

HOST LIST OF AVIAN BROOD PARASITES - 4 - PICIFORMES; Indicatoridae

Peter E. Lowther, *Field Museum*

version 29 Mar 2011

Friedmann's 1955 monograph lists 11 species. More recent summaries of honeyguide biology presented by Short and Horne (1985, 1988, 2001).

Prodotiscus

Prodotiscus Sundevall 1850, Öfversigt af Kongel Vetenskaps Akademiens Förhandlingar 7, p. 109.

Cassin's Honeyguide, *Prodotiscus [insignis] insignis* (Cassin) 1856, Proceedings of the Academy of Natural Sciences of Philadelphia 8, p. 157, (Moonda River, Gaboon).

Distribution. – West and central Africa.

Host list. – No definite hosts (Short and Horne 1985), but likely hosts include Black-throated Wattle-eye *Platysteira peltata*, Buff-throated Apalis *Apalis rufogularis*, and possibly Green White-eye *Zosterops [pallidus] virens*

Green-backed Honeyguide, *Prodotiscus [insignis] zambesiae* Shelley 1894, Ibis, ser. 6, vol. 6, p. 8, (Zomba, Nyasaland [Malaŵi]).

Distribution. – East and central Africa.

Taxonomic notes. – This taxon treated as subspecies of *Indicator insignis* in Friedmann 1955, but see Friedmann 1971.

Host list. – Based on Short and Horne 1985, 1988, 2001; see also Vernon 1987:

PARIDAE

Black-Tit, *Parus [niger] niger* (possible host; inclusion of this species based on adult honeyguide seen entering nest of this species)

CORVIDAE

Monarchidae

% African Paradise-Flycatcher, *Terpsiphone [paradis] viridis*

Vanginiae

% Black-throated Wattle-eye, *Platysteira [cyanea] peltata*

MUSCICAPIDAE

% Dusky Alseonax, *Muscicapa adusta*

ZOSTEROPIDAE

African Yellow White-eye, *Zosterops [senegalensis] senegalensis*

% Broad-ringed White-eye, *Zosterops poliogaster*

% White-breasted White-eye, *Zosterops abyssinicus*

NECTARINIIDAE

% Amethyst Sunbird, *Nectarinia amethystina*

Wahlberg's Honeyguide, *Prodotiscus regulus* Sundevall 1850, Öfversigt af Kongel Vetenskaps Akademiens Förhandlingar, vol. 7, p. 109, ("Caffraria inferiori et superiori", type from Mohapoani, Witfontein Berge, Western Transvaal).

Distribution. – West, east and south Africa.

Host list. – Based on Short and Horne 1985, 1988, 2001; see also Friedmann 1955, 1968b; Maclean 1971; Vernon and Dean 2004b:

APODIDAE

Horus Swift, *Apus horus* [possible host; honeyguide seen emerging from swallow nest that had been taken over by this swift]

STURNIDAE

African Pied Starling, *Spreo bicolor* (possible host)

HIRUNDINIDAE

Lesser Striped-Swallow, *Hirundo abyssinica*

CISTICOLIDAE

% Gray-backed Cameroptera, *Camaroptera brachyura*

Grey Cisticola, *Cisticola [subruficapillus] rufilatus* (possible host, honeyguide chased by pair of this species)

Wailing Cisticola, *Cisticola [subruficapillus] lais* [based on Hosken 1966; this warbler not hole nester and considered unlikely host species]

% Piping Cisticola, *Cisticola [fulvicapillus] fulvicapillus*

Tabora Cisticola, *Cisticola [fulvicapillus] angusticauda*

Lazy Cisticola, *Cisticola [aberrans] aberrans*

Rattling Cisticola, *Cisticola chinianus*

Tinkling Cisticola, *Cisticola tinniens*

Tawny-flanked Prinia, *Prinia [subflava] subflava*

Black-chested Prinia, *Prinia [maculosa] flavicans*

Karoo Prinia, *Prinia [maculosa] maculosa*

ZOSTEROPIDAE

Green White-eye, *Zosterops [pallidus] virens* (suspected host)

NECTARINIIDAE

Scarlet-chested Sunbird, *Nectarina senegalensis* (possible host, honeyguide chased by pair of this species)

PASSERIDAE

% Yellow-throated Petronia, *Petronia superciliaris*

Melignomon

Melignomon Reichenow 1898, Ornithologische Monatsberichte, vol. 6, p. 22.

