

## An annotated list and life history of the birds of Nyika National Park, Malawi-Zambia

by Françoise Dowsett-Lemaire

### INTRODUCTION

The Nyika Plateau is the largest montane complex in south-central Africa, with an area of some 1800 km<sup>2</sup> above the 1800 m contour – above which montane conditions prevail. The scenery is spectacular, with the upper plateau covered by *c.* 1000 km<sup>2</sup> of gently rolling *Loudetia-Andropogon* grassland, dotted about with small patches of low-canopy forest in hollows. Numerous impeded drainage channels support dambos. These high-altitude *Myrica-Hagenia* forest patches (at 2250-2450 m) are often no more than 1-2 ha in size, and cover about 2-3% of the central plateau. The highest patch of low scrubby forest is to be found at 2500 m, on the slope of the peak (Nganda Hill, a grassy hill at 2607 m). Only the wet eastern escarpment is extensively forested, with some 34 km<sup>2</sup> of tall *Ocotea-Ficalhoa* rain forest from 1700, mostly 1900-2350 m. An equally tall but drier type of rain forest (*Olea-Aningeria*) reappears on the gentle south-western escarpment (1950-2250 m), on both sides of the Zambia-Malawi border, but it is rather fragmented. Total forest cover in the park is *c.* 60 km<sup>2</sup>.

*Brachystegia* (miombo) woodland is the dominant vegetation type on the dry northern escarpment, and below the forest zone in the south-west; tall woodland ascends to at least 2050 m on the western side. Miombo is most extensive in the northern extension of the park (established in 1978) – an area of rugged terrain, broken hills and large faulted valleys.

The area above 2000 m has never been permanently inhabited by man; the high plateau was gazetted a national park in 1965, after the Forestry Department had established a few small plantations of exotic conifers and Eucalyptus in the 1950s, the main one being at Chelinda Camp. The present park covers 3134 km<sup>2</sup> in Malawi, in addition to a small section (80 km<sup>2</sup>) on the Zambian side. The Nyika is an important catchment area and contains the source of four large rivers which drain into Lake Malawi, including the North Rukuru, whereas on the Zambian side the Chire stream drains into the Luangwa River. The watershed that forms the international boundary provides the only access route to the Plateau. The main entry gate (at Thazima) is at 1600 m, in miombo, and the exit gate on the way to Nthalire (at Kaperekezi) is at 1500 m; the northern margins of the park (e.g. Uledi) approach 1000 m in altitude, whereas along the eastern escarpment the park's boundary fluctuates mostly between 1500-2000 m.

Famous for its outstanding beauty (well illustrated in Carter 1987), its large numbers of game (including Eland, Roan Antelope, Zebra and Reedbuck), the Nyika Plateau occupies a unique biogeographical position within the highlands of Tanzania-Malawi. Several species of orchids (la Croix *et al.* 1991) and butterflies (Dowsett-Lemaire *et al.* 2001) are endemic, and at least one amphibian (Critchlow 2001c). The Nyika highlands are also of considerable conservation importance for several montane bird species of restricted range, some of which are represented by endemic subspecies (see below). Over more than a century, and especially in the last 40 years, the Nyika has been much visited, by explorers, collectors, tourists, researchers; the present account aims at presenting a summary of the state of knowledge of its rich avifauna, listing all species recorded within the boundaries of the national park. Naturally more importance is given to the better-studied montane species of forest and forest edges for which the Nyika Plateau is such an important refugium.

### The history of exploration of the Nyika Plateau

The first major collection of birds was obtained by Alexander Whyte in June 1896 (Shelley & Sclater 1897): Whyte walked up the eastern escarpment from Livingstonia (then Khondowe) Mission and, after a short rest in Karonga, came back via the northern foothills (passing by Mpanda Mtn). He collected 57 species, of which a significant proportion were from the lower escarpments (e.g. *Phyllastrephus cerviniventris*, *Hypargos niveoguttatus*), with altitudes as low as 915-1220 m (3000 or 4000 feet) given for a few species. Specimens of note included the first *Lanius souzae* in Malawi, and the high montane *Nectarinia afra whytei* and *Serinus striolatus*. But it is in June 1895 that the very first specimen had been obtained on the Nyika, of no less than the endemic race of *Francolinus levaillantii*, by Richard Crawshay, named *crawshayi* by Olgilvie-Grant (1896). It seems very little was added around the turn of the century: *Streptopelia lugens* was collected by

Alfred Sharpe's staff in 1902 (Belcher 1930), and C.W. Benson (in Benson & Benson 1977) discovered in the British Museum two specimens of the erratic *Creatophora cinerea* dating from April 1903. There is no write-up of the species collected by the surveyor John McClounie (Head of Research at Zomba) on his visit in September 1902, but at least the type-specimens of the following races were obtained by him on the eastern Nyika (Shelley 1903): *Phyllastrephus flavostriatus alfredi*, *Cossypha anomala macclounii*, *Pseudoalcippe abyssinica stictigula* and *Nectarinia johnstoni salvadorii* (renamed *nyikensis*, as *salvadorii* was preoccupied). In his account of this journey, McClounie (1903) mentions only one unidentified night bird, evidently (from its song) *Caprimulgus poliocephalus*, which was formally identified on the Nyika much later, in 1937 (Benson 1940-41). Other montane species mentioned by Belcher (1930) which were discovered at about that time include *Apaloderma vittatum* (Mwenembwe, Nyamkhowa) and *Cisticola nigriloris* (Nyamkhowa); *Euplectes psammocromius* was first collected in September 1902 (Belcher 1930), thus the collector was probably McClounie.

One has to wait indeed until Benson's first visits in November 1937 and again in 1938 (in total about three weeks, including Nyamkhowa Mtn, the eastern escarpment and high plateau) to learn more about the typical high-altitude avifauna. Thus about 90 species are listed (Benson 1940-41): with few exceptions (e.g. *Buteo oreophilus*, *Schoutedenapus myoptilus* – discovered much later) the avifauna of the extensive forests of the eastern escarpment was by then basically identified, including the more discreet species such as *Alethe fuelleborni*, *Sheppardia sharpei*, *Illadopsis pyrrhoptera* and *Linurgus olivaceus*. Most of the characteristic species of high montane grassland and forest ecotones were also found, including *Accipiter rufiventris*, *Mirafra africana nyikae*, *Hirundo atrocaerulea*, *Chloropeta similis*, *Cisticola ayresii*, *C. nigriloris* (but see above), *Ploceus baglafecht nyikae*. Just before Benson's own visits, in the mid-1930s, the Reverend W.P. Young (based at Livingstonia) collected a few birds on the eastern escarpment (especially at Nyamkhowa) and this is mentioned in Benson (1940-41). C.W. Benson apparently revisited the Nyika more briefly in September-November 1940, which is when he collected *Cisticola njombe* and described its song (first under *C. lais nyikae*, re-identified as *C. njombe* in Benson 1947-48); Benson (1942) includes another two species from that year.

After the war, the Bensons revisited the Nyika in mid-October 1947, obtaining breeding records for half a dozen species (Benson & Benson 1949). The herpetologist Arthur Loveridge then visited the forests of the eastern escarpment in October-November 1948, collecting specimens and breeding data with the help of Jali Makawa (Benson's collector); these breeding records were written up by Benson (1951), with some other details also given in Peters & Loveridge (1953); Loveridge produced the first record (a specimen) of *Tyto capensis*. The faunal significance of the Nyika Plateau in a regional context was discussed by Benson (1953).

There is then another major gap in the publications covering the Nyika, as very little additional information was obtained before 1-12 January 1964, when C.J. Vernon, accompanied by C.W. Benson and C.S. Holliday, explored the south-western escarpment, mainly within the small Zambian sector. The first was particularly interested in the breeding ecology of *Cisticola* (Vernon 1964) and *Chloropeta* species (Keith & Vernon 1966); other reports of note include the first record and specimen of *Sarothrura affinis* (Benson & Holliday 1964), and the discovery of *Malaconotus multicolor* in Chowo forest (Benson & Irwin 1967). C.J. Vernon kept notes on altitudinal distribution of species on the (Zambian) western escarpment, many of those being listed in Benson *et al.* (1970), but they are now largely superseded by more recent observations. G.S. Keith visited the Nyika in late December 1964 and was the first to report the much-overlooked *Schoutedenapus myoptilus*, from Chowo (in Keith & Vernon 1969). R.J. Dowsett (1969, 1970) collected on the Zambian side in November 1969 (including the first Zambian specimen of *Cryptospiza reichenovii*). The 1970s saw quite a regular stream of keen amateur ornithologists from Zambia, such as D.R. Aspinwall, S.G. Madge, T.O. Osborne, E.H. Penry, J.J. Tucker (who was the first to ring birds in Chowo and around the Zambian rest house in 1972). R.J. Dowsett revisited for several weeks in October 1973, December 1975-January 1976, November-December 1977 (then accompanied by the author), during which netting and ringing of birds was continued on the Zambian side. Papers updating the status of various migratory and resident species on both sides of the border appeared in the *Bulletin of the Zambian Ornithological Society* (Aspinwall 1971, Aspinwall *et al.* 1973, Dowsett *et al.* 1974).

The first annotated list of birds for the high Nyika Plateau (excluding woodland from the lower slopes) was presented by Dowsett (1969); an update was reprinted in 1978, most of the additions being migrants and waterbirds with the notable exception of *Buteo oreophilus*, discovered over the eastern escarpment in 1977 (Dowsett & Dowsett-Lemaire 1979b). This was followed by another update (Dowsett & Dowsett-Lemaire 1980) after our first year of residence on the Plateau.

In October 1979 R.J. Dowsett and the author came to live on the Nyika as independent research biologists (funded from Belgium) for two and a half years, leaving in March 1982. Our main research project aimed at investigating the territoriality, longevity, breeding productivity and movements (if any) of montane forest birds in the fragmented forests of the south-western escarpment, the forest-grassland mosaic on the Nyika providing an ideal situation for the study of the population dynamics of species isolated on the tops of mountains. RJD selected the Starred Robin *Pogonocichla stellata* for a more detailed study (Dowsett 1982) and carried out intensive ringing and retrapping of all forest birds in Chowo and some Zovochipolo patches; birds were individually colour-ringed for easy monitoring. Over a thousand breeding records (back-dated to month) were thus obtained (Dowsett & Dowsett-Lemaire 1984). With a small number of birds netted from 1972 (as mentioned above), 2030 forest birds of 33 species had been ringed by 1982 (Dowsett 1985); with non-forest species added the grand total was nearer 2450 birds. Translocation experiments of ringed birds just before breeding were carried out across 6 km to test the navigation ability of various species (Dowsett & Dowsett-Lemaire 1986: only two species managed to return, *Pogonocichla stellata* and some of the *Batis capensis*!). Various publications cover the territorial and breeding behaviour of forest species (Dowsett-Lemaire 1983a, 1983b, 1983c, 1983d), their breeding productivity (Dowsett-Lemaire 1985a); the ecology and limited mobility of forest birds were discussed in the light of further research elsewhere in Malawi in 1982-84 (Dowsett-Lemaire 1989a). Our main findings showed that forest birds are essentially strongly territorial, long-lived, produce few young (they are single-brooded and refrain from breeding in some years of poor rainfall) and there is a large surplus of floaters waiting for their turn to get hold of a territory and breed; short distances of grassland are no barrier to dispersal but long-distance dispersal of resident species is a slow, irregular process for which some species have more ability than others. The study of forest and ecotone vegetation (Dowsett-Lemaire 1985b, see also Dowsett-Lemaire 1989c) led to investigations of the feeding requirements and resource partitioning of frugivorous birds (Dowsett-Lemaire 1988a) and of sunbirds (Dowsett-Lemaire 1989b).

We continued to pay short visits to the Nyika in 1982-1983 (including Nyamkhowa and Nkhonjera Hill), and on our very last one in October 1986 resighted a number of our old colour-ringed birds in the south-west, the longevity record being held by a 15-year old *Phyllastrephus flavostriatus* in Chowo (Dowsett & Leonard 2001). From February 1985 to March 1987 Mike Dyer was resident on the Nyika, being attached to National Parks as research and planning officer (funded by a Canadian NGO). His main subjects of research did not, however, include birds; Dyer (1992) published a short study on the territoriality of *Grus carunculatus*. Dyer (1988) presented an annotated list of the birds, basically a compilation of earlier lists, records by himself or located in the files held at Chelinda, in addition to woodland species from the lower escarpments. Dyer's report does not, however, include records of note nor any of the breeding records published in *Nyala* in the early 1980s. It omits a number of species or observations mentioned in earlier documents (e.g. Dowsett 1978), adds some of doubtful identity and "months" of breeding activity contain errors; some are taken from Benson & Benson (1977) and are not related to Nyika data.

David Critchlow (employed by National Parks in research and management) lived on the Nyika from October 1993 to September 1996, being based at Thazima for the first three months then at Chelinda. He published several notes on selected species (Critchlow & Haugaard 1996, Critchlow 2001a, 2001b); both M. Dyer and D.P. Critchlow made incidental observations on migrant or unusual species and contributed significantly to the Atlas scheme (see below). Many other people contributed information on migrants or other species, including several Game Wardens (notably J.M. Feely posted at Lundazi in Zambia in the early 1960s, others posted on the Nyika like A.P. Ziegler who discovered *Lybius minor* and *Estrilda perreini* at Thazima in 1981, and D.O. Elias in 1981-83). In about 1994 Bob Medland, a keen birder based in Lilongwe, prepared a bird tick-list for the national park, published by the Wildlife Society.

Various people contributed to the bird Atlas scheme, a project we started in 1980 in conjunction with an update on *The Birds of Malawi* of Benson & Benson (1977). We kept up-to-date lists of every map square (based on the 1:50,000 maps), which allowed for a more precise outline of distribution of birds within the national park.

### Scope and sources of the present list

The list includes all species (resident, migrant, vagrant) recorded within the boundaries of the national park. Sources include all published articles and notes, scattered observations that appeared in the local bird literature (*Vocifer* and *Nyala* in Malawi, the *Newsletter of the Zambian Ornithological Society* in Zambia), numer-

ous personal observations, records kept on file at Chelinda Camp, numerous verbal or written communications by various residents and regular visitors.

Until 1979 R.J. Dowsett entered all records onto a card system by species, giving dates, observers' names and a reference where applicable, but many were unpublished observations. We continued to do this while we were resident, but this ideal system could not be kept up after we left northern Malawi in 1983 and doubtless some unpublished observations of rare migrants went unnoticed.

Another major source of information is the bird mapping project. The Nyika Plateau consists of five main Atlas squares: 1033B4 and 1033D1-4. 1033D1-2 are very well covered; 1033D3-4 reasonably so; 1033B4 is largely taken up by woodland of the northern escarpment, and has been much less well documented: although we visited Nganda Hill (in the south of that square) we never entered the miombo belt. Most (unpublished) information for that square was provided by staff based at Chelinda, mainly D.O. Elias, M. Dyer and D.P. Critchlow; nevertheless a number of common, ubiquitous species remain unrecorded. Much the same goes for 1033B2, which is however more marginal but includes Mpanda Mtn and its foothills; some of the gaps were filled by R.J. Dowsett on a day trip in October 1986. Nyamkhowa Mtn is the one significant forest site within the Nyika that is outside the main squares, in 1034C1: it was visited by early explorers, especially Benson, and by ourselves in December 1982, and the composition of the forest avifauna is considered well known.

From the tick-list prepared by R.D. Medland in 1994, 11 species included then have been deleted as we found no satisfactory evidence for their presence within the park. Sixteen others have been added: some are recent records of erratic species (cf. Critchlow & Haugaard 1996 among others), and there are also a number of overlooked, older records. The accepted species total is now 430. In a number of cases the species status indicated by Medland (n.d.) is inaccurate: for example some of the rarer vagrants are mentioned as "common residents" when there are no more than one-three records (e.g. *Vanellus senegallus*, *Streptopelia senegalensis*); other extremely local or marginal species receive the same status ("common") as their ubiquitous congeners (e.g. *Pogoniulus bilineatus* vs *P. leucomystax*, *Andropadus virens* vs *A. nigriceps*) and this could confuse visitors who are unfamiliar with the avifauna of northern Malawi.

Unlike Dowsett (1978) and Dyer (1988) who gave months of records but no years nor observer's names, I present here the full details for the rarer species (dates and observers' names, locations, a reference where applicable); for commoner migrants the general status is summarized, with details given of extreme dates only (including the sources). For resident species and intra-African breeding migrants, a summary is given of their ecological requirements, altitudinal range, territory sizes, breeding seasons and other details of their life history, including longevity where known. The food plants of the more specialized frugivores and nectarivores are also mentioned, especially where they can explain the birds' localized distribution and/or seasonal movements; interested readers can find more information in the relevant publications.

### Some ecological considerations

**1. The distribution of forest species across the Plateau.** The distribution of forest birds on the high Nyika is not uniform: some species are confined to the moist eastern escarpment (*Buteo oreophilus*, *Pogoniulus bilineatus* (local), *Illadopsis pyrrhoptera*, *Andropadus milanjensis*, *Phylloscopus ruficapilla*, *Linurgus olivaceus*), others to the south-west (*Andropadus virens* (local), *Apalis cinerea*, *Terpsiphone viridis*, *Dryoscopus cubla*, *Malaconotus multicolor*, *Nectarinia verticalis*); many are absent from the low-canopy (10-15 m) patches on the top. The height of the canopy decreases with increasing altitude, from 25-30 m at 1950-2150 m, 20-25 m at 2150-2250 m, and 10-15 m at 2250-2450 m (Dowsett-Lemaire 1985b). There is a general impoverishment in floristic diversity, tree height and bird species diversity with increasing altitude (for further details see Dowsett-Lemaire 1989a).

The extensive rain forest of the eastern escarpment (Nyamkhowa, Mwenembwe, Kasaramba) is much wetter, richer in epiphytes, and with extensive Acanthaceae shrubbery which appears particularly suitable for *Illadopsis*; *Sheppardia sharpei* is more widespread there than in the south-west, where it is largely confined to Manyenjere forest, the most luxuriant patch in the area. The eastern forests, being on a steeper gradient, have a more open canopy, and many species common to both escarpments appear to occur at much lower densities (e.g. *Apaloderma vittatum*).

**2. The miombo avifauna.** The status of the bird species inhabiting the wooded slopes is less well known, except for the Thazima area and other parts of the south-western escarpment which have been much visited.

Our information from the northern scarp in particular is incomplete. However, the miombo woodlands of the Nyika are most extensive in the rain shadows and are certainly drier and less mossy than those on both Viphya Plateaux; it is probably not surprising that *Ploceus olivaceiceps* has never been reported, as the mossy woodland it favours is largely lacking. Other miombo endemics are very marginal as they are restricted to the lower levels: *Tockus pallidirostris* and *Tricholaema frontata* do not reach the altitude (1600 m) of Thazima; others (*Erythropygia barbata*, *Serinus mennelli*) are not found much higher than this; only a handful occur all the way to the upper limits of tall woodland at 2000-2050 m: *Monticola angolensis*, *Sylvietta ruficapilla*, *Cisticola woosnami*, *Anthreptes anchietae*, *Nectarinia manoensis*, *Parus griseiventris*, *P. rufiventris*. Other woodland species (not endemic to miombo) such as *Turdus libonyana*, *Erythropygia leucophrys*, *Eremomela scotops*, *Batis molitor* and *Emberiza cabanisi* occur marginally above the woodland limit, in wooded grassland to 2150 m.

**3. Open habitats (grassland, rocks and waterbodies).** The extensive Nyika grasslands are home to a number of montane species in the genera *Francolinus*, *Sarothrura*, *Caprimulgus*, *Coturnix*, *Psalidoprocne*, *Hirundo*, *Cisticola* and *Euplectes*, and a montane race of lark (*Mirafraga africana nyikae*). Small populations of *Grus carunculatus* and *Neotis denhami* breed; as mentioned below both are of conservation concern on an African scale. Occasionally large flocks of migratory storks fly over the Plateau, but rarely stop unless they are grounded by poor weather. Quite a variety of raptors inhabit the high plateau, including all four vultures, at least two of which are known to breed locally. Seasonally a few migratory raptors (*Aquila*, *Buteo*) pass over the south-western Nyika in large numbers, especially on their northward journey in February-March. Although one or two rocky domes are impressive (especially Fingira Rock), they are not of large size and are isolated in a sea of other habitats; the large rocky inselbergs and cliffs of south-central Malawi are not represented on the Nyika, and only the more common passerines, swifts and small raptors of rocky ridges and boulders are to be found.

With the small size and high altitude of artificial or natural pans, the numbers of waterbirds present on the Nyika at any one time are very low: few breed (*Tachybaptus*, *Fulica*, a couple of ducks) and most species are recorded on passage, with the highest number as mere vagrants. The Nyika Plateau having had high observer coverage over many years, it may not be surprising that some rare migrants or vagrants have not yet been recorded anywhere else in Malawi to this day, such as *Oxyura maccoa* and *Limicola falcinellus*.

### Biogeographical and conservation importance of the Nyika Plateau

Within the Afromontane archipelago-like region (White 1983), the highlands of northern Malawi are closely allied to those of Tanzania: within this region a striking latitudinal trend of species impoverishment is observed from north to south. Thus the following montane species reach their southern limits of range on the Nyika: *Streptopelia lugens*, *Chloropeta similis*, *Cisticola njombe*, *Apalis cinerea*, *Nectarinia johnstoni*, *Ploceus baglafecht*, *Euplectes psammocromius*. The *Ploceus* is represented by an endemic race (*nyikae*) and is indeed not present anywhere else in northern Malawi; *Nectarinia johnstoni* belongs to the race *nyikensis*, which is also probably endemic to the Nyika (although the species was observed once in the Mafingas). Another two species are represented by distinctive endemic races, far-isolated from other populations on the continent: the francolin *Francolinus levaillantii crawshayi* and the sunbird *Nectarinia afra whytei*; both are very common. *Illadopsis pyrrhoptera nysae* is endemic to the eastern Nyika and adjacent North Viphya Plateau, being isolated from populations to the north in western Tanzania by some 650 km. The distinctive race *nyikae* of *Mirafraga africana* is found nowhere else in Malawi but is shared with some highlands of southern Tanzania.

A few of the montane species occurring on the Nyika are of restricted range, i.e. limited to the highlands of northern Malawi and southern Tanzania: these are *Sheppardia sharpei*, *Cisticola nigriloris*, *C. njombe*, *Euplectes psammocromius* and the distinctive race *alfredi* of *Phyllastrephus flavostriatus*. *Cisticola njombe* and the *Euplectes* occur nowhere else in Malawi, but both are very common on the Nyika (as are most of the endemic races listed above). As if this were not enough to stress the special importance of the Nyika Plateau for the preservation of these local species, other, more widespread species breeding on the Nyika are also of conservation concern as they have lost much suitable habitat elsewhere on the continent: *Grus carunculatus* and *Hirundo atrocaerulea* are listed as "Vulnerable" by BirdLife International (2000, 2004). The Wattled Crane breeds in small numbers and is experiencing difficulties due to the poor fire-break management; the Blue Swallow, on the other hand, is more numerous, and with some 300 pairs (see species account),

the Nyika population is probably the most healthy in the African highlands. Other species of (lower) conservation concern on the Nyika include *Neotis denhami* (which breeds), the vulture *Torgos tracheliotus* (which is more common on the Nyika than anywhere else in Malawi) and several Palaearctic migrants: *Circus macrourus* is particularly common; *Crex crex* and *Gallinago media* winter in smaller numbers.

### Conservation issues

The park has no buffer zone and the agricultural use of surrounding areas is increasing, to the point that virtually no miombo woodland remains along the Bolero-Thazima road all the way to the entry gate. This means that there is no longer any woodland corridor between Vwaza Marsh W.R. to the south-west and the park. The northern extension area (dating from 1978) includes 2000 km<sup>2</sup> of miombo woodland that was formerly inhabited by several small communities. Their expulsion resulted in much resentment and there is political pressure on the National Parks to release land back to the people. A. Watson (*in litt.* 2002) recently saw some encroachment in the south, in the region of Fingira. Poaching pressure in the north has become so important that the small remaining population of Elephants (normally based in the northern extension) has been occasionally coming up to the top of the Plateau in the 1990s, something that was hardly ever observed in previous decades.

The cold, forested eastern escarpment was never inhabited but the lower edges of the forest continually suffer from bush fires and are slowly receding. In the dry season uncontrolled fires sweep up onto the plateau and cause serious damage to the small patches of forest scattered over the grasslands. From about 1953 (then under the management of the Forestry Department) and until the 1980s there was a strict "early burning" fire-break policy that protected most forests from the more virulent fires of the late dry season; thus by the 1980s there was significant forest regeneration in many areas. This system has broken down since, fires being started by poachers as well as Parks' staff all the time during the dry season (D.P. Critchlow pers. comm. 2002), thus undoing in a few years of neglect more than 30 years of active protection. In 2004-05, however, the situation improved somewhat, with an increase in assistance to the Department of National Parks from outside sources.

### SPECIES LIST

Names of observers, with initials as used in the list, are the following:

D.R. Aspinwall (*DRA*), J.D. Atkins (*JDA*), J. Auburn (*JA*), C. Badger (*CB*), G. Baker (*GB*), M. Bamford (*MB*), I. Bampton (*IB*), I. Barber (*IBa*), M. von Bechtolsheim (*MvB*), M. van Beirs (*MvBe*), C.W. Benson (*CWB*), S. Berg (*SB*), N. Borrow (*NB*), G. Brown (*GB*), W.F. Bruce-Miller (*WFB-M*), C. Bruessow (*CB*), Mrs G.R. Bullock (*GRB*), E.L. Button (*ELB*), C. Carter (*CC*), J. Chapman (*JC*), N. Cleere (*NC*), B. Coates (*BC*), J.F.R. Colebrook-Robjent (*JFRC-R*), R.A. Critchley (*RAC*), D.P. Critchlow (*DPC*), R. Cumming (*RC*), R.J. Dowsett (*RJD*), Mrs F. Dowsett-Lemaire (*FD-L*), M. Dyer (*MD*), D.O. Elias (*DOE*), Mrs E. Elias (*EE*), M.I. Evans (*MIE*), J.M. Feely (*JMF*), D. Foot (*DF*), H. Gibbs (*HG*), M. Gore (*MG*), A.H. Green (*AHG*), P. Gregory (*PG*), R. Groves (*RG*), J. Harvey (*JHa*), C. Haskard (*CHa*), J. Haugaard (*JH*), J. Hough (*JHo*), C. & L. Huxley (*CH & LH*), N. Johnston-Stewart (*NJ-S*), Mrs I. la Croix (*IlaC*), P.C. Lemon (*PCL*), P.M. Leonard (*PML*), S.G. Madge (*SGM*), M. Mallalieu (*MM*), G. Martin (*GM*), W. McClelland (*WMc*), R.D. Medland (*RDM*), P.C. Middleton (*PCM*), T.A. Mill (*TAM*), B. Mwapeyah (*BM*), T.O. Osborne (*TOO*), E. Paterson (*EP*), E.H. Penry (*EHP*), M. Petzold (*MP*), B. Pollard (*BP*), R. Casalis de Pury (*RCP*), G.P. Robinson (*GPR*), C. Saunders (*CS*), A.J. Scott (*AJS*), E. Spenner (*ES*), D. Stead (*DS*), P. Steyn (*PS*), R.J. Stjernstedt (*RJS*), P.B. Taylor (*PBT*), M. Trusler (*MT*), J.J. Tucker (*JJT*), M. Turner (*MTu*), C.J. Vernon (*CJV*), F. van Vuuren (*FV*), B. Walker (*BW*), A. Watson (*AW*), Dr von Weber (*vW*), P. Womfor (*PW*), R.C. Wood (*RCW*), N. van Zalinge (*NZ*), A.P. Ziegler (*APZ*), R.P. Zimmerman (*RPZ*).

#### Abbreviations of status:

**PM** = Palaearctic migrant; **AM** = intra-African migrant; **R** = resident (not excluding some local movements); **V** = vagrant or irregular visitor. **R/M** indicates a species that is normally resident in Malawi but shows regular seasonal movements on the Nyika.

**Figure 1.** Map of the Nyika Plateau, adapted from White *et al.* (2001).

Little Grebe *Tachybaptus ruficollis*

**R.** Occurs in small numbers on the dams around Chelinda, apparently since the early 1960s (*PCL* in Critchlow 1997a) when the three dams were built. Seems absent in some months (especially Jan.-Mar.), but in 1980-82 we had records overall for all months except Feb. Was proven to breed in 1996, when a pair with five small chicks was seen on 10 Feb. (Critchlow 1997a), suggesting egg-laying Jan.

Reed Cormorant *Phalacrocorax africanus*

**V.** No more than a rare visitor to dams: one individual visited Chelinda Dam 2 in Jul. 1987 (*MD*), and another Chelinda Dam 1 on 19 Aug. 2000 (*BM*). It was also reported from Chisanga Falls on 27 Aug. 1994 (*SB per DPC*).

African Darter *Anhinga rufa*

**V.** Exceptional vagrant: one at Lake Kaulime on 3 Jan. 1982 (*BW*).

White Pelican *Pelecanus onocrotalus*

**V.** One exceptional observation of an immature flying north over Zovochipolo (2200 m) with a large flock of Abdim's Storks on 2 Feb. 1981 (*RJD & FD-L*).

Common Squacco Heron *Ardeola ralloides*

**V.** Only three records on the plateau, all at Chelinda Dam: one seen 24 Oct. 1973 by *MT* (Dowsett *et al.* 1974); another in Oct. 1986 (Dyer 1988); three (including an immature) on 11 Mar. 1994 (*DPC*).

Cattle Egret *Bubulcus ibis*

V. Small numbers occasionally seen in the vicinity of the dams or Lake Kaulime (*FD-L & RJD, DPC*), even once near the Zambian rest house (Apr. 1955: Dowsett 1969, 1970). Overall recorded at any time of year (months of Feb.-May, Sep., Nov.-Dec.); the largest number seen was 21 (28 Mar. 1986 at Dam 2, Dyer 1988).

Green-backed Heron *Butorides striata*

V. An exceptional record of a vagrant to Dam 1, 18 Nov. 1998 (*BP*). *DPC* saw the species in reeds near Thazima, on a tributary of the Luvini on 28 Dec. 1995, but this was outside the park.

Little Egret *Egretta garzetta*

V. Rare visitor to waterbodies: one at Lake Kaulime 30 Oct. 1972 (Dowsett *et al.* 1974); one at Dam 1 on 20 Feb. 1980 (*FD-L & RJD*); two at Dam 1 on 1 Dec. 1995 (*DPC*) and one at Dam 3 on 14 Jul. 2000 (*DF*).

Yellow-billed Egret *Egretta intermedia*

V. Scarce visitor to waterbodies: one at Dam 3 in Feb. 1973 and one at Lake Kaulime on 27 Dec. 1973 (Dowsett *et al.* 1974). As many as three at Chelinda Dam on 8 Dec. 1991 (*NZ*), singles on 10 Nov. 1993 (*RDM*), 12 Feb. 1994 and 26 Nov.-5 Dec. 1995 (*DPC*).

Great White Egret *Egretta alba*

V. First one reported from Dam 2 in Feb. 1973 (Dowsett *et al.* 1974); one at Lake Kaulime 17 Jan. 1981 (*FD-L & RJD*); two at Chelinda 12 Apr. 1992 (*DF*); sightings of singles at all three dams on 1 Jan. 1994, 2 Feb. 1995 and 8-22 Dec. 1995 (*DPC*); one at Dam 3 on 14 Jul. 2000 (*DF*).

