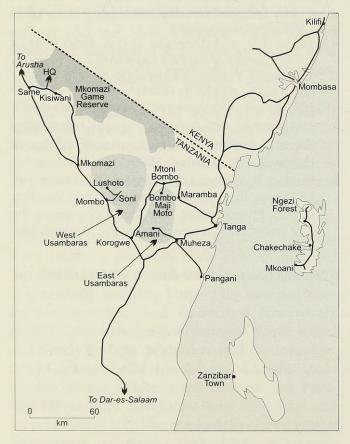
Birding in and around the East Usambaras, north-east Tanzania

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Tanzania is one of the best birding countries in Africa, and the East Usambara mountains one of its ornithological gems. They lie in the north-east, within sight of the Indian Ocean and 50 km from the Kenyan border. Despite severe deforestation they retain evergreen forests of outstanding importance and great beauty. Two Endemic Bird Areas (EBAs) meet here – the montane forests of the 'Eastern Arc' and the lowland or 'Coastal' forests⁹. Recent articles in *Bull. ABC* have covered birding elsewhere in the Eastern Arc⁸ and Coastal forests⁵ but the East Usambaras are perhaps unique in offering such an array of specialities from both EBAs.



Map 1. Birding areas in Tanzania

The Usambaras actually comprise two ranges, separated by the deep, semi-arid Lwengera Valley. The East Usambaras, the focus of this article, are one of the most important bird areas in Africa. Nine globally threatened species top the bill. One, the **Usambara Eagle Owl** *Bubo (poensis) vosseleri*, was thought endemic to the East and West Usambaras

until its recent discovery further south, in the Ulugurus⁸. The neighbouring West Usambaras are also important for threatened birds (and have their own endemic, the **Usambara Ground Robin** *Sheppardia montana*), but are discussed only briefly here.

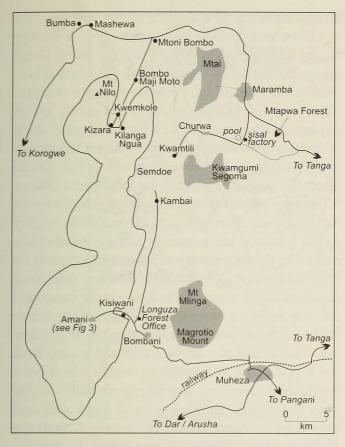
The East Usambaras have a long ornithological history, starting with German collectors before World War I, one of whom, Julius Vosseler, procured the first Usambara Eagle Owl. Reg Moreau lived here in the 1930s and 1940s, carrying out much ground-breaking research from Amani. Major surveys, led by Simon Stuart, were undertaken in the late 1970s and early 1980s¹³, and followed by various teams in the 1990s^{1,2,3,4,12,14}. Few other ornithologists have lived in the area; the tour company BirdQuest has visited in recent years and a trip report was recently produced by a solo visiting birder¹⁵. Despite earlier work, new discoveries continue: Sokoke Scops Owl Otus ireneae, East Coast Akalat Sheppardia gunningi Swynnerton's Robin Swynnertonia swynnertoni were found in 1990–923,4 and in 1994 the endemic Usambara Weaver Ploceus olivaceiceps nicolli was rediscovered after 50 years1.

Few birdwatchers reach the area, which provides logistical challenges in comparison with the popular Tanzanian national parks or Arabuko-Sokoke in Kenya. Nonetheless, the moderately intrepid visitor can expect to see some superb birds amongst truly beautiful scenery, always with the possibility of making another major discovery.

Geography

The East Usambaras are in Tanga Region and include the Amani hills at 800–1,200 m, a series of outlying peaks to the east and north (the highest, Mt. Nilo, reaches 1,504 m) and wide valleys down to 130 m. Forest once reached the surrounding plains, but this has virtually all been cleared.

Annual rainfall at Amani is c1,900 mm, rather less in the foothills, with moderate amounts in every month. The most difficult periods to visit are during the short and long rains. These traditionally fall in October–November and March–May respectively, but the timing varies from year to year. The July–September period is relatively cool and dry and is perhaps the most pleasant time to visit. It is also thought to be the



Map 2. Routes in the East Usambaras

period of least breeding activity, but nesting birds are easy to find in any month. Many submontane species (eg White-starred Robin Pogonocichla stellata, Black-fronted Bush-Shrike Malaconotus nigrifrons and Barred Long-tailed Cuckoo Cercococcyx montanus) are partial altitudinal migrants, and can be seen even at the lowest altitudes at this time of year, whilst some lowland breeders visit the submontane areas only in the warm season.

The birder must visit both lowland (especially below 500 m) and submontane areas (above 800 m) to find the full range of forest species. True montane forests are found above 1,200 m on Mt. Nilo. These three habitats are described below. Although many lowland species occur only below c400 m, the lowland/submontane boundary is not sharp, with a broad overlap between 500-900 m. The least disturbed forests appear to support the highest densities of some key species (eg Usambara Eagle Owl, Sokoke Scops Owl, Swynnerton's Robin and Dappled Mountain Robin Modulatrix orostruthus) but most also occur in degraded forest, which also has its own specialities. For instance, the invasive, bamboo-like grass Olyra latifolia thrives in disturbed areas and is a favourite food of the striking Red-headed Bluebill Spermophaga ruficapilla.

Access

The nearest big town is Tanga on the coast. There is a small airport, with regular flights to Dar-es-Salaam, Pemba and Zanzibar but no international facilities. The foreign visitor has to fly in to Dar, Kilimanjaro, Zanzibar or Mombasa. Buses are regular between Tanga and Dar, Arusha (near Kilimanjaro) and Mombasa and there is a twice-weekly train from Moshi (also near Kilimanjaro) and Dar. If travelling by bus on the Dar-Tanga, Arusha-Tanga or Mombasa-Tanga-Dar route, you pass through Muheza (a change in Tanga may be necessary if coming from Mombasa), from where a well signposted side road leads to Amani. In Muheza catch one of the daily Tanga-Amani or Tanga-Bulwa minibuses. Hitching may be better: wait at the line of shops just before the railway crossing on the Amani road. If schedules force an overnight in Muheza (almost certain, if coming from Arusha or Mombasa), it may be better to alight in Tanga and catch the Tanga-Muheza-Amani/Bulwa minibus next day. The Muheza-Amani road offers a good chance to see Yellow Baboons Papio cyanocephalus and Blue Monkeys Cercopithecus mitis en route. The Bulwa service branches off the road to Amani one km before Amani.