Yellow-footed Honeyguide, *Melignomon [zenkeri] eisentrauti* Louette 1981, Revue de zoologie africaine 95, p. 131, Grassfield, Mt. Nimba, Liberia.

Distribution. – West Africa (northeastern Liberia and southwestern Cameroon).

Taxonomic notes. – May be conspecific with *Melignomon zenkeri* (see Colston 1981).

Host list. – No known host species (Short and Horne 1985, 1988, 2001).

Zenker's Honeyguide, *Melignomon [zenkeri] zenkeri* Reichenow 1898, Ornithologische Monatsberichte, vol. 6, p. 22, (Jaunde [Jaoundé], Cameroons).

Distribution. – Central Africa.

Host list. – No known host species (Short and Horne 1985, 1988, 2001)

Indicator

Indicator Stephens 1815, General Zoology, or systematic natural history by George Kearsley Shaw; [and afterwards (Vol. IX - XIV) by J. F. Stephens], with plates from the first authorities and most select specimens engraved principally by Mr. Heath [and afterwards Mrs. Griffith], vol. 9, pt. 1, p. 131.

Spotted Honeyguide, *Indicator maculatus* G. R. Gray 1847, The Genera of Birds: comprising their generic characters ... and an extensive list of species, vol. 2, p. 451, pl. 113 (No locality; type in British

Museum from Gambia).

Distribution. – West and central Africa.

Host list. – No known hosts; suspected host species include: Buff-spotted Woodpecker *Campethera nivosa*, Gray-throated Barbet *Gymnobucco bonapartei* and other barbets of genus *Gymnobucco* (Short and Horne 1985, 1988).

Scaly-throated Honeyguide, *Indicator variegatus* Lesson 1830, *Traité d'ornithologie*, livr. 2, p. 155 (Africa; restricted to Knysna, Cape Province [Grant and Mackworth-Praed 1938]).

Distribution. – South and east Africa.

Host list. – Based on Short and Horne 1985, 1988, 2001; see also Friedmann 1955, 1958, Vernon and Dean 2004a: Additional species that are possible or likely hosts include: Rufous-chested Wryneck *Jynx ruficollis*, Mombasa Woodpecker *Campethera mombassica*, Green-backed Woodpecker *Campethra cailliautii*, Green Barbet *Stactolaema olivacea*, Green Tickerbird *Pogoniulus simplex* and Brown-breasted Barbet *Lybius melanopterus*

APODIDAE

Horus Swift, *Micropus horus* (unsubstantiated)

CAPITONIDAE

Crested Barbet, *Trachyphonus vaillantii* (unsubstantiated)

White-eared Barbet, *Stactolaema leucotis* (unsubstantiated)

% Whyte's Barbet, *Stactolaema whytii*

% Black-collared Barbet, *Lybius torquatus*

% Yellow-rumped Barbet, *Pogoniulus bilineatus*

PICIDAE

% Nubian Woodpecker, *Campethera nubica*

% Golden-tailed Woodpecker, *Campethera abingoni*

Knysna Woodpecker, *Campethera notata*

% Olive Woodpecker, *Dendropicus griseocephalus*

% Gray Woodpecker, *Dendropicos goertae*

% Cardinal Woodpecker, *Dendropicos fuscescens*

% Bearded Woodpecker, *Dendropicos namaquus* (Davey 1994)

MUSCICAPIDAE

Mocking Cliff-Chat, *Thamnolaea cinnamomeiventris* (unsubstantiated)

PASSERIDAE

Yellow-throated Petronia, *Petronia superciliaris* (unsubstantiated)

Greater Honeyguide, *Indicator indicator* (Sparman) 1777, *Philosophical Transactions of the Royal Society of London*, vol. 67, p. 43, pl. 1, (Great Fish River, near Somerset East, Cape Province).

Distribution. – Sub-Sarah Africa.