Purple Heron *Ardea purpurea*

V. One exceptional record of a vagrant at Chelinda Dam, coming to roost on 25 Oct. 1992 (*RDM*).

Grey Heron *Ardea cinerea*

V. Two records of single vagrants at Chelinda Dam, 23 Sep. 1992 (*RDM*) and 7-12 Jul. 1993 (*CH & LH*).

Black-headed Heron *Ardea melanocephala*

V/R. First reported in 1969, in grassland on the edge of Dam 1 (three birds in Mar., then one in Aug.: Dowsett *et al.* 1974). Singles have been noted quite often at the same locality in later years, mainly in the rains (*FD-L & RJD* in 1980-82, *MD* in 1985-86, *DPC* in 1993-1995). Presumably present but unreported in other years.

Hamerkop *Scopus umbretta*

V/R? Singles irregularly reported from Chelinda dams (Feb. 1969, 25 Feb.-2 Mar. 1972 by *RAC*), Chelinda (29 Oct-2 Nov. 1972 by *EHP*), Dam 3 and Lake Kaulime (Oct. 1973, *RJD*). One at horse stables (Chelinda) and Dam 1 in Aug.-Sep. 1995 (*DPC & DF*) and Jan. 1996 (*DF*). Could breed in the foothills.

Yellow-billed Stork *Mycteria ibis*

V. The first record is of a flock seen by *TOO* in May 1975 on the Zambian/Malawi border. Dyer (1987) noted six at Lake Kaulime on 30 Nov. 1985 and three at Dam 3 on 24 Oct. 1986; five visited Chelinda dams on 12 Apr. 1992 (*DF*); one flew over Chelinda on 21 Feb. 1995 (*DPC*) and seven flew over "Nganda camp" (in 1033B4) on 14 Apr. 1997 (*JH et al.*).

Openbill Stork *Anastomus lamelligerus*

AM. Critchlow (2001a) summarized the occurrence of groups flying over or roosting on the high Nyika from 1976 to 1996. In that time, flocks were noted on seven occasions, mainly in Mar. (2) and Apr. (4), once in Dec. The largest was 250 over Vipiri Rocks (1033D2) on 4 Apr. 1994 (*MD & DPC*), followed by 120 over Manyenjere on 18 Dec. 1976 (*DRA*). Since then small groups were seen at Chelinda on 14 Jul. 1997 (*DF*) and 17 Apr. 2000 (*RC*).

Black Stork *Ciconia nigra*

R? Only three records traced: one on the northern slopes (1033B4) on 4 Aug. 1981 (*EE*) and seen again in the area in the mid-1980s (Jun., *MD*), one at Thazima on 6 Aug. 1981 (*APZ*). The last was presumably a wan-



derer; there may be nesting habitat in the northern rocky woodland, but this has not been investigated.

Abdim's Stork *Ciconia abdimii*

**AM.** Overall months of observation, of birds passing through, are Dec.-Mar. and marginally early Apr. Significant numbers fly over the Nyika in some years: in Dec. 1963 about 200 flew south on the 10th and 150 the next day (*JMF*); in Feb. 1981 northward passage was noted on at least three dates (2-25), with a maximum of 110 on the 2nd, and 90 on the 25th (*FD-L & RJD*). About 30 were grounded near Chelinda on 17 Feb. 1982 (*RJD*). An unusual 1500 birds (minimum) were flying south on 22 Dec. 1989 (*MB & RDM*), and 150-200 over Chelinda as late as 8 Jan. 2002 (*DPC*); also of note is a flock of well over 500 grounded in Zovochipolo on 24 Jan. 1994 (*DPC*). Further records since of northward passage, of 52 on 29 Feb. 1993 (*MP*), and up to 200 feeding near Chelinda on 11 Feb. 1995 with smaller groups seen later that month, then one roosting in Eucalyptus by Dam 1 on 6 Mar. and a late one near stables on 15 Apr. (*DPC & DF*).

Woolly-necked Stork *Ciconia episcopus*

**V.** Exceptional vagrant, with one immature walking through grass near Dam 3 (Chelinda) on 22 Dec. 1995 (Critchlow & Haugaard 1996).

White Stork *Ciconia ciconia*

**PM.** Small numbers noted on passage most years (e.g. Oct.-Nov. and Feb.-Mar. during our period of residence). The earliest arrival date reported is 9 Oct. (1981, five birds, *FD-L & RJD*). The normal "last date" seems to be one bird on 15 Apr. (1995: *PW*). A few are occasionally reported in the off-season, probably over-summering, for example two on 15 May 1986 (*MD*), one on 6 Jun. 1992 (Anon.), one on 2 May 1994 (*DPC*) and three on 3 Jun. 1996 (*DF*). And of older records, two were reported in mid-May 1962 (*PCM*) and one in Jun. 1963 (Anon.). Very few seem to winter, e.g. 12 on 26 Jan. 1992. The largest number we saw was 19 birds (passing on 4 Mar. 1980), but *DPC* saw as many as 45 on 5 Feb. 1994 (over Chisanga Falls) and 140-150 over the plateau on 16 Mar. 1996.

Saddlebill *Ephippiorhynchus senegalensis*

**V.** There are three old records of single vagrants: one was at Lake Kaulime on 14 Nov. 1959 (*AHG*); others were noted in Nov. 1956 and mid-May 1962 without details (Dowsett *et al.* 1974).

Marabou Stork *Leptoptilos crumeniferus*

**V.** At least three old records (pre-1977), two considered "unproven" (Dowsett *et al.* 1974), and two birds seen about 1976 (Anon., *Nyala* 1977, 3(1): 101). More recently, four were by Dam 3 on 9-10 Jul. 1995 (Critchlow & Haugaard 1996); one at Chelinda on 25 Jun. 1996 (*DPC*); one at Lake Kaulime on 9 Sep. 2000 (*BM*); and a remarkable concentration of 28 at an Eland carcass on 19 May 2002 (*DF*). Since the absence of reports in the 1980s, the species seems now to be increasing in the region.

[Shoebill *Balaeniceps rex*. A species whose presence in Malawi overall remains unproven. A single-observer sight record of a lost bird by Dam 2 on 7 Feb. 1988 (Roseveare 1989), a location eminently unsuitable for a bird of large papyrus swamps; misidentification considered probable.]

Sacred Ibis *Threskiornis aethiopicus*

**V.** An exceptional vagrant to the Nyika: one at Lake Kaulime on 18 Aug. 1996 (*ES*).

Glossy Ibis *Plegadis falcinellus*

**V.** Equally exceptional: one at Dam 3 on 30 Jun. 1967 (Talbot 1968).

Hadada Ibis *Bostrychia hagedash*

**V.** Only a couple of records: one flying over (near Zambian rest house) 24 Nov. 1979 (*FD-L*) and one present in Apr. 1994 around Chelinda, up to Dam 2 (*DPC*).

African Spoonbill *Platalea alba*

**V.** An exceptional vagrant: one at Dam 1 on 24-25 Aug. 1980 (*JA*).

Greater Flamingo *Phoenicopterus roseus*

V. A vagrant thought to be this species turned up at Dam 1 on 5-6 Oct. 1965 (Dowsett *et al.* 1974).

Fulvous Tree Duck *Dendrocygna bicolor*

V. Four birds turned up at Dam 3 on 30 Mar. 1973 (Dowsett *et al.* 1974).

[White-backed Duck *Thalassornis leuconotus*. Should not be included in the Nyika list: one mention for the Nyika in Nyala 1997 (20: 48) is apparently a typing error for the Kasitu floodplain near Rumphu.]

Spur-winged Goose *Plectropterus gambensis*

V. A single vagrant to Lake Kaulime in Aug. 1961 (Dowsett *et al.* 1974).

Knob-billed Duck *Sarkidiornis melanotos*

AM. Singles or small groups visit the dams and Lake Kaulime on irregular occasions, at any time of year. In 1989, it apparently bred, as four half-grown young accompanied seven adults at Chelinda on 27 Dec. (CB). The largest group noted in the past was 12, at Lake Kaulime in Aug. 1958 (vW). Also a group of 10 on a pool by the North Rumphu (2050 m) in Jan. 1995 (DPC), and nine at Dam 3 in Apr. 1980 (APZ).

African Black Duck *Anas sparsa*

R. Recorded a few times on the North Rukuru river below the plateau and other streams on the high Nyika (e.g. Dembo stream, a pair Apr. 1980, RJD & FD-L, and North Rumphu in Jan. 1995, DPC). Singles or pairs wander rarely to the Chelinda dams or Lake Kaulime (several observers); also seen on the main stream at Thazima (Nov. 1981, FD-L & RJD) and near Katizi (Jun., MD). Female with three ducklings in the Wovwe valley (1400 m) in Nov. 1986 (MD).

Yellow-billed Duck *Anas undulata*

R. The only reasonably common duck on the high Nyika, with small numbers on the dams and Lake Kaulime at all seasons. It was already recorded from Lake Kaulime before 1940 (long before the creation of the dams, Benson 1940-41) and five were also seen there by the Bensons in 1947 (Benson & Benson 1949). During our period of residence the species was present in all months, but it may be absent for short periods. It was proven to breed in 1994, with five small ducklings (quarter size) accompanying a pair at Chelinda (Dam 2) on 15 Apr. (RDM), seen again later that month (DPC), and two juveniles on 5 Jun. were probably from the same brood (DPC). One large group of 19 on 19 Dec. 1995, same number on 2 Oct. 1996 and 22 counted around Chelinda on 26 Jul. 1996 (DPC).

Red-billed Teal *Anas erythrorhyncha*

V. No more than a rare visitor: the first report was of two birds at Dam 1, 7 Feb. 1980 (Dowsett & Dowsett-Lemaire 1980); a pair again at Chelinda on 9 Jan. 1983 (FD-L & RJD); one bird in Apr. 1986 (MD); one at Dams 2 and 3 in Jan.-Feb. 1996 (DPC).

Hottentot Teal *Anas hottentota*

V. A single record of this species (no numbers) wandering to Dam 3, 3 Jan. 1978 (DS).

Garganey *Anas querquedula*

PV. A single record of this species visiting a dam south of Chelinda (Dam 2 or 3) in Nov. 1983 (RCP).

Northern Shoveler *Anas clypeata*

PV. A scarce vagrant to Malawi, with a single record from Chelinda Dam, 19 Oct. 1977 (JC), without details of number or sex.

Southern Pochard *Netta erythrophthalma*

V. Two records of wanderers: 10 at Dam 3 on 24 Apr. 1985 (Dyer 1987), and a single female also at Dam 3 in Jan. 1996 (DPC).

Maccoa Duck *Oxyura maccoa*

**V.** One bird in female plumage was at Dam 1 from 22 Dec. 1979 to early Apr. 1980 and was photographed (Dowsett & Dowsett-Lemaire 1979a, 1980), the Nyika being the only site in Malawi where the species has ever been recorded. There is a possible sighting of one at Chelinda on 27 Sep. 1987, but without a supporting description.

[African Cuckoo Hawk *Aviceda cuculoides*. We have not traced a valid record of this species, listed by Medland (n.d.); it is probably based on one record mentioned in Dyer (1988, at 1700 m) but MD has no recollection of this observation. It has been recorded recently (2002) close to the western escarpment (Gamba, DPC) but should not for the moment be included in the park's list.]

Honey Buzzard *Pernis apivorus*

**PV.** Scarce migrant, with singles flying north over Chowo Rocks on 12 Mar. 1980, 22 Mar. 1981 (RJD); singles on southward passage 23 Oct. and 22 Nov. 1990 (PS); one at Thazima 14 Nov. 1997 (MvB); two on 17 Nov. 1998 (NB et al.).

Bat Hawk *Macheiramphus alcinus*

**V.** No more than a scarce visitor: one was around the Zambian rest house in the last week of Oct. 1979, and the Zambia-Malawi border road on 11 Mar. 1980 (RJD), c. 2150 m.

Black-shouldered Kite *Elanus caeruleus*

**R.** Small numbers are resident on the high plateau grasslands, up to at least 2400 m. Much attracted to grass fires. A specimen obtained by Dowsett (1970) had eaten a *Rhabdomys pumilio*, a diurnal rodent.

Eurasian Black Kite *Milvus m. migrans*

**PM.** One of this race was noted by DRA flying north over the Manyanjere track on 27 Feb. 1979; we also recorded this race on northward passage over Chowo Rocks, with 16 flying north-west on 12 Mar. 1980, 14 flying north on three days from 20-25 Feb. 1981; also three at Chelinda 21 Feb. 1986 (MD); one 23 Dec. 1989 (RDM). [An earlier report of one around Lake Kaulime in Oct. 1976 remains unconfirmed.]

Yellow-billed Kite *Milvus migrans parasitus*

**AM.** In various habitats on the escarpments and high plateau. During our period of residence the species was seen regularly from late Jul.-Aug. to Feb., sometimes into Mar., and we suspected breeding in the area of Chowo (a pair hunting up to 2200 m, already back in mid-Jul. 1980). Occasionally seen over the high plateau up to at least 2400 m but probably not breeding that high. Intra-African migrant normally arriving in the second half of July or early Aug.: thus first one noted 19 Jul. 1975 (EHP); mid-Jul. 1980 (Chowo, RJD); 22 Jul. 1995 (DPC); 20 Jul. 2000 (DF) with an unusually early one on 2 Jul. 1999 (DF). A few on northward passage on 10 and 14 Mar. 1992 (Anon., the possibility of those being the Palaearctic race cannot be excluded) and 10 Mar. 1997 (JH). A single reported on 17 Jun. 1991 (Anon.) may have been wintering. Dowsett (1970) collected a bird that had eaten a *Rhabdomys pumilio*.

African Fish Eagle *Haliaeetus vocifer*

**V.** There are at least a dozen records from the high plateau: first noted at Chelinda Dam on 25 Jul. and 16 Aug. 1978 (APZ), and we had several observations of singles visiting the dams during our period of residence (Sep. 1980, Aug., Oct., Dec. 1981, Feb. 1982) as well as in Jan. 1983. The one seen on 22 Aug. 1981 was flying (calling) over Zovochipolo! Also several records by MD at the Chelinda dams (mid-1980s). Presumably still an occasional visitor in later years but unreported.

Palm-nut Vulture *Gypohierax angolensis*

**V.** An exceptional wanderer from the Lake-shore: one adult drifted over Chelinda (to the north-west) on 3 May 1980 (Dowsett & Dowsett-Lemaire 1980). There is a later record, on 28 Apr. 1995, of a subadult circling over to the east of Zovochipolo (HG & PW).

Hooded Vulture *Necrosyrtes monachus*

**R.** Small numbers are resident on the high plateau, hunting up to at least 2400 m. A pair was breeding in a

patch of forest in Zovochipolo in 1980 at 2150 m: the nest was situated in a large *Polyscias fulva* and contained a large nestling in Nov. (with egg-laying back-dated to Jun.). The food regurgitated to the youngster seemed to be greatly in excess of requirements! Breeding took place in the same patch again in 1981. On 17 Nov. 1981 we found another nest in Manyenjere forest, also in a tall *Polyscias*, and the large young was ready to fly. Normally seen as singles or pairs. An unusual concentration of 12 birds was seen at a Zebra carcass in May 1985 (Dyer 1988).

#### White-backed Vulture *Gyps africanus*

**R.** The most numerous of the vultures on the Nyika, seen up to *c.* 2500 m alt. Feeds on carcasses of large mammals, including Common Duiker, Zebra, Eland. Seen in groups of up to 20 or 30 (*EHP & RJD* in the 1970s); on 19 Jul. 1994 *DPC* saw over 100 vultures on a Zebra carcass, the majority of which would have been this species. Not proven to breed on the Nyika, and presumably wanders to and from other game areas, such as Vwaza Marsh and the Luangwa Valley (Zambia).

#### Lappet-faced Vulture *Torgos tracheliotus*

**R.** Seen year-round in small numbers (throughout), normally one-three individuals, with as many as 14 gathered at a carcass in Apr. 1986 (*MG*), and 17 on a Zebra carcass in May 1985 (Dyer 1988).

#### White-headed Vulture *Trigonoceps occipitalis*

**R.** Widespread in small numbers, with a maximum of four together at a carcass (Apr. 1986, *MG*). A pair was often around a nest in the fork of a *Polyscias fulva* in Zovochipolo in 1980-81 (at 2200 m), and an immature was with an adult near the empty nest on 4 Nov. 1980 (*FD-L*). Also a pair at nest in Chipome valley in Nov. 1986 (Dyer 1988).

#### Black-breasted Snake Eagle *Circaetus pectoralis*

**R.** Widespread over woodland and grassland, with territorial pairs observed up to *c.* 2200 m (Zovochipolo); also visits the central plateau up to 2400 m (Chelinda, Kasaramba etc.). Attracted to bush fires and the early burning of grassland. Pair with immature near Chelinda in May (Dyer 1988).

#### Brown Snake Eagle *Circaetus cinereus*

**R.** Recorded from miombo woodland on the dry, northern slopes, and also on the southern slopes, up to *c.* 1900 m (Fingira Rock area, *RJD & FD-L*); one vagrant visited Zovochipolo 23-29 Sep. 1981 at 2150 m (*RJD*) and there is an older record from the Zambian side at 2130 m (Aug. 1972, in *Aspinwall et al.* 1973).

#### Western Banded Snake Eagle *Circaetus cinerascens*

**V.** A species mostly of low-lying valleys, very marginal here, with a single record of a wanderer in riparian vegetation near Thazima, 1600-1650 m, 11 May 1985 (Dyer 1987).

#### Bateleur *Terathopius ecaudatus*

**R.** Very widespread. A pair was occupying a nest in a patch in Zovochipolo (2200 m) in 1979-1981, often alarm-calling (and carrying sticks on some occasions) but apparently failed to produce any young. There is an earlier report of a pair nest-building in a forest patch (13 Oct. 1973) from the same area (*JFRC-R & TOO*).

#### Gymnogene *Polyboroides typus*

**R.** Uncommon on the lower slopes (e.g. Thazima, Chipome) and rare visitor to the high plateau, as near the Zambian rest house (a few records in the 1970s); one record from 1033D2 in Jun. 1994 (near Mpopoti turn-off, *DF & HG*, *c.* 2300 m) and over Zovochipolo (Jul. 2001, *DF*).

#### Eurasian Marsh Harrier *Circus aeruginosus*

**PM.** Used to be lumped with African Marsh Harrier, and old records cannot be treated separately. May be scarcer than *C. ranivorus*. Uncommon migrant (late Nov.-Mar.) over open grassland and dambos, recorded by us at least once in three years (a male on 28 Jan. 1981). Also reported on 12 Mar. 1989, 22 and 25 Dec. 1989 (all males, *RDM*). More frequently noted in the 1990s and early 2000s, with a few in all months from late Nov. to Mar., but especially in Dec. Extreme dates appear to be 21 Nov. (1995, one male, *DPC*) and 14-15 Mar. (1997, near Nganda, *JH et al.*). Possibly a later date on 8 Apr. 1995 (*DPC*).

African Marsh Harrier *Circus ranivorus*

**R?** Probably a scarce resident in large dambos on the central plateau, up to 2300-2400 m, including Chelinda dams, but absent at times (as in most of 1981 when we saw it near Chelinda only in Oct.-Nov.). Recorded nesting in late Feb. 1972 (occupied nest in rushes at the head of Dam 3) and Dec. 1974 (two pairs nest-building), both by *RAC*. In the mid-1990s, *DPC* saw this species less often than Eurasian, in the months of Nov. to Jan., and Apr-May.

Pallid Harrier *Circus macrourus*

**PM.** The most frequently seen harrier over the grasslands of the high Nyika, a regular migrant, wintering in small numbers from late Oct. to Mar. The earliest arrival date seems to be 12 Oct. (1973, one adult male, *RJD*) and the latest 25 Mar. (1997 near Nganda, *JH et al.*) – there is possibly an earlier arrival date (2 Oct. 1979) but details are lacking. A total of 15 birds, in three groups, was seen going to roost at dusk on 8 Dec. 1991 (*NZ*), and as many as 20 were counted heading north over a large area of the plateau on 2 Mar. 1985 (*MD*).

Montagu's Harrier *Circus pygargus*

**PM.** Much scarcer than last, also on the high plateau. Our own few records were in Jan.-Mar., with a possible (female/immature) on 10-13 Nov. (1980). There is a predominance of Jan.-Mar. records in other years too, with the latest sighting on 5 Apr. (1985, *MD*); in addition one (no sex given) was apparently seen on 5 Nov. 1997 (*DF*); also one female on 24 Nov. 2002 (*WMc*), one male on 5 Dec. 1995 and 23 Dec. 1994 (*DPC*). On 29 Dec. 2001 a male attacked unsuccessfully a Red-winged Francolin (*DPC*).

Dark Chanting Goshawk *Melierax metabates*

**R.** Uncommon resident in light woodland on the lower slopes of the west and south-west (*MD*), unrecorded from the north. Dyer (1987) located a pair at the altitude of *c.* 1800 m north of Thazima, and this is the highest for the country.

[Gabar Goshawk *Melierax gabar*. A bird of low-altitude *Acacia* or other dry country, not yet recorded from the park. We unhesitatingly reject one sighting from 2300 m near Nganda, in either Aug. or Sep. 1972 (Anon. 1973); given the altitude and time of year, Lizard Buzzard would have been more likely. There are no other claimed records.]

Black Goshawk *Accipiter melanoleucus*

**R.** Discreet species of evergreen forest and plantations, which may also hunt in the open; widespread (up to at least 2400 m in forest patches) and breeding up to at least 2200 m (in Chowo/Zovochipolo). *DRA* saw one bird apparently displaying over Manyenjere forest on 27 Feb. 1979; there was an occupied nest in Lusero forest in Oct. 1981, and in Chowo in Oct. 1986 (fork of *Polyscias*, *FD-L*). One immature was chasing a Giant Kingfisher at Dam 1 on 29 Sep. 1980; one attacked a Red-winged Francolin near Kaulime on 8 Aug. 1981 (*RJD* & *FD-L*).

Red-breasted Sparrowhawk *Accipiter rufiventris*

**R.** Widespread resident on the high plateau, usually hunting small birds in open country and often along roads. Mainly above 2100 m, and up to at least 2400 m. A small raptor's nest in a Zovochipolo patch on the international border probably belonged to this species (*RJD* & *FD-L*); a juvenile was collected in Nov. (Irwin *et al.* 1982) and more recently a female was accompanied by a begging juvenile on 25 Nov. 2002, in Zovochipolo (*WMc*). *RJD* collected an adult male (Aug. 1971) that was carrying a juvenile Red-winged Francolin and it was seen attacking Red-winged Francolin on other occasions; small passerines are probably the most frequent prey.

[Little Sparrowhawk *Accipiter minullus*. Another low-altitude raptor of (usually) riparian vegetation and thickets. Although included in Medland's list, we have failed to trace any valid records.]

African Goshawk *Accipiter tachiro*

**R.** The commonest forest raptor on the Nyika, throughout the forested area up to at least 2400 m (Chelinda Hill). It is still (strangely) unrecorded from the Thazima area (1033D3). Easily located from its noisy aerial display (given often just after dawn, also in late afternoon), and at least three pairs occupied territories in

Zovochipolo in an area of 9 km<sup>2</sup> of forest-grassland mosaic (Dowsett-Lemaire 1989a); one of them produced three young (fledged) in Nov. 1980, the nest being in a *Polyscias*; nest-building was observed in the same patch (in a *Hagenia*) in early Sep. 1981. Aerial displays noted most months, at least from Jul. to early Mar.

#### Shikra *Accipiter badius*

**V.** Very few records of this hawk, at most a scarce visitor to the high plateau: one was seen near the Zambian border (c. 2150 m) on 3 and 10 Jul. 1980, coming to grass fires (Dowsett & Dowsett-Lemaire 1980). *MD* saw one below Domwe at c. 2200 m, and there is also a record from Chelinda (Apr.) and the Juniper Forest (Sep.) (Dyer 1988).

#### Lizard Buzzard *Kaupifalco monogrammicus*

**R/M.** Critchlow (2001a) summarized many records (1970s to 1990s) of birds wintering at Chelinda on the edge of Pine plantations; this appears to be an annual event taking place between late Apr.-May and Oct., and birds defend territories vocally. In addition to the Chelinda area, we recorded one in tree clumps in the vicinity of Lake Kaulime (2350 m) holding a territory in Sep. 1980, and another around some patches in Zovochipolo, and there is an older record from the Zambian rest house in Jul. 1975 (*EHP*). Also more recently noted in Zovochipolo (Jul. 2001, *DF*). In the summer months, probably occurs no higher than the Thazima area.

#### Common Buzzard *Buteo buteo*

**PM.** A common passage and wintering migrant from mid-Oct. to early Apr., with largest numbers noted on northward passage in late Feb.-Mar. Widespread on the high plateau in open country. The earliest arrival date is 3 Oct. (1980) and latest northward passage was recorded on 13 Apr. (1980, all *RJD* & *FD-L*). Towards the end of Feb. and in Mar. it is not unusual to see one to several dozen fly over, especially near the Chowo ridge: thus on 12 Mar. 1980 we counted at least 112 in 20 minutes over Chowo Rocks (and 31 the next day) and 30 on 25 Feb. 1981. On 14-22 Oct. 1975 there was also daily southward passage, with over 20 on the 19th (*GPR*).

#### Forest Buzzard *Buteo oreophilus*

**R.** First discovered on 4 Dec. 1977 on the eastern escarpment at Kasaramba (Dowsett & Dowsett-Lemaire 1979b), and later (1980 *et seq.*) also observed at Mwenembwe. Seen displaying (calling, swooping and then disappearing inside forest) around the extensive forests of the eastern escarpment in the months of Feb. to Apr., Sep. and Dec. (all *RJD* & *FD-L*), and we suspect that the total number of pairs may not be more than six or seven. There have been a couple of sight records away from this area, near Chelinda and the Zambian border, but we are convinced (having spent over two years in the area) that the species is genuinely absent from the south-western escarpment. It is possible the odd bird might wander away from the eastern side in open country but the chances of confusion with Common Buzzard remain high.

#### Augur Buzzard *Buteo augur*

**R.** Common resident in open country on the high plateau; some birds are melanistic. The scarcity of large rocky hills is remedied by the species having adapted to tree-nesting: on 10 Oct. 1947 *CWB* collected a downy nestling from a nest in *Podocarpus* at c. 2150 m (Benson & Benson 1949); on 15 Oct. 1973 *RJD* & *TOO* observed a nest with pulli in a forest patch on the road to Kasaramba (c. 2440 m), and Anon. (1973) found a nest with two young in forest in Aug. 1972. Near Manyenjere however, a pair was holding territory by the rock face on top of the escarpment (*RJD* & *FD-L*, Dec. 1977).

#### Wahlberg's Eagle *Aquila wahlbergi*

**AM.** Widespread in miombo woodland on the lower slopes, up to at least 1700 or 1800 m; an occupied nest in the North Rukuru valley at 1400 m in Oct. (*MD*). Occurs around Thazima and higher in the Fingira Rock area, but the upper altitudinal limit of breeding pairs is uncertain. Seen on passage anywhere over the high plateau, up to 2400 m (e.g. Kasaramba, 9 Apr. 1981, *RJD* & *FD-L*), maximum 15 flying north 7 Apr. 1990 (*JA*).

#### Lesser Spotted Eagle *Aquila pomarina*

**PM.** Uncommon as a wintering species, but more conspicuous on northward passage in Feb.-Mar. A few pass south in Oct., earliest probably 18 Oct. (1975, *GPR*) followed by 21 Oct. 1973 (*RJD*). Very few seen in the months of Nov.-Jan. (*RJD* & *FD-L*), but numbers build up from mid-Feb., Chowo Rocks being a good place

to watch the migration: thus up to *c.* 200 flying north on 23 Feb. 1981 (also “many” flying north on 27 Feb. 1979, with Steppe Eagle, *DRA*), 64 on 13 Mar. 1980, 55 on 22 Mar. 1981. Passage peters out in late Mar. or early Apr., with last date 3 Apr. 1981 (all *RJD* & *FD-L*).

[Tawny Eagle *Aquila rapax*. Included in Medland’s list, apparently based on Dyer (1988: singles at carcasses in Feb. and May), but there are few accepted records of this localized, low-altitude species in Malawi. The odd one could visit the Nyika from Vwaza Marsh, where its presence is well established, but it would be no more than a vagrant.]

#### Steppe Eagle *Aquila nipalensis*

**PM.** Much the same status as for Lesser Spotted, but in smaller numbers. Very few on southward passage, earliest possibly 15 Oct. 1979 (Anon.), otherwise 26 Oct. 1973 (*RJD*); uncommon in Nov.-Jan., with numbers increasing on northward passage. Thus 25 flying north over Chowo Rocks on 13 Mar. 1980, and daily until the end of the month; many on 23 Feb. 1981, at least eight on 22 Mar., last one on 3 Apr. (*RJD*). Two were also noted over the Nyika on 3 Apr. 1986 (*MD*).

#### Black Eagle *Aquila verreauxii*

**V.** Its breeding habitat is largely lacking on the Nyika and it is no more than a wanderer to the plateau, coming perhaps from the breeding site in Njakwa Gorge (Rumphi): there is one Atlas record from the Nganda square (early 1980s) and it was seen again there in 1997 (Overton 1998); a pair was flying over the eastern escarpment once in Nov. 1983 (*RCP*); one was seen in 1033D2, flying north into 1033B4, on 8 Apr. 1995 (*DPC* & *HG*). Dyer (1988) gives another couple of records from the Nyika files, for Jan. (Nkhonjera) and Sep. (Mpanda).

#### African Hawk Eagle *Hieraaetus spilogaster*

**V.** Very marginal for the area, with one record of three birds (including an immature) at Thazima, 1600 m, 20 Nov. 1994 (*DPC*). An old record of a pair over Kasaramba (12 Jan. 1973, *BC* in Benson & Benson 1977) is now considered doubtful, as may have been confused with Ayres’s Hawk Eagle. *MD* saw a pair between Kaperekezi and Nthalire, outside the park, but it might occasionally visit the border there.

#### Booted Eagle *Hieraaetus pennatus*

**PM.** Uncommon passage and wintering migrant; in our period of residence we saw it rarely in Nov.-Feb., with a few more passing in Mar. (daily maximum of seven flying over Chowo Rocks on 13 Mar. 1980), and last one on 2 Apr. 1981 (*RJD*). There is one earlier arrival date, two birds on 26 Oct. 1973 (*RJD*). [An Anon. report of three in mid-Oct. 1976 remains unconfirmed].

#### Ayres’s Hawk Eagle *Hieraaetus ayresii*

**R.** Discreet forest eagle, without a noisy display and thus easily under-recorded. We saw this species at Mwenembwe, over extensive forest (Sep. 1980) and a specimen was collected at Nyamkhowa (Oct., Benson 1940-41), where we saw it again in Dec. 1982. We did not find it in Chowo forest, but a pair was seen there “displaying” in Aug. 1972 (Aspinwall *et al.* 1973) and one in Sep. 1974 (*CC*); there is also one observation lower down (Zambian side) by *EHP* on 22 Jul. 1975. A pair probably of this species over Zovochipolo on 4 Feb. 1980 (*FD-L*); a pair over Manyenjere on 28 Jul. 2004 and single over Zovochipolo 29 Jul. 2004 (*WMC*).