Maramba and Bombo Maji Moto, small towns at the foot of the mountains further north, are served by frequent buses from Tanga on a reasonable road. A few dirt roads served by ancient Land Rover bush taxis run from there into the northern valleys. Reaching sites off these bus routes will require either long walks, a great deal of patience waiting for infrequent vehicles to hitch with, or your own transport. Some roads are challenging even for 4WD vehicles, and become impassable during rains. Cars can be hired in Arusha or Dar-es-Salaam, but 4WD vehicles (essential) are very expensive and of dubious reliability, and most companies insist on providing a driver.

Permission

Most forests belong either to the Government (Forest Reserves) or tea estates and visitors must obtain permission to enter. Many tea estate forests will be incorporated in the new Amani Nature Reserve, and permission for visiting both Forest Reserves and tea estate property should thus be sought from the Tanga Region Catchment Forest Office, and from the relevant local Catchment Forest Offices. The local offices can be contacted from the Tanga office by radio as follows: Kisiwani (for Amani Botanical Gardens, Amani East, Amani-West, Amani-Sigi and the Bulwa tea estate forests); Kwamkoro (for

Kwamkoro, Monga and Ndola); Longuza (for Semdoe and Kambai), Maramba (for Mtai and Kwamgumi) and Kilanga Ngua (for Mt. Nilo). All of the local Catchment Forest Offices are well signposted. For Kwamgumi, it is also necessary to get permission from Kwamtili Cocoa Estate office, since you will need to pass through the cocoa plantation and possibly to camp in it.

Guide books

The Tanga office has an invaluable guide to trails and drives in the Amani area, which should also be available from the Kisiwani and Amani Guest Houses (see below). A guide book to the East Usambaras is in preparation and should be ready by the end of 1997. Visitors to the Tanga office can also use their library, which includes much recent information on the biology of the East Usambaras.

Accommodation

Most people recommend avoiding the cheapest accommodation around the bus station in Tanga. There are some better cheap hotels, including the Planters and the Bandarini, near the market square. The Bandarini is more pleasant and offers mosquito nets and a sea view. More luxurious and expensive hotels with air-conditioning, include the Marina (central), Phoenix (next to Uhuru Park) and, on Ras Kazone (the headland running east from Tanga), the Inn by the Sea, Makonde Beach Hotel and Panori. The last has the best menu.

In Muheza, the basic Ambassador Hotel on the main road is the best of a rather limited selection. In Maramba the Mlinga Guest House is recommended. Otherwise take your pick from various cheap and simple guest houses (but don't let the frequent 'hoteli' signs fool you as this means 'restaurant'). In Amani, there is a guest house run by the Amani Medical Research Centre (AMRC). The AMRC guest house is comfortable and serves food, but prices are high (around US\$ 30 per person per night) unless you are a Tanzanian citizen, have a residence permit, or business with the medical station. It is sometimes full, so it is wise to book ahead by letter. Camping on the lawn is permitted for a small fee. There is also a guest house at Bulwa run by the East Usambara Tea Company. Similar conditions apply as at Amani. A new guest house will open during 1997 at the Amani Nature Reserve Information Centre near Kisiwani: bookings should be made via the East Usambaras Catchment Forest Project in Tanga but tariffs have not been finalised. This will be an ideal base for access to both submontane forest around Amani and lowland forest around Kisiwani, all within the Nature Reserve.

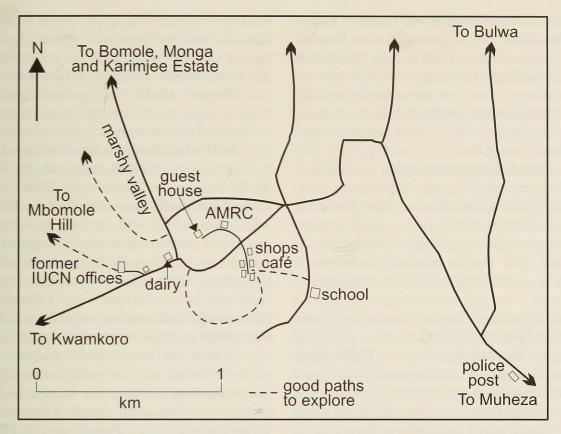
Elsewhere, it will be necessary to camp or arrange to stay with families in villages near the forest. These are quite remote and visitors, while politely and hospitably received, may be viewed with some concern. Knowledge of Swahili would of enormous use in explaining who you are and what you want to do. It is vital to ask permission from the Village Chairman or his/her representative when you arrive. You should also make yourself known to the local Forest Officer. A few semi-official camp sites are available. Birdquest and bird researchers have camped on a site belonging to the Karimjee tea estates at Monga. Another site owned by the tea estates is at a former tea nursery on the road between Kwamkoro and Monga near some excellent submontane forest. Three more camp sites are scheduled for development as part of the Amani Nature Reserve facilities: at Kisiwani, near the new guest house and two on the forest trail leading from the Forest Office at Kwamkoro, one of which has a spectacular view over the Lwengera Valley to the West Usambaras. Permission for all these sites, and directions to them, should be requested from the Tanga Region Catchment Forest Office. In the lowlands away from Kisiwani it may be easiest to stay with staff of the Kambai Forest Conservation Project or camp on Kwamtili Cocoa Estate next to Kwamgumi Forest Reserve.

Food and equipment

If camping, you will need to take most food with you, although there are shops at Amani, Bulwa, Kwamkoro, Monga, Bombani, Kisiwani, Bombo Maji Moto, Kwemkole, Maramba and Muheza, where basic groceries including bread and potatoes can be bought. The small tea rooms in most villages can often serve bread, buns and bean stew. Be prepared for cool weather in the highlands and sudden heavy rainstorms throughout.

Health

The lowlands are a very high risk area for malaria and both *falciparum* (the severe, potentially fatal cerebral form) and other drug-resistant strains are common. The risk is lower but still quite high in montane areas. Take precautions against being bitten, including long-sleeves and trousers, permethrin-treated mosquito nets and a good repellent (the new lemon-smelling Mosi-Guard was field-tested here!). Follow the malaria drug-regime recommended by your doctor. Bear in mind that the malaria research station at Amani has no facilities for treatment. Bilharzia is another common disease in the area, so avoid swimming in still



Map 3. Amani

water where possible.

The submontane forests

These are tall and lush, with many epiphytes, mosses and lianas and an outstanding diversity of plant species. Groups of the introduced timber-tree *Maesopsis eminii*, native to Central Africa, can be seen in many areas of degraded forest (look for the whitish, mottled bark and pinnate leaves).