Host list. – Based on Short and Horne 1985, 1988, 2001; see also Friedmann 1955, 1968b, Berruti et al. 1995, Spottiswoode and Colebrook-Robjent 2007: Additional species that are possible hosts include: Yellow-rumped Tinkerbird, *Pogoniulus bilineatus*; Red-fronted Tinkerbird, *Pogoniulus [pusillus] pusillus*; Cape Bulbul, *Pycnonotus [cafer] capensis*; Zanzibar Sombre Greenbul, *Andropadus importunus*; Fork-tailed Drongo, *Dicrurus adsimilis*; Southern Boubou, *Laniarius ferrugineus*; Black-backed Puffback, *Dryoscopus [cubla] cubla*; African Black-headed Oriole, *Oriolus larvatus*; Cape Rock-Thrush, *Monticola rupestris*; Violet-backed Starling, *Cinnyricinclus leucogaster*

ALCEDINIDAE

% African Pygmy Kingfisher, *Ispidina ~~Ceryx~~ picta*

HALCYONIDAE

% Gray-headed Kingfisher, *Halcyon leucocephala*

% Brown-hooded Kingfisher, *Halcyon albiventris*

% Striped Kingfisher, *Halcyon chelicuti*

MEROPIDAE

- % White-fronted Bee-eater, *Merops [bullocki] bullockoides*
- % Little Bee-eater, *Merops pusillus*
- % Cinnamon-chested Bee-eater, *Merops oreobates*
- % Swallow-tailed Bee-eater, *Merops hirundineus*
- % Little Green Bee-eater, *Merops orientalis*
- % Boehm's Bee-eater, *Merops boehmi*
- % Carmine Bee-eater, *Merops nubius*
- % Madagascar Bee-eater, *Merops [superciliosus] superciliosa*

CORACIIDAE

- % Abyssinian Roller, *Coracias abyssinicus*

PHOENICULIDAE

- % Green Wood-Hoopoe, *Phoeniculus purpureus*

RHINOPOMASTIDAE

- % Abyssinian Scimitar-bill, *Rhinopomastus minor*
- % Common Scimitar-bill, *Rhinopomastus [cyanomelas] cyanomelas*

UPUPIDAE

- % African Hoopoe, *Upupa [epops] africana*

LYBIIDAE

- % Crested Barbet, *Trachyphonus vaillantii*
- % Pied Barbet, *Tricholaema [leucomelas] leucomelas*
- % Black-collared Barbet, *Lybius torquatus*

PICIDAE

- % Rufous-breasted Wryneck, *Jynx ruficollis*
- Fine-banded Woodpecker, *Campethera taeniolaema*
- % Nubian Woodpecker, *Campethera nubica*
- % Golden-tailed Woodpecker, *Campethera abingoni*
- % Knysna Woodpecker, *Campethera notata*
- % Tullberg's Woodpecker, *Campethera tullbergi*
- % Gray Woodpecker, *Dendropicus goertae*
- Cardinal Woodpecker, *Dendroipicos fuscescens* (likely host)

HIRUNDINIDAE

- Blue Swallow, *Hirundo [atrocaerulea] atrocaerulea* (Berruti et al. 1995)
- % Greater Striped Martin, *Hirundo cucullata*
- % White-throated Swallow, *Hirundo albigularis*
- % Rufous-chested Swallow, *Hirundo semirufa*
- % Banded Martin, *Riparia cincta*

STURNIDAE

- Violet-backed Starling, *Cinnyricinclus leucogaster* (honeyguide host, uncertain which species of *Indicator*)
- % Pied Starling, *Spreo bicolor*
- % Blue-eared Glossy-Starling, *Lamprotornis chalybeus sycobius*
- % Red-shouldered Glossy-Starling, *Lamprotornis nitens culminator*

PARIDAE

- % Black-Tit, *Parus [niger] niger*

NECTARINIIDAE

- % Scarlet-chested Sunbird, *Nectarina senegalensis*

MUSCICAPIDAE

- % Southern Anteater Chat, *Myrmecocichla formicivora*
- % Northern Anteater Chat, *Myrmecocichla aethiops*
- Capped Wheatear, *Oenanthe pileata* (Spottiswoode and Colebrook-Robjent 2007)

PASSERIDAE

- % Yellow-throated Petronia, *Petronia superciliaris*
- % Gray-headed Sparrow, *Passer griseus*

Malaysian Honeyguide, *Indicator archipelagicus* Temminck 1832, in Temminck and Laugier de Chartrouse, Nouveau recueil de planches coloriées d'oiseaux, pour servir de suite et de complément aux planches enluminées de Buffon, livr. 91, pl. 542, fig. 1, (Pontianak, Borneo).