#### Long-crested Eagle *Lophaetus occipitalis*

**R.** Present on the northern slopes and resident on the south-western scarp, up to Zovochipolo, but also seen near Chelinda, near Lake Kaulime and the Juniper Forest, thus up to *c.* 2300 m. Perches on forest edges, hunting in the open. A nest was found by *CWB* on the north-western escarpment (probably near Chisanga Falls) on 8 Oct. 1947, containing C/1 and N/1 (Benson & Benson 1949); a pair calling frequently in a section of Zovochipolo in 1980-81 was suspected to breed locally; an immature was seen there in Oct. 1981 (*FD-L*). Dyer (1988) mentions an occupied nest in Zovochipolo in Aug., without details.

#### Crowned Eagle *Stephanoaetus coronatus*

**R.** Widespread resident in forest on both the south-western and eastern escarpments; also at Nkhonjera Hill and seen hunting throughout, up to Nganda Hill. Four pairs (and nests) were located in the south-west (in *c.*

45 km<sup>2</sup>) in 1980-82, with inter-nest distances of about 4 km. Three of those were in emergent *Aningeria adolfi-friedericii* (Chowo, Zovochipolo, Kasyaula area) and one in a very tall *Chrysophyllum gorungosanum* (Manyenjere). Prey brought to the Zovochipolo nestling included Dassie *Heterohyrax brucei*, *Cephalophus* duikers, and the adult was seen hunting (but missing) Blue Monkey *Cercopithecus albogularis*. The chick had reached the size of a big chicken in early Nov. 1980, fledged in late Jan., and was still fed a year later in the summer of 1981-82. The pairs nesting in Chowo and Manyenjere were often seen flying off a long way over the wooded escarpments into Zambia (all *FD-L* & *RJD*).

#### Martial Eagle *Polemaetus bellicosus*

**R.** Resident, with huge territories, only one pair present in the south-west (and beyond) where four pairs of Crowned Eagle. A nest with a large chick was found by *IB* in Aug. 1982 near the Juniper Forest. In the mid-1980s there were two active nest sites: one still at the Junipers and another on the western escarpment below Chisanga Falls (where *MD* saw a full-grown young in Nov.), at a distance of at least 32 km. *MD* once disturbed a bird hovering over a couple of crouching Denham's Bustards. It has been seen eating a large snake (Mar. 1997, *JH et al.*).

#### Osprey *Pandion haliaetus*

**PV.** A few records of single wanderers visiting the Chelinda dams, including one "over-summering" (11 Jun. 1974, *TOO* in Dowsett *et al.* 1974); others being on 31 Mar. or 1 Apr. 1961 (*CHa*) and 22 Apr. 2000 (*DF*).

#### Secretary Bird *Sagittarius serpentarius*

**V.** This is an irregular visitor in the dry season to montane grassland, recorded usually as singles, once as a "pair" (Jun.-Nov. 1973, Roseveare in Benson & Benson 1977); in Oct. 1973, however, *RJD* saw only one or two singles, not associating as a pair. Often seen around Lake Kaulime, or in grassland near Chelinda. Our only record in nearly three years of residence was by the road (near the Kaulime turn-off) in Sep. 1980. *MP* saw one on 15 Oct. 1979; later records are one on 19 Jul. 1987, two on 6 Sep. 1987 (*IlaC*), one on 7 Nov. 1987 (*RDM*); one in mid-Jun. 1993 (*FV*), Aug.-Nov. 1994 (*HG et al.*) and Jul. 1995 (*SB et al.*). Thus all months combined are Jun. to Nov.

#### Lesser Kestrel *Falco naumanni*

**PM.** Observed on passage in very small numbers, by us mostly Dec. and Mar. in our three years of residence (from one to six birds at any time), also early Jan. 1982, and it was seen once in Feb. by *DPC* (12 Feb. 1994). Extreme dates are 3 Nov. (1996, *MvB*) – otherwise no records before early Dec. – and 9 Apr. (1986, *MD*). More recently, over 50 birds passed over on 1-4 Apr. 2002, with a maximum of 30 drifting past on 3 Apr. (*CS*). Dyer (1988) mentions having seen about 30 at Jalawe in Apr. but did not note the exact date (*MD in litt.*).

#### Rock Kestrel *Falco tinnunculus*

**V?** Rarely seen, the local race (*rupicolus*) is apparently no more than a vagrant. Our few sightings are from Dec. 1975 (Manyenjere, *RJD*), Nov. 1980 (near Junipers) and Mar. 1981 (near Nganda), while the Palaearctic race was definitely identified passing through on 12 Feb. and 26 Mar. 1980 (Chelinda-Chitipa road junction). Singles seen near Nganda by Anon. (1973) in Jul.-Aug. would be the local race. Also one mention for 2 Oct. 1994 (*HG*), race not determined. Noted in the months of Feb., Apr., Jul.-Aug. and Nov. by *DPC* in the mid-1990s.

#### Dickinson's Kestrel *Falco dickinsoni*

**V.** A wanderer visiting grass fires near the Zambian rest house 30 Jun.-4 Jul. 1980 (Dowsett & Dowsett-Lemaire 1980) is the only record.

#### Western Red-footed Falcon *Falco vespertinus*

**PV.** Of very irregular appearance on the plateau: over 100 birds seen by *JMF* over the high plateau on 20 Jan. 1963, and three males on 10 Dec. 1963 (in Benson & Irwin 1967). Then no records until 18 Mar. 1996, when *DF* reported over 100 birds over Thazima. These large numbers are unusual, and the possibility that they included *F. amurensis* cannot be ruled out.



Eastern Red-footed Falcon *Falco amurensis*

**PM.** More regular than last, on both passages, but far from common. Months of records overall are Nov.-Dec., Mar.-Apr. but they are not apparently seen every year. Two males were noted by *TOO* on 16 Nov. 1974 (Dowsett *et al.* 1974); and apparently “large flocks” in Apr. 1976 (*TAM*). We saw some in Dec. 1979 and Mar. 1980, but none in the following two summers. Three small groups were noted 7-10 Apr. 1990 (*JA*). Some were reported again (*DF*) on 14 Nov. 1995 and *DPC* saw *c.* 12 (in groups of up to four) on 27 Nov. 1995; further reports are 18 Mar. 1996, 27 Mar. 1997 (*JH et al.*), and 3-4 Apr. 2002 (*CS*). The only large groups we saw were nine and 50 birds over the Zambian rest house on 13 Dec. 1979. Dyer (1988) mentions a group of over 100, but without a date.

Eurasian Hobby *Falco subbuteo*

**PM.** The only common falcon on the Nyika, wintering at all levels (up to the high central plateau); singles or in small flocks of a dozen or so, not occurring in large flocks unlike the Red-footed Falcons. Common from mid- or late Nov.-Dec. (depending on start of main rains) to Mar., extreme dates being 7 Nov. (1980, *FD-L*) and 11 Apr. (1996, *DF*). We have not traced any Oct. record, and one observation on 18 Sep. (1995) appears abnormal and should be left unconfirmed.

[African Hobby *Falco cuvierii*. A possible record of one near Dembo bridge on 21 Feb. 1995 (*DF*); identification of this species is difficult and we prefer to leave this as unconfirmed.]

[Sooty Falcon *Falco concolor*. Two birds, thought “probably” to be this species, were seen over the Malawi Nyika on 21 Nov. 1983 (*RCP*); in the absence of convincing details, this record of a species difficult to identify cannot be accepted.]

Lanner Falcon *Falco biarmicus*

**R.** Uncommon or local resident, with singles or pairs occasionally seen hunting over the high plateau and attracted to grass fires; there was an occupied nest on Fingira Rock on 4 Sep. 1981, with young soon to leave (*DOE*).

Peregrine Falcon *Falco peregrinus*

**R/PV.** One pale-breasted bird flying north at Chelinda on 20 Apr. 1985 (*MD*) may have been of Palaearctic origin. Otherwise the African race *minor* is a rare and local resident (likely to wander), with a nesting record from the northern escarpment, at Jalawe Rock: a pair with immature in Aug. 2000 (*BM & DF*).

Coqui Francolin *Francolinus coqui*

**R.** Sparse francolin of miombo woodland, recorded from the western escarpment near and above Kaperekezi (*DPC, MD*), above Thazima (*RJD*), on the way to Nkhonjera Hill (*FD-L & RJD*) and near Fingira (*MD*), up to 1800-1900 m overall.

Shelley's Francolin *Francolinus shelleyi*

**R.** Present in rocky miombo on the south-western escarpment up to *c.* 2000 m, as near Mwanda Mtn (Zambia) at *c.* 1950 m (*EHP, RJD*); also observed near Thazima, Mbuzinandi and Fingira Rock (*FD-L & RJD*), with one record from the northern woodland (1033B4) in 1997. Although a specimen was collected on the high plateau (apparently as high as 2400 m) once in the past (Benson 1940-41), it was never observed again at that altitude and we assume it was merely a wanderer. In our three years of residence, I have only one observation (of a bird singing, Feb. 1981) on Chowo Rocks, 2200 m, where it was not resident. Its absence from the high plateau may be explained by the scarcity of rocky hills, and also, perhaps, competition with Red-winged Francolin.

Red-winged Francolin *Francolinus levaillantii*

**R.** The endemic race *crawshayi* is a very common resident in montane grassland on the high plateau, mainly 2100-2600 m (marginally down to the lower limit of grassland at 1950 m), but occurs lower on Nyamkhowa Mtn (1750-1800 m, *FD-L & RJD*). Egg-laying is spread out in the summer months (Oct.-Apr.), with largest broods observed of six and eight small chicks; whereas a full clutch (ready to hatch) contained 5 eggs (Benson & Benson 1949). This species was the first ever collected on the Nyika, in Jun. 1895 (Ogilvie-Grant 1896).

Hildebrandt's Francolin *Francolinus hildebrandti*

**R.** Not uncommon resident in bracken-briar at forest edges and particularly on rocky hills (e.g. Chowo Rocks), up to about 2300 m altitude, throughout the plateau. One breeding record (egg-laying Jun.) from the Zambian side.

Red-necked Francolin *Francolinus afer*

**R.** Occurs in small numbers in rank grass and scrub in valleys up to 2000-2100 m (south-western slopes on both sides of the border, Mbuzinandi), also present on the northern slopes. Occasionally wanders to higher altitudes, as around the Zambian rest house (*FD-L*), and *DPC* saw it once as high as 2200 m (on the Dembo road).

Common Quail *Coturnix coturnix*

**R.** Common to very common resident in montane grassland throughout the plateau, up to Nganda Hill, and including lush grassland in the Kasoma-Kasyaula area, thus mainly 2000-2600 m. One record of a very small chick seen on 17 Mar. (1996, *DPC*) can be back-dated to a Feb. clutch; we also flushed two small young on 1 May 1980 (road to Junipers). Singing noted throughout the rains (at least Nov. to Mar.). A "breeding season" of Oct.-Feb. mentioned by Dyer (1988) is based on Benson & Benson (1977) and not just on Nyika data.

Harlequin Quail *Coturnix delegorguei*

**V.** An uncommon migrant, with singles recorded by us on the high plateau on 7 Apr. 1981 (road to Nganda) and 17 Mar. 1982 (near Kasaramba), up to c. 2400 m; there is one Apr. record from the Nganda square (*MD*) and it was also recently seen on the road to Kasaramba on 29 May 2002 (*WMc*).

Blue Quail *Coturnix chinensis*

**V.** No more than a vagrant: one male flushed by the road on the way to Fingira (2070 m) on 20 Nov. 1986 (Dyer 1987) and one seen near Zungwara 15 Dec. 2002 (*AW*, the altitude would have been no more than 2100 m).

Helmeted Guineafowl *Numida meleagris*

**R.** In woodland on the southern and northern slopes, the upper limit being about 1850 m (north of Thazima, and near the turn-off to the old Mbuzinandi road, *FD-L*, *RJD*, *DPC*, *MD*). Family group with 3/4 grown chicks near old gate on 20 Apr. 1981.

Kurrichane Buttonquail *Turnix sylvaticus*

**R.** Flushed twice in lush *Themeda* grassland at 2050 m (near Kasyaula), once in a Zovochipolo valley at 2150 m as well as on the edge of Manyenjere (*FD-L*, *RJD*). Also recorded from the Fingira area (*MD*). Probably a scarce resident.

[Hottentot Buttonquail *Turnix hottentottus*. This is mentioned under "Nyika" in *Nyala* 1996 (19: 60) without any details so should not be included in the Nyika list.]

Red-chested Flufftail *Sarothrura rufa*

**R.** Found locally in moist herbage along permanent streams up to about 2000 m, as on the Chire below Chowo and near Fingira; one singing then calling ("ku-wa, ku-wa, ku-wah") in a Zovochipolo valley at 2150 m (Jan. 1982, all *FD-L* & *RJD*). Also on the Kaswerera stream at Thazima (*FD-L* & *RJD*) and small valley west of Lusero (*DRA*).

Red-tailed Flufftail *Sarothrura affinis*

**R.** Not reported from the Nyika before the 1960s, with the first specimen collected in Jan. 1964, on the Zambian side (Benson & Holliday 1964). Common in montane grassland and bracken from 1900 up to at least 2450 m, occasionally heard inside forest (Chowo, and forest patch near Zambian rest house, in Dec. 1980 and Jan. 1981) but not far from edge. In Nov.-Jun. nearly always in grassland. Apparently moving into dambos in the dry season: the characteristic cackle was heard from dambos in Zovochipolo in Aug.-Oct. (all *FD-L* & *RJD*). Starts singing in late November (earliest dates between 20 Nov. 1980 and 1 Dec. 1981) and continues until Mar., especially in cloudy conditions and also at night. Appears resident as there are records for all

months except Jul.

Corn Crake *Crex crex*

**PM.** Winters in small numbers in rank grass and bracken; we recorded the species six times in 1979-82, and there are a few earlier and later records, with extreme dates 5 Dec. (1982, near Dembo Bridge, *FD-L & RJD*) and 1 Apr. (1994, same locality, *DPC*). Most records are in Dec. (at least five) which suggests that some birds may be passing through, then three in Jan., one in Feb. and one in Apr. Locations include Kasoma, Manyenjere ridge, Zovochipolo, Fingira and Dembo Bridge, over an altitudinal range of 1900-2250 m.

African Crake *Crexopsis egregia*

**V.** Only one record traced: one flushed from rank grass near the road (between Lusero and old gate) on 20 Jan. 1982 at *c.* 1900 m (*FD-L & RJD*).

Red-knobbed Coot *Fulica cristata*

**R.** Singles or pairs are normally present on the dams near Chelinda, but the species's presence goes back to long before the creation of the dams, since a specimen was collected at Lake Kaulime in 1940 (Benson 1942), and it has occasionally been seen there again (e.g. Oct. 1973, *RJD*). Has bred at Chelinda on several occasions, in 1967 (Talbot 1968), 1975 (*TAM*), at least twice in 1980 (*RJD & FD-L*) and more recently in 2001 (*DPC*) and 2005 (*GB*). Numbers seem to fluctuate somewhat: although we saw it continuously during our period of residence, Critchlow (2001a) has shown periods of absence of a few months from Chelinda in later years. Numbers noted include over 12 birds at Chelinda in Nov. 1969, 13 on Dam 3 in Oct. 1973 (plus one at Kaulime, *RJD*) and 17 on the dams on 4 Jan. 2002 (*DPC*).

Wattled Crane *Grus carunculatus*

**R.** About a dozen pairs are resident on the high plateau (Dyer 1992), from about 2000 m, visiting the Zambian side but breeding only on the Malawi side, particularly in dambos. Egg-laying is fairly protracted but takes place mainly in the dry season (May to Dec.); in recent years it is feared that the total break-down in the fire protection policy is threatening nest sites throughout the dry season and most pairs can no longer breed (*DPC* pers. comm. in 2002). The situation may improve with the re-establishment of a policy of early burning. The largest number of cranes seen together is often six or seven, as near Lake Kaulime or Chelinda; Dyer (1992) mentions small influxes of "migrants", particularly during the rains, as with a group of 14 birds always seen together between Feb. and Apr. 1986. In a 1969 park's report *RPZ (per MD)* counted a total of 49 birds.

Southern Crowned Crane *Balearica regulorum*

**V.** No more than old records of wanderers, including two seen with Wattled Cranes in early Nov. 1959 by *GRB*, and there are two other records without details (Dowsett *et al.* 1974).

Black-bellied Bustard *Eupodotis melanogaster*

**R.** Resident in very small numbers on the escarpments, regularly encountered in montane grassland in the south-west (Manyenjere to Zovochipolo) from 2000-2200 m (*FD-L & RJD*). There are a couple of records of wanderers to the high plateau: a female near Chelinda on 27 Sep. 1987 (*IlaC*), one near Nganda turn-off on 17 Feb. 1994 at 2450 m (*DPC*). There are as yet no records from miombo in the Thazima or other areas.

Denham's Bustard *Neotis denhami*

**R.** Resident in montane grassland, in small numbers. There are eight dated breeding records (all *C/2*) published by Wilson (1972), for the months of Aug., Oct., Nov. (3), Dec., Jan. and Mar. The birds are very attracted to recently burnt grassland to pick up insects and reptiles, readily moving from one burnt patch to another. Occasional gatherings have been noted, of up to 15-24, as follows: 15 in Apr. 1986 at Jalawe (*MD*), 24 in Jul. 1992 (*DF* in Critchlow 2001b), 15 on 13 Jun. 1997 (*DF*), 20 at Chosi on 21 Jun. 2000 (*BM*). Other reports of large numbers (e.g. 21 on 17-19 Apr. 1992, *RDM*) refer to overall totals, not the size of groups (Critchlow 2001b).

Black-winged Stilt *Himantopus himantopus*

**V.** A rare visitor, with a few records from the Chelinda dams: two at Dam 3 in Jul. 1983 (Dyer 1988), an immature at Dam 1 on 7 Dec. 1995 (*DPC*), also seen by *SB (per DPC)* at least once at the dams.

Spotted Dikkop *Burhinus capensis*

**R.** Apparently a scarce resident, and breeding. There are a number of records scattered over the high plateau, from the Zambian rest house (no more than a wanderer there, Nov. 1969, *RJD*) and border road (c. 2000 m) to the vicinity of Nganda Hill (as high as 2450 m, Talbot 1968); in the early 1980s it was most often seen on a gravel extrusion near Dam 3, where a pair (present in Dec.) produced three young in two successive years (family of five in Feb. 1980, Mar. 1981) and fewer in 1982 (family of three in Feb., all *FD-L* & *RJD*). Overall, records cover all months except Sep.-Oct., and the altitudinal range 2000-2450 m.

Bronze-winged Courser *Rhinoptilus chalcopterus*

**V.** A vagrant turned up on the unusual date of 10 Jan. 1982, near Chelinda (2350 m, *RJD* & *FD-L*), and a pair near the Zambian border at the more usual date of 27 May 2002 (*WMc*). Otherwise recorded at lower levels, in miombo above Thazima, 29 Jan. 1980 (at least one) and 30 May 1980 (at least three, *RJD*).

Temminck's Courser *Cursorius temminckii*

**R.** Small numbers appear to breed in montane grassland on the high plateau, both sides of the border, up to c. 2400 m: we have traced at least six breeding records of pairs with dependent young, some of which could be back-dated to egg-laying in Sep. (one), Oct. (one) and Nov. (two) (*PS*, *FD-L* & *RJD*). Family groups of three or four birds have also been seen, and as many as 12 on 23 Dec. 1995 south of Chelinda (*DPC*). The species has been noted at all seasons, but not yet reported in the months of Mar. and May-Jun.

Common Pratincole *Glareola pratincola*

**V.** Unusual vagrant: the first record was very odd, as a party of 17 were grounded on the road and ploughed fire-break in the morning of 18 Dec. 1975 in Zovochipolo at c. 2200 m, in misty weather (*RJD*). There was a later record of a bird at Chelinda, Dec. 1981 (*DOE*), and in Nov. 1985 (Dyer 1988); Dyer (1988) also mentions one near Chosi (Jan.).

Ringed Plover *Charadrius hiaticula*

**PV.** Few records of southward passage: one bird turned up at Lake Kaulime on 9 Oct. 1947 (Benson & Benson 1949: 158); possibly another record in mid-Oct. 1976, no details (Nyika files); one (immature) at Lake Kaulime again on 7 Nov. 1980 (*RJD*).

Three-banded Plover *Charadrius tricollaris*

**V.** Exceptional visitor: one adult resided at Lake Kaulime from 12-25 Oct. 1973 (Dowsett *et al.* 1974). Apparently another record, of one near Dam 2 in Dec. (no year given: Dyer 1988).

Caspian Plover *Charadrius asiaticus*

**PM.** Rare migrant on southward passage: one on 16 Oct. and two on 23 Oct. 1986 at 2100 m on stony ground along the Zambian border road towards Kaperekezi; three were noted in grassland on the high plateau (c. 2300 m) on 13 Sep. 1986 and one on 16 Dec. 1986 (Dyer 1987). There was possibly an earlier record, of one on 8 Jan. 1978 (*WFB-M*), not included in Dowsett's (1978) list because of the late date.

Senegal Wattled Plover *Vanellus senegallus*

**V.** Few records of wanderers on the high plateau: 14 Jan. 1981 (single on border road, 2200 m, *FD-L* & *RJD*); a pair near Chelinda (2350 m) on 3 May 1985 and single at Chowo on 11 Jun. 1986 (Dyer 1987). Certainly not a "common resident" as in Medland (n.d.).

Ethiopian Snipe *Gallinago nigripennis*

**R.** Uncommon resident of dambos (2200-2300 m) on the high plateau: *APZ* (in Dowsett & Dowsett-Lemaire 1980) noted display flights about Sep. to Jan. around Chelinda; similar observations by *MD* on the Chelinda and Dembo streams. Also seen in May (*RJD*), a road kill in Jun. (*MD*) and one observation in Mar. (1996, *DPC*).

Great Snipe *Gallinago media*

**PM.** Very small numbers winter in the high-altitude dambos (around Chelinda): a few noted in Dec. 1981-Jan. 1982 and Dec. 1982 (*FD-L*). One was seen at the late date of 30 Mar. 1986 (*MD*) near Chelinda.

[Curlew *Numenius arquata*. Listed by Medland (n.d.) without an identified source, so the record should be disregarded for the time being, given also the possibility of confusion with Whimbrel *N. phaeopus*; both are equally rare in Malawi.]

Marsh Sandpiper *Tringa stagnatilis*

**PV.** A rare Palaearctic migrant: one at Lake Kaulime on 15 Oct. 1973 (Dowsett *et al.* 1974) [an unconfirmed record in mid-Oct. 1976 (one at Lake Kaulime and Dam 3, Nyika files)]; one at Chelinda in Sep. 1980 (*RJD*, day not noted); one at Dam 3 on 20 Sep. 2000 (*DF*).

Greenshank *Tringa nebularia*

**PM.** Uncommon or irregular visitor to pools and dams: two in early Aug. 1969 at Dam 3, one in Dec. 1971 at Dam 1 (Dowsett *et al.* 1974), two at Lake Kaulime on 20 Jul. 1975, one at a small pool near Chosi on 21 Jul. (*EHP*), one at Dam 3 on 5 Mar. 1981 (*RJD & FD-L*), one at Dam 2 on 24 Oct. 2001 (*IBa*).

Green Sandpiper *Tringa ochropus*

**PM.** Winters annually, in small numbers around Chelinda. Although there was only one record before we lived on the Nyika (one at a puddle near Chelinda Dam, 23 Feb. 1979, *DRA*), we saw the species at the dams on regular occasions (Feb. 1980, Nov. 1980 to Mar. 1981, late Aug. 1981 to Mar. 1982) and *MD* also noted the species in the mid-1980s, at least from Nov. to Feb. Extreme dates appear to be 31 Aug. (1981) and 9 Mar. (1981, *RJD & FD-L*), with an exceptional early bird on 27 Jul. 2004 (*WMc*). Below Chelinda, several were noted at roadside pools at 1900 m on 21 and 26 Feb. 1989 (*RDM*). No doubt regular at Chelinda in later years, e.g. reported in Jan. and Nov. 1993 (*RDM et al.*) and Feb.-Mar. 1996 (*DPC*).

Wood Sandpiper *Tringa glareola*

**PM.** Annual on southward passage, in small numbers (ones and twos) at Lake Kaulime and Chelinda dams, from Aug. to Dec. (many observations Sep.-Dec., including pers. obs. during our period of residence). Seems uncommon later, as we have only one Jan. record (5 Jan. 1982 at Dam 3), traced another for Feb. (two on 23 Feb. 1979 at Chelinda, *DRA*), and it was mentioned once on northward passage by *MD* (5 Apr. 1985). Thus extreme dates appear to be 5 Aug. (1969, Dowsett *et al.* 1974) and 5 Apr. as above.

Common Sandpiper *Actitis hypoleucos*

**PM.** Annual in small numbers (usually as singles) at the dams and Lake Kaulime mainly on southward passage, from Aug. to Nov. or Dec. Earliest dates are 21 Jul. 1975 (*EHP* at Dams 1 and 2) and 22 Jul. 1995 (*DPC*, on Chelinda stream). Far fewer records on spring passage, one on 23 Feb. 1979 (*DRA*), two on 14 Apr. 1980, noted Apr. 1981 (*RJD & FD-L*). *DPC* noted one-two on 16 Mar. and 4 Apr. 1994, and as many as 13 on 19 Apr. 1994 (at Dam 3).

Sanderling *Calidris alba*

**PV.** A single record, on southward passage: two at Lake Kaulime on 11 Sep. 1986 (Dyer 1987).

Little Stint *Calidris minuta*

**PM.** Small numbers recorded annually on southward passage, at Lake Kaulime and Chelinda dams, from late Aug. to Oct. or Nov.; we have not traced observations of spring passage (when much less common in Malawi overall). Earliest date is last week of Aug. (1972, in Aspinwall *et al.* 1973). Largest number reported is nine birds at Lake Kaulime (*RJD*, Oct. 1973).

Curlew Sandpiper *Calidris ferruginea*

**PV.** Much rarer than Little Stint, as only irregular records documenting southward passage: up to two birds 13-22 Oct. 1973 (Dowsett *et al.* 1974) and four on 6 Oct. 1976 (*RJD*), all at Lake Kaulime. Reported (no numbers) at Chisanga Falls on 27 Aug. 1994 (*SB per DPC*), in unsuitable habitat and perhaps misidentified.

Broad-billed Sandpiper *Limicola falcinellus*

**PV.** Exceptional vagrant: one was well seen next to Little Stint and Curlew Sandpiper at Lake Kaulime on 14 Oct. 1973 (Dowsett 1974). This remains the only record for Malawi.

Ruff *Philomachus pugnax*

**PV.** Only three records: one bird seen by *CWB* (in Ms) at Lake Kaulime on 25 Sep. 1956 – this was omitted from Benson & Benson 1977 – a female at Dam 1 on 15 Oct. 1973 (Dowsett *et al.* 1974), and one at Lake Kaulime on 10 Nov. 1981 (*RJD*).

Grey-headed Gull *Larus cirrocephalus*

**V.** A rare vagrant: one bird in almost full breeding dress visited Dam 2 on 18 Dec. 1975 (*RJD* in Benson & Benson 1977: 252); there is also an undocumented record from late Jan. 1974 (*RG*, Nyika files).

White-winged Black Tern *Chlidonias leucopterus*

**PV.** A rare visitor: five birds turned up at Chelinda Dam on 1 Nov. 1972 (Dowsett *et al.* 1974); one on 9 Nov. 1981 (*RJD*), one in breeding dress at the same dam on 5 Apr. 1992 (*GM*) and one on 3 Nov. 1994 (*JH*); also one at Dam 3 on 9 Nov. 1995 (*DPC*).

Rameron Pigeon *Columba arquatrix*

**AM.** Seasonally common in the forests of both escarpments and also on the high plateau (wherever there are *Afrocrania* trees, up to *c.* 2300-2400 m), most numerous in the months of Aug.-Nov., with over 90% of the population leaving in Dec. Its specialized diet was studied in some detail (Dowsett-Lemaire 1988a): numbers of breeding pairs were higher in 1980 and 1982 when *Olea capensis* fruited synchronously, whereas in 1981 numbers of territorial pairs were fewer and more directly proportional to the number of *Afrocrania* (now *Cornus*) *volkensii* fruiting annually in forest patches; highest breeding densities known are one-three pairs/3 ha in Zovochipolo (Dowsett-Lemaire 1989a). Other important fruit trees include *Myrica*, *Podocarpus*, *Polyscias*, *Croton* and *Neoboutonia* (fibrous capsules of the last two eaten whole). Large numbers return normally in Aug., with (in some years) some flocks in Jun. (when *Chionanthus* (*Linociera*) *battiscombei* is fruiting, as in Jun. 1980 and 1983). Egg-laying takes place from Sep. to Dec.; some pairs breed in Pines (as near the Zambian rest house). There are in addition large numbers of non-breeding birds during the breeding season, which roost communally, as in Chowo forest and Chelinda Pine plantations.

Cinnamon Dove *Aplopelia larvata*

**R.** Fairly common resident, breeding in forest patches with a permanent stream (but occasionally visiting dry patches), up to at least 2300 m, with territories of 2-4 ha in Zovochipolo and Kasoma (Dowsett-Lemaire 1983a, 1989a). Takes a variety of seeds on the ground (species listed in Dowsett-Lemaire 1988a), and some small invertebrates; once seen patiently plucking the tiny seeds of *Ficus thonningii* fruit on the ground, carefully avoiding flesh! (*FD-L*). A dozen breeding records from Chowo and Zovochipolo, with egg-laying Sep.-Dec. (*RJD* & *FD-L*).

Pink-breasted Turtle Dove *Streptopelia lugens*

**R.** Uncommon resident of forest-grassland ecotone, although widespread from the Zambian side (including Mwanda Mtn) to the central plateau, Juniper Forest, Nyamkhowa Mtn; at 1950-2400 m on the main plateau. It occurs lower on Nyamkhowa: it was seen there by *RCW* (in Benson 1942) on the slopes from 1400 m and higher, and collected by Sharpe's staff (Belcher 1930) in May and Sep. 1902 at *c.* 1300 m above Livingstonia. Normally seen as singles or pairs, feeding in the open and taking shelter inside forest or Pine plantation. An unusual concentration of at least 30 birds in Dec. 1977 in a small valley just below Chowo Rocks (*FD-L*). There may be some local movements, as we have not traced records for the months of Feb.-Apr., and the low-altitude records near Livingstonia may be of wanderers.

Laughing Dove *Streptopelia senegalensis*

**V.** Almost absent from the Nyika, even from the dry woodlands on the slopes; there is only one record, of a vagrant north of Zungwara, *c.* 2100 m, Nov. 1986 (*MD*).

Cape Turtle Dove *Streptopelia capicola*

**R/V.** Confined to the lower slopes in woodland (e.g. Kaperekezi, Thazima, Jalawe-Chipome) up to 1600-1650 m, common below about 1400 m in the north (*MD*), but only a scarce vagrant on the high plateau: one on the road to Chelinda Hill, 2325 m, 19 Feb. 1982 (*FD-L* & *RJD*); at Chelinda itself, one on 23 Apr. 1986 at 2300 m (Dyer 1987); and one on the border road on 19 Nov. 1993 (*DPC*).

Red-eyed Dove *Streptopelia semitorquata*

**R.** Confined to the lower slopes in woodland and riparian vegetation, up to 1600-1700 m, and never recorded on the high plateau, not even as a wanderer.

Emerald-spotted Wood Dove *Turtur chalcospilos*

**R.** Recorded from miombo on the lower south-western slopes (e.g. Kaperekezi, Thazima) and the northern escarpment, upper altitudinal limit probably around 1600-1650 m.