Most visitors are likely to start birding in the Amani hills; the cool climate and beautiful landscape, a patchwork of tall forest among tea plantations, streams and small farms, are a delightful relief from the heat and dust of Dar-es-Salaam and the savannas. The best first base would be Amani itself, with a useful second option being Bulwa or one of the campsites. The Amani hills can easily be reached by road from any of these so if you have your own transport only one base is necessary, you could even base yourself at the new guest house in Kisiwani.

The trail guide available from the Catchment Forest Office in Tanga includes probably the best all-round selection of walks, designed to give visitors a flavour of the scenery, history, biology and human use of the area. They are not specifically for birders but by following them the visitor should be able to find the majority of the area's specialities. Perhaps the most rewarding areas are the Amani Botanical Gar-

den, the trail leading from Kwamkoro Forest Office, and the steep hike from the Nature Reserve HQ at Kisiwani into submontane forest, to the ridge-top Amani-Sigi Forest Reserve.

The Botanical Garden can be explored around the AMRC and Kisiwani. There is also a trail from behind the IUCN Amani office (which may soon be abandoned) through forest to a spectacular clifftop viewpoint at Mbomole Hill, overlooking the forest canpy. It is an easy 30-60 min climb - just ask at the guest house for directions. The Kwamkoro trail is easily found by asking directions to Kwamkoro Forest Office ("Misitu Kwamkoro"); it follows an old logging road past the front of the office and into the forest. The Amani-Sigi trail accesses an area where the transition from lowland to submontane can be observed. It cannot be followed without a guide at the time of writing, but knowledgeable guides can be found at Kisiwani who will proceed slowly and quietly for birdwatching. The trail guide also includes three driving routes, which give a thorough tour of the main tracks of the Amani hills, and pass other forest blocks which may be worth exploring.

Many of the East Usambara specialities frequent the forest canopy or "edge" habitats such as tree-fall gaps and gardens. Many occur in the grounds of the AMRC where you can wander more or less at will. Often seen here are **Amani** Anthreptes pallidigaster, Banded Green A. rubritorques and Uluguru Violetbacked Sunbirds A. neglectus, Green-headed Oriole Oriolus chlorocephalus and Southern Banded Snake-Eagle Circaetus fasciolatus with its distinctive, chicken-like koh-koh-koh-kah-ko call. The Uluguru Violet-backed Sunbird is more of an insectivore than its two relatives and is usually seen hunting through low bushes in small parties. The Amani and Banded Green Sunbirds prefer higher treetops, but they may join commoner species, especially Olive Nectarinia olivacea and Collared Anthreptes collaris, and also occasionally Scarletchested Nectarinia senegalensis, Amethyst N. amethystina, and Purple-banded Sunbirds N. bifasciata, at smaller ornamental flowering trees in gardens.

The AMRC is also the easiest place to find 'Mombasa' Woodpecker Campethera abingoni mombassica, Moustached Green Tinkerbird Pogoniulus leucomystax, and Kenrick's Poeoptera kenricki, Black-bellied Lamprotornis corruscus and Waller's Starlings Onychognathus walleri. Although the Centre is in relatively open habitat, the predominant drongo there is the Square-tailed Dicrurus ludwigii, a forest bird. Fischer's Turaco Tauraco fischeri and the monotonously popping Green Barbet Stactolaema olivaceum can also be heard from the grounds, although they rarely venture from the surrounding forest. The forest-canopy **Forest Batis** *Batis* mixta and the open-country East Coast Batis Batis soror occur side-by-side in forest edge habitats at Amani, sometimes with flocks of Yellow White-eye Zosterops senegalensis. Other commoner species around the Centre include Crowned Eagle Stephanoaetus coronatus (heard calling high overhead almost daily), Long-crested Eagle Lophaetus occipitalis, Ayres's Hawk-Eagle Hieraeetus ayresii, Great Sparrowhawk Accipiter melanoleucos and the abundant and noisy White-eared Barbet Stactolaema leucotis. Flocks of Silvery-cheeked Hornbill Ceratogymna brevis are commonly seen all year, while **Trumpeter Hornbills** *C. bucinator* only reach this altitude during the warmer half of the year. Black Saw-wing Psalidoprocne pristoptera is sure to be seen flying gracefully overhead or prospecting roadside banks. Emerald Cuckoo Chrysococcyx cupreus is common; in season, its loud hello geoor-gie call can't be missed.

Other forest specialities are more difficult. They include **Dappled Mountain Robin**, **White-chested Alethe** *Alethe fuelleborni*, several species of forest **bulbul**, all restricted to the dimly-lit understorey, and the **owls**. The **alethe** is common throughout and its

viscivorus) is heard most early mornings, and during the day in the wetter seasons, but it is extremely shy. The forest robins, including White-starred Robin and Sharpe's Akalat Sheppardia sharpei are even more difficult, as they have much quieter songs, but are less likely to fly long distances if disturbed. Among the bulbuls, Stripe-cheeked Andropadus milanjensis and Yellow-streaked Phyllastrephus flavostriatus are fairly often seen at the forest edge. Yellow-streaked draws attention by its frequent calls and habit of raising one wing, while the distinctive ukkeri-ukkeri-ukkeri song of Stripe-cheeked is a monotonous feature of the damp seasons. Little Greenbuls Andropadus virens burble away almost constantly, but can be hard to see. Cabanis's (Olive Mountain) Phyllastrephus cabanisi and Shelley's Greenbuls Andropadus masukuensis are fairly common within the forest, and sometimes seen in mixed-flocks at the edge. Grev-backed Camaropteras Camaroptera brachyura are common, occurring with small numbers of the green-backed form. Pale-breasted Illadopsis Illadopsis rufipennis is also quite common and can be traced by its quiet churring calls. Lemon Dove Aplopelia larvata can usually be found when it flushes a short distance from the forest floor to sit quietly on a low branch, peering at the observer. Eastern Bronze-naped Pigeon Columba delegorguei is more difficult, as it usually keeps to the canopy (the call is rather like European Woodpigeon Columba palumbus), while Olive Pigeons Columba arquatrix are scarce but can sometimes be found sitting in the open, high in small patches of forest or isolated clumps of trees near the western escarpment. African Broadbills Smithornis capensis are common but elusive except when calling at dawn and dusk. It is worth stalking their strange, upward-inflected brrrrUP to find the source, since the sound is made during an extraordinary display sequence.

loud, monotonous song (like a Mistle Thrush Turdus

The forest interior prize is the rare **Dappled Mountain Robin**, found only in virtually undisturbed sites. One site where it has been mist-netted is the Karimjee estate, and Eddie Williams lured one in with a tape on Mbomole Hill¹⁵. The other local speciality (otherwise found only on the Njesi Plateau in Mozambique) is the elusive and extremely rare **Long-billed Tailorbird** *Orthotomus moreaui*. Its song is said to resemble hitting a metal peg with a mallet¹¹. It was reported by Birdquest from a site at the edge of forest belonging to Karimjee Tea Estates, although AT is doubtful that the sound-recording is of this species. It was also found in the early 1980s

where streams emerge from forest along the Amani–Monga road, within easy walk of the Research Centre, and recently on Mt. Nilo (see below). The call recorded by Birdquest was also heard along the Amani–Monga road in 1996¹⁵.