Distribution. – Southeast Asia in Malay peninsula, Sumatra and Borneo.

Host list. – No known hosts.

Lesser Honeyguide, *Indicator minor* Stephens 1815, General Zoology, or systematic natural history by George Kearsley Shaw; [and afterwards (Vol. IX - XIV) by J. F. Stephens], with plates from the first authorities and most select specimens engraved principally by Mr. Heath [and afterwards Mrs. Griffith], vol. 9, pt. 1, p. 140, (Cape of Good Hope = Zwartkop River, Uitenhage Division, Cape Province).

Distribution. – Sub-Saharan Africa.

Host list. – Based on Short and Horne 1985, 1988, 2001; see also Friedmann 1955, 1958, Spottiswoode 1994, Colebrook-Robjent 1984. Additional species that are possible hosts or have been suggested as hosts include: Green Woodhoopoe *Phoeniculus purpureus*; glossy-starling *Lamprolornis* sp., and rock thrush *Monticola* sp.

HALCYONIDAE

% Striped Kingfisher, *Halcyon chelicuti*

MEROPIDAE

% Cinnamon-chested Bee-eater, *Merops oreobates*

% Little Bee-eater, *Merops pusillus*

LYBIIDAE

Grey-throated Barbet, *Gymnobucco bonapartei* (likely host)

White-eared Barbet, *Stactolaema leucotis* (probable host)

% Whyte's Barbet, *Stactolaema [anchietae] whytii*

% Anchieta's Barbet, *Stactolaema [anchietae] anchietae*

% Green Barbet, *Stactolaema olivacea*

Red-fronted Tinkerbird, *Pogoniulus [pusillus] pusillus* (uncertain host)

Yellow-rumped Tinkerbird, *Pogoniulus bilineatus bilineatus* (host of uncertain species of *Indicator*)

% Pied Barbet, *Tricholaema [leucomelas] leucomelas*

% Red-fronted Barbet, *Tricholaema [leucomelas] diademata*

Miombo Pied Barbet, *Tricholaema [leucomelas] frontata* (likely host)

Vieillot's Barbet, *Lybius vieilloti* (probable host)

% Chaplin's Barbet, *Lybius [leucocephalus] chaplini*

% White-headed Barbet, *Lybius [leucocephalus] leucocephalus*

Red-faced Barbet, *Lybius rubrifacies* (likely host)

Black-billed Barbet, *Lybius guifsobalito* (likely host)

% Black-collared Barbet, *Lybius torquatus*

% Double-toothed Barbet, *Lybius bidentatus* (identity of honeyguide not completely certain)

% Crested Barbet, *Trachyphonus vaillantii*

PICIDAE

% Rufous-breasted Wryneck, *Jynx ruficollis*

% Bennett's Woodpecker, *Campethera bennettii*

% Golden-tailed Woodpecker, *Campethera abingoni*

Nubian Woodpecker, *Campethera nubica* (possible host)

Cardinal Woodpecker, *Dendropicus fuscescens* (probable host; Spottiswoode 1994)

Olive Woodpecker, *Dendropicus griseocephalus* (likely host)

Grey Woodpecker, *Dendropicus goertae* (likely host)

HIRUNDINIDAE

% White-throated Swallow, *Hirundo albigularis*

Greater Striped Swallow, *Hirundo cucullata* (possible host)

PARIDAE

Gray Tit, *Parus [afer] afer* (probable host)

Black-Tit, *Parus [niger] niger* (host of uncertain species of *Indicator*)

STURNIDAE

% Pied Starling, *Spreo bicolor*

% Violet-backed Starling, *Cinnyricinclus leucogaster*

PASSERIDAE

% Yellow-throated Petronia, *Petronia superciliaris*

Thick-billed Honeyguide, *Indicator conirostris* (Cassin) 1856, Proceedings of the Academy of Natural Sciences of Philadelphia 8, p. 156, (Moonda River, Gaboon).

Distribution. – West and central Africa.

Taxonomic notes. – Friedmann (1955) treated this taxon as subspecies of *Indicator minor*, but see Friedmann 1971.

Host list. – Only 1 definite host known (see below; Short and Horne 1985, 1988, 2001), other species that are possible hosts include Naked-faced Barbet *Gymnobucco calvus* and 2 other *Gymnobucco* species; and Yellow-rumped Tinkerbird *Pogoniulus bilineatus* which is considered a doubtful host.