Blue-spotted Wood Dove *Turtur afer*

**R.** Apparently uncommon on the Nyika: recorded from the northern foothills in the Uledi area (*FD-L* & *RJD*) and at least once at Thazima (*JH*); *CJV* (in Ms) saw one pair at c. 1700 m in Jan. 1964, probably on the Zambian side; and *RJD* noted it at Mbuzinandi (Mar. 1981) at 1980 m in riparian *Acacia*, which is high for the species.

Tambourine Dove *Turtur tympanistris*

**R.** Locally common in forest on the south-western slopes (up to 2200 m in Zovochipolo where rare, but much more common at lower levels, with 20 pairs estimated in the 40 ha of Kasyaula forest at about 2000 m: Dowsett-Lemaire 1983a), and on Nyamkhowa Mtn (Benson 1940-41, *RJD* & *FD-L*). We never recorded it elsewhere on the eastern escarpment, but presumably it could occur near the bottom, at altitudes similar to Nyamkhowa. Fairly common also in Kasoma, Manyenjere and Chowo, with three breeding records Aug. (1)-Sep. (2) (all from Chowo, *RJD*); only one pair owned a territory in Zovochipolo (8 ha-patch), but birds wandered to other patches occasionally. Little is known about its diet, was seen taking seeds of *Polyscias* and *Neoboutonia* (also eaten by Cinnamon Dove, Dowsett-Lemaire 1988a). (*N.B.* The account of this species in Dowsett-Lemaire 1989a disappeared accidentally during printing). As for many other species, the breeding season given by Dyer (1988) is taken from Benson & Benson (1977) for other parts of the country and does not apply to the Nyika situation.

Namaqua Dove *Oena capensis*

**V.** Absent from the wooded slopes, and the only record in existence is that of a vagrant to the Nganda square (1033B4) turning up on 25 Dec. 1994 at 2350 m (Critchlow & Haugaard 1996).

African Green Pigeon *Treron calvus*

**R/M.** Widespread on the lower wooded slopes, including riparian; small flocks visit montane forest (mainly 2000-2200 m, Manyenjere to Zovochipolo, Juniper Forest) annually in the rains, mainly Jan.-Mar. Seen all three summers 1980-82; extreme dates 25 Dec. (1989, *CB*) and 1 Apr. (1980, *FD-L*). Unlike Rameron Pigeon, very fond of sweet fruit such as *Syzygium guineense* ssp. *afromontanum*, *S. cordatum*, *Cussonia*, *Jasminum*, *Rapanea* and figs (Dowsett-Lemaire 1988a).

Brown-necked (Cape) Parrot *Poicephalus robustus*

**R/M.** Occurs locally in miombo woodland (several records from the Thazima area, including *DPC*'s for the period Oct.-Jan.), but more regularly encountered on the plateau in the rains. When resident on the high Nyika (1979-82) we saw small flocks visit montane forest annually, up to 2150 m (both sides of the Zambian border), from late Nov.-Dec. (21 Nov. 1979, 23 Nov. 1980, 15 Dec. 1981) to Jan. (1980, 1981), once as late as 20 Feb. (1982); we also noticed them on shorter visits in Dec. 1973 (*RJD*, flock of 25 in Chowo), Dec. 1977 (up to 20, Chowo and Manyenjere) and Jan. 1983 (Kasoma, Chowo); later recorded by *MD* (flying over Chelinda) 4 Dec. 1985, and by *DF* late Jan.-Feb. 1995. On 24 Nov. 1980, pair seen with immature to which the female was regurgitating seeds of *Parinari excelsa* (in Manyenjere). *Aningeria* seeds were apparently taken in Dec. 1979 (Zovochipolo) when trees of this species fruited massively, but in the following two summers *Aningeria* did not fruit and Parrots fed exclusively on the seeds of *Parinari excelsa* in the Chowo, Manyenjere, Kasoma and Kasyaula area, peeling the flesh off and extracting the two seeds from the hard stone (fruits handled by Parrots were examined underneath the trees and found empty of their seeds with the hard stone intact) – see also Dowsett-Lemaire 2004.

Meyer's Parrot *Poicephalus meyeri*

**R.** A bird of low-altitude woodland, marginal on the Nyika as recorded (in the park) only from the northern

foothills, near Uledi (*RJD & FD-L*), and a few times near Thazima (*FD-L & RJD*; *DPC* saw it only outside the park).

Schalow's Turaco *Tauraco schalowi*

**R.** Common resident in miombo woodland and riparian forest lower down as well as in montane forest on the plateau, up to 2250 m (Zovochipolo) and *c.* 2300 m (Kasaramba). I estimated densities of 40 pairs in 160 ha of forest patches in Zovochipolo (Dowsett-Lemaire 1989a); the species has a wide diet of fleshy fruit, observations on most of the 58 species listed for Malawi in Dowsett-Lemaire (1988a) coming from the Nyika. The few breeding records that could be back-dated showed egg-laying taking place in Sep. (Zovochipolo), Oct. and Nov. (one each, Chowo) – *FD-L & RJD*.

Purple-crested Turaco *Tauraco porphyreolophus*

**R.** Local, in lower-altitude woodland and riparian forest, on the western escarpment (Kaperekezi area and below) and in the northern foothills (Uledi area); upper altitudinal limit probably close to 1500 m, not known from Thazima, which is higher.

[Grey Lourie *Corythaixoides concolor*. Not yet confirmed for the park, as recorded only from near Uledi in 1033B1, well outside the park, *RJD & FD-L* in Oct. 1986.]

Great Spotted Cuckoo *Clamator glandarius*

**V.** Only one record for the Nyika: a migrant in open miombo woodland below Jalawe Rock, *c.* 1500 m, 22 Sep. 1986 (*MD*).

Jacobin Cuckoo *Clamator jacobinus*

**AM.** No more than migrants passing through the area in very small numbers: we recorded the species six times, from Feb.-Apr. Other records, by *DRA*, *WFB-M*, *DPC*, *GM*, *JH*, added to ours, give the following monthly occurrences: Jan. (1x), Feb. (3x), Mar. (4x), Apr. (5x) and May (1x, this being 2 May 1971 near Zambian rest house, Aspinwall 1971). Thus it seems Jacobin Cuckoos visit the Nyika mainly when leaving the country. There is also a Nov. record (6 Nov. 1976, *PBT*). Can turn up in any open habitat such as rank grass and bracken-briar, up to the altitude of 2200-2300 m. One bird was mobbed by a Black-eyed Bulbul at Kalambwe (south of Chosi), 18 Feb. 1982 (*RJD*).

Striped Crested Cuckoo *Clamator levaillantii*

**V.** A rare migrant on the plateau, apparently much more irregular than the last species. We never saw any; two singles have been reported by *PG* on 23-24 Apr. 1981 (Juniper Forest and near Zambian border, 2150 m) and one by *DPC* on 1 Jan. 2002 west of Lake Kaulime, an odd date. Also noted on the Kaswerera stream near Thazima (Nov. 1993, *DPC*), it could perhaps breed at that lower altitude.

Red-chested Cuckoo *Cuculus solitarius*

**AM.** Not uncommon on the plateau, at the edge of forest patches and bracken-briar up to *c.* 2250 m, in the summer rains, and also recorded from the Thazima area. Present generally from Oct.-Jan. when calling (*FD-L & RJD*), with an early record on 9 Sep. 1998 (*DF*, no locality). There is one breeding record, of a chick fed by Cape Robin in Zovochipolo in Dec. 1981 (egg-laying Oct.) (*FD-L*).

Black Cuckoo *Cuculus clamosus*

**AM.** Completely absent from the high plateau, and recorded only from miombo on the lower slopes, in the Chipome valley (1400 m) in Nov. 1986 (*MD*) and at Thazima on 12 Nov. 1993 (*RDM*).

Eurasian Grey Cuckoo *Cuculus canorus*

**PM.** Old records cannot be utilized as observers were not sure of the form (European or African). Recorded mainly on northward passage (Feb.-Mar.). We saw a few large Eurasian Cuckoos on the high Nyika on 14 Nov. 1979, several from 5 Feb.-29 Mar. 1980, one on 20 Mar. 1981 (this last on Chelinda Hill at 2400 m), several from 16 Jan. to Mar. 1982; in forest-grassland mosaic. *MD* noted one "last" one at Chelinda on 18 Apr. 1985 and 25 Mar. 1986; also four on 29 Feb. 1994 (Anon., no locality), one in Chipome valley on 24 Feb. 1996 (*DPC*).



African Grey Cuckoo *Cuculus gularis*

**AM.** Identified with certainty (calling birds) only from Thazima, 3-4 Nov. 1981 (*FD-L & RJD*), in miombo woodland. It should be expected to occur in the northern dry woodlands but has never been reported as far as we know.

Emerald Cuckoo *Chrysococcyx cupreus*

**AM.** Only recorded (locally) from miombo woodland and riparian in the northern foothills (North Rukuru, *RJD*) and on the western and south-western slopes, Kaperekezi and Thazima, 1500-1600 m (*MD, RDM*).

Klaas's Cuckoo *Chrysococcyx klaas*

**R/M.** Widespread on the lower slopes and especially at forest edges and riparian scrub on the plateau, up to about 2200 m (Zovochipolo, Mbuzinandi, Fingira, etc.). We recorded it monthly from Sep. (earliest date 30 Aug. 1981) to Mar. in our period of residence, so it presumably leaves the high altitudes in winter. There are two breeding records: a large young fed by a pair of Churring Cisticolas in bracken below Chowo forest (Chire valley) in mid-Feb. 1982 (*FD-L*), back-dated to Dec. laying; one fed by Pallid Flycatcher at Thazima on 17 Feb. 1995 (*DF*).

Didric Cuckoo *Chrysococcyx caprius*

**V/AM.** Attracted to weaver colonies, thus a bird of lower altitude of only exceptional occurrence on the high Nyika. A male was seen in the vicinity of some weavers' nests (probably Bertram's) at 2000 m in riparian *Acacia* near Fingira Rock, 20 Feb. 1981 (*RJD*); there is one later record, on the Dembo stream at nearly 2200 m on 14 Feb. 1995 (*DPC & DF*). Otherwise recorded only from the northern foothills in the Uledi area (*FD-L & RJD*, Oct.).

African Black Coucal *Centropus grillii*

**V.** An exceptional vagrant, recorded once in bracken-briar on the edge of Dam 1 on 28 Feb. 1973 by *RAC* (Dowsett *et al.* 1974).

Senegal Coucal *Centropus senegalensis*

**R?** A few records from bracken-briar of this localized species, possibly a scarce resident: first recorded in Zovochipolo on 20 Nov. 1979 at 2200 m, then near Fingira on 3 Mar. 1981 at *c.* 1900 m (*FD-L & RJD*), and subsequently from the Chipome valley on 23 Aug. 1994 (*DPC*); also several times around Thazima (*DPC*).

White-browed Coucal *Centropus superciliosus*

**R.** Widespread and locally common in rank (riparian) herbage and scrub, or forest edges; on the lower slopes as well as on the high plateau, up to *c.* 2250 m in some valleys on the central plateau (Chelinda stream etc.).

Grass Owl *Tyto capensis*

**R.** A scarce resident of rank growth (bracken-briar) on the high plateau. Typically singles or pairs flushed from dense scrub on the edge of forest. It was collected on the eastern escarpment by Loveridge in Nov. 1948 (Peters & Loveridge 1953), and is also known from the Zambian side (rest house area), Zovochipolo (*FD-L*) and the central plateau (near Chelinda, Dyer 1987, near Dam 3, *WMc*), up to *c.* 2380 m. (Not yet recorded from the Nganda square).

African Scops Owl *Otus senegalensis*

**R.** Heard in miombo near Thazima in Nov. 1981 (*FD-L & RJD*), which is high for the species (1600 m); in addition a road casualty was picked up at Thazima gate (Dyer 1988). Should be expected to occur in the dry woodlands of the northern escarpments, but there are as yet no records.

White-faced Owl *Otus leucotis*

**V.** Very marginal with a wanderer seen once near Thazima gate (*NB et al.*, Nov. 1998), an unusually high altitude for the species (1600 m).

[Cape Eagle Owl *Bubo capensis*. There are no reliable reports from the Nyika: one old record (1976, Chelinda Pines) was withdrawn by the observer, and two, "probably" this species, flew off at Chelinda bridge (below

Chelinda Hill) on 4 Sep. 1991 (*JA*). This owl depends on large, rocky inselbergs or extensive rock faces, a habitat largely missing from the Nyika.]

Spotted Eagle Owl *Bubo africanus*

**R.** The commonest owl on the Nyika, can be encountered anywhere in light woodland, open country, near rocks and on roads, up to at least 2400 m; young recently fledged can be very vulnerable. Has been known to nest on the ground, in between rocks in the shade of a tree clump (Zovochipolo, pers. obs. of an occupied nest in Sep.) and on a small rock ledge 1.6 m above the ground on the North Rukuru river (Metcalf & Gibbs 1996); in the latter instance there were three nestlings in Sep. (egg-laying Jul.). Ten pellets from the vicinity of this nest contained remains of insects and of a rodent, *Otomys angoniensis* (Critchlow 1997b).

Giant Eagle Owl *Bubo lacteus*

**R.** We recorded this bird calling at Thazima in Nov. 1981 and *DPC* in Mar. 1994; there is one observation from the northern slopes (*MD*, in 1033B4). Dyer (1987) reported seeing one in a small patch of forest at nearly 2400 m, but later (*in litt.*) added that the record required confirmation.

Wood Owl *Strix woodfordii*

**R.** Widespread and fairly common, in miombo with riparian (e.g. Thazima) as well as in evergreen forest, up to at least 2400 m; also heard at Nyamkhowa. Probably no more than three pairs in Zovochipolo, of which one bred in a patch of 10 ha (where a nature trail was later established), producing two young late Nov. 1981 (egg-laying Sep.). One pair also bred in the forest patch (4.5 ha) on Chelinda Hill, with two young in late Jan. 1982 (egg-laying Nov.) – all *FD-L* & *RJD*.

Marsh Owl *Asio capensis*

**R.** Local inhabitant of high-altitude dambos: it was first reported on the Nyika by *RG* in Jan. 1974 near Chelinda bridge, “noted” by *TOO* (May 1975), then by *JHo* near Chelinda (Dec. 1981), and by *DPC* upstream of Dam 1, south of Chelinda and 7 km north of Chelinda at 2380 m (respectively Mar., Apr. 1994, Nov. 1995). Also a few observations on the high plateau by *MD* (Dyer 1988).

Eurasian Nightjar *Caprimulgus europaeus*

**PM.** One specimen of the nominate race was collected in Jan. 1964 at *c.* 2130 m (Malawi) (Benson & Irwin 1967); a male was well seen by the Chire near the Zambian rest house on 31 Dec. 1975 (*RJD*); we saw it twice in Nov. 1981 (Zovochipolo and Zambian border) and also Feb. 1982 (Chowo). Reported in Nov. 1993 (*RDM*), while the earliest date is 24 Oct. (1992) when one was seen on the Chelinda road by *NC*, apparently of the race *unwini* – however, the bird was not examined in the hand but only through car lights, so racial identification under such circumstances appears doubtful. Also on 14 Nov. 1994 near Chelinda (*DPC*). Overall is probably annual on passage, and the Dec.-Jan. dates indicate some may winter in some years.

Fiery-necked Nightjar *Caprimulgus pectoralis*

**R.** Recorded from the escarpments (north and south-west) up to *c.* 1600 m at Thazima (*FD-L* & *RJD*) and unlikely to occur much higher than this, in miombo and riparian.

Mountain Nightjar *Caprimulgus poliocephalus*

**R.** Common resident on the high Nyika, above 1900 m, also at Nyamkhowa (heard at *c.* 2000 m in Oct.: Benson 1940-41). It was first collected in Nov. 1937 (female and juvenile: Benson 1940-41); egg-laying takes place in Sep.-Oct. (from four clutches of C/2 found in Oct. and Nov. 1947 (Benson & Benson 1949) and N/2 in Oct. 1973 (*JFRC-R*)); two fledglings (not full grown) were flushed on 9 Nov. 1980 (*FD-L*). Hunts over montane grassland and at forest edges, and may rest on roads; takes shelter by day in dense bracken-briar and at forest edges. We regularly heard the full song from mid- or late Feb. to early Nov. (with a decrease in vocal activity in the colder months of Jun.-Jul.), once in late Nov. (27 Nov. 1979, but otherwise not heard since 5 Nov.) and once (very briefly) in Dec. 1977; similarly *DPC* heard it once in late Dec. Thus generally silent for about three months (Nov.-Jan.) immediately after breeding.

Freckled Rock Nightjar *Caprimulgus tristigma*

**R.** Recorded from a rocky hill near Thazima (*DPC*), and locally on the high plateau (some years) at about

2200 m on Chowo Rocks, with an observation on the Chelinda road (*RJD*). It was already noted at Chowo Rocks by *CWB* in Sep. 1956 and Jan. 1964, and the only breeding record on the Nyika is indeed a C/2 collected there on 26 Sep. 1956 (Benson & Pitman 1959). During our period of residence a bird was singing there from 27 Dec. 1979 to at least Mar. 1980.

Pennant-winged Nightjar *Macrodipteryx vexillarius*

**AM.** Present on the wooded escarpments (north and south-west) where likely breeds (indeed a nest with egg in the North Rukuru valley at 1450 m in Oct. (Dyer 1988)). Common at Thazima Oct.-Jan., with males losing their pennants mid-Jan. (*DPC*). On the high Nyika only on passage, in all months from Sep. to Mar. (including our own observations Oct.-Mar.), with a female collected once as high as about 2450 m in Oct. (Benson 1942).

Scarce Swift *Schoutedenapus myoptilus*

**AM.** Seasonally common over montane forest (Sep. or Oct. to Mar.), particularly on the Zambian side, and over the extensive forests of the eastern escarpment including Nyamkhowa. As elsewhere in Malawi (Dowsett-Lemaire 1989a) hunts mainly over the forest canopy of the larger patches (such as Manyenjere and Chowo, Kasaramba-Mwenembwe) but may visit smaller patches (Junipers, Zovochipolo) – *FD-L* & *RJD*. The nesting habitat of this species has not yet been identified conclusively anywhere in Africa, but with the scarcity of small cliffs in the area, it most likely breeds in holes in trees, as suggested by the discovery of a live young bird on the floor of Chowo forest in late Dec. (Scott 1979). Mates in the air, and this was seen frequently from the last week of Oct. to early Dec. (*RJD* & *FD-L*, especially around Chowo). There is an unusual observation of two drinking in Lake Kaulime with other swifts on 15 Oct. 1973 (*RJD*).

The species starts arriving in Sep. (earliest date 1 Sep. 1981, calling over Zovochipolo, otherwise 13 Sep. 1980, with six birds at Chowo) but does not “settle” before late Oct. (as before that time usually passes through at great speed), after which can be seen daily over regular sites such as Chowo until Feb. or Mar. Last departures are in early Apr. (as observed both in 1980 and 1981) with latest on 12 Apr. 1980 (all *FD-L* & *RJD*).

A good tape-recording of this noisy bird was published by Gibbon (1991), from Chowo.

African Palm Swift *Cypsiurus parvus*

**R/V.** Recorded from the northern foothills (1033B2 and B4) and a couple of times over the high Nyika, as single vagrants in Sep.-Oct. 1981 in the Chelinda area, including one drinking at Dam 1 (*RJD* & *FD-L*).

Alpine Swift *Apus melba*

**AM.** Uncommon migrant over the high Nyika with some seen on both passages; there are at least 10 records, usually of ones or twos (but several in Oct. 1994), the majority are in the late dry season, mainly Sep.-Oct., extreme dates being 23 Aug. (1981, *RJD*) and 25 Oct. (1992, *DF*). Only a couple of April records: 23 Apr. 1982 (*NJ-S*) and 20 Apr. 1992 (*RDM*).

Mottled Swift *Apus aequatorialis*

**R?** Uncommon species, most often seen around Manyenjere, and it was found breeding on the small cliff on the Manyenjere ridge in Nov. 1974 (two nests with N/1, female and nestling collected by *TOO*, Dowsett *et al.* 1974). May wander or hunt elsewhere over the plateau, as when two were found drinking (with two Alpine Swifts and two Scarce Swifts) in Lake Kaulime on 15 Oct. 1973 (*TOO* & *RJD*). It is not clear whether it is resident, as outside the period Sep.-Jan. (several records, mainly our own) we have found only two definite records, of one seen by *DPC* in Feb. 1995 (over the plateau) and one mistnetted near Nganda on 7 Apr. 1997 (*JH et al.*); we had a possible at Manyenjere in Feb. 1980.

Eurasian Swift *Apus apus*

**PM.** Widespread and seasonally numerous over the whole Nyika, with thousands attracted to storms. Earliest dates are 3 Sep. (1980) and 5 Sep. (1981) but they do not arrive in large numbers until the rains break (usually Nov.), and remain common until early Mar., leaving before the end of the month (*RJD* & *FD-L*).

African Black Swift *Apus barbatus*

**R?** May be confused with European Swift unless calling. We have a few records of small numbers in the

months of Feb., May, Aug.-Nov. in 1980-81 mostly over the south-west. In Oct. 1973 several were seen at Lake Kaulime and also displaying high over the Chire valley (Dowsett *et al.* 1974); it is likely the species breeds in the area, suitable spots being the Manyenjere rocky ridge and Jalawe Rock, but that remains to be proven.

Little Swift *Apus affinis*

**V/R?** Very uncommon in the area, with a few records of wanderers over the high plateau, Oct. 1973 (from Chowo to Kaulime and Chelinda, Dowsett *et al.* 1974), then in the months of Jan.-Feb., Sep.-Oct. 1980, Jan. and Sep. 1981, near Chowo, Manyenjere ridge, Zambian rest house and Zovochipolo (RJD & FD-L).

African White-rumped Swift *Apus caffer*

**AM.** We saw this species regularly over the high plateau from 30 Aug. to Apr. in our years of residence, and a number of older records show the extreme dates to be 21 Aug. (1972, Aspinwall *et al.* 1973) and 16 May (1975, TOO). Two specimens were collected in Nov. 1969 from a group of eight roosting under the eaves of the Zambian rest house (Dowsett 1970), and it had been collected long before on the Malawi side by Benson (1940-41).

Speckled Mousebird *Colius striatus*

**R.** Common, gregarious resident in bracken-briar and at forest edges on the escarpments and lower plateau, up to *c.* 2200 m (Zovochipolo); normally absent from the Chelinda area, but a group of eight were noted by DPC on the edge of Dam 2 on 9 Mar. 1996 (*c.* 2280 m). There are at least three breeding records, one C/3 Dec. (CJV, Zambian side) and two broods (one N/3) back-dated to Sep. and Oct. laying (Zambian rest house, FD-L & RJD).

Narina's Trogon *Apaloderma narina*

**R.** Appears very local, as recorded only from riparian forest on the North Rukuru river near Kaperekezi gate (below 1500 m, MD) and on the Chire stream at *c.* 1500 m (Nov. 1974, TOO in Dowsett *et al.* 1974).

Bar-tailed Trogon *Apaloderma vittatum*

**R.** Common resident in tall-canopy forest in the south-west up to about 2220 m altitude (Zovochipolo), rarer on the eastern escarpment, up to approximately 2200 m (Kasaramba-Mwenembwe), and noted also at Nyamkhowa (Benson 1940-41, FD-L & RJD). The highest densities observed are in Chowo, with a minimum of 12 pairs in 25 ha; in Zovochipolo all patches above 2.3 ha in size are occupied, and successful breeding was observed two years running in a patch of 3 ha (Dowsett-Lemaire 1983a). Occasionally wanders to patches away from breeding areas, including the Juniper Forest. There are eight dated breeding records (laying Oct. 6x, Nov. 2x) most from Chowo, two from Zovochipolo. Two of nine adults ringed in Chowo were retrapped locally after one and three years (Dowsett 1985).

Half-collared Kingfisher *Alcedo semitorquata*

**R.** Recorded from the North Rukuru in the northern foothills (1033B1-2) and other streams in 1033B4; also from streams near Thazima (FD-L & RJD), up to about 1600 m. Medland (n.d.) mentions Chelinda dams, but we have traced no records this high.

Malachite Kingfisher *Alcedo cristata*

**R/V.** Very marginal on the Nyika, as recorded only from the northern foothills (North Rukuru near Uledi), and as a vagrant to Chelinda, with one on the stream at the head of Dam 1 on 11 Nov. 1980 (MB). DF apparently saw it once at Dam 2, probably in 1996 or 1997.

Pygmy Kingfisher *Ceyx pictus*

**AM.** Recorded from the northern foothills and south-western slopes, up to *c.* 2000 m above Chisanga Falls (19 Dec. 1981, FD-L); the date of this record suggests that the species might occasionally breed as high as this. Otherwise one bird on passage in Zovochipolo, Nov. (Dyer 1988), probably at least 2100 m.

Brown-hooded Kingfisher *Halcyon albiventris*

**R.** Resident in riparian vegetation on the northern and south-western escarpments, up to Thazima (FD-L & RJD).

Chestnut-bellied Kingfisher *Halcyon leucocephala*

**AM/V.** Seasonally in woodland on the northern and south-western escarpments; no more than a scarce migrant at high altitude: one in open *Protea* grassland on 5 Jan. 1964 at 1800 m (*CJV*); one in Zovochipolo on 14 Apr. 1980 (*FD-L*); and one on the Dembo stream on 30 Sep. 1985 (Dyer 1987), so up to *c.* 2250 m.

Senegal (Woodland) Kingfisher *Halcyon senegalensis*

**AM/V.** A species of low-altitude, dry woodland, known from the northern foothills (near Uledi) and normally present Oct.-Mar.; there are a couple of records of vagrants on the high plateau: one "long dead" by 3 May 1982 (*AJS*) and one at Dam 2 near Chelinda on 23 Mar. 1996 (*DF*).

Giant Kingfisher *Megaceryle maxima*

**R/V.** It is normally recorded from the North Rukuru and other streams on the northern and western slopes (including rarely Chisanga Falls), and from Thazima, with occasional wanderers to the Chelinda dams. The first record there was a female at Dam 1 in Oct. 1973 (Dowsett *et al.* 1974); one was mentioned in *Nyala* 1977 (3(1): 101) without a date; we saw it only once in nearly three years (Sep. 1980). More recently three were on the North Rumphu river (east of Nganda) in Jan. 1995, and also two-three on the Chelinda stream in Jul. 1995 (*DPC*). One-two birds visited Dam 1 and 2 from Dec. 1995-Mar. 1996 (*DPC et al.*) and one was reported at Dam 2 on 4 Jan. 2002 (*DPC*).

Pied Kingfisher *Ceryle rudis*

**R/V.** Recorded marginally from the northern foothills (North Rukuru near Uledi, *FD-L & RJD*), and an exceptional wanderer to Chelinda Dam: one on 21 Sep. 1978 (*APZ* in Dowsett & Dowsett-Lemaire 1980).

Little Bee-eater *Merops pusillus*

**R.** Widespread in grassy clearings in woodland and on the edge of riparian on the escarpments, coming up to the plateau (moist herbage near streams, open wooded grassland) below the altitude of 2000 m: thus present in the Lusero area, in the Chire valley below Chowo, near Fingira etc. In 1979-80, a pair bred near the Zambian rest house at 2150 m, feeding at nest on 10 Dec. (*FD-L*). There is only one record higher than this, of a pair wandering to Chelinda, 10 Oct. 1989 (*NJ-S*).

Swallow-tailed Bee-eater *Merops hirundineus*

**AM.** Recorded from dry woodland in the northern foothills; also rarely at Thazima: a pair on 21 Sep. 1992, interacting with Little Bee-eater (*RDM*), so perhaps territorial. Also noted by *DOE* on the "southern Nyika" (no altitude) on 19 Nov. 1981.

White-fronted Bee-eater *Merops bullockoides*

**V.** A species of low-altitude sandy rivers, subject to wandering in the off-season. There are two records from the southern slopes at an unusual altitude (1700-1800 m): we saw a couple near Nkhonjera Hill in Jun. 1983, and *MD* saw a dozen on the Katizi stream in Jun. 1985.

Madagascar Bee-eater *Merops superciliosus*

**AM.** A migrant with a double passage, flying over the high plateau in small flocks (up to at least 2400 m), most noticeable on southward migration (around Sep.), less so on northward migration (Apr.-May). We recorded this species on a few occasions from 23 Apr.-9 May 1980 as well as from 15 Apr. 1981 (we were absent in May); more common in Sep. 1980 and 1981 (first date of 8 Sep. 1980 and 1 Sep. 1981), with fewer into Oct. of both years. In 1985, *MD* noted passage over Chelinda on 19 May. Certainly annual, although not reported since.

Blue-cheeked Bee-eater *Merops persicus*

**PM.** Difficult to tell apart from Madagascar Bee-eater unless one has an exercised ear. A migrant preferring floodplains and valleys, likely much scarcer than its sibling over the Nyika. One record of several flying over on 27 Apr. 1980, and a small flock flying south on 5 Oct. 1980 (Zovochipolo, *FD-L*); also heard by *MD* over Chelinda on 17 Apr. 1985, as late as 4 May 1986, and near Fingira on 25 Nov. 1985.

Eurasian Bee-eater *Merops apiaster*

**PM.** The commonest bee-eater over the Nyika, most numerous on passage (mid-Sep. to Oct., Mar. to mid-Apr.), with smaller numbers Nov.-Feb. Extreme dates when we were resident were 10 Sep. (1980) and 11 Sep. (1981), 15 Apr. (1980) and 14 Apr. (1981). More extreme dates noted: 21 Apr. 1985 (*MD*) and an exceptionally early 26 Aug. 1997 (*DF*). Noted feasting on bees from Chelinda bee-hives in the Regional Game Warden's garden in Mar. (*MTu* in *Nyala* 1978, 4: 41).

Southern Carmine Bee-eater *Merops nubicoides*

**V.** An exceptional wanderer, with a single record over the Nyika: at least one (calling) over Zovochipolo on 4 Apr. 1981, c. 2200 m (*FD-L*).

Eurasian Roller *Coracias garrulus*

**PM.** An irregular migrant recorded mainly on northward passage (late Feb.-early Apr.). First reported at Dam 3 on 27 Dec. 1975 (*RJD & TAM*), which is also the only record on southward passage; it was unusually common in Apr. 1976, mentioned by several observers, including *JHa* who saw about 20 feeding around Eucalyptus trees at Chelinda from 4-7 Apr. Certainly not as conspicuous during our period of residence, as we saw one at Chelinda 17-23 Feb. and one at Chelinda Hill (2400 m) on 8 Apr. 1981. Critchlow (1995) has omitted observations from 1976-1981 but reports some later ones, especially by *MD* who saw some in Mar. 1985, Mar.-Apr. 1986 (latest on the 23rd). There are a few later records, all of northward-bound birds, late Feb. to 11 Apr. (this last in 1996, *DPC*).

Lilac-breasted Roller *Coracias caudatus*

**R/V.** Recorded from the northern foothills in the Uledi area (*RJD & FD-L*, Oct. 1986); otherwise no more than a rare vagrant to the high plateau in the off-season, with three acceptable records: one at Lake Kaulime, 9-10 Jan. 1973 (*BC* in Dowsett *et al.* 1974), one on the Zambian side (c. 1950 m) on 30 Jan. 1994 (*DPC*) and one near Chelinda on 9 Jul. 1994 (*GB*, in Critchlow 1995). Some lists mention other observations (Feb.-Mar. 1975) but as the observer added that this was a "regular visitor" in small numbers, there was probably confusion with Eurasian Roller.