Commoner birds of the submontane forests, although not necessarily easier to find, include the Yellow-throated Woodland Warbler Phylloscopus ruficapilla, Red-headed Bluebill, Green-backed Twinspot Mandingoa nitidula and Red-faced Crimsonwing Cryptospiza reichenovii. All keep to the lowest levels, often in dense undergrowth near the forest edge. The latter three, all estrildid finches, may be glimpsed as small groups fly across an open space early in the morning or late in the evening. In similar areas you may find the uncommon, more open-country Yellow-bellied Waxbill Estrilda quartinia. Other forest species which should not be so difficult include Dark-backed Weaver Ploceus bicolor, Bar-tailed Trogon Apaloderma vittatum, Olive Woodpecker Dendropicos griseocephalus, Grey Cuckoo-shrike Coracina caesia, Blackheaded Apalis Apalis melanocephala, Yellowbill Ceuthmochares aureus, Black-fronted Bush-Shrike and the noisy White-tailed Crested Flycatcher Trochocercus albonotatus, all common members of mixed parties. Scaly-throated Honeyguides Indicator variegatus endlessly repeat their whining, mechanical buzz, and the long call sequence of Barred Long-tailed Cuckoo is also often heard, but both are very hard to see.

Kretschmer's Longbill *Macrosphenus kretschmeri* is not likely to be found at Amani. The best area in the Amani Hills is along the western escarpment, eg at Ndola, where it hides in dense vine tangles whilst endlessly repeating its 4-note song, which is uncannily like that of the **Common Bulbul** *Pycnonotus barbatus*. It is commoner in the lowlands.

On the tea estates, a selection of open-country highland specialities can be found, including the endemic race of **Common Stonechat** *Saxicola torquata* and **Cabanis's Bunting** *Emberiza cabanisi*, both of which sit obligingly on telephone lines, **Dark-capped Yellow Warbler** *Chloropeta natalensis* and a variety of **swallows** especially at migration times.

The lowland forests

The lowlands are much hotter than the Amani hills. The forest is naturally lower and there are few epiphytes. Cycads, pandans and, on rocky outcrops, the candelabra tree *Euphorbia*, are striking features of the understorey and the very tall, smooth, yellow trunk of *Sterculia appendiculata* is a common sight. These

forests naturally invite comparison with Arabuko-Sokoke⁵, with which they share specialities such as **East Coast Akalat** and **Sokoke Scops Owl**. While the East Usambaras lack three of Sokoke's star birds (**Sokoke Pipit** *Anthus sokokensis*, **Spotted Ground Thrush** *Zoothera guttata* and **Clarke's Weaver** *Ploceus golandi*), several lowland species which do not occur in Sokoke (eg **Uluguru Violet-backed Sunbird** and **Kretschmer's Longbill**) along with a great variety of typically submontane species, among them **Swynnerton's Robin** do occur. In its three other far-flung localities this bird occurs only above 850 m, but in the East Usambaras it has only been found below 550 m.

The most accessible lowland forest, although not the best, is in the Kihuhwi-Sigi Forest Reserve straddling the Amani road near Kisiwani. The 2-3 km stretch downhill of the village can easily be birded from the main road. There is little traffic, tall trees overhang the road on both sides and a couple of paths enter the forest, which is very steep and dense, with many rocky outcrops. You have another chance here to find Southern Banded Snake-Eagle, Fischer's Turaco, 'Mombasa' Woodpecker, Amani Sunbird, Uluguru Violet-backed Sunbird, Kretschmer's Longbill and several other species that may have been missed higher up. Banded Green Sunbirds have been found nesting in a treetop beside the road here. There are also many lowland specialists. Little Yellow Flycatchers Erythrocercus holochlorus predominate in many mixed-species flocks, along with Blue-mantled Crested Trochocercus cyanomelas and Ashy Flycatchers Muscicapa caerulescens, Green-backed Woodpeckers Campethera cailliauti, Narina Trogons Apaloderma narina, Fischer's Greenbuls Phyllastrephus fischeri, Plainbacked Sunbirds Anthreptes reichenowi and a dozen other species. The sunbird is common, but only below 400 m, and can be quite elusive until the insistent toi-toi-toi-toi call is learnt.

Mixed-flocks are also the best place to find **Southern Hyliota** *Hyliota australis*, here a bird of forest and forest-edge, rather than miombo woodland. This isolated race is endemic to the East Usambaras (mainly below 400 m) and may be a full species. Only one female specimen is known and, unlike every other female of the genus, it shares the male's coloration. If this is true for the whole population it would probably justify specific status, but observations so far have been inconclusive. Kisiwani is one of the easiest places to find them feeding quietly in the crowns of tall trees, alone or in pairs.

The long whistle and Mistle Thrush-like rattle of

Red-tailed Ant Thrush Neocossyphus rufus are common sounds, often announcing that the bird itself is about to rocket past. Black-and-white Flycatchers Bias musicus are common, especially in forest-edge and riverine habitats. Large parties of Chestnutfronted Helmet-shrikes Prionops scopifrons are also a feature, clacking their bills like castanets as they tumble through the canopy. They may be joined by the superficially similar Retz's Helmet-shrike P. retzii, though both mainly roam in monospecific flocks. The lucky observer may also find Pallid Honeyguide Indicator meliphilus, Eastern Honeybird Prodotiscus zambesiae, Eastern Bearded Scrub Robin Cercotrichas quadrivirgata, Four-coloured Bush-shrike Malaconotus quadricolor or Eastern Green Tinkerbird Pogoniulus simplex here. Emerald Cuckoos are quite common, but outnumbered by the similar **Klaas's Cuckoo** *Chrysococcyx klaas*, which calls hoooee-jiu, hoooee-jiu. Bat-like Spinetails Neafrapus boehmi sometimes hawk over the canopy, as do the commoner Mottled Spinetails Telacanthura ussberi. Lead-coloured Flycatchers Myioparus plumbeus and Peter's Twinspots Hypargos niveoguttatus are common but often hard to see. The colourful Red-headed Bluebill (an endemic race) is commoner in the lowlands, but quiet and furtive. Half-collared Kingfishers Alcedo semitorquata are quite common on wooded streams and rivers, with Giant Kingfisher Megaceryle maxima and African Finfoot Podica senegalensis along the Sigi River itself.

