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woodpecker on their list) and *Apalis binotata*. Thus of the 26 species claimed as new, five had already been recorded by Prigogine or have to be deleted, whereas six others were new but are not indicated as such; the number of species new to the Idjwi list therefore is 27. As Prigogine listed 118 species (not 115, as stated by Kizungu *et al.*), the total number of species for Idjwi stands at 145.

No fewer than 61 species recorded by Prigogine (1967, 1973) were not found by Kizungu *et al.* (2002), although some of these were common. These authors claim that extensive deforestation has resulted in the disappearance of many species, but not all those on Prigogine's list that they missed were forest birds, and in our experience many of those that do mainly inhabit forest in this region can be found in secondary situations. We must therefore question the thoroughness of their survey. In any case, the supposed disappearance of such species as *Apalis rufogularis eidos*, *Oriolus percivali*, *Coracina caesia* and *Nectarinia purpureiventris* (for example) requires a more detailed and convincing argument than is put forward here. The avifauna of Idjwi island remains in need of a thorough survey.

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## Ectoparasite gleaning of Sitatunga *Tragelaphus spekeii* by Fire-crested Alethe *Alethe diademata* and a bulbul

Most of the documented bird-mammal associations in Africa have been observed in savannas (reviewed in Dean & MacDonald 1981, Vernon & Dean 1988) and include a wide diversity of both bird and mammal species, with most interactions noted being birds taking prey flushed by mammals. However, very few such interactions have been documented within African forests (Vernon & Dean 1988), where visibility is poor and mammals tend to flee when humans approach. This note describes one of the

few records of forest passerines gleaning ecoparasites from a large mammal in closed canopy rainforest in Africa. The only previous record of gleaning by birds in closed forests quoted in Dean & MacDonald (1981) is of Chorister Robin *Cossypha dichroa* gleaning a Nyala *Tragelaphus angasi*.

Ruggiero & Eves (1998) reported bird-mammal associations from the Central African forest in open, sedge-dominated clearings where visibility of mammals was good and observers were located on viewing platforms. Most observations were of birds catching insects disturbed by the mammals' activities, although some birds gleaned ectoparasites from their skins. All their observations were therefore made in roughly the same conditions as a savanna. These clearings are a striking feature of areas of the lowland forests of Central Africa, and are very attractive to some large mammalian herbivores, including Gorilla Gorilla gorilla, Forest Elephant Loxodonta africana cyclotis, and the aquatic antelope, the Sitatunga Tragelaphus spekeii (e.g. Blake 2002, Magliocca et al. 2002, Vanleeuwe et al. 1998).

Some aspects of Sitatunga population dynamics and ecology have been documented (Manning 1983, Magliocca *et al.* 2002, Owen 1970, Starin 2000) and Ruggiero & Eves (1998) documented three bird species (African Jacana *Actophilornis africanus*, Yellow-billed Oxpecker *Buphagus africanus* and Great Egret *Egretta alba*) gleaning arthropods from their skin. These three bird species, however, tend to be confined to open country, or to isolated patches of dry or swampy savannas embedded within the forest zone. No bird species was observed by these authors to glean arthropods from ungulates whilst actually within the forest itself.

The Mbeli clearing in the northern Republic of Congo is one of the sites mentioned by Ruggiero & Eves (1998). It lies 5 km inside the well-protected Nouabale-Ndoki National Park. There has been an almost continuous research presence (focusing on Gorillas) at the clearing since 1993 (e.g. Parnell 2002, Stokes et al. in press), and most of the large mammals visiting the clearing are habituated to human presence, especially at and around the viewing platform. Sitatunga are particularly tame and can be seen resting and feeding both in the clearing and in the closed swamp forest near the platform, often at distances of 10–20 m from the observer.

On 12 Mar 2001, a greenish coloured (unidentified) bulbul (Pycnonotidae) was observed sitting on the back of an adult female Sitatunga in closed forest about 40 m from the viewing platform at Mbeli. The bulbul was gleaning insects from the back of the Sitatunga as it moved through the undergrowth of the swamp. Both animals were completely unconcerned by the presence of the observer. The Sitatunga moved out of sight after about 20 min.

On 16 Mar 2003, a Fire-crested Alethe *Alethe diademata* was seen gleaning arthropods from the ears of a young male Sitatunga which was lying down ruminating in the swamp forest. The bird was mostly perched on the back of the Sitatunga, and leaped to the ears to pick off food, then settled again on the antelope's back. The animals were very close to the previous locality, but about 20 m further into the forest. After about 10 min., the Sitatunga got up and moved around in the undergrowth; the

alethe remained close to it, sometimes perching on its back and sometimes on adjacent vegetation. Finally the Sitatunga and its attendant bird walked out of sight. The antelopes were at no point worried about human presence, which allowed for excellent views of the interactions.

In both cases the Sitatungas were completely unconcerned by the gleaning activities of the birds. When they are hosts to Yellow-billed Oxpeckers *Buphagus africanus*, for example in the Odzala National Park, Congo, Sitatunga show signs of distress, shaking their ears and twitching their skins (pers. obs.). It may be that the smaller bills and weaker pecking of the two bird species observed here are less irritating or painful to Sitatunga than are those of the Oxpeckers. This is the first published record of Sitatunga being gleaned by birds, but other Tragelaphinae (Nyala and Bushbuck *Tragelaphus scriptus*) have been recorded being gleaned by Red-billed Oxpecker *Buphagus erythrorhynchus*, the Turdidae Chorister Robin and Natal Robin *Cossypha natalensis*, and the Pycnonotidae Yellow-bellied Bulbul *Chlorocichla flaviventris* (Dean & MacDonald 1981) and Yellow-spotted Nicator *Nicator gularis* (Roche & Kilpin 2003). Yellow-bellied Bulbul has also been recorded gleaning ectoparasites off Impala *Aepyceros melampus*, Common Duiker *Sylvicapra grimmia*, Red Duiker *Cephalophus natalensis* and Klipspringer *Oreotragus oreotragus* (Currie 1999, Dean & MacDonald 1981, Roberts 1993, 1995).

This sort of interaction between large mammals and birds may be very common in closed forest. It is, however, particularly difficult to observe relaxed ungulates, due to the high levels of hunting pressure in most areas of forested Africa. Hunting pressure is becoming ever greater as access into the last remote forest tracts is facilitated by logging roads throughout Central Africa. It will be increasingly more difficult to find areas where such interrelationships between species can still be observed. Observers in tropical forested Africa are encouraged to be alert for more records of this type, and to act where they can to conserve this intricate, multifaceted forest world.

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Fiona Maisels

Wildlife Conservation Society, Nouabalé-Ndoki Project, BP 14537, Brazzaville, Congo and (correspondence) Institute of Cell, Animal and Population Biology, Edinburgh University, U.K. <fmaisels@wcs.org>