Broad-billed Roller *Eurystomus glaucurus*

**AM.** Recorded from the northern foothills (near and east of Uledi, *RJD & FD-L*) where it could be breeding, and from the Thazima area. On the high plateau, only an uncommon migrant seen mainly on southward passage, with at least eight records (in Critchlow 1995, in addition to ours on 15 Oct. 1981, Zovochipolo), extreme dates 29 Sep.-14 Nov. Only three Mar. records: one on 8 Mar. 1996 (*DPC*), four on 11 Mar. 1997 (*JH et al.*), one on 24 Mar. 1994 (*DF*).

Red-billed Wood Hoopoe *Phoeniculus purpureus*

**R.** A bird of miombo woodland, observed on the northern escarpment, on the Zambian side of Kaperekezi (*DPC*), at Thazima (*FD-L & RJD*) near the upper altitudinal limit of its range, also with an immature in Jan. (1994, *DPC*), and once near Ulera at 1700 m (*MD*).

Scimitarbill *Phoeniculus cyanomelas*

**R.** Recorded from the northern woodlands and near Thazima, with an exceptional observation of a wanderer seen crossing a valley in Zovochipolo (c. 2150 m) on 12 Sep. 1981 (*FD-L*).

Hoopoe *Upupa epops*

**R.** Recorded from the northern woodlands, and near Kaperekezi and Thazima (*DPC*). Subject to much wandering and rarely turns up on the high plateau. One well seen in Zovochipolo (3 Jan. 1981, 2200 m) was definitely the race *africana* (*RJD & FD-L*). Other dated records are 15 Dec. 1974 (*RAC* in Benson & Benson 1977) at about 2400 m (near Domwe), and one on 25 Dec. 1995 at 2300 m (*DF*). *DPC* has also seen it once or twice in the mid-1990s, between Kaulime and Kaperekezi, also one on 6-8 Jan. 2002 along the same road.

Crowned Hornbill *Tockus alboterminatus*

**R.** In dense miombo and forest, resident in small numbers on the escarpments and on the plateau up to at least 2200 m, also known from Nyamkhowa (Benson 1940-41, *FD-L & RJD*). There are several breeding records

from the forests of the south-west (Manyenjere, Chowo, twice in Zovochipolo) with egg-laying back-dated to Aug. (1) and Sep. (3) – all *FD-L*. Food brought to a Zovochipolo nest included large insects and arboreal chameleons *Chamaeleo goetzei*; the home range covered by the feeding bird was at least 4.5 km<sup>2</sup> (with over 50 ha of forest); there are at least two pairs in Chowo, and densities are higher at lower altitudes (Kasyaula area) (Dowsett-Lemaire 1983a). The comment by *JH* (in *Vocifer* of Jul. 1997: 2), that the altitude of 2150 m (where seen in Apr. 1997 north of Nganda) is unusual for this species, does not appear justified.

Pale-billed Hornbill *Tockus pallidirostris*

**R.** A bird of low-altitude, dry miombo woodland, recorded only from the northern foothills in 1033B4 (Chipome valley, Atlas record). The upper altitudinal limit is around 1400 m elsewhere in Malawi, but has not been documented for the Nyika.

African Grey Hornbill *Tockus nasutus*

**R.** Only recorded (as far as we know) from the northern foothills, as near Uledi (*FD-L* & *RJD*) and Chipome (*MD*).

Trumpeter Hornbill *Bycanistes bucinator*

**R/M.** Recorded from riparian on the North Rukuru near Uledi, and at Thazima; small numbers are present seasonally in the larger forests of the south-western escarpment (mainly Kasyaula, Kasoma, Manyenjere and Chowo, rarely visiting Zovochipolo) mostly from Sep.-Mar. (*FD-L* & *RJD*), the earliest date being the last week of Aug. (1972, Aspinwall *et al.* 1973), followed by 2 Sep. (1981 at Kasoma, *FD-L*), and latest 2 Apr. (1981 in Zovochipolo, *FD-L*). We suspect that they leave in the winter months as fruit production (including figs) is poor at that time. It was also present at Nyamkhowa (Dec. 1982). Occurs in pairs or small parties and likely breeds.

Silvery-cheeked Hornbill *Bycanistes brevis*

**V.** Only a vagrant to the Nyika, possibly originating from the large breeding population in the Misukus (Dowsett-Lemaire 1989a). The first record was one at Chelinda on 16 Oct. 1973 (Dowsett *et al.* 1974); then one-two in Manyenjere on 18 Dec. 1976 (*DRA*), a male flying from Chowo to Zovochipolo on 13 Nov. 1979 (*RJD*), one in Chowo on 9 Apr. 1980 and a noisy pair in Manyenjere on 5-8 Sep. 1981 (both *JA*), and one in Manyenjere on 7 Nov. 1988 (*RJS*).

Southern Ground Hornbill *Bucorvus leadbeateri* (syn. *B. cafer*)

**R.** Resident in small numbers in montane grassland on the plateau, regularly up to 2200 or even 2250 m (from Manyenjere to Zovochipolo, *FD-L* & *RJD*). There is one observation of a bird at *c.* 2400 m at Kasaramba in May 1974 (M. Rosevear *per* *CWB*, omitted in Benson & Benson 1977), and it has also been seen north of Nganda at 2100 m (*JH et al.*). Known too from the escarpments, near Thazima and in the north-east (Ruwile stream, *per* *DPC*). Pair with fledged young near Thazima in Feb. (Dyer 1988).

Whyte's Barbet *Stactolaema whytii*

**R.** Scarce resident of riparian forest and adjacent miombo woodland, recorded only from Thazima, where seen interacting with Black-backed Barbet (Sep. 1992, *RDM*); seen again by *DPC* in Dec. 1993-Jan. 1994.

Moustached Green Tinkerbird *Pogoniulus leucomystax*

**R.** Common resident in montane rain forest on all escarpments (up to 2300 m on the eastern side, 2250 m in the south-west), also at Nyamkhowa (down to 1720 m) and the Juniper Forest. Even though it takes a lot of insects, it is above all a highly specialized consumer of mistletoe berries (Dowsett-Lemaire 1988a) and its distribution depends on abundant fruit supply, thus it is absent from the high central plateau (above 2250 m, where there are no mistletoes). In Zovochipolo, pairs have moved to breed in some small patches from Oct.-Dec. where only *Englerina* berries (ripening Sep.-Dec.) are to be found (Dowsett-Lemaire 1983a). Densities in fragmented forest in Zovochipolo are of one-two pairs/ha; they are less in larger forests. The entrance of occupied nest holes is decorated with the sticky white seeds of *Englerina*, which eventually fall off as they cannot survive on dead wood. Nest holes are invariably dug out of dead wood, and the nestlings are easy to find from their piping calls, this resulting in 81 dated breeding records, egg-laying taking place from Sep.-Nov., rarely Dec. (*FD-L*). It appears to be mainly single-brooded, but some pairs (laying Dec.) probably raise

a second brood (Dowsett-Lemaire 1985a).

Yellow-fronted Tinkerbird *Pogoniulus chrysoconus*

**R.** Common in miombo woodland on the escarpments, coming up to the upper limit of tall woodland on the western side, at about 2050 m.

Golden-rumped Tinkerbird *Pogoniulus bilineatus*

**R.** First collected at Nyamkhowa in 1938 (Benson 1940-41) and we noted several there in Dec. 1982 (1720-2000 m), thus overlapping with *P. leucomystax* but apparently outnumbered. We also heard it (just the one) in Mwenembwe forest, below 2000 m, in Jun. 1983.

Miombo Pied Barbet *Tricholaema frontata*

**R.** Very marginal in the Nyika woodlands as it does not ascend as high as Thazima; noted in the vicinity of Kaperekezi (MD), c. 1500 m, but not yet reported from the northern escarpment.

Black-collared Barbet *Lybius torquatus*

**R.** Recorded from the northern foothills (including the North Rukuru), and Thazima, ascending marginally higher to riparian vegetation on the old Mbuzinandi road at c. 1800 m (MD).

Black-backed Barbet *Lybius minor*

**R.** Uncommon and discreet resident of riparian forest and adjacent miombo; first reported from the foothills in 1981, at Thazima (APZ), and in the Chipome valley and slopes of Mpanda in the north (DOE). There have been several subsequent observations from both areas, including a pair feeding at a nest (in a *Ficus natalensis*) 31 Aug.-1 Sep. 1994 in the north-east (1033B4 at 1150 m, DPC), and a pair interacting and driving off a Whyte's Barbet at Thazima (Sep. 1992, RDM).

Crested Barbet *Trachyphonus vaillantii*.

**R.** A species of dry woodland at low altitudes, not yet reported from the northern escarpments where it would seem likely to occur. It barely reaches Thazima, as it was seen twice in 1993 on or near the park's boundary (DPC).

Green-backed Honeyguide *Prodotiscus zambesiae*

**R.** There are a few records from miombo woodland just above Thazima (PML saw a pair copulating 29 Sep. 1995, NB reported it in Nov. 1998, also seen by MD once), at the altitude of 1600-1700 m. It is also recorded from the western escarpment, in miombo above Kaperekezi (Aug. 1986, MD).

Scaly-throated Honeyguide *Indicator variegatus*

**R.** Uncommon and discreet resident of montane rain forest in the south-west (up to 2250 m in Zovochipolo) and on the central plateau (up to 2300 m); also recorded from the northern escarpment. Although I never found a song-post anywhere the species definitely breeds, parasitizing the Olive Woodpecker (Dowsett-Lemaire 1983b). In 1981 in Zovochipolo three neighbouring territories of Woodpeckers were all parasitized; two nests produced a fledgling, in the third, the nestling was abandoned about half way. The Honeyguide was seen visiting this particular nest during incubation; the young Woodpeckers never hatched (long past the normal date) but the young Honeyguide hatched 18 days after a prolonged visit by the adult, the egg-shell being carried out by the male Woodpecker. It is likely the same female Honeyguide was involved in all three territories (laying in Aug. and Sep.). The voice of nestling Honeyguide is a low, husky "chess-chess-chess", very different from the high piping of the young Woodpeckers. The most common call of adult Honeyguide heard year-round is a soft whistle, repeated a few times, reminiscent of Scimitarbill whistles.

Greater Honeyguide *Indicator indicator*

**R/V.** Recorded from woodland on the northern and south-western escarpments (Thazima), and very rarely wanders to the high plateau (up to about 2200 m). Thus one immature seen above the Zambian rest house on 19 Dec. 1975 (RJD), and one female in Zovochipolo on 15 Oct. 1981 (FD-L); one immature was netted north of Nganda in Mar. 1997 (JH et al.).



Lesser Honeyguide *Indicator minor*

**R?** Although Medland (n.d.) writes “common woodland” it was reported only once from the northern escarpment (Jalawe valley, Aug. 1994) and once from Thazima (Dec. 1993, both *DPC*). One was netted north of Nganda (at c. 2200 m) at forest edges in Mar. 1997 (*JH et al.*); there are at least seven earlier observations of wanderers on the high plateau in the months of Jan.-Mar., May and Nov. (near Chowo and Zambian rest house, in Zovochipolo). Parasitizes mainly barbets and unlikely to breed this high.

Eastern Least Honeyguide *Indicator meliphilus*

**R.** Discreet species of montane rain forest, flycatching in canopy or at edges. There are a few reports from Chowo, c. 2100 m (Jul. and Dec. 1975, Dec. 1977, Feb. and Dec. 1979: *DRA, RJD, FD-L*) and we saw it once in riparian in the Lusero area (Jan. 1981).

Bennett’s Woodpecker *Campethera bennettii*

**R.** Marginal for the Nyika: has definitely been recorded from Thazima (*FD-L & RJD*) and lower down in the extreme north-east (lower Wovwe, *MD*), but could be more widespread on the northern escarpment.

Golden-tailed Woodpecker *Campethera abingoni*

**R.** Common on the escarpments (northern foothills and in the Thazima region). In addition, the odd pair occurs higher up in forest patches in the south-west, up to 2200 m. It was seen in Manyenjere (Jan. 1976, *RJD*); a typical nest hole (oval) was found near the Chire stream below Chowo and in 1981 a pair bred in a small forest in Zovochipolo on the Zambian border, producing two young (eggs laid in Sep.) – *FD-L*.

Little Spotted Woodpecker *Campethera cailliautii*

**R.** Uncommon species of riparian forest and adjacent miombo, reported from the northern foothills, along the North Rukuru (*RJD & FD-L*), and netted in riparian at 1150 m in 1033B4 (1997, *JH et al.*).

Cardinal Woodpecker *Dendropicos fuscescens*

**R.** Commonest woodpecker in miombo woodland below 1800 m (northern and south-western escarpments), uncommon above that, but locally to 2100 m (above Chisanga Falls, *FD-L*).

Bearded Woodpecker *Thripias namaquus*

**R.** Widespread in miombo on the escarpments, up to about 1800 m (near Ulera on the southern slopes, *FD-L & RJD*).

Olive Woodpecker *Mesopicos griseocephalus*

**R.** Common in montane forest, including the small patches on the high plateau, up to 2450 m. Especially common in small patches with many soft-barked trees (e.g. *Hagenia, Maesa, Myrica, Nuxia, Polyscias*). Thus in Zovochipolo 22 pairs are known to breed in 100 ha of forest patches, an average of 4.5 ha/pair, whereas I located only three pairs in the 90 ha of Chowo forest (Dowsett-Lemaire 1983a). Its breeding behaviour was studied in detail in 1980 and 1981 (Dowsett-Lemaire 1983c): this resulted in 32 dated breeding records (laying Jul. to Sep.). Breeding success was very high, the only source of failure identified being the parasitism by Scaly-throated Honeyguide. More often than not, only one fledgling left the nest (n = 16, against nine cases of two young), following its father; when two young fledged, the second eventually (and reluctantly at first) followed (and was fed by) the female, as the male could not feed both young. Fledglings leave the nest after 26 days, are then fed for one month and still attended by their parents for at least another two months, when they learn to practise their special feeding techniques. One of three birds ringed was retrapped locally after five years (Dowsett 1985).

African Broadbill *Smithornis capensis*

**R.** There are a few observations in rain forest in the south-west (Manyenjere and Chowo), but it appears very rare in Chowo where probably just a wanderer, up to 2150 m (e.g. Jul. 1975, *DRA*, and a male collected on the edge in Nov. 1969 (Dowsett 1970); also noted once by *MD* in 1986 (Dyer 1987)). A pair alarm-calling with great agitation in Manyenjere on 13 Jan. 1983 (*FD-L*) suggests breeding activity. It is also known from riparian forest on the western escarpment, at Thazima (Dyer 1987) and on the North Rukuru on the northern boundary (*FD-L*).

African Pitta *Pitta angolensis*

**V.** A species breeding in deciduous thicket at low altitude (as near the Lake-shore); only a rare migrant through the area, with a male collected in forest at *c.* 1830 m on Mwanda Mtn by *ELB*, Zambian Nyika, on 27 Nov. 1950 (Benson *et al.* 1970).

Rufous-naped Lark *Mirafra africana*

**R.** Common resident of montane grassland up to the peak, this race (*nyikae*) being confined to the Nyika and some of the southern highlands of Tanzania. There are at least four dated breeding records, two C/2 and two C/3, laid in Nov. (3) or late Oct.-Nov. (1). Also occupied nests in Jan.-Feb. 1987 near Chelinda (*MD*). Occasionally forms small flocks on burnt grassland.

Flappet Lark *Mirafra rufocinnamomea*

**R.** In wooded grassland on the northern escarpments, up to *c.* 1400 m (*MD*), and apparently not recorded from as high as Thazima.

Red-capped Lark *Calandrella cinerea*

**AM.** Uncommon visitor in small numbers, normally in the dry season. However, the first observations were on 2-12 Jan. 1964, when it was seen (and collected) in grassland on both sides of the border (Benson *et al.* 1970). Later records are all in the dry season, usually as small flocks in burnt grassland (from Manyenjere and Kasoma to the central plateau as near Kaulime), mostly from May to Oct., extreme dates 19 Apr. 1982 (*PG*), then 5 May (1985, *MD*) to 25 Oct. (1973, *RJD*). Adults seen with young near Chelinda in Oct.-Nov. (Dyer 1988), but the last date of presence was not noted.

Black Saw-wing *Psalidoprocne pristoptera*

**AM/R.** Not uncommon at edges of forest and woodland on the escarpments, up to 1800-1900 m (Lusero, Fingira, Chisanga Falls etc.), with a few occasionally to 2050 m; at higher altitudes it is essentially a seasonal migrant over montane grassland, appearing in some numbers in Apr.-May (often flying north) and Aug.-Sep., with fewer in Oct. (and only once in Jan. near Chelinda) – *FD-L* & *RJD* in our years of residence. There is also a report of about 30 in a flock with Angola Swallow in Jul., at 2300 m (Benson 1940-41).

White-headed Saw-wing *Pristoptera albiceps*

**AM.** Replaces the Black Saw-wing at higher altitudes, although there is much overlap, as it is recorded from at least Thazima. Seasonally common in small numbers on the edge of forest and scrub on the plateau, especially around 1800-2200 m. Normally arrives in late Sep. and departs in Apr.: our first dates were 17 Sep. (1981) and 28 Sep. (1980); in Apr. 1980 flocks were passing through until the last day, but we saw none in May. *TOO* noted some in early May 1975, and *DPC* last saw the species on 3 May (1996). Breeds in earth banks, with a couple of dated records from the Zambian side (N/2 in one case) indicating laying in Nov. and Dec. (*JFRC-R*, Dec. 1985); nest holes also occupied in early Jan. (1978, *WFB-M*) and apparently in Feb.-Mar. near Chisanga Falls (Dyer 1988).

Eurasian Sand Martin *Riparia riparia*

**PM.** Uncommon passage migrant, but probably annual, with singles seen usually near water, dated records being 23 Sep. (1992, Anon., which is the earliest date in Malawi), Oct. (including mid-Oct. 1973 at Lake Kaulime, *RJD*), 6 Nov. (1981, over Zovochipolo, *RJD*), then Mar.-Apr. (latest 10 Apr. 1986 at Chelinda, *MD*).

African Sand Martin *Riparia paludicola*

**V.** Apparently just the one record, of a vagrant at Dam 2, 14 Sep. 1981 (*RJD* & *FD-L*).

Banded Martin *Riparia cincta*

**AM.** In small numbers seasonally over montane grassland, mainly from late Oct.-Mar. (*RJD* & *FD-L*). Extreme dates are 12 Oct. (Benson & Benson 1949) and 18 Apr. (1992 at Nganda, *RDM*). Nest-building was recorded on 22 Dec. (*DPC*, 1995), in Jan. (Benson 1952), and egg-laying twice in Dec. (from pair feeding nestlings near Chelinda, Jan. 1981, *FD-L* & *RJD*, and C/4 at Chelinda, Dec. 1989, *JDA*). Dyer (1988) saw some nests in road-cut on the way to Dam 3; they were occupied in Jan.-Mar. and later abandoned (*MD in litt.*). Largest group seen early in the season of just over 20 birds, 10 Nov. 1980 in Zovochipolo (*FD-L*) and

about 200 on 17 Mar. 1996 (DPC).

Grey-rumped Swallow *Pseudhirundo griseopyga*

**AM.** Seasonally common over montane grassland, especially in the months of late Apr.-May to Nov. when they leave; the odd one stays in the rains (Dec.-Jan.) and we saw six early birds on 28 Mar. 1980. Breeds in rodent holes in the ground: two occupied holes noted in Aug. 1972 (Aspinwall *et al.* 1973) and we had four breeding records, back-dated to laying in Aug. (2 in 1981) and Sep. (2 in 1980), on both sides of the border, near Zambian rest house and in Zovochipolo (up to 2200 m). Dyer (1988) also noted some entering nest holes near Chelinda in Aug.-Sep.

Mosque Swallow *Hirundo senegalensis*

**R.** Small numbers seen year-round on the southern escarpments and the high plateau up to 2200 m, occasionally higher (2300 m); *CJV* saw a family party living in a hollow branch of a large tree (Jan. 1964, *c.* 2000 m) and *RDM* noted several pairs collecting mud on border road before Chowo (*c.* 2100 m) on 12 Nov. 1993. On 2 Dec. 1981 a pair was looking into a crack in an *Olinia* tree on the Chire stream below the Zambian rest house (*FD-L*).

Lesser Striped Swallow *Hirundo abyssinica*

**R.** Uncommon, but seen overall in all months, often in ones and twos with mixed flocks of swallows and swifts, over the high plateau up to at least 2400 m and over the escarpments. There is as yet no evidence that it breeds at high altitude on the plateau, but it was observed nesting at Chisanga Falls in Dec. 1994 (*DPC*).

Greater Striped Swallow *Hirundo cucullata*

**V.** Exceptional migrant (the Nyika being far to the east of its normal route), with one bird well seen on 27 Dec. 1975 flying west over the border road (*c.* 2000 m), and another (or same?) over grassland near Manyenjere, 2100 m, on 30 Dec. (*RJD* in Benson & Benson 1977: 254).

Red-rumped Swallow *Hirundo daurica*

**R.** Occurs year-round in small numbers over the high plateau and upper slopes, especially near rocky hills but has adapted to breeding on buildings (Zambian rest house and Chelinda). *CJV* observed a fresh nest (empty) on a rock in Jan. 1964 (Zambian side) and we saw a pair building a nest on Chowo Rocks on 26 Feb. 1981. Nests on the veranda of the Zambian rest house were noted from the mid-1970s, e.g. pair at half-finished nest Jul. 1975 (*EHP*), pair roosting in nest under eaves Nov. 1976 (*PBT*), nest-building inside tin huts in Dec. 1976 (*DRA*) and on veranda Dec. 1977 (*FD-L* & *RJD*); occupied nest Feb. 1979 (*DRA*). In 1979-80, a pair bred in one of the staff houses, raising a first brood in Dec. (from eggs Nov.); on 6 Feb. it was busy feeding a second brood with the help or interference of the first brood (of three juveniles)! Some of the juveniles were seen visiting the nest and even spending some time inside (presumably brooding). But on one occasion the three young, perched just above the nest, begged and one of them got food from an adult who then flew away without entering the nest. It was later recorded nesting at Chelinda Camp (feeding nestlings 22 Dec. 1989, *RDM*).

African Rock Martin *Hirundo fuligula*

**R.** A few pairs found around the larger rocky hills of the plateau (e.g. Fingira Rock, Chowo Rocks, Manyenjere ridge, Domwe, Jalawe) up to at least 2350 m, and also on the northern escarpments.

Blue Swallow *Hirundo atrocaerulea*

**AM.** Seasonally common over montane grassland on the high plateau, mainly above 2100 m, between mid-Sep. and Apr. Normally arrives in late Aug., our first date being 21 Aug. (1981), *DPC*'s earliest being 20 Aug. (1996) and the overall earliest is 17 Aug. (2000, *EP*); our latest date was 30 Apr. (1980), but there is an exceptional observation of a late straggler on 13 May 1975 (*TOO*). Has been found breeding mainly under overhangs of banks (as along streams and roads, first clutch of C/3 collected by Loveridge in Nov. 1948: Benson 1951), also on buildings at Chelinda (since 1976, *TAM*). Of 35 active and old nests located by Holroyd & Quinn (n.d.), 28 (80%) were on eroded faces of stream-banks, five were in holes underground, including one in a Warthog burrow, and the remaining two were attached to the underside of a wooden bridge and under the eaves of a small boathouse. Egg-laying takes place in Nov. (4), Dec. (3) and Jan. (2). Known clutch-size: C/3 (3) and N/3 (1).

In Nov. 1987 Holroyd & Quinn (n.d.) found 22 active nests and another six territorial pairs in 71 km<sup>2</sup> (from north of Chelinda, downstream to Chelinda bridge). Given the amount of suitable habitat above the altitude of 2100 m it is estimated that at least 300 pairs are present on the Nyika.

Wire-tailed Swallow *Hirundo smithii*

**R.** Very marginal for the Nyika list, as recorded essentially along the North Rukuru in the extreme north (near Uledi, c. 1000 m, *RJD*, *FD-L* and *MD*).

[Pearl-breasted Swallow *Hirundo dimidiata*. Unconfirmed, brief observations of a few (flying north) on 25 May 1980 near the Chitipa/Chelinda road junction and of one between Kasoma and Chowo on 23 Sep. 1980 (*FD-L*).]

White-throated Swallow *Hirundo albigularis*

**V.** Exceptional migrant: three flying east over the road near Chowo on 31 Oct. and two flying south over Chowo Rocks on 3 Nov. 1979 (*RJD* & *FD-L*); then two in early Dec. 1983 (*CC*).

Eurasian (Barn) Swallow *Hirundo rustica*

**PM.** Common wintering species over the plateau and escarpments, often in their hundreds, at least from Sep.-Apr.; the earliest arrival dates are 17 Aug. (1996, *DPC* and *MD*) and 19 Aug. (1981, *FD-L*) and latest departure dates 3 May (1980, *RJD* & *FD-L*) and 4 May (1985, *MD*).

Angola Swallow *Hirundo angolensis*

**AM.** Restricted to the high plateau (1033D1-2, 1033B4), where small numbers occur mainly from May-Jan. at 2000-2300 m. Seems to leave the area for a few months upon completing breeding, sometimes as early as late Dec. (in 1979, *RJD* & *FD-L*), but there is one observation in Mar. (13 Mar. 1996) of several pairs around the Zambian rest house (*DPC*). Has been recorded breeding at the Zambian rest house since 1962 (*JMF*, family with three juveniles roosting at nest Dec.), again during the next rains (*CJV*, N/3 left the nest on 12 Jan. 1964), in 1969 (two nests with young in Nov., Dowsett 1970) and in late Nov. 2002 five pairs were present, with three nests located (*WMc*). Dated records of egg-laying are Oct. (1), Nov. (2), and Dec. (1), with two broods of N/3. On the Malawi side a nest was built on the bridge support on the North Rukuru stream with C/3 laid in Nov. or early Dec. 1987 (*PS*); a pair was building a nest in the abandoned hangar on Chelinda airstrip on 26 Nov. 2002 (*WMc*).

Eurasian House Martin *Delichon urbicum*

**PM.** Winters in smaller numbers than Eurasian Swallow, but occasional influxes of hundreds in the months of late Oct.-Jan. and Mar.-Apr. Uncommon before late Sep., earliest traced on 11 Sep. (1981, *RJD*); northward passage often quite heavy, until late Apr., last definite ones noted on 3 May (1980, *RJD* & *FD-L*). [Reports from Aug. appear doubtful, perhaps due to confusion with Grey-rumped Swallow.]

Yellow Wagtail *Motacilla flava*

**PM.** Scarce migrant stopping briefly on both passages, usually as singles near water (Lake Kaulime, Dam 3), in short grass or on roads. Recorded in Nov.-Dec. and Mar.-Apr., extreme dates 13 Nov. (1995, plateau, *DPC*) to 4 Dec. (1977, Dam 3, *RJD* & *FD-L*), and mid-Mar. to 25 Apr. (1980 at Dam 3, a female, *RJD* & *FD-L*). One male we saw in Mar. belonged to the race *lutea*.

Long-tailed Wagtail *Motacilla clara*

**R.** A few pairs inhabit the North Rukuru river on the western escarpment from Zungwara and Chisanga Falls to Uledi (*RJD* & *FD-L*). Also recorded from Chipome and Wovwe valleys (*DOE*, *DPC*), on the Kaswerera stream at Thazima (*DPC*) and as a rare wanderer to Chelinda dams, e.g. from 26 Dec. 2001-5 Jan. 2002 (*DPC*), with an older report on 3 Dec. 1975 (*TAM*).

We found this species breeding at Zungwara Falls, 2000-2050 m (two pairs present on 30 Nov. 1980, one with large N/2 (eggs Oct.)), and at Chisanga Falls in Dec. 1981 (dependent fledgling from eggs Oct.).

African Pied Wagtail *Motacilla aguimp*

**R.** Very local on the high plateau, but often seen at Chelinda where commensal, around camp and the dams

where appears resident. Was proven to breed there in 1989 (*RDM*, N/3 in Dec., eggs Nov.) and again in 1994 (copulating 28 Aug., feeding at nest Oct., *DPC*). Only an occasional visitor to the Zambian rest house. Otherwise known from Thazima, Kaperekezi gate (N/1 Apr. 1994, *DPC*), and the northern escarpments (e.g. North Rukuru).

Richard's Pipit *Anthus richardi*

**R.** Very common in montane grassland (to the peak), with at least 11 breeding records (7xC/3, N/3) with egg-laying Oct. (2), Nov. (7) and Dec. (2).

Long-billed Pipit *Anthus similis*

**R.** Discreet species of miombo woodland and large boulders on the high plateau; most frequently seen on Chowo Rocks (around 2200 m, at all seasons), where we eventually found it breeding (Oct. 1986, carrying food to nest). Other localities on the high plateau include Zungwara Falls (large rocks and scrub), Fingira Rock (miombo), the top of Manyenjere ridge (wooded *Protea* grassland with rocks, 2090 m) – all *FD-L* & *RJD*. On the escarpments it has been recorded from the Thazima area (*RDM*) and the western scarp (near Gamba, *FD-L* & *RJD*) and is probably more widespread. At Manyenjere and Fingira there is a continuum between the miombo woodland and the open montane rocky habitat.

Buffy Pipit *Anthus vaalensis*

**AM.** A dry-season visitor to short montane grassland, not proven to breed as high as the Nyika. Is attracted to recently burnt grassland and has been recorded from the Zambian side (including Manyenjere and Kasoma) as well as the central plateau, east to Kasaramba. Arrival dates appear to be 1 May (1980, *RJD* & *FD-L*) followed by 6 May (1985, *MD*) and the species is regularly seen (in very small numbers) until the end of Sep. [An Apr. record is considered unconfirmed.]

Tree Pipit *Anthus trivialis*

**PM.** Not uncommon species wintering in miombo woodland and higher up in open *Protea* montane grassland, edges of forest patches and Pine plantations, scrub among rocks. Seen regularly from late Nov. to early Apr., our earliest arrival date (in three years) was 12 Nov. (1979), but there is one earlier observation, two at Chelinda on 25 Oct. (1992, *RDM*), and the latest departure date mentioned seems to be 23 Apr. (1982, *NJ-S*).

[Striped Pipit *Anthus lineiventris*. Listed by Medland (n.d.) but not considered as confirmed for the Nyika (pers. obs. and *contra* Dyer 1988).]

Black Cuckoo-shrike *Campephaga flava*

**AM.** Widespread on the escarpments, and into the lower montane forests (e.g. patches in the Lusero and Kasoma area) up to 2050 m. In variable numbers on the high plateau, where an influx of birds arrives in the dry season and some may stay to breed in the rains: thus not recorded around Chowo/Zovochipolo in the summer of 1979-80, but present from May 1980 (with many records in Zovochipolo Sep.-Oct.), and pair feeding a fledgling on the upper edge of Chowo forest at 2150-2200 m in Mar. 1981 (*FD-L*). Fairly common in the dry season of 1981 (up to 2250 m) and fewer throughout the rains 1981-82, but pair present again on the upper edge of Chowo and at Kasoma. Elsewhere on the high plateau also noted at Chelinda in May and the Juniper Forest in Sep. (Dyer 1988).

White-breasted Cuckoo-shrike *Coracina pectoralis*

**R.** Confined to the escarpments in miombo woodland, on the northern side (Chipome valley), and the south-western slopes (Thazima and the Kaperekezi area). Does not reach the upper levels of woodland, but has been recorded up to 1700 m or a bit higher above Kaperekezi (*MD*).