The principal lowland species which cannot be seen in Kisiwani are **Swynnerton's Robin**, **East Coast Akalat** and **Sokoke Scops Owl**. The other area of lowland accessible by public transport is the Forest Reserve on the east slope of Mt. Mtai, a three km walk from Maramba (past the school and a water tower amongst the coconut plantations, over a wide stream and up the hill). A large path leads to the summit ridge. **Swynnertons' Robin** is known on this slope. Both **Banded Green Sunbird** and **Usambara Eagle Owl** occur on the summit ridge, where there is submontane forest.

The best lowland site is the Kwamgumi-Segoma Forest Reserve. These forests escaped the worst logging, which damaged much of the East Usambaras until the 1980s, and are tall, lush and well-structured. Densities of many birds are high and the variety of species is the greatest of any lowland site thus far studied. Access is easiest from the north, via Maramba, Churwa and Kwamtili Cocoa Plantation. A road runs through the cocoa to the forest edge. It formerly ran through the forest, but after a clampdown on illegal

logging in 1992 it has become very overgrown. There are a few other paths, including one along the west edge near the river, but they can be indistinct and hard to follow.

Swynnerton's Robins and East Coast Akalats are common here. The former prefer the least disturbed patches, where the ground layer is devoid of small plants and deeply shaded by several strata of trees and shrubs. The latter appear less choosy and occur in selectively logged areas. Both are best detected by their songs and respond well to playback. The East Coast Akalat has a high, thin quavering song a few seconds in duration. Reasonable views are needed to separate it from **Sharpe's Akalat** which is only recorded above 600 m (but may occur lower) and has an ochraceous, rather than yellow chest and no slaty panel on the wing coverts. Swynnerton's **Robin** has a slow, sweet 3–5 note whistle, first high, then low, typically di di du du. Sokoke Scops Owl and Usambara Eagle Owl are easy to hear at this site, but seeing them is another matter altogether! As well as the lowland specialities, some largely submontane species, eg Silvery-cheeked Hornbill, Waller's Chestnut-wing Starling and Grey Cuckoo-shrike are also common here.

Of the other lowland sites, Mtapwa was once the easiest place to see East Coast Akalat and Plainbacked Sunbird, but it was being stripped for charcoal production in 1992 and may now be unsuitable. It lies a few km from Maramba towards Tanga and is visible 100 m south of the main road. Access is via a network of footpaths. Semdoe and Kambai have some tall forest and many of the best species, although Usambara Eagle Owl has not been heard at Semdoe. Kambai village is the base for the Kambai Forest Conservation Project, which aims to slow the clearance and degradation of nearby lowland forests. Access is via the road from Muheza, via Bombani and Longuza and then along the west bank of the Sigi. There is virtually no traffic, and it is a hot, five-hour walk to Kambai village from Longuza, the nearest bus stop. It may be possible to arrange a lift with the project staff.

Among the many lowland birds to be seen in open country are Palm-nut Vulture Gypohierax angolensis, Lizard Buzzard Kaupifalco monogrammicus, African Fish Eagle Haliaeetus vocifer, African Jacana Actophilornis africanus, Zanzibar Sombre Greenbul Andropadus importunus, Zanzibar Red Bishop Euplectes nigroventris, Purple-banded Sunbird, Kurrichane Thrush Turdus libonyanus (here at its northernmost limit), Magpie Mannikin Lonchura fringilloides,

African Golden Weaver Ploceus subaureus, Grosbeak Weaver Amblyospiza albifrons and, intermittently, Violet-backed Starling Cinnyricinclus leucogaster. Crested Barbet Trachyphonus vaillantii has been recorded.

Mt. Nilo

The mountain is reached via a poorly marked junction at Mtoni Bombo, c25 km from Maramba on the main road north of the Usambaras. From Mtoni Bombo, a road leads south through scrub and woodland along the Bombo valley. After passing Bombo Maji Moto, you reach Kwemkole and Kizara, from where you can walk another one km to Kilanga Ngua. Access to the higher parts of Mt. Nilo Forest Reserve can be facilitated by contacting the forest guard station at Kilanga Ngua. In order to explore this area properly you must camp, either on the Lutindi ridge to the north-west or the Kilanga ridge to the south-east. Kilanga, reached via Kizara, is lower, lusher and an easier climb but the terrain is more rugged and it is hard to find a suitable stream to camp by. The birds are similar on the two ridges and resemble those at Amani, with the loss of some lower-altitude species and the addition of a few specialities.

The two-hour hike up a fairly steep, cultivated valley side from Kwemkole north-west to Mt. Nilo may produce Mountain Buzzard Buteo orophilus, White-necked Raven Corvus albicollis, Crowned Eagle and perhaps an Ayres's Hawk-Eagle gliding overhead, with Black-throated Wattle-eye Platysteira peltata and Black-and-white Flycatcher in the trees. Southern Hyliota hase been seen at the forest edge. A path along a small ridge north-east of the last hut in which livestock are kept leads to a bracken-dominated glade; the site of a recent, as yet unpublished record of Long-billed Tailorbird.

A well-trodden path heads south—south-west along the side of the Hundu valley into lush forest dominated by the feathery-leaved trees *Newtonia buchananii* and *Albizia* spp, with an often dense understorey of the familiar pot-plant *Dracaena*. There are at least two small streams where you could camp.

The rare **Usambara Weaver** was not seen in the East Usambaras for over 50 years until its rediscovery on Mt. Nilo in 1994. There have been several recent records in the Forest Reserve of small groups alone or associated with mixed-flocks. They are quite vocal but occur at low densities, so finding this species may require several days. Other canopy species likely to be seen include **Amani** and **Banded Green Sunbirds**.

In the undergrowth lurk several inconspicuous species, including the **Spot-throat** *Modulatrix*

stictigula, which may be found digging quietly through litter, although it is best located initially by its highpitched series of whistles. Olive Turdus olivaceus and Orange Ground Thrushes Zoothera gurneyi also occur, and occasionally visit more open areas. They also betray their presence by their melodious, far-carrying songs. A recent addition to the East Usambara avifauna, although it is common in the West Usambaras, is the **African Hill Babbler** *Alcippe* abyssinica. The otherwise uncommon Oriole-Finch Linurgus olivaceus may also be found. Usambara Eagle Owl has been heard. Fruiting trees attract Bronze-naped and Olive Pigeons, and Kenrick's, Waller's Chestnut-winged and Red-winged Starlings Onychognathus morio, while Lemon and Tambourine Doves Turtur tympanistria eat fallen fruit.

