe and in other montane forests of the Albertine Rift must continue.

Acknowledgements

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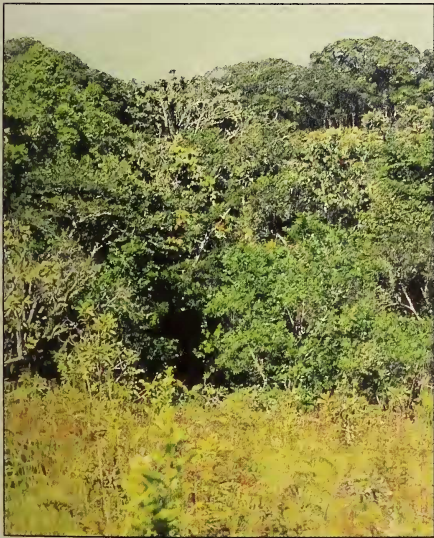
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- ^aZoo Atlanta, National Museums of Kenya, P.O. Box 24434, Nairobi, Kenya.
^bFaculté des Sciences, Université de Kisangani, B.P. 2012, Kisangani, Zaire.
^cInstitut Zairois pour la Conservation de la Nature, B.P. 660, Goma, Nord Kivu, Zaire.
^dThe Wildlife Conservation Society, Bronx Zoo, Bronx, New York, 10460, USA.



Congo Bay Owl, *Phodilus prigoginei* wing-stretching, Itombwe, May 1996 (T. Butynski).



Gallery Montane forest and highland savanna near Kabembwe, Itombwe Forest, in which Congo Bay Owl *Phodilus prigoginei* was captured (T. Butynski).



Head on portrait of Congo Bay Owl, *Phodilus prigoginei* Itombwe, May 1996 (T. Butynski).