Eastern Mountain Greenbul *Andropadus nigriceps*

**R.** Very common in montane rain forest and low-canopy montane forest, throughout the plateau up to 2450 m; also at Nyamkhowa (down to 1720-1750 m). Inhabits all levels of the forest, as well as montane shrubland 2-4 m high. Has a wide diet of insects and fleshy fruit (over 60 species recorded: Dowsett-Lemaire 1988a). Densities in fragmented forest are of two-three pairs/ha; in Zovochipolo a pair can breed in a patch as small as 0.12-0.16 ha, but with some scrub attached (Dowsett-Lemaire 1983a). Nearly 70 dated breeding

records (including 10 C/2), laying occurring in Aug. (8), Sep. (25), Oct. (30) and Nov. (6). Thirty-five territorial birds ringed in Chowo and Zovochipolo were retrapped up to seven years later (Dowsett 1985). Essentially resident, but some birds wander, witness the capture of two birds netted on the northern slopes (1033B4) at 1150 m in early Apr. 1997 (*JH et al.*).

Stripe-cheeked Greenbul *Andropadus milanjensis*

**R.** Confined to the more humid forests of the eastern escarpment, including Nyamkhowa, and from Mwenembwe to Vitumbi, up to about 2250 m (*FD-L & RJD*). Less common than Mountain Greenbul (with which it coexists) and it is likely both species compete; their fruit diet is broadly similar (Dowsett-Lemaire 1988a). There are a couple of breeding records from the eastern Nyika, with egg-laying Sep. (N/2 in Oct., Benson & Benson 1949) and Oct. (dependent fledgling Dec., Benson 1940-41). Netted in riparian forest low down in Apr. 1997 in 1033B4 (1150 m, *JH et al.*) but whether this represents altitudinal movement is not clear, as this bulbul occurs at lower altitudes than its congener, as on the escarpment of the South Viphya (all the way down to 1100 m).

Little Greenbul *Andropadus virens*

**R.** A bird of evergreen forest at lower altitudes elsewhere in the north of Malawi, barely present on the south-western escarpment, in Manyenjere forest at 2000-2050 m (where 8-10 pairs were located along two streams, Dowsett-Lemaire 1983a), and in riparian on the North Rukuru (below Chisanga Falls), 1500 m (*MD*). It was not found on the colder, wetter eastern escarpment, not even as low as 1720-1800 m in riparian (Nyamkhowa), but was recorded lower down (1400 m) from riparian forest in the north (1033B4) in 1997 (Overton 1998). Not reported from Thazima either.

Yellow-bellied Bulbul *Chlorocichla flaviventris*

**R.** A bird of low-altitude thicket or forest, very marginal for the Nyika list as only recorded from the North Rukuru near Uledi (1033B1-2, c. 1000 m, *FD-L & RJD* 1986).

Terrestrial Bulbul *Phyllastrephus terrestris*

**R.** Another species of low or medium altitudes, observed in riparian forest on the North Rukuru (1033B2, *RJD*) east of Uledi, and also in riparian near Thazima (*JH*). The normal altitudinal limit of range of the species in Malawi is 1750 m, so it was surprising to find a couple at the edge of a patch of forest at Nkhonjera at 2050 m on 11 Jun. 1983 (Dowsett-Lemaire 1989a), presumably off-season wanderers.

Grey-olive Bulbul *Phyllastrephus cerviniventris*

**R.** In riparian forest at lower altitudes, as on the North Rukuru (Uledi area, *FD-L & RJD*, and below Chisanga Falls, *MD*), on the Chipome stream (*DPC*), and at Thazima (*DPC*). *ELB* collected a specimen on Mwanda Mtn in Zambia in 1950 (Meyer de Schauensee 1951), altitude not specified (but that would probably be below 1800 m).

Yellow-streaked Bulbul *Phyllastrephus flavostriatus*

**R.** Common in montane rain forest on both escarpments, including the larger patches in Zovochipolo (7.5 ha and above), up to 2300 m below Kasaramba, and down to 1720-1750 m at Nyamkhowa. Unlike *Andropadus* species, completely insectivorous (Dowsett-Lemaire 1983a, 1989a). Probes bark of trunks, large branches and lianes, being particularly attracted to epiphytic vegetation; some territories are no more than 2-3 ha. There are 11 breeding records, with egg-laying in Sep. (1), Oct. (2), Nov. (5), Dec. (2) and Jan. (1), including some C/1 (incomplete?) and C/2. Eleven of 22 territorial birds ringed in Chowo have been controlled in following seasons (Dowsett 1985); the oldest is a male first ringed as an adult in Aug. 1972 by *JJT* and last re-identified by *RJD* in Oct. 1986 (thanks to its individual colour-ring combination of yellow-yellow), thus at least 15 years old. Subject to local wandering away from breeding patches, including to the Juniper Forest.

Black-eyed Bulbul *Pycnonotus barbatus*

**R.** Common at edges of woodland and forest, and in bracken-briar, almost throughout, up to at least 2350 m. There are at least two breeding records, from both sides of the border, with egg-laying Oct. and Nov.

**Miombo Rock Thrush** *Monticola angolensis*

**R.** In miombo woodland on all the escarpments, to the upper limit of tall woodland, at *c.* 2050 m (above Chisanga Falls, *FD-L & RJD*). Adults feeding fledged young in Nov. near Chisanga (Dyer 1988).

**Olive Thrush** *Turdus olivaceus*

**R.** Occurs in all forest types from 1800 to 2450 m, east to Nyamkhowa, but in small numbers. In Zovochipolo does not seem to occupy all available habitat, although some pairs breed in small patches (less than 1 ha: Dowsett-Lemaire 1983a); at least one pair around small Pine plantation at the Zambian rest house. More local still in the larger forests of the escarpments. There are 28 breeding records (some C/2 and N/2), most coming from Zovochipolo (*FD-L & RJD*): egg-laying has been back-dated to Sep. (3), Oct. (12), Nov. (10) and Dec. (3). It is possible some of the Dec. laying are second broods: Benson (1940-41) collected on 25 Dec. a female with yolking eggs who was attending a spotted juvenile. Seven of 15 ringed adults have been retrapped locally in following seasons, up to five years later (Dowsett 1985).

**Kurrichane Thrush** *Turdus libonyana*

**R.** In miombo woodland on all the escarpments, up to the upper limit of tall woodland, at *c.* 2050 m above Chisanga Falls (*FD-L & RJD*).

**Groundscraper Thrush** *Psophocichla litsitsirupa*

**R.** A pair foraging under the low canopy of *Uapaca*-dominated miombo, about 10 km into the park from Thazima gate, 27 Nov. 2002 (*WMc*).

**Orange Thrush** *Zoothera gurneyi*

**R.** Uncommon or discreet thrush of montane rain forest on both escarpments; in the south-west it is recorded from Kasyaula (rare), Manyenjere (widespread) and Chowo where it is clearly more common than Olive Thrush (12 to 15 singing males: Dowsett-Lemaire 1983a); on a few occasions a bird sang briefly in one or other Zovochipolo patch (19 Dec. 1979, 3 Jan. 1981, 29 Oct. and 21 Dec. 1981). On the eastern side, widespread in small numbers from Nyamkhowa (1720-2000 m) and Mwenembwe to Vitumbi, up to the top (2350 m). We have two breeding records from Chowo, based on females with active brood patch (egg-laying in Nov. and Dec.). Four of seven birds ringed in Chowo were retrapped the following year (Dowsett 1985).

**White-chested Alethe** *Alethe fuelleborni*

**R.** Widespread in forest on the escarpments, more local on the central plateau (up to 2400 m), and its distribution is restricted by the presence of active ant swarms; breeds down to 1720 m at Nyamkhowa. In Zovochipolo breeding was observed (in patches even as small as 0.5 ha) only when a colony of ants moved in; two pairs bred in neighbouring patches of 1 ha each depending on a single ant nest, and the pair in the forest without ants kept crossing the grassland gap to feed on the same ant party. Although they eat small ants occasionally, Alethes feed mainly on other arthropods flushed by the ants. Overall densities in the larger forests are of two pairs/10 ha – Dowsett-Lemaire 1983a, 1987a, 1989a. We obtained nearly 40 breeding records in our period of residence, with egg-laying in Oct. (2), Nov. (20), Dec. (13) and Jan. (4). Twenty-two of 25 adults ringed in the south-west were retrapped locally in subsequent seasons, up to seven years later (Dowsett 1985). Mainly resident, but it is likely that some females move out in the dry, winter months.

**Starred Robin** *Pogonocichla stellata*

**R/M.** The commonest forest robin, throughout up to the upper limit of montane forest at 2450 m. Breeds in patches as small as 0.2 ha in Zovochipolo, and often two pairs breed in patches of 1 ha (but in years with poor rainfall only one of the two pairs may attempt breeding) (Dowsett-Lemaire 1983a, 1985a). In the 25-ha section of Chowo under study, 36 to 40 pairs were present (an average territory size of 0.6-0.7 ha). More than 200 breeding records were obtained (mainly C/2 and N/2, some C/3), with egg-laying taking place mainly from Oct.-Dec. (clearly single-brooded). All adult males and some of the immature ones are sedentary whereas females depart after breeding (moving to lower altitudes), usually returning to the same territory in the following season; 137 of 166 territorial adults were controlled up to eight years later (Dowsett 1985), and one male 11 years later, having been ringed as a full adult it was at least 13 years old (Dowsett & Leonard 2001). All four territorial adults translocated from a forest patch near Chelinda to Zovochipolo (6 km away) in Sep. 1980 and Sep. 1981 returned to their territories, one male by the next day (Dowsett & Dowsett-Lemaire 1986).

Sharpe's Akalat *Sheppardia sharpei*

**R.** A local robin of the more humid forest types, thus almost confined to Manyanjere in the south-west (very rare in Chowo) and the eastern escarpment, from 1720 m (Nyamkhowa) to 2300 m. In Manyanjere a population of 25-30 pairs inhabits the dense understorey near streams, hunting close to the ground (Dowsett-Lemaire 1983a). Like Starred and Olive-flanked Robins they attend ant swarms whenever ants cross their territory. In Chowo an unmated male (ringed) held a territory for at least three seasons (1979-82) and single birds had been reported in previous years, with a female collected in May 1975 (*TOO*); one bird was seen by *TOO* in Kasoma in May 1974. There are 11 breeding records (nine from Manyanjere, one from Kasaramba, one from Nyamkhowa), with egg-laying in Oct. (5), Nov. (5) and Dec. (1).

Thrush Nightingale *Luscinia luscinia*

**PM.** One was heard singing in riparian bush on the Kaswerera stream near Thazima on 26 Dec. 1995, at c. 1550 m (Critchlow & Haugeard 1996). This is at the upper altitudinal limit for this species in Malawi.

Olive-flanked Robin *Cossypha anomala*

**R.** Common and widespread in the understorey of montane rain forest on the escarpments and in low-canopy forest on the high plateau, up to 2450 m (at the upper limit of forest); down to 1720 m at Nyamkhowa. Some territories (in prime habitat, with much thicket) can be as small as 0.25 ha; overall densities in Zovochipolo are of one pair/ha (Dowsett-Lemaire 1983a). There are 50 breeding records (several C/2), with egg-laying in Oct. (1), Nov. (24), Dec. (21) and Jan. (4); clearly single-brooded (Dowsett-Lemaire 1985a). Twenty-six of 43 territorial adults ringed in the south-west were controlled locally for up to nine years after first capture (Dowsett 1985).

Cape Robin *Cossypha caffra*

**R.** A common species of secondary growth, bracken-briar and forest edges up to 2500 m (patch of scrubby forest on slope of Nganda Hill). In very small patches in Zovochipolo (0.20-0.25 ha) it can be seen right inside forest, but the larger the forest the more it confines itself to edges. Birds venturing too far inside forest (e.g. to drink) can be chased right back to the edge by Olive-flanked Robins (Dowsett-Lemaire 1983a). There are 50 breeding records (C/1 to C/3), with egg-laying in Oct. (5), Nov. (17), Dec. (25), Jan. (3). Eight ringed birds were retrapped locally in the south-west, up to six years after first capture (Dowsett 1985).

Heuglin's Robin *Cossypha heuglini*

**R.** A species of riparian thicket and forest found on all the escarpments, up to 2000-2050 m on the western escarpment (just west of Zambian rest house, above Chisanga Falls) and 2050 m in the south (on Nkhonjera Hill) – all *FD-L* & *RJD*.

Red-capped Robin *Cossypha natalensis*

**R/AM?** Marginal for the Nyika list, as observed in riparian forest on the North Rukuru near Uledi (both 1033B1-2, *RJD* & *FD-L* Oct. 1986), and also in a thicket of *Combretum/Oxytenanthera* bamboo a little higher the same day (in 1033B2, *RJD*).

Central Bearded Scrub Robin *Erythropygia barbata*

**R.** Recorded from miombo woodland on the lower escarpments, in the north, west and south-west (up to Thazima area), probably not much above 1650 m. Female carrying food (to nest probably) on 18 Oct. (1986, near Uledi, *FD-L*).

[Rufous Bush Chat *Erythropygia galactotes*. This very rare Palearctic migrant was mentioned in *Bull. Afr. Bird Club* 1997 (4: 144) as having been seen in miombo woodland on the Nyika, but the observer could not provide a description and had not noticed the ubiquitous White-browed Scrub Robin. The record is considered invalid.]

White-browed Scrub Robin *Erythropygia leucophrys*

**R.** In the understorey of open miombo woodland with fairly rank ground cover; quite common on all the escarpments, up to the upper limit of woodland at 2050 m above Chisanga Falls, and near Fingira (*FD-L* & *RJD*).



Stonechat *Saxicola torquatus*

**R.** Common resident in montane grassland with some scrub, in bracken-briar, often at roadsides, up to 2450 m. There are 15 breeding records, with egg-laying in Sep. (1), Oct. (7), Nov. (5), Dec. (2); clutch-sizes of C/3 and C/4.

Whinchat *Saxicola rubetra*

**PM.** A few records of this scarce Palaearctic migrant on the high plateau (both sides of the border), mainly in the months of Nov.-Feb., with an exceptionally early observation of one on 24 Sep. 1992 (by *RDM*). In the 1970s some were probably wintering (several observations from 10 Nov.-22 Feb., including one by Dam 3 on 11 Jan. 1973, *BC*), but we had only one observation in 1979-82 (21 Nov. 1979 at Chowo Rocks). In recent years, apart from the unusual Sep. observation, one was reported on 25 Nov. 2002 (*WMc*, Zambian side), and another on 10 Apr. 1995 on the Dembo stream (*DF*): this is only one of two Apr. records for the country, which the species normally leaves in Feb.

Northern (Eurasian) Wheatear *Oenanthe oenanthe*

**PM.** A regular migrant (in very small numbers) on southward passage in montane areas, recorded mainly Oct.-Dec. Extreme dates known are 7 Oct. (1976, *RJD*) and early Jan. 1978 (*WFB-M*). Dyer (1988) mentions "Sept." without a date but this would be abnormally early.

Capped Wheatear *Oenanthe pileata*

**AM.** A migrant of irregular appearance in short montane grassland (Jun.-Dec., Mar.), which probably breeds very locally. One adult was on burnt ground near Chowo Rocks on 24 Jun. 1980 (*RJD*); *DPC* saw one on 7 Jun. and 19 Jul. 1994 south of Chosi; there are at least three records for Aug.: one on 22 Aug. 1972 (*Aspinwall et al.* 1973), 28 Aug. 1980 (an adult at 2400 m, *MIE*), 22 Aug. 1985 (adult near Dam 2, Dyer 1987); it was reported to us in Sep. 1981 (*DOE?*); a juvenile was seen on the border road (2050 m) on 21 Oct. 1973 (*RJD*); we saw an immature near Chelinda from 21 Nov.-21 Dec. 1979. More unusual is the observation of one immature (between Chelinda and Zovochipolo) on 20 Mar. 1980 (*FD-L & RJD*), suggesting possible "wintering".

Familiar Chat *Cercomela familiaris*

**R.** In open miombo woodland with some rocks, found widespread on the escarpments, up to *c.* 2000 m above Chisanga Falls, and at Fingira Rock (*FD-L & RJD*).

Arnot's Chat *Myrmecocichla arnoti*

**R.** Of local occurrence in miombo woodland, known from the south-western escarpment near Thazima (*FD-L & RJD*) and Kaperekezi (*NJ-S*).

Mocking Chat *Myrmecocichla cinnamomeiventris*

**R.** Associated with large boulders, most regularly encountered on Chowo Rocks (several pairs present), and found in similar habitat on the northern and south-western escarpments, e.g. Jalawe, Fingira Rock. Found up to the altitude of *c.* 2350 m in the Chosi area (*FD-L & RJD*).

Broad-tailed Warbler *Schoenicola platyurus*

**R.** A skulking but locally not uncommon warbler of rank, lush grassland from 1900-2150 m on the south-western escarpment, up to the Zambian rest house. Rarer above that, but observed near Chelinda and on the eastern escarpment at Kasaramba at 2300 m – all *FD-L & RJD*. More conspicuous in the rains when calling, but appears resident, as there are records for May (1975, *TOO*; 1994 near Fingira, *DPC*), Jul. (1975, *DRA*) and Aug. (border road, *DPC*), and we saw the species monthly from Sep.-Apr. There is even an old specimen taken in June (Shelley & Sclater 1897). We had two breeding records based on feeding behaviour, with egg-laying back-dated to Jan. and Feb., in the vicinity of Kasoma.

Little Rush Warbler *Bradypterus baboecala*

**V.** An exceptional bird on the Nyika, with two records: a pair held a temporary territory on the Chelinda stream in Dec. 1985-Jan. 1986 at *c.* 2270 m (Dyer 1987); a bird in song near Katizi (1680 m), in Dec. 1985 (*MD*).

Cinnamon Bracken Warbler *Bradypterus cinnamomeus*

**R.** Common at forest edges and in bracken-briar throughout from 1900-2500 m (scrubby forest on slope of Nganda Hill), descending lower (about 1750 m) on Nyamkhowa Mtn (*FD-L & RJD*). Penetrates some small forest patches above 2150 m, mostly in herbaceous undergrowth not occupied by *B. lopezi*; on two occasions a pair moved into a small forest patch in Zovochipolo as soon as it was deserted by Evergreen Forest Warbler, and in one case both species were observed countersinging (Dowsett-Lemaire 1983a). Some breeding territories can be as small as 0.1 ha. There are 18 breeding records (four C/2), with egg-laying in Oct. (1), Nov. (4), Dec. (10) and Jan. (3). Four ringed birds were retrapped locally after one and two years (Dowsett 1985). There is also a strange Aug. egg-laying record in Benson & Benson (1977): this is based on a juvenile collected on the eastern escarpment on 9 Sep. 1940, apparently recently fledged (*CWB in litt.*).

Evergreen Forest Warbler *Bradypterus lopezi*

**R.** Fairly common in dense shrubby understorey of montane forest on the escarpments and the high plateau up to 2450 m. Pairs can breed in patches as small as 0.9 ha (with dense Acanthaceae shrubbery on a stream), and densities in larger forest patches in Zovochipolo vary from one to four pairs in 4 ha, depending on the availability of thick undergrowth (Dowsett-Lemaire 1983a). We obtained 12 breeding records in Chowo and Zovochipolo (one C/2), with egg-laying in Nov. (2), Dec. (7) and Jan. (3). Five of 16 ringed adults were retrapped locally in following years, the oldest after six years (Dowsett 1985).

Sedge Warbler *Acrocephalus schoenobaenus*

**PM.** An uncommon wintering species on the high plateau, observed usually as singles with most records in Dec.-Jan. (several reports 1973-1982, 1986-87, 1989) in wet herbage near Dam 1, Dam 2, Dam 3 and once as high as 2350 m (5 Dec. 1982, *RJD*). At least one wintering around Dam 1 from Dec. 1986-Apr. 1987 and there is a "last" date of 19 Apr. 1985 at Chelinda (*MD*). Also one observation on the western escarpment (Chisanga Falls) on 10 Apr. 1996 (*DPC*).

African Yellow Warbler *Chloropeta natalensis*

**R.** Common in bracken-briar and secondary growth along streams, including on the lower edges of forest patches with a stream; up to at least 2300 m (including eastern escarpment), overlapping (locally) with Yellow Mountain Warbler: where both species coexist in extensive bracken, African is usually in a riparian situation. Vernon (in Keith & Vernon 1966) found the two *Chloropeta* breeding within 50 m of each other (Jan. 1964). There are at least three breeding records (one C/2), with egg-laying in Nov. and Jan. (2).

Mountain Yellow Warbler *Chloropeta similis*

**R.** From 1920 m (Lusero area) to 2450 m on the main plateau, locally common but not recorded from Nyamkhowa. Is not found inside tall montane rain forest where it occupies (locally) the edges and rank clearings, but is throughout patches of low-canopy montane forest, and thus more widely distributed on the high plateau than on the escarpments. In low scrubby forest densities are of one-two pairs/ha; it also occupies montane shrubland 1-4 m high where it may overlap with African Yellow Warbler. Breeds in 44 out of 80 patches in Zovochipolo, some as small as 0.25 ha, but its distribution is rather patchy and it does not seem to occupy all available habitat. There are 15 breeding records (two C/2), with egg-laying in Dec. (3), Jan. (6), Feb. (4) and Mar. (2). The breeding season given in Dyer (1988: Oct.-Feb.) is a mis-reading of Benson & Benson (1977), and there are definitely no records for Oct.-Nov. Seven of 27 ringed adults were controlled locally after one or two years (Dowsett 1985). A male translocated from a patch near Chelinda to an unoccupied forest in Zovochipolo (1.8 ha) settled there (Sep. 1980), paired and was still vigorously defending its territory two years later (Dowsett-Lemaire 1983a, Dowsett & Dowsett-Lemaire 1986).

Green-capped Eremomela *Eremomela scotops*

**R.** Widespread in miombo woodland on the northern and south-western escarpments, up to 1900-2000 m near the upper limit of tall woodland (Mbuzinandi, near Fingira Rock (*FD-L & RJD*), above Chisanga Falls, *DPC*).

Yellow-bellied Eremomela *Eremomela icteropygialis*

**R.** More local than last, on the lower escarpments in the north, and once in a mixed party just south of the old gate on the south-western slopes, 1800-1900 m (*FD-L & RJD* Nov. 1981). Also observed lower down on the Zambian side by *CJV*.

Red-capped Crombec *Sylvietta ruficapilla*

**R.** Widespread in miombo woodland on the escarpments, in the north (e.g. Chipome valley) and south-west, up to the upper limit of tall woodland at 2000-2050 m (above Chisanga Falls and near Fingira, *FD-L* & *RJD*).

Long-billed Crombec *Sylvietta rufescens*

**R/V.** Very marginal for the Nyika list, as recorded mainly from the northern border of the park near Uledi (North Rukuru, *FD-L* & *RJD* Oct. 1986); a bird of low-altitude thicket or riparian growth, with an exceptional observation of a vagrant near Lusero at 1900 m (in *Acacia abyssinica*) by *DRA* in Apr. 1971 (*Aspinwall* 1971). One observation from miombo on the old Mbuzinandi road at 1800 m (*Dyer* 1988) is considered as unlikely and indeed unconfirmed (*MD in litt.*).

Willow Warbler *Phylloscopus trochilus*

**PM.** Widespread species of woodland, wooded grassland, tree clumps or scrub in montane grassland and forest edges, up to c. 2400 m. Most common from Oct. or Nov. to Mar, with extreme dates apparently 27 Sep. (1980) and 14 Apr. (1981, *FD-L* & *RJD*); starts singing on northward passage in early Feb., more by late Feb. or early Mar. Also a few singing in Nov.

Yellow-throated Warbler *Phylloscopus ruficapilla*

**R.** Confined to the wetter forests of the eastern escarpment, from Nyamkhowa and Mwenembwe to Vitumbi, 1750-2350 m, in small numbers, not uncommon at Kasaramba and Nyamkhowa.

Yellow-bellied Hyliota *Hyliota flavigaster*

**R.** Widespread but uncommon in miombo woodland on the lower escarpments (north and south-west), coming almost to the upper limit of tall woodland, at 1980 m at Mbuzinandi (Feb. 1981, *RJD* & *FD-L*).

Garden Warbler *Sylvia borin*

**PM.** Seasonally common in forest patches and shrubland, up to at least 2300 m, mainly on southward passage from early Oct.-Dec. (when also in full song); for instance we ringed 17 birds near the Zambian rest house in a few days (30 Nov. to early Dec. 1977). Our earliest date was 2 Oct. (1980) and we have not traced an earlier one. In some years seems to leave by end of Dec. or Jan., in other years small numbers stay until Mar. (1981, exact date not noted). The scarcity of Garden Warblers in Jan.-Mar. may be related to the decrease in the amount of fleshy fruit available (the peak being in Sep.-Nov.: *Dowsett-Lemaire* 1985b); on the other hand, birds may be more discreet then as they are normally moulting at that time. Seen to eat a variety of small fruits, including *Aphloia*, *Clausena*, *Maesa*, *Myrica*, *Polyscias*, *Psychotria*, *Rhus longipes*, *Urera* (*Dowsett-Lemaire* 1988a).

Blackcap *Sylvia atricapilla*

**PM.** Winters annually in small numbers on the high plateau, in forest patches (often in the canopy eating fruit) and shrubland, up to at least 2400 m (Chelinda Hill). Not uncommon in some years, especially Nov.-Dec. (thus 11 ringed on the Zambian border in those two months in 1981), but numbers drop sharply in Jan.-Feb., and there are only two Mar. records on the plateau. Our earliest arrival date was 9 Nov. (1980), and latest bird was seen on 21 Feb. (1980, the only bird of that month); in the 1990s, some were seen later than this: 24 Feb. 1994 (*DPC*), 26 Feb. 1996 (*DF*), 5 Mar. 1994 (*DF* & *DPC*), and *JH et al.* reported one near Nganda on 15 Mar. 1997. Seems to be largely frugivorous, eating small fleshy fruit of *Aphloia*, *Maesa*, *Myrica*, *Polyscias* (frequently) and *Urera* (*FD-L*). Very rarely heard singing (Dec.).

Common Whitethroat *Sylvia communis*

**PM.** Uncommon migrant, possibly not annual. As elsewhere in Malawi seems particularly scarce on southward passage, with only two Nov. records (27 Nov. 1979, near Chowo, *RJD*, and 27 Nov. 2002, *WMc*). There are a handful of Dec. records, including one collected above Nchenachena (*Benson* 1940-41), a few seen in the south-west (*RJD et al.*) and at Thazima (*DPC*), and only one Jan. record (6 Jan. 1976, one ringed near Zambian rest house, *RJD*). Otherwise not observed again before late Mar.-Apr., with 11 records traced, extreme dates 30 Mar. (1996, *DF* & *DPC*) and 27 Apr. (1985 at Chelinda, *MD*).

*Brown Parisoma Sylvia lugens*

**R.** Discreet species confined to small groves of *Acacia abyssinica* on the southern and south-western escarpments, in 1033D2 (Mbuzinandi at 1980 m), 1033D4 (region of Fingira) and especially 1033D1, from just above the old gate to the Lusero area (1900-1950 m). Does not seem to reach the small groves of *Acacia* present on the upper edge of Kasoma at 2050-2070 m. All of the confirmed locations are on the Malawi side; it has apparently been seen also on the Zambian side by *TOO* (1975), but this may be due to confusion over the position of the border in relation to the road.

*Ayres's Cisticola Cisticola ayresii*

**R.** Common in short montane grassland (dominated by *Loudetia simplex*) of the high plateau, from about 2000 m to 2600 m (Nganda Hill). There are five breeding records (two C/3), with egg-laying in Nov.-Feb.

*Croaking Cisticola Cisticola natalensis*

**R.** A local species of lush *Themeda* grassland found on the south-western escarpment up to 2050-2100 m as on the track to Manyenjere, in the Chire valley, the Kasyaula-Kasoma area (all 1033D1), and slightly lower down on the way to Ulera (1033D4) – *FD-L & RJD*.

*Wailing Cisticola Cisticola lais*

**R.** Common species of montane grassland with some bracken, with a preference for rocky areas; it occurs next to Churring Cisticola in many places (below 2220 m) but prefers overall shorter grassland and the vicinity of rocks (*FD-L, RJD* and Vernon 1964). Widespread up to at least 2250 m, more local above that, as on the eastern escarpment at 2350 m (Kasaramba) and on Chelinda Hill (2400 m) – *FD-L & RJD*. There are 14 breeding records (one C/2, six C/3), with egg-laying in Nov. (3), Dec. (10) and Jan. (1).

*Churring Cisticola Cisticola njombe*

**R.** Common in rank grass with some bracken as along roadsides, near forest edges and in valleys, from 1950 to 2450 m. Overlaps with Wailing Cisticola near forest edges and in bracken patches but is much more common than its congener on the high plateau (2250-2450 m). There are 22 breeding records (two C/2, six C/3, two C/4), with egg-laying in Nov. (4), Dec. (10), Jan. (4) and Feb. (4). A pair was feeding a young Klaas's Cuckoo in the Chire valley below Chowo in Feb. 1982 (*FD-L*).

*Short-winged Cisticola Cisticola brachypterus*

**R.** Localized, as it inhabits rank grass with scattered bushes or trees on the southern and south-western escarpments, including the Fingira-Ulera region, and the border road up to 2050 m (near Kasoma, *FD-L*). There is one breeding record, egg-laying Dec., from about 1800 m (*CJV*).

*Neddicky Cisticola fulvicapilla*

**R.** Common in miombo woodland on the lower escarpments (e.g. Chipome valley in the north, Thazima in the south-west), up to about 1650 m. Curiously unreported from the Kaperekezi area (1033D1) although seen near Gamba (1033B3).

*Rock Cisticola Cisticola aberrans*

**R.** In miombo woodland in the vicinity of rocks (widespread on the northern escarpment), and occurring regularly up to the upper limit of tall woodland, to 2000-2050 m (above Chisanga Falls, and at Fingira Rock). Not recorded with certainty above the tree limit, and certainly absent from the much-visited Chowo Rocks (2150-2220 m).

*Trilling Cisticola Cisticola woosnami*

**R.** Common in miombo woodland on all the escarpments, up to the upper limit of woodland (as near the old gate above Thazima, and above Chisanga Falls at c. 2050 m, at Mbuzinandi at 1980 m, near Fingira Rock, etc.).

*Red-faced Cisticola Cisticola erythroptera*

**R.** In long grass in riparian situations, confined to the lower escarpments (as on the North Rukuru in 1033B1-2) and up to about 1600 m or a little higher in the south-west (Thazima, *FD-L & RJD*). A very common

species at low altitudes, rather marginal for the Nyika. [A mention of this species occurring as high as 2100 m at Zungwara (Dyer 1988) is unlikely to be correct.]

Singing Cisticola *Cisticola cantans*

**R.** Common in rank growth below 2200 m: grass with bracken, shrubland as near forest edges, and especially any rank vegetation along streams. More local above 2200 m, up to 2350 m on the eastern escarpment, and down to the Thazima area (we had both Red-faced and Singing on the main stream). (Not yet reported from the Nganda/Chipome square where expected to be common).

Black-lored Cisticola *Cisticola nigriloris*

**R.** Common and noisy, gregarious species of bracken-briar (as along forest edges, in moist depressions and valleys) throughout the high plateau, up to 2500 m (scrubby forest on slope of Nganda Hill); it has been recorded as low as 1400 m above Nchenachena (Benson 1940-41) and is common down to 1720 m at Nyamkhowa (*FD-L & RJD*). Its breeding behaviour and nests were studied by Vernon (1964), who noted parties of up to nine birds; with a few later observations there are altogether 12 dated records (two C/2, three C/3, two C/4), with egg-laying in Nov. (6), Dec. (3) and Jan. (3).