Higher, above 1,400 m, the forest near the peak is often covered in mist for much of the day. Bird activity here is greatest when the sun emerges. **Bar-throated Apalis** *Apalis thoracica* and, perhaps seasonally, **White-starred Robins** haunt the undergrowth of the stunted forest, and **Eastern Double-collared Sunbird** *Nectarinia mediocris* is quite common. Treeferns provide feeding areas for **Red-capped Forest-Warbler** *Orthotomus metopias* and the retiring **Sharpe's Akalat**.

How to find the nocturnal birds

Great care should be taken not to disturb nocturnal (or indeed any other) birds by repeated use of playback in their territories. Care should also be taken not to get lost – all too easy at night. Carry a compass and wear stout boots to protect against the risk of snake bite

Usambara Eagle Owl. Sometimes considered conspecific with the West African Fraser's Eagle Owl⁶ it is, at least, an incipient species. The farcarrying call is a deep, slow, resonant drumming. A recording from the Ulugurus is in the National Sound Archive (Wildlife Section) in London, UK. In the early 1990s, one often sat after dark on the main Muheza—Amani road at c650 m, near Amani Police Post. Despite this, a couple captured in mist-nets, and a few young birds found below their nest holes, it remains one of the most poorly-known birds in Africa and a great prize for any observer.

Sokoke Scops Owl has been found in most East Usambara forests below 400 m, except Kisiwani. A tape is useful to elicit calls (there is a published recording¹⁰), but an alternative is to whistle the monotonous *boo*, *boo*, *boo* call. Birds do not seem to

approach playback, so off-the-path stalking is required, although they are not shy and will continue to call even when caught in the torch beam. They often call from the canopy, 10–20 m up, making them harder to see than in Arabuko-Sokoke, where densities are higher and they call 3–6 m above ground.

During searches for these two species, you can expect to hear African Wood Owl Strix woodfordii. On the forest edge or in degraded forest, Spotted Bubo africanus and Verreaux's Eagle Owls Bubo lacteus also occur. Spotted is rather similar to Usambara Eagle Owl but Usambara is more goldenbrown, has more widely separated bars below and deep brown eyes, whilst Spotted is greyer with yellow eyes. At a few places in the lowlands Barred Owlet Glaucidium capense has been found, and they may prove to be quite common. Another lowland bird is Fiery-necked Nightjar Caprimulgus pectoralis, which makes its good-lord-deliver-us call as it flies over both forest and scrub. The authors have heard them in September-October in the East Usambaras, but they may call in other months. An incentive for going out on foggy or drizzly nights is the chance of hearing Buff-spotted Flufftail Sarothrura elegans. Living in dense undergrowth, often far from water, these rails make a deep humming sound like the note from a tuning fork, or by blowing over the mouth of a bottle. So unlike a bird does this sound that local people insist it is the call of a chamaeleon. Finally, the elusive **Olive Ibis** Bostrychia olivacea is also active from dusk to dawn, announcing its presence with a guttural honking flight call, which is often heard, for example, along roads near Amani.

Other animals and plants

In the forests, **Blue Monkeys** (listen for the bird-like *chick* alarm call) and **Black-and-White Colobus** *Colobus polycomos* are common. The latter are among the most beautiful of all monkeys, and since monkeys are not heavily hunted except when raiding crops (which **colobus** do not), they can be watched with ease, even along the roads near Kisiwani or around Amani.

Several species of squirrel occur in the forests: the grey-mantled **Red-legged Sun Squirrel** *Helioscuirus rufobrachium* with its very long, faintly-banded tail often joins mixed-flocks of insectivorous birds. In the lowlands, the all-red **Red Bush Squirrel** *Paraxerus palliatus* occurs, while higher the rarer **Tanganyika Mountain Squirrel** *Funiscuirus lucifer* can be seen. They are joined on the tree trunks by the technicolour **Blue-tailed Tree Lizard** *Holaspis guntheri*. The best place to look is on medium-sized trees with smooth pale bark in direct sunlight – eg by

small clearings – but they can be found on fallen logs or even coconut palms.

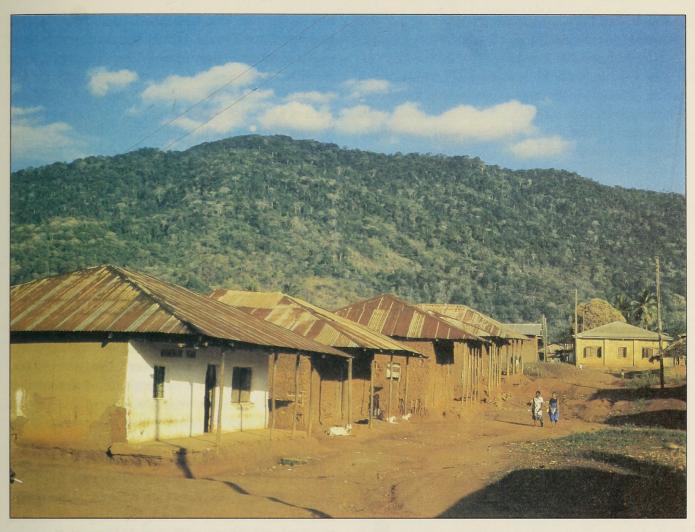
The Black-and-rufous Elephant Shrew Rhynchocyon cirnei, like a big dark rat with a red face and yellow tail, is most often seen when flushed. A stationary observer is sometimes rewarded with prolonged views of them tottering about the leaf litter. Banded Mungos mungo, Eastern Dwarf Helogale undulata, White-tailed Ichneumia albicauda and Marsh Mongooses Herpestes paludinosus are all possible. There are also some specimens from Mtai of Sokoke Bushy-tailed Mongoose Bdeogale crassicauda omnivora, one of the rarest small carnivores in Africa. Other mammals are largely nocturnal - Bush Pig Potamochoerus porcus, African Civet Viverra civetta, Blotched Genetta tigrina and Common Genets G. genetta, Two-spotted Palm Civet Nandinia binotata, Eastern Tree Hyrax Dendrobyrax validus, duikers and bushbabies. Bushbabies come in a range of sizes and recent research on calls⁷ suggests that there may be one large species (Garnett's Galago Otolemur garnetti) and two newly described small species (Mountain Galago Galagoides orinus at higher altitudes and Matundu Galago G. udzungwensis lower). Four-toed Elephant Shrews are common and can often be stalked and seen by torchlight.