LYBIIDAE

Gray-throated Barbet *Gymnobucco bonapartei*

Willcock's Honeyguide, *Indicator willcocksi* Alexander 1901, Bulletin of the British Ornithologists' Club 12, p. 11, (Prahou, Gold Coast [Ghana]).

Distribution. – West and central Africa.

Taxonomic notes. – This taxon treated as subspecies of *Indicator exilis* by Friedmann 1955.

Host list. – No known host species (Short and Horne 1985, 2001); possible host species is Speckled Tinkerbird *Pogoniulus scolopaceus* (based on observation of this barbet attacking honeyguide for > 1 hr).

Least Honeyguide, *Indicator exilis* (Cassin) 1856, Proceedings of the Academy of Natural Sciences of Philadelphia 8, p. 157, (Moonda River, Gaboon).

Distribution. – West and central Africa.

Host list. – No known host species (Short and Horne 1985). Possible host species include Yellow-rumped Tinkerbird *Pogoniulus bilineatus* (Short and Horne 1988; honeyguide observed entering nest cavity of this species, Short and Horne 2001), unidentified barbet *Pogionulus* sp. (Friedmann 1955), and Bronze Sunbird *Nectarinia kilimensis* (J. P. Chapin notes in Short and Horne 2001). This honeyguide seen near nests of Yellow-throated Tinkerbirds *Pogoniulus subsulphurues* and Gray-throated Barbets *Gymnobucco bonapartei* (Short and Horne 2001).

Dwarf Honeyguide, *Indicator [meliphilus] pumilio* Chapin 1958, Bulletin of the British Ornithologists' Club 78, p. 46, (Tshibata, E. Zaïre).

Distribution. – East-central Africa.

Host list. – No known host species (Short and Horne 1985, 1988, 2001); likely hosts include only Yellow-rumped Tinkerbird *Pogoniulus bilineatus*, Western Green-Tinkerbird *Pogoniulus coryphaeus* and Cardinal Woodpecker *Dendropicos fuscescens*.

Pallid Honeyguide, *Indicator [meliphilus] meliphilus* (Oberholser) 1905, Proceedings of the U.S. National Museum 28, p. 869 (Taveta, Kenya Colony [Kenya]).

Distribution. – East and central Africa.

Taxonomic notes. – Friedmann (1955) treated this taxon as subspecies of *Indicator exilis*. The name *Indicator narokensis* Jackson 1906 may be synonym of this taxon (Short et al. 1987), but that taxon was treated as separate species – Kilimanjaro Honeyguide – in Short and Horne (1985) with no

known hosts; but individual "Kilimanjaro" Honeyguides appeared to monitor nests of, and were chased by, Black-collared Barbets *Lybius torquatus*, suggesting that that barbet may well be a host (Short and Horne 1985).

Host list. – One known host (see below; Friedmann 1955, Short and Horne 1985, 1988, 2001; see also Vernon et al. 1990). Several species have been ascribed as hosts but these are of doubtful validity: Bennett's Woodpecker *Campethera bennettii* (Benson and Benson 1977; but record questionable); Yellow-throated Petronia *Petronia supercilarius* (Mackworth-Praed and Grant 1970; but no evidence listed).

LYBIIDAE

White-eared Barbet, *Stactolaema leucotis* (possible host; see Vernon et al. 1990)

Yellow-rumped Tinkerbird *Pogoniulus bilineatus*

Yellow-rumped Honeyguide, *Indicator xanthonotus* Blyth 1842, The Journal of the Asiatic Society of Bengal, vol. 11, p. 116, (Darjeeling).

Distribution. – Himalayas of southern Asia.

Host list. – No known host species.

Melichneutes

Melichneutes Reichenow 1910, Ornithologische Monatsberichte, vol. 18, p. 160.

Lyre-tailed Honeyguide, *Melichneutes robustus* (Bates) 1909, Bulletin of the British Ornithologists' Club 25, p. 26, (Bitye, River Ja, Cameroons).

Distribution. – West and central Africa.

Host list. – No known host species (Short and Horne 1985). Possible hosts are likely barbets of genus *Gymnobucca* (Friedmann 1955, Short and Horne 1988).