Tawny-flanked Prinia *Prinia subflava*

**R.** In rank grass with shrubs on the escarpments and the lower plateau lip, up to 2150 m (two pairs in a small valley just below Chowo Rocks, *FD-L*), coming up the Chire valley on the Zambian side (below 2100 m). In 1033D2 present only in the lower-altitude corner of the square (Mbuzinandi). A very common species at lower altitudes.

Red-winged Warbler *Heliolais erythropterus*

**R.** A local species of rank grass in miombo woodland, recorded from Thazima (*FD-L & RJD*), the Ulozga valley (in 1033B4) and near Kaperekezi, including the Mwavumwe stream (*DPC*); thus up to 1600-1650 m.

Yellow-breasted Apalis *Apalis flavida*

**R.** In riparian forest at lower altitudes in the northern foothills (up to Chipome valley), where can be common (as on the North Rukuru), and also recorded at Thazima, which is close to the upper altitudinal limit for the species in Malawi (1650 m).

Bar-throated Apalis *Apalis thoracica*

**R.** Very common species of montane (rain) forest and tall shrubland (3-4 m), throughout up to 2450 m. Particularly numerous in fragmented forest with much edge; forest patches as small as 0.12-0.15 ha are occupied by one pair, densities in larger forests depend on the relative importance of the edge (one pair/0.6 ha in round patches, one pair/0.4 ha in narrow patches with more edges). In low-canopy montane forest on the high plateau it is the only *Apalis* species and it occupies all levels from undergrowth to canopy; in taller-canopy forest (from Zovochipolo down) it leaves the canopy to Chestnut-headed Apalis and apparently the two species are somewhat in competition as there is a great deal of counter-singing (well over 100 observations!) and occasional chasing (Dowsett-Lemaire 1983a). Forty-seven of 50 breeding records were obtained during our period of study (eight C/2, one C/3), with egg-laying in Sep. (1), Oct. (18), Nov. (19), Dec. (6), Jan. (4) and Feb. (1). Members of a pair keep in touch through a vocal duet all year round, and 30 of 58 ringed adults were controlled locally over successive seasons (Dowsett 1985), some up to 1986 (*FD-L*) thus up to seven years after first capture. Some unmated males may wander a few km into the edge of Pine plantations (Chelinda). None of the six territorial adults and five floaters translocated from near Chelinda to Zovochipolo found its way back, but all territorial birds were replaced locally within one day, suggesting there was a large population of floaters (Dowsett & Dowsett-Lemaire 1986).

Grey Apalis *Apalis cinerea*

**R.** Mostly in the canopy of tall, montane rain forest in the south and south-west, up to Chowo (where uncommon, one to three pairs present depending on the year). More common at altitudes of 1950-2050 m in the Manyenjere, Kasoma and Kasyaula area, with about three pairs/10 ha (as in Kasoma patches). Competes directly with Chestnut-headed Apalis at that level, and patches of 1-2 ha in the area are occupied by one or the other species, but not both. Near Kasyaula, two neighbouring patches of 0.9 and 1.2 ha separated by 40

m of grassland had each one pair – one of each species – with much counter-singing and chasing taking place between neighbours! Still lower, at 1925 m, a pair of Grey Apalis occupied alone a patch of 0.5 ha (all from Dowsett-Lemaire 1983a). Also found in a patch of tall forest at 2000 m on the way to Fingira (1033D4), which is at the southern limit of range for the species in Malawi, and we did not find it on Nkhonjera Hill. Otherwise “noticed” by *CWB* in small patches between Mpanda and Kawozya Mts (Benson & Benson 1949); the altitude indicated was 5000 feet (1500 m) but was possibly nearer 1800 m.

#### Chestnut-headed Apalis *Apalis chapini*

**R.** A common species of canopy in montane rain forest, also coming down the edges where exposed to the sun, and there in competition with Bar-throated Apalis. The smallest patch occupied in Zovochipolo is 0.5 ha and all patches of tall, closed canopy above 0.75 ha are occupied; densities in larger patches are about three pairs/10 ha (Dowsett-Lemaire 1983a). For competition with Grey Apalis, see above. Not found in low-canopy forest on the high plateau, thus not above 2250 m in the south-west, and observed up to about 2300 m on the eastern escarpment; common at Nyamkhowa, down to 1750-1800 m (*FD-L*). Members of a pair keep in touch vocally through a vocal duet as in other apalises, and they appear resident. We obtained four breeding records (Zovochipolo and Chowo) in addition to an old one, with egg-laying in Oct. (1), Nov. (2) and Jan. (2).

#### Bleating Bush Warbler *Camaroptera brachyura*

**R.** Normally common in low rank growth in woodland, thicket and riparian vegetation at low and medium altitudes: on the Nyika known only from the northern foothills (North Rukuru), Thazima and Ulera. Elsewhere in northern Malawi it does penetrate the understorey of montane rain forest where Evergreen Forest Warbler is absent (e.g. Mafinga and Jembya), but this was never observed on the Nyika.

#### Miombo Barred Warbler *Camaroptera undosa*

**R.** Not uncommon in miombo woodland on the escarpments, north and south-west. Does not come up all the way but reaches the altitude of about 1800 m on the southern slopes (above Thazima, near Ulera and on the old Mbuzinandi road, *FD-L*, *RJD* and *MD*).

#### Pallid Flycatcher *Bradornis pallidus*

**R.** Local, in miombo woodland on the escarpments, in the north, west and south-west, up to 1600-1650 m at Thazima. [A record from north of Nganda at 1800 m (in Benson & Benson 1977) is considered unproven as common local flycatchers are missing from the authors' list (Anon. 1973).]

#### Slaty Flycatcher *Melaenornis chocolatinus*

**R.** Fairly common in montane grassland with scattered bushes or trees, dense bracken-briar and at forest edges, up to 2220-2250 m. Occasionally penetrates a short distance into small forest patches to attend ant swarms (Dowsett-Lemaire 1983a). On the eastern escarpment recorded down to at least 1670 m (above Livingstonia, a breeding record, Benson & Benson 1949). There are 27 breeding records (one C/2, one N/2), with egg-laying in Sep. (2), Oct. (10), Nov. (7) and Dec. (8).

#### Southern Black Flycatcher *Melaenornis pammelaina*

**R.** Local in light woodland on the escarpments, in the north, west (near Kaperekezi, *MD*) and Thazima (*JH*), up to about 1600 m.

#### Collared Flycatcher *Ficedula albicollis*

**PM.** Not many records (Nov.-Mar.), but probably winters in small numbers in miombo woodland, with more observations in the 1990s than 1980s: thus noted in the Chipome valley, at Chisanga Falls, near Fingira and several times around Thazima (Nov.-Jan.), also once at Chelinda (in Pines, 2300 m, on passage), with extreme dates 5 Nov. (2002, Chelinda, *MvBe*) and 21 Mar. 1997 (Chipome, *JH et al.*).

#### Spotted Flycatcher *Muscicapa striata*

**PM.** More often recorded than last (Oct.-Mar.), mainly from miombo woodland (to the upper limits) or the Lusero area, but occasionally higher (Chelinda). Extreme dates appear to be 7 Oct. (1976, *RJD*) and 27 Mar. (1985, *MD*). [A June record (1974) is considered unlikely.]

Dusky Flycatcher *Muscicapa adusta*

**R/M.** In upland miombo woodland, edge of riparian forest (e.g. Chisanga and Zungwara Falls) and at the edges and in large clearings of tall montane rain forest, up to 2200 m, including the lower levels of the eastern escarpment (as at Nyamkhowa and bottom of Kasaramba). In Zovochipolo it is recorded in 29 of 80 patches (2 ha and above), but densities are low, with no more than one pair in forests of up to 12 ha, as the habitat appears rather patchy (Dowsett-Lemaire 1983a). At least some birds appear to leave the high plateau in winter, as it is hard to find in the months of May-Aug. (thus not recorded in May-Jun. 1980, and few in Jul.-Aug. 1980 and 1981, *RJD & FD-L*). There are 12 breeding records (two N/2), with egg-laying in Sep. (1), Oct. (3), Nov. (7) and Dec. (1). One bird (wanderer?) seen in Eucalyptus once near Chelinda (Nov., Dyer 1987).

Ashy Flycatcher *Muscicapa caerulescens*

**R.** In the canopy and at edges of riparian forest and woodland at lower altitudes, recorded from the northern and south-western escarpments, up to about 1600 m (Thazima, *RDM*). [Dyer (1988) records this species from the Juniper Forest at 2100 m, which is in error.]

Böhm's Flycatcher *Muscicapa boehmi*

**R.** A miombo endemic that appears very scarce on the Nyika: located once on the old Mbuzinandi-Katizi road at about 1800 m (*IlaC*) and near Thazima (*DPC, MD*). We saw it on the western escarpment between Nthalire and Gamba (the northern limit of its range in Malawi), so could be expected in the Kaperekezi area too.

Lead-coloured Flycatcher *Myioparus plumbeus*

**R.** This species is rather local and seems to have been recorded only from the northern escarpment (1033B4) and at Kaperekezi (*DPC*), c. 1500 m, normally found on the edge of riparian. [One report (1975) from the Chire stream near Chowo does not appear acceptable.]

Cape Batis *Batis capensis*

**R.** Common in understorey and at edges of montane (rain) forest, throughout on the escarpments and high plateau to 2450 m. In Zovochipolo some patches as small as 0.25-0.30 ha are occupied by a breeding pair; in larger forests densities are of one pair/ha on average (Dowsett-Lemaire 1983a). Adult females beg from their mates and are fed throughout the incubation period; this is one of several methods of dating breeding. We obtained at least 175 breeding records (some C/2 and N/2), with egg-laying in Sep. (32), Oct. (51), Nov. (41), Dec. (42), Jan. (6) and Feb. (3). Single-brooded, from observations of colour-ringed pairs (Dowsett-Lemaire 1985a). Forty-five of 63 ringed adults were checked locally in following seasons, up to 10 years after first capture (Dowsett 1985, Dowsett & Leonard 2001); the oldest was ringed as an adult male, so was more than 11 years old when controlled. Members of a pair stay in touch vocally; the case history of an adult female demonstrates however the pre-eminence of site tenacity over mate fidelity. The female and her mate (both colour-ringed) were in the same patch near the Zambian rest house during visits in 1975 and 1977. In Oct. 1979 the territory was found empty, but the female had moved into another patch (350 m distant) and was paired with a new mate. In early Nov. a subadult male appeared in the first (deserted) patch, upon which (no later than early Dec.) the old female left her new mate and returned to the Zambian side to pair with him; she then successfully raised two young.

A few birds may wander into Pine plantations (Chelinda); they are usually unmated. Three (two males, one female) of seven territorial adults translocated from near Chelinda to Zovochipolo (Sep. 1980-1981) returned to their territories within a few weeks; on the other hand, an adult female and a first-year female skulked in the release patch (Dowsett & Dowsett-Lemaire 1986).

Chinspot Batis *Batis molitor*

**R.** Common in any woodland or wooded grassland on the escarpments and onto the plateau lip, including *Protea-Faurea* wooded grassland in the Chire valley and near Chowo Rocks, up to 2150 m (*FD-L*). One fledgling fed by female near Chire stream on 22 Nov. 1981 (egg-laying Oct.); adults feeding at nest in Nov. in miombo (Dyer 1988).

Black-throated Wattle-eye *Platysteira peltata*

**R.** Very marginal for the Nyika list, as found on the Chire stream at 1520 m (*TOO* in Dowsett *et al.* 1974), more or less on the park's boundary. Could be expected to occur in riparian forest in the north, especially on

the North Rukuru.

White-tailed Blue Flycatcher *Elminia albicauda*

**R.** Mainly on the edge of riparian forest (including *Acacia abyssinica* on the edges of the high plateau) and in adjacent miombo woodland. Regularly seen up to about 2000 m (Chisanga Falls, Lusero area, Fingira), with a wanderer on the edge of forest at 2150 m near the Zambian rest house (Feb. 1980, *FD-L*) and another on the edge of Pines below Dam 3 at 2220 m (May 1986, Dyer 1987). We obtained one breeding record (Nov.) from the old gate area.

White-tailed Crested Flycatcher *Elminia albonotata*

**R.** Common in understorey of montane (rain) forest on the escarpments and high plateau, up to 2450 m. Requires slightly larger territories than Cape Batis, the smallest patches occupied in Zovochipolo measuring 0.33 and 0.45 ha (and all tall patches above 0.5 ha are used). In larger forests, densities are about two pairs/3 ha (Dowsett-Lemaire 1983a). Courtship feeding takes place only on the day of mating, males do not feed the female after laying (unlike batises). There are at least 54 breeding records (one C/2, one N/2, but we never saw more than one fledgling), with egg-laying in Sep. (3), Oct. (13), Nov. (20), Dec. (16) and Jan. (2). As for several other species, a significant proportion of established pairs refrained from breeding in years with poor rainfall; single-brooded (Dowsett-Lemaire 1985a). Twenty of 38 ringed adults were controlled locally in following seasons, two up to 6-7 years later (Dowsett 1985). Of two territorial males translocated from near Chelinda to Zovochipolo, one settled close to the release patch and paired, the other disappeared. None of those two emptied territories were re-occupied up to nearly three years later, this species showing perhaps the least mobility of all tested (Dowsett & Dowsett-Lemaire 1986).

African Paradise Flycatcher *Terpsiphone viridis*

**AM.** Widespread on the escarpments, especially in riparian, up to 2000 m; comes up locally into montane rain forest in the south-west, at Kasyaula, Manyenjere and Chowo (late Sep.-Mar.). Unlikely to breed any higher than Chowo (up to six pairs present, two summers out of three under study, Dowsett-Lemaire 1983a). Also encountered on passage occasionally in Zovochipolo (Oct.-Dec.) and (rarely) at Chelinda late Sep.-Nov. The earliest arrival date is 26 Sep. 1980 (several in Kasyaula, *FD-L*).

Mountain Illadopsis *Illadopsis pyrrhoptera*

**R.** Confined to the wetter forests of the eastern escarpment, including Nyamkhowa. Favours dense understorey with much Acanthaceae shrubbery, from 1720 m (Nyamkhowa) to 2300 m (Mwenembwe) – *FD-L* & *RJD*. Two pairs were collected in Nyamkhowa in the late 1930s (Benson 1940-41), including one with two juveniles who had just left the nest on 13 Oct. (egg-laying Sep.). Found in pairs or small parties.

African (Abyssinian) Hill Babbler *Pseudoalcippe abyssinica*

**R.** Not uncommon locally in montane rain forest on both the eastern and south-western escarpments, favouring understorey with walls of lianes (under broken canopy). Densities in Chowo are of five-six pairs in 25 ha, and in Kasyaula of at least four-five pairs in 10 ha. In Zovochipolo the smallest patch occupied by a pair was only 1.5 ha, but densities are overall low, up to two pairs in patches of 7.5 and 12 ha (Dowsett-Lemaire 1983a). Appears very local on the high plateau, as we found it in only one 6-ha patch (at 2400 m). There are seven breeding records from the south-west (*RJD* & *FD-L*), one from Kasaramba (Benson 1951, one C/2), one from the north-east (*DOE*), with egg-laying in Oct. (5) and Nov. (4). Five of eight birds ringed in Chowo were retrapped up to seven years after first capture (Dowsett 1985). Unlike the Illadopsis, found only in pairs.

Arrow-marked Babbler *Turdoides jardineii*

**R.** In patches of thickets and rank grass, especially riparian growth, on the escarpments and lower plateau. Regularly found up to 2000-2050 m on the south-western escarpment (in a small valley west of the Zambian rest house, Malawi side of the border, *FD-L*); also apparently on the northern slopes below Nganda (Anon. 1973). A bit lower elsewhere, as at Chisanga Falls, near the old gate and near Nkhonjera.

White-winged Black Tit *Parus leucomelas*

**R.** Typically at the ecotone of riparian forest and woodland (on the escarpments), and at higher altitudes in wooded grassland, small tree clumps and scrub most often along streams. Regularly encountered in the south-



west to 2200 m (Zovochipolo, *FD-L*), and there is a breeding record from near the Zambian rest house (Oct.). Dyer (1988) saw one carrying food in Mar., but this was perhaps not related to breeding.

Miombo Grey Tit *Parus griseiventris*

**R.** Widespread in miombo woodland on the northern and south-western escarpments, up to the upper limit of tall woodland, at *c.* 1900 m (near the old gate) to 2000-2050 m (Chisanga Falls, Fingira).

Rufous-bellied Tit *Parus rufiventris*

**R.** Widespread in miombo woodland on the northern and south-western escarpments, coming up nearly as high as Miombo Grey Tit, up to 1900-2000 m (Fingira Rock, *FD-L* & *RJD*, and Kawozya Hill, *DPC*). Nest-building observed in Nov. in the Chipome valley (Dyer 1988).

Grey Penduline Tit *Anthoscopus caroli*

**R.** In miombo woodland on the northern and south-western escarpments, coming up to about 1800 m on the southern slopes (above Thazima and near Ulera, *FD-L* & *RJD*), and once as high as 1920 m in *Acacia abyssinica* (Dyer 1987, a family party of four in Jun. 1985).

Spotted Creeper *Salpornis spilonotus*

**R.** In miombo woodland on the northern and south-western escarpments, not coming up to the top, but a few have been seen on occasion in riparian *Acacia abyssinica*, as near the old gate at 1900 m (*FD-L* & *RJD*, Nov. 1981; again in Nov. 2002, *MvBe*), in the Mbululuji valley east of the old gate and south of Fingira (both *DPC*, May 1994).

Red-and-blue Sunbird *Anthreptes anchietae*

**R.** Widespread in miombo woodland and riparian vegetation on the northern and south-western escarpments, coming up to 2050 m above Chisanga Falls, 2025 m on the Manyenjere ridge; seen feeding on the flowers of *Syzygium cordatum* and *Protea* spp. (*angolensis*, *gaguedi* and *petiolaris*), also *Crossopterix febrifugum* – *FD-L*.

Violet-backed Sunbird *Anthreptes longuemarei*

**R.** In miombo woodland on the northern and south-western escarpments, coming up to 1800-1900 m on the southern slopes (near Fingira Rock and Ulera, *FD-L* & *RJD* Feb.-Mar.), feeding on various *Protea* spp.

Collared Sunbird *Anthreptes collaris*

**R.** In riparian forest in the northern foothills and on the south-western slopes (e.g. Thazima), penetrating feebly into montane rain forest in the south-west: *RJD* saw it very rarely in the canopy in Chowo (Oct. 1973, Dec. 1977, Dec. 1981) and *FD-L* found some in riparian forest near Kasyaula, including a female with juvenile on 5 Oct. 1981 (alt. about 1950 m). Female feeding juvenile near Uledi, 18 Oct. 1986 (*FD-L*).

Olive Sunbird *Nectarinia olivacea*

**R.** In riparian forest in the northern foothills (as on the North Rukuru), on the Chire river at 1500 m (*TOO*) and marginally into lower-altitude montane rain forest, up to 2150 m. Never more than a rare wanderer in Chowo (one netted in Aug. and another in Oct. 1980, *RJD*) and Zovochipolo (seen by *DPC*, never by us) but the odd pair breeds in Manyenjere. One observed in full song there in Feb. 1980 and a juvenile was being fed on 27 Dec. 1981 (*FD-L*), thus egg-laying Nov. Also observed at Nkhonjera Hill and Kasoma in Jun. 1983 (*FD-L*). Unlikely on the high eastern escarpment, and definitely recorded only from the lower section, as at Nyamkhowa where uncommon (below 2000 m, Dec. 1982). [Some reports from the high plateau seem unlikely to be this species.]

Green-headed Sunbird *Nectarinia verticalis*

**R.** Recorded in forest within a rather limited altitudinal range, from the Thazima area (*IlaC*, *DPC*) and the southern slopes (Nkhonjera Hill, Ulera-Fingira, *FD-L* & *RJD*) to the south-western escarpment (Lusero and Kasyaula to Manyenjere, Chisanga Falls, Chowo and Zovochipolo), up to 2200 m. Was observed feeding at 15 species of flowers (listed in Dowsett-Lemaire 1989b) but insects are probably more important. Has held territories in at least 11 patches in Zovochipolo (0.5-10 ha: Dowsett-Lemaire 1983a), with breeding occurring in the rains, Dec. (1), Jan. (1), Feb. (2) and Apr. (1). Three of nine ringed birds were retrapped locally two

years later (Dowsett 1985).

Black Sunbird *Nectarinia amethystina*

**R.** Common in miombo woodland on all the escarpments, to the upper limit of tall woodland at Chisanga Falls (2050 m); also observed a few times in riparian *Acacia abyssinica* from the old gate to the Lusero area (e.g. on *Erythrina* and *Syzygium*, Aspinwall *et al.* 1973). Once a wanderer to Chowo Rocks at 2200 m (31 Dec. 1981, a female chased by the local Red-tufted Malachite). Seen feeding also on the flowers of *Crossopterix*, *Uapaca*, *Protea gaguedi*, *P. petiolaris*... (FD-L).

Scarlet-chested Sunbird *Nectarinia senegalensis*

**R.** A species of open woodland and riparian vegetation at low altitude, so far recorded only from the northern foothills (North Rukuru valley) and lower escarpment. Not normally found above 1400 m.

Yellow-bellied Sunbird *Nectarinia venusta*

**R.** Widespread on the escarpments, on the edge of riparian forest (at lower altitudes) and in bracken-briar on the lower levels of the high plateau, mainly below 2150 m. Fairly common up to 2000 m (old gate, Fingira, Ulera, Mbuzinandi, etc.). At the upper altitudinal limits we saw a few birds most months in the Chire valley up to the Zambian rest house, and more rarely in Zovochipolo and up to Chowo Rocks (2200 m), feeding on *Leonotis*, *Kotschya* etc. Seems to compete with the numerous Greater Double-collared Sunbird (which has been seen chasing it) and this may be why numbers are limited at montane levels. SGM (in Aspinwall *et al.* 1973) found a nest with N/1 about to leave on 25 Aug. at 2130 m (from egg late Jul.).

White-bellied Sunbird *Nectarinia talatala*

**R.** A bird of low-altitude, dry woodland, very marginal for the Nyika list as known only from the northern foothills (North Rukuru near Uledi, 1033B1-2, c. 1000 m, FD-L & RJD).

Greater Double-collared Sunbird *Nectarinia afra*

**R.** The endemic race *whytei* is very common in montane shrubland and regenerating growth at forest edges, occasionally wandering into open grassland to feed on certain flowers, the altitudinal range being 1900-2500 m. Is mainly a nectar thief (piercing the base of corolla tubes or probing open cups without touching pollen) except in the case of *Englerina inaequilatera*, which is pollinated by both this species and Eastern Double-collared Sunbird; 29 food plants have been identified (Dowsett-Lemaire 1989b). There are 21 breeding records (three C/1), with egg-laying in Feb. (6), Mar. (1), Apr. (7), May (1), Jun. (3), Jul. (1) and Aug. (2). Breeding territories are very small (0.1-0.5 ha). Individually colour-ringed pairs were shown to be double- or triple-brooded according to local plants available and length of flowering season. Both insects and nectar seem important in determining breeding: for instance on Chowo Rocks breeding starts in Apr. with the flowering of *Kotschya recurvifolia* (attracting many insects) (Dowsett-Lemaire 1989b). The species was mentioned as being "single-brooded" in Dowsett-Lemaire (1988b) but this was through an editorial error.

Several ringed birds were controlled locally over a number of years, up to seven years after first capture (a male first ringed as an adult in Jan. 1976 thus more than eight years old when resighted in Jan. 1983, FD-L in Dowsett & Leonard 2001); this particular individual occupied a territory with the same female near the Zambian rest house over several years, and in Nov. 1980 (before the start of the breeding season) was seen chasing her around as if she were a "new" mate.

Miombo Double-collared Sunbird *Nectarinia manoensis*

**R.** Widespread in miombo woodland on the northern and south-western escarpments, coming up to the upper limit of woodland (at 1980 m at Mbuzinandi, near 2000 m Fingira, around 2050 m near Manyenjere and above Chisanga Falls, FD-L & RJD).

Eastern Double-collared Sunbird *Nectarinia mediocris*

**R.** Very common in montane (rain) forest on the escarpments and throughout the high plateau, from 1900-2450 m, lower down at Nyamkhowa (1750 m). At all levels of the forest but more often in the canopy and at edges (where may compete with Greater Double-collared, over which it is dominant). Breeding territories measure 0.2-0.5 ha in Zovochipolo; known to prospect at least 25 food plants for nectar, and like its small congener, is mainly a nectar thief (Dowsett-Lemaire 1989b). The seasonal abundance of canopy insects is

likely the more important factor determining breeding: there are 32 breeding records (one N/1), with egg-laying in Apr. (1), May (1), Jun. (7), Jul. (7), Aug. (10), Sep. (5) and Oct. (1). Twenty-five of 88 territorial birds ringed were controlled locally in later years, up to five years after first capture (Dowsett 1985).

#### Yellow-tufted Malachite Sunbird *Nectarinia famosa*

**R.** Widespread in small numbers in montane grassland (1900-2500 m) with scattered shrubs or small trees (especially *Protea* spp.); very aggressive, as even outside the breeding season it defends temporary territories around clumps of flowers (e.g. *Aloe mzimbana* in June on Chowo Rocks). Sixteen food plants have been identified, all probed frontally (Dowsett-Lemaire 1989b). Near Fingira it was found breeding next to Scarlet-tufted Malachite in *Protea petiolaris* (on Chowo Rocks it is normally excluded from *Protea* bush by its congener but comes back in Feb. as soon as breeding of *N. johnstoni* is over), and in Zovochipolo in *Leonotis*. Dated breeding records are Jan. (1), Feb. (1) and Aug. (1). Subject to local wandering on the plateau in search of flowers.

#### Scarlet-tufted Malachite Sunbird *Nectarinia johnstoni*

**R.** Not as widespread on the high plateau as its congener, but nevertheless found in many localities (mainly 1950-2450 m, down to c. 1800 m at Nyamkhowa), including the top of Mpanda Mtn among rocks (MD in Jul. 1985), at the top and bottom of the eastern escarpment (in *Protea madiensis*, *P. wentzeliana*), in rocky grassland near Fingira (*Protea petiolaris*), *P. madiensis* grassland near the Zambian rest house and *P. welwitschii* at Manyenjere, and especially on Chowo Rocks (*P. welwitschii*, *P. petiolaris*) where a few pairs breed each year. Very specialized ecology, feeding primarily on *Protea*, also *Tecomaria* and *Leonotis* after breeding. One unusual record of a bird feeding on a red *Disa* orchid (not identified at the time, but possibly *D. robusta*) at Chelinda on 30 Dec. 1979.

Two breeding territories on Chowo Rocks measured 0.5 and 1 ha; three nests were situated in large bushes of *Erica* (ex-*Philippia*) *benguelensis* (Dowsett-Lemaire 1988b, 1989b). Males start defending territories on the Rocks for a few hours daily in Jun.-Aug., but feed elsewhere; they keep chasing Yellow-tufted Malachite Sunbirds and by the time breeding starts, their congeners have left the area. Egg-laying (one C/1, one C/2, two J/1, one J/2) on Chowo Rocks was recorded in Dec. (3) and Jan. (2) at the peak of *Protea* flowering and Jan. (1) near Fingira; also (eastern escarpment) in Oct. (3), with one C/2 and two N/2 (Benson 1951, Peters & Loveridge 1953).

#### Bronze Sunbird *Nectarinia kilimensis*

**R.** Widespread in montane grassland, shrubland and at forest edges (mainly 1700-2350 m). Visits a variety of flowers (including *Syzygium* in the forest canopy), but on the Nyika depends on abundant flowering of *Tecomaria* and especially of *Leonotis* spp. for breeding and seems much less attracted to *Protea* flowers than the two large Malachite Sunbirds (Dowsett-Lemaire 1989b). Breeding takes place mainly in Feb.-Mar. (six egg-laying records), when most nectar is taken from *Leonotis mollissima* in rank valleys, and Jul. (one record, probably more) when another *Leonotis* (*decadonta*) is flowering. There is also an egg-laying record in Dec. (Zambian side, food not documented).

#### Yellow White-eye *Zosterops senegalensis*

**R.** In miombo woodland (often in riparian situations) on the lower escarpments and very common in forest and secondary growth throughout the high plateau, to 2450 m. From ringing data in Zovochipolo this appears to be the most numerous forest passerine, with for instance 26 breeding adults mist-netted in three patches totalling 2.9 ha (Dowsett-Lemaire 1983a). Not strongly territorial when breeding and forming large flocks (up to 50 birds) in the off-season; is both insectivorous and frugivorous, with 16 fruit species identified in its diet (Dowsett-Lemaire 1988a). There are 91 breeding records (eight C/2, five C/3, also N/2 and N/3), with egg-laying in Sep. (8), Oct. (50), Nov. (25) and Dec. (8). Of 266 adults ringed, 29 were controlled in subsequent years, up to seven years later (Dowsett 1985).

#### Eurasian Golden Oriole *Oriolus oriolus*

**PM.** Uncommon passage migrant, with only a handful of records (of singles) on southward passage in Oct.-Nov., from the southern slopes (above Thazima) to Chowo, Zovochipolo (one seen feeding in *Polyscias fulva*, FD-L) and Lake Kaulime. Extreme dates are 15 Oct. (1986, FD-L, close to the earliest arrival date in Malawi of 14 Oct.) and 25 Nov. (1969, RJD).

African Golden Oriole *Oriolus auratus*

**R.** Present in miombo woodland and riparian forest on the lower slopes, occasionally wandering into forest on the high plateau, especially in the months of Oct.-Nov.: we had several observations of singles in Nov. 1979, Oct. 1980, Oct. 1981 and Nov. 1981 (mostly Zovochipolo), also a pair calling on the lower edge of Chowo at 2100 m on 23 Oct. 1973 (*RJD*) and one in song in Manyenjere forest on 22 Nov. 1981 (*FD-L*). Not yet known to breed as high as this. Also one on passage in exotic "Wattles" (*Acacia*) near Chelinda (Dam 1) on 11-22 Apr. 1980, near 2300 m.

Eastern Black-headed Oriole *Oriolus larvatus*

**R/M.** A common species of miombo woodland on the escarpments, below 1700 or 1800 m. Above that, several individuals move each year to forest patches on the high plateau, advertising territories (without any sign of breeding) from mid-Apr. to early or mid-Oct. (Dowsett-Lemaire 1989a). This was observed in both 1980 and 1981 over quite a large area, including small patches near Kasyaula, on the edge of Chowo, in Zovochipolo and the Juniper Forest. We had further observations of this during our shorter visit in Jun. 1983 (including again one singing in the Juniper Forest).

Sousa's Shrike *Lanius souzae*

**R.** A scarce resident of miombo woodland, with recent records only so far from the southern slopes, as near Ulera Hut, and above Thazima (*RJD* & *FD-L*) up to about 1800 m. We also saw it west of Kaperekezi (outside the park) on the Nthalire road. The first specimens for Malawi (a pair) were collected by A. Whyte in June 1896, on the northern escarpment (from the altitude given this would have been in 1033B4).

Red-backed Shrike *Lanius collurio*

**PM.** Fairly common on northward passage over the high plateau (up to at least 2400 m), but scarce on southward passage. We had only one such record (two on 24 Nov. 1980, Lake Kaulime), *DPC* saw one on 8 Oct. 1993 at Thazima, and *DRA* noted one on 19 Dec. 1976. Much more noticeable on northward passage, from late Mar. to mid- or late Apr., with many records (latest 23 Apr. 1986 at Chelinda, *MD*).