There is an outstanding reptile and amphibian fauna, which is still incompletely known. For example, previously undescribed species of snake and toad were found in Kwamgumi in 1992. The treefrogs are particularly attractive, and although mainly seen at night may be spotted by day, glued to the rubbery leaves of understorey plants. Nightwalks are also the best time to find the endearing pygmy chamaeleons Rhampholeon spp, which feed in the leaf litter and climb a few inches off the ground to sleep in the tops of seedlings. Perfectly camouflaged by day, they turn pale yellow when sleeping. Nile Crocodile Crocodilus niloticus is common in the Sigi River and occasionally kills bathers. There is reportedly one large individual in the pond on Kwamtili estate - so don't go swimming!

Other sites nearby

Mount Tongwe

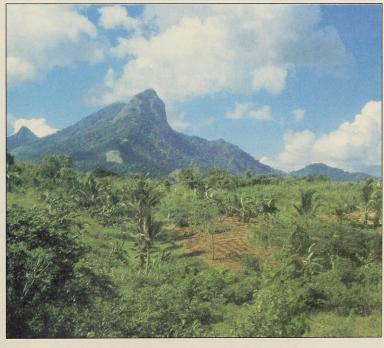
Mount Tongwe (not to be confused with the village of Tongwe, north of the Muheza–Amani road), is an outlier of the East Usambaras, south of the Tanga–Muheza road. It holds important Coastal Forest and is of historical interest: a tiny summit fort, constructed by the Sultan of Zanzibar was visited by both Speke and Burton on their journeys into the interior. Tongwe is



Mt. Mtai behind Maramba village, East Usambaras (Tom Evans)



Usambara Eagle Owl *Bubo (poensis) vosseleri* (Laura Watson)



Mt. Mlinga, East Usambaras (Tom Evans)

a Forest Reserve, permission to enter should be obtained from the Catchment Forest Office at Tanga.

The "mountain" (it rises to only 648 m) can be reached via the Muheza–Pangani road, which leaves the main Tanga–Muheza road just west of the Amani junction. Fork right after c5 km and after c8 km the road enters a sisal estate. Continue south and just after emerging from the sisal turn right past a small dam. This road brings you almost to the foot of the mountain, which is clearly visible.

The forest contains species such as **Little Yellow Flycatcher**, **Plain-backed Sunbird** and **Chestnut-fronted Helmet-shrike**, but has been little studied ornithologically and there is the chance of finding something new, possibly even **Sokoke Scops Owl** or **Sokoke Pipit**.

Amboni Caves

This site is known for its extensive limestone cave system, but worth visiting also for its attractive, tranquil location in a formerly wooded limestone gorge of the Mkulumuzi River. The woodland has been reduced to scattered remnants on cliffs. However, Black-andwhite Colobus still occurs, and the river valley is a superb birding spot with many of the coastal opencountry species. Bat-like Spinetail is virtually guaranteed, along with African Golden Weaver. The caves are six km from Tanga, four km along the Mombasa road (look for the black and yellow "Amboni Caves" antiquities sign on the left), then two km down the side road. After 1.3 km, the track turns sharp left (another antiquities sign) in Kiomoni village. The guardian lives in the village and will intercept you or follow you to the caves. For a small fee, he will give a guided tour, full of anecdotes (some more credible than others). A taxi will take you cheaply from Tanga, and wait for your return, or you can catch a Maramba bus; ask to be dropped at the junction. Bicycles can be hired in Tanga.

Coastal habitats near Tanga

There are several spots within reach of Tanga which offer the possibility of seeing **waders**, including **Crab Plover** *Dromas ardeola*. South of Tanga Bay the shoreline becomes more open, with mudflats at low tide. The easiest place to find is Mwambani: walk, cycle or take the Pangani bus c6 km south (of Tanga bus station) along Pangani Road, looking for a concrete plinth on the left for the defunct Baobab Beach hotel. Follow the track, which winds two km through coconut plantations, to the coast, following the Baobab Beach markers at junctions. You can swim here at high tide, and watch waders at low tide.

Even better, but further afield, are the salt pans, mangroves and shore at Moa. You can reach these by

bus along the Mombasa road (ask for a bus to Horohoro), or by taxi, but without your own transport will probably have to walk a few km. Moa village is easy to find, the turning being 40 km north on the Tanga–Mombasa road, just north of Kastam. The salt pans of Kibo Match Co are reached by staying on the Mombasa road until the right turn to Mkomazi Estates (a defunct sisal estate), c2 km after the Moa junction. Walk the four km to the pans, following signs if in doubt. You will need to ask permission to enter the pans, but this will almost certainly be forthcoming if you explain your interest.

West Usambaras

To reach the highlands, take the bus to Mombo on the road to Arusha, from Muheza, Tanga or Dar. From here a surfaced side road leads into the mountains, with regular buses from Mombo through Soni to Lushoto. There is good accommodation at Soni and Lushoto, and several Forest Reserves are within a few km of both, accessible by local bus. Permission is required to enter the reserves (from the office in Lushoto or Tanga) but a number of quiet public roads pass through some. From Soni, the easiest to reach is Ndelemai, which has roads through it. From Lushoto, try Shume-Magamba, either on the road north towards Mlalo or on that north-west to Manolo and Shume (on both, drop off the bus at the pass head, c12 km north of Lushoto, in forest). At Mazumbai, on the eastern escarpment, the University of Dar-es-Salaam maintains a field station (visitors welcome) and its own forest reserve. Mazumbai is reached by local bus from Lushoto, via Bumbuli. Finally, at Ambangulu, in the south-east corner of the West Usambaras, the tea estate protects good forest. Accommodation might be arranged by contacting the offices of George Williamson and Co in Dar-es-Salaam. Buses from Lushoto also go via Bumbuli, but the road is often impassable during the rains.

The West Usambaras reach greater altitudes than the East, and have some different vegetation types, including tree heath. Therefore true montane species may be seen, including Rufous Sparrowhawk Accipiter rufiventris, Mountain Buzzard, Cinnamon-chested Bee-eater Merops oreobates, African Hill Babbler, Mountain Greenbul Andropadus nigriceps, Fülleborn's Black Boubou Laniarius fuellebornei and Sharpe's Starling Cinnyricinclus sharpii; some of these may be seen in the East Usambaras but are more difficult there. The West Usambaras are also the only home of the Usambara Alethe (reportedly common in the understorey of Shume–Magamba Forest Reserve) and there are some

interesting species replacements between East and West Usambara, eg the **turaco** in the West Usambaras is **Hartlaub's** *Tauraco hartlaubi*. **Usambara Eagle Owl**, **Usambara Weaver** and **Banded Green Sunbird** are known from Mazumbai.