References:

- Benson, C. W., and F. M. Benson. 1977. The birds of Malawi. Mountford Press, Limbe, Malawi.
- Berruti, A., B. McIntosh, and R. Walter. 1995. Parasitism of the Blue Swallow *Hirundo atrocaerulea* by the Greater Honeyguide *Indicator indicator*. Ostrich 66: 94.
- Colebrook-Robjent, J. F. R. 1984. A nest of the Double-toothed Barbet *Lybius bidentatus* parasitized by a honeyguide in Uganda. Bulletin of the British Ornithologists' Club 104: 123-124.
- Colston, P. R. 1981. A newly described species of *Melignomon* (Indicatoridae) from Liberia, West Africa. Bulletin of the British Ornithologists' Club 101: 289-291.
- Davey, P. 1994. Woodpecker feeding immature honeyguide. Scopus 18: 61.
- Friedmann, H. 1955. The honey-guides. U.S. National Museum Bulletin 208.
- Friedmann, H. 1958. Advances in our knowledge of the honey-guides. Proceedings of the U.S. National Museum 108: 309-320.
- Friedmann, H. 1968b. Additional data on brood parasitism in the honey-guides. Proceedings of the U.S. National Museum 124: 1-8.
- Friedmann, H. 1971. Phenotypic potential and speciation in *Indicator* and *Prodotiscus*. Ostrich 8 (suppl.): 21-26.
- Hosken, J. H. 1966. Sharp-billed Honeyguide *Prodotiscus regulus* being fed by a pair of *Cisticolas*. Ostrich 37 (4): 235.
- Mackworth-Praed, C. W., and C. H. B. Grant. 1970. Birds of west central and western Africa. Vol. 1. Longmans Group, Ltd., London, UK.
- Macleay, G. L. 1971. Sharp-billed Honeyguide parasitising Neddicky in Natal. Ostrich 42: 75-77.
- Payne, R. B. 1992. Clutch size, laying periodicity and behaviour in the honeyguides *Indicator indicator*

- and *I. minor*. Proceedings of the VII Pan-African Ornithological Congress 537-547.
- Short, L. L., and J. F. M. Horne. 1985. Behavioral notes on the nest-parasitic Afrotropical honeyguides (Aves: Indicatoridae). American Museum Novitates 2825.
- Short, L. L., and J. F. M. Horne. 1988. Indicatoridae, honeyguides. Pp. 486-512 in C. H. S. Fry, S. Keith and E. K. Urban (eds.), The birds of Africa, vol. 3. Academic Press, London, UK.
- Short, L. L., and J. F. M. Horne. 2001. Tucans, barbets and honeyguides. Ramphastidae, Capitonidae and Indicatoridae. Oxford University Press, Oxford, UK.
- Short, L. L., J. F. M. Horne and J. P. Chapin. 1987. *Indicator narokensis* Jackson is synonym of *Indicator meliphilus* (Oberholser). Mitteilungen aus dem Zoologischen Museum in Berlin 63 (Annalen für Ornithologie 11): 161-168.
- Spottiswoode, C. N. 1994. Lesser Honeyguide parasitizing Cardinal Woodpecker. Promerops 213: 9.
- Spottiswoode, C. N., and J. F. R. Colebrook-Robjent. 2007. Egg puncturing by the brood parasitic Greater Honeyguide and potential host counteradaptations. Behavioral Ecology 18: 792-799.
- Vernon, C. J. 1987. On the Eastern Green-backed Honeyguide. Honeyguide 33: 6-12.
- Vernon, C. J., and W. R. J. Dean. 2004a. R475 Scaly-throated Honeyguide *Indicator variegatus*. Roberts VII draft texts. [Http://web.uct.ac.za/depts/fitzpatrick/docs/r475.html](http://web.uct.ac.za/depts/fitzpatrick/docs/r475.html)
- Vernon, C. J., and W. R. J. Dean. 2004b. R478 Brown-backed Honeyguide (Sharp-billed Honeyguide) *Prodotiscus regulus*. Roberts VII draft texts. [Http://web.uct.ac.za/depts/fitzpatrick/docs/r478.html](http://web.uct.ac.za/depts/fitzpatrick/docs/r478.html)
- Vernon C. J., I. A. Macdonald and W. R. J. Dean. 1990. The Birds of the Haroni-Lusitu. Honeyguide 36: 14-35.