Mkomazi Game Reserve

This reserve is rarely visited by tourists, although there are two places to stay. Large mammals have been severely reduced by recent hunting, but you will certainly see antelope, with the possibility of African Elephant Loxodonta africana and others. The birds are superb, with a number of species reaching their southern limit here including Hartlaub's Bustard Eupodotis hartlaubii, Three-streaked Tchagra Tchagra jamesi and Pink-breasted Lark Mirafra poecilosterna. Pygmy Batis Batis perkeo and Northern Crombec Sylvietta brachyura have recently been found. A wide range of dry-country birds can easily be seen, including montane species eg Verreaux's Eagle Aquila verreauxii, as well as plainsdwellers eg Kori Bustard Ardeotis kori.

To reach the reserve, take the bus from Tanga or Dar to Same on the road to Arusha, then a local bus to Kisiwani. There are small hotels in Same if an overnight stop is necessary. Ask to be dropped at the turning for the reserve HQ (which is also the road to "Tony Fitzjohn's camp"). Same has a Rest House (take your own bedding and food; cooking facilities available), Tony Fitzjohn's a camp site only (water and pit latrine provided). Both sites are several km from the main road, requiring a long walk, which may or may not be permitted by the gate staff, or your own transport (4WD if wet).

Pemba Island

Pemba can be reached by plane from either Dar via Zanzibar or direct from Tanga (the low prices make it also worth considering chartering a small plane if in a party of 3–4), by dhow from Tanga (they sink regularly), or by twice-weekly (as of mid-1995) passenger ferry from Zanzibar or Tanga. In Tanga, bookings can be made at Karimjee Travel, on the market square.

Pemba is rarely visited by tourists. It has four endemic species: **Pemba Scops Owl** *Otus pembaensis*, **Pemba Green-Pigeon** *Treron pembaensis*, **Pemba Sunbird** *Nectarinia pembae* and **Pemba White-eye** *Zosterops vaughani*, plus several other endemic subspecies. Try to reach Ngezi Forest, in the north-west, where all the endemics can be seen. Most can also be found in less attractive surroundings in the towns. At Ngezi you may be lucky to spot the endemic flying fox, **Pemba Fruit Bat** *Pteropus pembaensis*. Other birds commoner or easier to see than on the mainland include sea- and shorebirds,

Palm-nut Vulture, Dickinson's Kestrel Falco dickinsoni, Brown-headed Parrot Poicephalus cryptoxanthus, Madagascar Bee-eater Merops superciliosus, Java Sparrow Pada oryzivora (!), Grosbeak Weaver and Black-bellied Starling (endemic race). Pemba has been poorly studied by ornithologists and almost every visit turns up useful new records. A trail map and brochure for Ngezi is available from the Forest Office on Pemba.

There are small hotels in Chake-Chake, Wete and Mkoani, from where trips to the north and east coasts can be made by hiring a small car with driver: (\$15–20/day in 1994). Boats can also be hired for snorkelling trips, and the reefs off Pemba are truly superb. Ask at the hotel in Chake-Chake for Chili, a helpful tourist guide who has a boat and Suzuki jeep.

Records

Interesting records should be submitted to The Recorder, EANHS Ornithological Sub-Committee, Box 48019, Nairobi, Kenya, and to the Tanga Region Catchment Forest Office in Tanga. The authors would also appreciate receiving a copy of any trip reports from visitors to the area.

Useful contact addresses

Tanga Region Catchment Forest Project (for permission to enter or camp in the forests) PO Box 1449, Tanga, Tanzania. Tel: 255 53 43453/46907; Fax: 255 53 43820.

Forest Project Officer (currently Mr M. Katigula). **East Usambaras Catchment Forest Project** (for information about the Amani Nature Reserve and enquiries about the guest house at Kisiwani) PO Box 5869 Tanga, Tanzania. Tel: 255 53 43453/43820; Fax: 255 53 43820; E-mail: usambara@twiga.com Offices of both the above are beside the second major roundabout when entering town from Dar and heading towards Mombasa, not far from the Marina Restaurant.

East Usambara Tea Company (EUTCO) PO Box 5707, Tanga, Tanzania. Fax: 255 53 43124.

Amani Medical Research Centre Guest House c/o Amani PO, Tanga, Tanzania.

Kambai Forest Conservation Project, PO Box 23410, Dar-es-Salaam, Tanzania. Fax: 255 51 150387.

Kwamtili Cocoa Estate (run by Mrs Jane Thamé, offices in Tanga just off the crossroads at the northeast corner of the football stadium).

George Williamson and Co, Kelvin House, Samora Avenue, PO Box 2667, Dar-es-Salaam, Tanzania. Tel: 255 51 31179 (Mr B Patel).



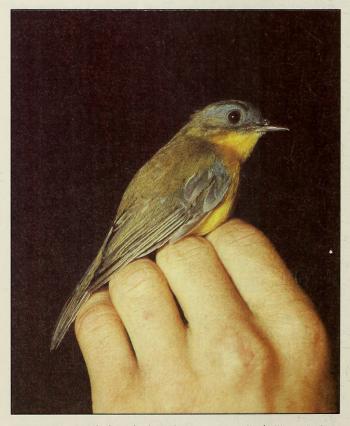
Narina Trogon Apaloderma vittatum (Laura Watson)



Barred Long-tailed Cuckoo Cercococcyx montanus (Laura Watson)



Spot-throat *Modulatrix stictigula*, Ukaguru Mountains, central Tazania (Tom Evans)



East Coast Akalat Sheppardia gunningi (Rob Timmins)

Acknowledgements

We would like to thank MIL Katigula, Stig Johansson, Andy Perkin, Laura Watson and Gillem Sandys-Lumsdaine for their helpful comments on this article.

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- ^a 11a, Yeoman Lane, Bearsted, Maidstone, Kent, ME14 4BX, UK.
- ^b 2 School Lane, King's Ripton, Huntingdon, Cambridgeshire PE17 2NL, UK.
- ^c 8541 Karlov Ave, Skokie, IL 60076, USA.
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Evans, Tom D. et al. 1997. "Birding in and around the East Usambaras, north-east Tanzania." *Bulletin of the African Bird Club* 4(2), 116–129. https://doi.org/10.5962/p.308942.

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