Red-tailed Shrike *Lanius isabellinus*

**PV.** Very rare vagrant this far south: a male specimen was collected by W.P. Young near Livingstonia, presumably on or above the eastern escarpment, in the mid-1930s (exact date unknown: Benson & Benson 1949). One bird in full male dress was well seen on 4 Dec. 1977 between Kaulime and Chelinda at 2350 m (*RJD* & *FD-L*). There have been a couple of reports of birds in female plumage since (17 Apr. 1992, 26 Nov. 1995), but as the colour of the undertail was not checked, it is impossible to eliminate the possibility of pale-plumaged Red-backed Shrike (cf. Zimmerman *et al.* 1996).

Lesser Grey Shrike *Lanius minor*

**PM.** This species migrates in a loop and crosses Malawi essentially on northward passage: noted regularly over the high Nyika then (up to at least 2400 m), in smaller numbers than Red-backed, from late Mar. to mid-Apr., rarely later (latest date 21 Apr. 1990, *MM*). One immature on 11 Nov. 1993 (*RDM*) is at a more unusual date, one of the very few Malawi records of southward passage.

Fiscal Shrike *Lanius collaris*

**R.** Common resident in open grassland with scattered bushes or trees (as in *Protea* grassland), and in bracken-briar, up to at least 2400 m. There are 10 breeding records (one N/4), with egg-laying in Oct. (4), Nov. (5) and Dec. (1).

Brubru *Nilaus afer*

**R.** Widespread in miombo woodland on the northern and south-western escarpments, up to the upper limit of tall woodland above Chisanga Falls (2050 m, *FD-L*). Also occasionally in *Acacia abyssinica* (near the old gate, c. 1900 m) whence there is a breeding record with pair feeding a fledgling 22 Nov. 1986 (*MD*), thus from egg-laying Sep. or Oct.

Southern Puffback *Dryoscopus cubla*

**R.** Very common in the canopy of miombo woodland and riparian forest on the escarpments, and coming up

into montane rain forest in small numbers in the south-west up to 2200 m. It is not uncommon around 2000 m (both sides of the border), becomes rare in Chowo (one or two pairs) and barely gets into Zovochipolo, where two patches of 8.5 and 12 ha were occupied by a pair (Dowsett-Lemaire 1983a). Proven to breed in Chowo, with a dependent fledgling observed 28 Sep. 1981, and a juvenile also heard in Kasoma on 23 Sep. 1980 (FD-L). Subject to local wandering, e.g. visiting the Juniper Forest in Nov. 1980.

Marsh Tchagra *Tchagra minutus*

**R.** Skulking but not uncommon species in tall rank grass and bracken-briar, between 1800 and 2150 m, on the southern (Ulera, Fingira, 1033D4) and south-western escarpments (both sides of the border, 1033D1). Pairs with young observed up to 2150 m (just below Chowo Rocks) and two dated breeding records, with egg-laying in Dec. (CWB had a N/1 in Jan. 1964 on the Zambian side) and Jan. (feeding juvenile 11 Mar. 1981, Chowo clearing, FD-L).

Brown-headed Tchagra *Tchagra australis*

**R.** A bird of rank riparian growth and dense grass or scrub on the northern and south-western escarpments, coming up marginally into montane shrubland, the upper limit being about 2000 m near Chisanga Falls and Nkhonjera area. Also recorded from the eastern escarpment in secondary growth at Nyamkhowa (?1800 m) – FD-L.

Black-crowned Tchagra *Tchagra senegalus*

**R.** Widespread on the escarpments, and more generally distributed than last at higher altitudes, up to 2200 m at least, in bracken-briar, *Protea* grassland, etc. (including Chowo Rocks, Zovochipolo, eastern escarpment at Nyamkhowa and above Nchenachena). One female netted at the Zambian rest house was brooding Dec. (RJD).

Tropical Boubou *Laniarius aethiopicus*

**R.** Common in any type of thicket or low scrub on the lower escarpments, at high altitudes not uncommon to 2200 m (e.g. Chowo Rocks) and locally higher, to 2300 m, often in riparian situations but also in scrub among rocks, approaching Black Boubou locally at forest edges – FD-L & RJD.

Fülleborn's Black Boubou *Laniarius fuelleborni*

**R.** Common in dense understorey of montane rain forest on the escarpments and at all levels of low-canopy montane forest on the high plateau (favouring thickets and walls of lianes), including tall (3-4 m) montane shrubland, from 1750 m (Nyamkhowa) to 2500 m (scrubby forest on slopes of Nganda Hill). On 31 Oct. 1991 it was also found in a small patch just above Livingstonia at only 1350 m (NJ-S & RDM); possibly breeds this low, as found even lower on the eastern escarpment of the South Viphya (FD-L & RJD). The smallest forest patches occupied in Zovochipolo (with suitable thickets and a ring of regeneration scrub) are 0.6 and 1 ha but as the habitat is rather patchy, overall densities in larger forests are around one pair/4 ha (Dowsett-Lemaire 1983a). There are seven breeding records, with egg-laying in Oct. (1), Nov. (1), Dec. (3) and Jan. (2). Four of 10 ringed birds were controlled locally in following seasons, one up to seven years later (Dowsett 1985).

Orange-breasted Bush Shrike *Malaconotus sulfureopectus*

**R.** Mostly in riparian forest or woodland on the lower slopes of the northern escarpment; we found it locally in riparian *Acacia abyssinica* on the south-western slopes, once near Lusero (Jan. 1981) at 1900 m and also near Fingira (Feb. 1981) at 1900-1950 m, perhaps no more than wanderers this high.

Many-coloured Bush Shrike *Malaconotus multicolor*

**R.** Partial to the canopy and mid-stratum of tall montane rain forest in the south-west (1900-2200 m), throughout from the Lusero area and Manyenjere to Zovochipolo. Pairs occupy several patches of 6.5 to 8.5 ha in size, and two pairs were found in a 12-ha patch in Zovochipolo (Dowsett-Lemaire 1983a). There are mainly two colour morphs in the area, with either a rich yellow belly, or pinkish-fawn (including one of each in a pair in Chowo); in addition a male with a red belly was collected in Chowo in 1964 (Benson & Irwin 1967). No dated breeding records, but immatures noted several times in Mar.-Apr. Absent from the eastern escarpment and most other forested areas of northern Malawi (except Wilindi in the Misukus).

Grey-headed Bush Shrike *Malaconotus blanchoti*

**R.** An uncommon species of woodland and riparian vegetation, recorded from the northern foothills (Uledi area, 1033B1-2), and also from miombo woodland near Ulera, c. 1800 m (Mar. 1981, *FD-L* & *RJD*); more widespread around Thazima (*DPC*). An exceptional wanderer to the lower edge of Chowo forest (2100 m), calling on 23 Aug. 1981 (*FD-L*).

White Helmet Shrike *Prionops plumatus*

**R.** Widespread in miombo woodland on the lower escarpments (north and south-west) up to 1500-1600 m; a group seen at c. 1850 m above Thazima on 26 Aug. 1972 (*JJT* in *Aspinwall et al.* 1973) is at an unusual altitude for this species, which may wander in the off-season.

Red-billed Helmet Shrike *Prionops retzii*

**R.** Widespread in woodland and riparian forest on the northern escarpment (with a breeding record, C/3, from the north-east on 8 Sep. 1994, *DPC*), more local in the south-west, up to 1500 or 1600 m (Kaperekezi area, not uncommon at Thazima, *DPC*). There are a couple of high-altitude observations of a group wandering in the off-season to c. 1800 m below Jalawe Rock (Apr. 1985) and (Jul.) below Mpanda Mtn (*MD*).

Fork-tailed Drongo *Dicrurus adsimilis*

**R.** Widespread in miombo woodland on the northern and south-western escarpments up to 1800 or 1900 m (near Fingira Rock, Feb. 1981). In the off-season some individuals come up to the high plateau and establish temporary territories at the edge of Pine plantations, more rarely forest patches: thus one-two around Chelinda from 29 Apr. to late Jun. 1980, Apr. 1981, and Aug. 1981 near Lake Kaulime (*FD-L* & *RJD*).

Pied Crow *Corvus albus*

**R.** A commensal species, recorded within the park mostly at Chelinda and at the Zambian rest house. It was first reported at both sites in Nov. 1969 (Dowsett 1970); we saw it monthly during our period of residence except in Feb.-Mar. 1981. Critchlow (2001a) adds that he has seen the species nest-building at Chelinda in Jul.-Aug., with periodic absences also in the late rains. It appears rarer at Thazima (a pair once in Nov. 1993, *DPC*). It may have become irregular at the disused Zambian rest house in the 1990s (*DPC*), but was always present there in the 1970s-early 1980s when the place was occupied.

White-necked Raven *Corvus albicollis*

**R.** More widely distributed than its congener (also on the escarpments), as associated with rocky hills or small boulders for breeding and foraging widely over the whole plateau. Two egg-laying records for Sep.: a nest with five small pulli was found on 13 Oct. 1973 by *JFRC-R* & *TOO*, in a boulder crack on the Malawi side of the border road (towards Kaperekezi); a large young was fed on a rock on a ridge in Zovochipolo in early Nov. 1980. Two young were seen on the same rock in Nov. 1981 (*FD-L*). A family of four occasionally foraged around Chelinda Camp, with one of the two young becoming very tame, tapping on the windows of our chalet and being hand-fed. This youngster spent considerable time arguing with its image in the driving mirror of our car, and looking behind it to identify the "intruder". Critchlow (2001a) reports the species occasionally using the back of a large mammal as a perch (Eland and Horse). Some attending a Zebra carcass with many vultures teased the Hooded Vultures by pulling their tail feathers, and by distracting them in this way managed to sneak ahead to grab morsels (*MD*).

Waller's Red-winged Starling *Onychognathus walleri*

**R.** Widespread in tall montane rain forest on both eastern and south-western escarpments, from 1750 m (Nyamkhowa) to 2220 m (Zovochipolo). It does not come up all the way to Kasaramba (at least not in the breeding season). Its breeding distribution is clearly limited by the availability of suitable nest sites (in tree holes): 12 pairs bred in 160 ha of forest patches (Zovochipolo and part of Chowo) in 1980 when feeding conditions were good (Dowsett-Lemaire 1983d); even then these birds were greatly outnumbered by non-breeding birds and the habitat appeared more than saturated (Dowsett-Lemaire 1985a). The diet includes a variety of fruits (Dowsett-Lemaire 1988a), but insects are more important and tree chameleons *Chamaeleo goetzei* are also brought to the young. A nest hole can be in use for many years: thus one occupied in Chowo in 1980-81 was still in use in Oct. 1986 (*FD-L*). There are 30 breeding records (N/1 to N/3), with egg-laying in late Aug. (2), Sep. (12), Oct. (13) and Nov. (3); normally single-brooded, with one pair laying again, but the brood

was later abandoned (Dowsett-Lemaire 1983d). Subject to local wandering, visiting forest patches on the Nyika up to 10 km from a breeding area; flocks in the non-breeding season can be very large, e.g. 40 and 60 birds in Zovochipolo in Jan. 1981.

African Red-winged Starling *Onychognathus morio*

**R.** A few pairs at rocky hills on the escarpments and high plateau, wandering for food about anywhere, including the edge of forest where may take some fruit. Known nest sites on the high Nyika include the small cliff on the Manyenjere ridge, rocks near Chelinda bridge, and Zungwara Falls. This last (a wet rock face) was occupied in Nov. 1981 and had in the previous season been used by a pair of Slender-billed Starlings! (Dowsett-Lemaire 1983d). Those three breeding records were dated Oct. (1) and Nov. (2).

Slender-billed (Chestnut-winged) Starling *Onychognathus tenuirostris*

**R.** A more specialized species than last, breeding on rock faces somewhat protected by waterfalls; it is confined to the high plateau, mainly from 2000-2400 m. Feeds in montane grassland and occasionally in forest trees (where takes fruit and insects). Known nest sites (where breeding was proven) include a waterfall on the Chire stream below the Zambian rest house, Chisanga Falls (with at least two pairs) and Zungwara Falls (also at least two pairs) – *FD-L & RJD*. A pair was also seen regularly at a waterfall near the Juniper Forest (*FD-L*) and it was noted on the North Rumphu waterfalls (*DPC*). There are eight dated breeding records, with egg-laying in Sep. (1), Oct. (1), Nov. (2) and Dec. (4). At Chisanga Falls one brood of three large nestlings was seen coming out onto a ledge to get fed, getting absolutely drenched in the process (Dec. 1981). May wander in large flocks in the off-season, e.g. at least 100 birds on the Kasaramba road, feeding on the ground on 1 May 1980, about 80 on Chelinda Hill on 6 Feb. 1981; the largest flock observed on the Zambian border (Chitipa road junction) was 30, on 29 Jul. 1980.

Lesser Blue-eared Starling *Lamprotornis chloropterus*

**R.** A local species of miombo woodland on the lower escarpments, recorded in 1033B4 (Jalawe valley, *DPC*), near Thazima (*FD-L & RJD*) and a little higher on the southern slopes on the way to Nkhonjera Hill (at least 1700 m, *RJD*). The observation of an immature at Chelinda by *HG* (*per DPC*) in Jan. 1995 must be considered as exceptional.

Amethyst Starling *Cinnyricinclus leucogaster*

**AM.** Seasonally common (mostly Sep. to Dec. or Jan.) in miombo woodland and in patches of montane rain forest on the south-western escarpment up to *c.* 2250 m, wandering rarely to 2300 m (near Chelinda). Quite a few pairs bred in forest in 1980 (*c.* 30 pairs in Zovochipolo), but none in 1981 (a poor fruiting season), although some flocks were present (Dowsett-Lemaire 1983a, 1989a). Food is collected in forest as well as outside, by flycatching from low bushes and hopping on the ground. Dated records of egg-laying on the plateau are Oct. (4) and Nov. (2); and Sep. (2) in the northern foothills (feeding large nestlings 18 Oct. 1986, *RJD*). Uses smaller holes than Waller's Starling, including old nests of Olive Woodpecker: I once saw a female start building a nest in a hole the very day that the young Woodpecker had left it! But, as is usual, the Woodpecker family came back in the evening to roost, and chased the Starlings, who had to wait for several days until the Woodpeckers stopped roosting in it (Dowsett-Lemaire 1983a); breeding was then successful. A flock of over 200 birds on 14 Oct. 1973 in a small patch on the Zambian side (*RJD*) seems early for post-breeding dispersal, perhaps in a year with poor breeding prospects.

Wattled Starling *Creatophora cinerea*

**V.** Quite an erratic species in Malawi, with one old record from the high Nyika: two specimens were collected in Apr. 1903 at Nyamkhowa (2040 m, at the peak) and at Mwenembwe (2300 m) – Benson & Benson 1977. The collector would have been native staff employed by A. Sharpe. There is a more recent observation from the western escarpment (near the turn-off to Chisanga Falls) of a single bird in Dec. 1986 (*MD*).

Yellow-billed Oxpecker *Buphagus africanus*

**R?** Never recorded in the 1970s and 1980s despite good observer coverage, three oxpecker sp. were first seen on the high plateau in Sep. 1993 and Nov. 1994 and positively identified as this species in Nov. 1995 in the area between Chelinda and Chosi (*HG* in Critchlow & Haugaard 1996). Host species are Eland, Roan Antelope (Critchlow & Haugaard 1996, *DF* in 2000) and Zebra (*DF*, 2000). Other months recorded are Dec.

(1995, 2001), and Aug.-Sep. (2000, with up to five birds, *DF*).

Northern Grey-headed Sparrow *Passer griseus*

**R.** Known marginally from the Thazima office area, at least since 1993 (*DPC*). Mainly commensal.

Yellow-throated Petronia *Petronia superciliaris*

**R.** Widespread in miombo woodland on the northern and south-western escarpments, up to about 1800 m (south-west, *FD-L & RJD*), and twice in *Acacia abyssinica* near the old gate at 1900 m (30 Apr. 1971, in Aspinwall 1971; 30 May 2002, *WMc*).

Chestnut-mantled Sparrow-weaver *Plocepasser rufoscapulatus*

**V.** Very marginal for the Nyika list, its inclusion being based on a vagrant seen on 26 Oct. 1991 at Thazima gate (*MM*). This is not a high-altitude species, and as the woodland between Thazima and Vwaza Marsh W.R. (where it is common) has been destroyed extensively, the species is unlikely to turn up again.

Baglafaecht Weaver *Ploceus baglafaecht*

**R.** The endemic race *nyikae* is widespread in montane grassland with clumps of trees or shrubs, riparian growth and generally forest margins, from 1900 to 2450 m, but not recorded from Nyamkhowa. Has nested in Pines at the edge of plantations (Chelinda, *FD-L & RJD*), in *Hagenia* and *Syzygium* on the Zambian side, in *Hagenia* at Chelinda; dated breeding records (one C/2) are Oct. (2), Nov. (1), Dec. (3), Jan. (1, several more nest-building early Jan.) and Feb. (1). An insectivorous species, usually in pairs or small family parties. One taking nectar from *Leonotis mollissima* (15 Feb. 1982), piercing the corolla tube but nevertheless getting pollen on its forehead (*FD-L*).

Bertram's Weaver *Ploceus bertrandi*

**R.** Mainly at forest margins, bracken-briar with scattered trees, riparian *Acacia abyssinica*, and often alongside Baglafaecht but does not ascend above *c.* 2200 m, thus absent from the higher sections of the plateau. Overall 1600-2200 m (Thazima-Zovochipolo). One dated breeding record (Dec.) from N/1 collected in Jan. at 1920 m by *CJV* (Benson & Holliday 1964), the large round nest being in the top of a *Lippia* bush at 2.5 m. Nesting also noted in Apr.-May 1971 (contents unknown, Aspinwall 1971), and Nov.-Dec. 1977 near Zambian rest house (*FD-L*). One female ringed at Zambian rest house in Dec. 1975 was retrapped in Dec. 1977 (*RJD*). Mainly insectivorous and in pairs, like Baglafaecht. (Not recorded from the Nyamkhowa-Livingstonia square but should be expected to occur).

Spectacled Weaver *Ploceus ocularis*

**R.** Widespread in riparian growth on the escarpments and up to 2150-2200 m on the plateau (Zovochipolo and near Chowo Rocks). Not uncommon in bracken-briar and tree clumps, particularly along streams, alongside Bertram's and Baglafaecht Weavers, and similarly unsocial (in pairs and family parties). One breeding record (Dec.) with C/2 (a nestling plus infertile egg) at 1900 m on the Zambian side (Benson *et al.* 1970); also seen nest-building on 25 Aug. at 2130 m (Aspinwall *et al.* 1973), and "at a nest" in Oct. at Kaperekezi (Dyer 1988). (No record from 1033B4, presumably through an oversight).

Large Golden Weaver *Ploceus xanthops*

**R.** In very small numbers on the southern and south-western slopes (from the old gate to Kasoma, Mbuzinandi and Fingira area, overall up to 2050 m, *FD-L & RJD*), not yet recorded from the northern escarpment. In bracken-briar and at forest edges, often in riparian situations (including *Acacia abyssinica*). Also noted "in bushes, near Chowo" in Jul. 1975 (*EHP*). Was found nesting in the Chire valley by *CJV* below 1800 m in Jan. 1964.

[Lesser Masked Weaver *Ploceus intermedius*. This low-altitude species was recorded by Dyer (1988) for the Mbuzinandi area at 2000 m, in error for *P. bertrandi*, and indeed dropped by Medland (n.d.).]

[African Masked Weaver *Ploceus velatus*. A bird of low-altitude dry woodland; there are no confirmed records of this species within the park, and it should be deleted from Medland's (n.d.) list (confusion with Bertram's?). *DPC* saw it, however, near Nthalire to the west, which is high for the species.]



[Spotted-backed Weaver *Ploceus cucullatus*. Seen near Uledi in Oct. 1986 (*FD-L & RJD*), outside the park.]

Red-headed Weaver *Anaplectes melanotis*

**R.** Noted in dry miombo woodland on the northern slopes (slopes of Mpanda Mtn), Oct. 1986 (*RJD*), and near Uledi (*MD*). Also seen outside the park on the western escarpment (near Gamba) and near Thazima by *DPC*. All observations below 1550 m.

Red-billed Quelea *Quelea quelea*

**V.** A species of low-altitude dry savannas, only an exceptional wanderer to the Nyika: one bird was seen by *JH* at the bottom of Dam 1 (Chelinda, 2250 m) on 2 Nov. 1994 (Critchlow & Haugaard 1996), and a small flock was on Zambian side of Kaperekezi on 12 Jul. 1994 (*DPC*).

Black-winged Bishop *Euplectes hordeaceus*

**R.** Very marginal for the Nyika list, as it is a localized species of rank grass on the northern escarpment, seen on the park's boundary near Uledi (1033B1, *FD-L & RJD, MD*).

Yellow-rumped Bishop *Euplectes capensis*

**R.** In rank grass in woodland clearings on the northern (common in Chipome valley) and south-western escarpments, probably not much above 1700 m (above Thazima). A couple of wanderers to the Lusero area at 1950 m: one seen there by *DRA* (Aug., Aspinwall *et al.* 1973) and by us on 20 Oct. 1981; also one near old gate (1900 m) noted by *DPC* in Nov. 1995. In Sep. 1956 a specimen was collected at *c.* 1800 m on the Zambian side (Benson & Irwin 1967).

White-winged Whydah *Euplectes albonotatus*

**R.** A species of rank grass in dry, open woodland, very marginal for the Nyika list as recorded only from the boundary on the North Rukuru below the western escarpment (*MD*).

Red-collared Whydah *Euplectes ardens*

**R.** In rank, moist grass on the northern and south-western escarpments, coming up to the plateau in some numbers up to 2150-2200 m (as in Zovochipolo, common in most valleys and in full display there Jan.-Mar., first few end of Dec.). Subject to local wandering and occasionally reported higher: a flock of at least 50 birds at 2300 m near Chelinda on 26 Dec. 2001 (*DPC*). One breeding record from Chipome valley (C/3, Feb. 1996, *DPC et al.*).

Mountain Marsh Whydah *Euplectes psammocromius*

**R.** The species was first collected in Sep. 1902 (Belcher 1930), probably by J. McClounie. Common in moist herbage along streams and dambos on the high plateau, mainly from 2000 or 2100 to 2400 m. Polygamous as are other *Euplectes* and in flocks of up to 40-50 in the dry season. Moults into breeding dress mainly in late Sep. and early Oct. and retains it until Feb.-Mar.: one male coming into dress at Kaulime on 5 Sep. 1980, with tail more than half-grown (*FD-L*), was certainly early. The last date with a bird in full breeding dress was noted as the 5th Apr. (1996) by *DPC*. There are seven dated breeding records, in Oct. (2) and Nov. (5), with three C/2 known (Benson 1940-41, 1951), and also an occupied nest in early Jan. 1964 on the Zambian side (*CJV*).

Green-winged Pytilia *Pytilia melba*

**R.** Local at low altitudes, in thickets: recorded from the north-eastern foothills on the slopes of Mpanda Mtn (1033B2, Oct. 1986, *RJD*) and close to but outside the park on the Ruwile stream (*DPC*). In the south-west comes close to Thazima (which is near the upper altitudinal limit for the species), with a pair seen on a hill *c.* 4 km outside the park (*DPC*).

Orange-winged Pytilia *Pytilia afra*

**R.** Local in rank grass and small thickets in miombo woodland: in the northern foothills (North Rukuru and foothills of Mpanda Mtn, *FD-L & RJD*, Oct. 1986) and the Kaswerera stream at Thazima (*DPC*). In addition, there is an unexpected observation of a vagrant (male) at Lake Kaulime on 19 Jun. 1994 (*DPC & HG*), an abnormal altitude and habitat.

Red-faced Crimsonwing *Cryptospiza reichenovii*

**R.** Discreet but widespread species in the understorey of montane rain forest on both escarpments, up to 2300 m (Mwenembwe) and 2220 m (Zovochipolo); also recorded at Nyamkhowa (1750 m) and Nkhonjera (*FD-L* & *RJD*). In Zovochipolo breeding pairs were found in 18 patches with streams (the smallest 0.8 ha); they feed both on insects and grass seeds (especially *Streblochaete longiarista*, also *Panicum* and *Setaria*) as well as seeds of Acanthaceae (*Hypoestes*) and other families (*Hagenia*, *Urera*, *Acalypha*) – Dowsett-Lemaire 1983a, 1988a. There are three dated breeding records, Jun. (1), Jul. (1) and Sep. (1). Four of 37 ringed adults were retrapped locally after one to three years; subject to local wandering, a bird ringed in Chowo being retrapped in Zovochipolo 3 km away (Dowsett 1985).

Red-throated Twinspot *Hypargos niveoguttatus*

**R.** Uncommon or discreet species of riparian thicket, recorded only from the northern escarpment (1033B2 and B4, *MD*).

Green Twinspot *Mandingoa nitidula*

**V/R.** Mainly reported from the Zambian side (up to 2150 m), with so few records that it is presumably only a wanderer from lower altitude: in Chowo one was netted near the ground on 24 Nov. 1969 (Dowsett 1970), and at least one seen on 27 Aug. 1972 (Aspinwall *et al.* 1973), also one reported for 24 Aug. 1983 (*JA*), and *RJD* saw one in the canopy in Manyenjere on 24 Nov. 1980. In addition, one was netted in riparian forest at 1150 m in 1033B4 (Apr. 1997, Overton 1998).

Blue-billed Firefinch *Lagonosticta rubricata*

**R.** Widespread in rank growth, bracken-briar and at forest edges over a wide altitudinal range, from the wooded escarpments to the high plateau, up to 2500 m (scrubby forest on the slopes of Nganda Hill, *FD-L*). One was seen eating flying termites from the canopy of a forest patch in Zovochipolo on 8 Jan. 1981!

Black-tailed Grey Waxbill *Estrilda perreini*

**R.** A discreet bird of dense riparian forest, discovered at Thazima in 1981 (*APZ*), with several subsequent observations. Also found in Oct. 1985 in riparian near Kaperekezi (*MD*) and in the Chisimuka valley (above the old gate) in Apr. 1994, *c.* 1900 m – where seen again, as in 2002 (*WMc*).

Sweet Waxbill *Estrilda melanotis*

**R.** Common in bracken-briar and dense herbaceous growth at forest edges and along streams, scrub on rocks, penetrating occasionally inside forest to drink (e.g. Chowo), up to 2450-2500 m; seen eating seeds or small fruit of the liane *Urera hypselodendron* (Nov.). Usually in small flocks, occasionally much larger (50 or so) in the off-season. Some nest-building has been seen in Dec., and we have a breeding record for Jan.: a nest with C/3 situated 2 m up in a Pine tree at the Zambian rest house (*FD-L*). Recorded quite low down on the escarpments, to *c.* 600 m (just outside the park) on the Ruwile stream in the north-east (*DPC* on 3 Sep. 1994).

Common Waxbill *Estrilda astrild*

**R.** Small parties or flocks commonly encountered in open montane grassland and dambos on the plateau, up to 2400-2500 m. Already noted as high as 2400 m by Benson (1942).

Blue Waxbill *Uraeginthus angolensis*

**R.** In small thickets or scrubby understorey of open woodland: recorded from the northern foothills and south-western escarpment (up to Thazima), rarely wandering to the high plateau: thus a couple seen at the Zambian rest house in Apr.-May 1971 (Aspinwall 1971) and possibly one more record after that (1976).

Zebra (Orange) Waxbill *Amandava subflava*

**R/V?** Normally in moist grassland and dambos: one record of small flocks on the Chipome river at 1370 m (Dyer 1987) is all we could trace.

Bronze Mannikin *Spermestes cucullata*

**R.** In any grassland on the lower slopes (north and south-west), as in clearings in woodland. Only a vagrant to the high plateau, with small flocks (10-15) observed for the first time near Chelinda at 2300 m from 26

Dec. 2001-9 Jan. 2002 (*DPC*); otherwise only one other record on the Malawi side, at Zungwara (27 Nov. 1995, *DPC* & *MD*) and a couple on the Zambian side, in bracken on the Manyenjere ridge (18 Dec. 1976, *DRA*, and 12 birds on 17 Nov. 1981, *RJD*). Nest-building at Kaperekezi on 21 Apr. 1994 (*DPC*).

#### Red-backed Mannikin *Spermestes bicolor*

**R.** Normally in rich woodland and the edge of riparian, known from the northern and south-western escarpments, up to Thazima, only irregular above that: noted at *c.* 1800 m (above Thazima) by *JJT* 26 Aug. 1972 (*Aspinwall et al.* 1973), one calling in Pines at Chelinda on 9 May 1980, *c.* 2300 m (*FD-L*). Nest-building observed at Kaperekezi in Oct. (*Dyer* 1988).

#### Variable Indigobird *Vidua funerea*

**R.** The only indigobird on the plateau, but uncommon, confined to altitudes below 1900 or 2000 m, in rank grass and bushes. At least two males in breeding dress noted on the border road in Apr.-May 1971 at *c.* 2000 m (*Aspinwall* 1971), and similarly noted by *TOO* in May 1975; we saw this species on the southern slopes (near Fingira) in Mar. 1981 (a female) at *c.* 1950 m and on the road to Thazima in Apr. (a male), while *DPC* reported it from the old Mbuzinandi road in 1033D1 on 16 May 1994. There are also anonymous Atlas records from 1033D2 (presumably Mbuzinandi area), so probably nowhere above 2000 m, even though its host the Blue-billed Firefinch occurs to the highest patches of scrub (at 2500 m). Also known from the Chipome valley.

#### Pin-tailed Widow *Vidua macroura*

**R?** A species of open, rank grassland, largely absent from the wooded escarpments, and local on the high plateau, at the upper altitudinal limit of its range. Of irregular appearance around the Zambian rest house (e.g. one male in song Feb.-Mar. 1980 and a female in Mar., pers. obs.; a male and two females in Feb. 1979, *DRA*) or Zovochipolo (one male in Jan. 1981), the border road in Apr. (*DPC*) and usually one-two males holding a territory near Chelinda Camp, from Dec.-Mar. (*FD-L* & *RJD*) or even until May (*MD*).

[Long-tailed and Broad-tailed Paradise Widows *Vidua paradisaea*, *V. obtusa*. Listed by Medland (n.d.) but not yet confirmed to occur within the park; they have both been seen near Uledi outside the boundaries, *RJD* & *FD-L*, *MD*.]

#### Cape Canary *Serinus canicollis*

**R.** Usually common on the high plateau, in grassland, bracken-briar, at forest edges, occasionally in the forest canopy (where seen eating seeds of *Hagenia abyssinica*, *FD-L*), up to 2450 m; also recorded at Nyamkhowa (1750-2000 m). In small to large flocks, with seasonal wandering and fluctuations in numbers. In our period of residence seen in all months but occasionally noted as locally absent for a couple of weeks (as on Zambian border in late Dec. 1979-Jan. 1980). There are nine breeding records (five C/4, see Benson 1940-41 and 1951), with egg-laying in Sep. (1), Oct. (2) and Nov. (6); from the eastern escarpment and the Zambian rest house.

#### African Citril *Serinus citrinelloides*

**R.** Locally not uncommon at forest edges and secondary growth, often along streams, on the escarpments and plateau, up to 2300 m. Often in pairs and overall discreet, most usually picked up from its quiet, detached 3-note whistles (heard from Aug. to Apr. or May). Seen eating seeds of *Cussonia spicata* and *Hagenia* (*FD-L*). Two breeding records for Oct. (Zambian rest house and Zovochipolo, *RJD* and *FD-L*). Appears scarcer in May-Jul. but whether this is due to altitudinal movements or simply the lack of singing activity at that time is not clear.

#### Yellow-eyed Canary *Serinus mozambicus*

**R.** Not a bird of high altitudes, recorded only from the lower wooded slopes (north and west), normally up to Thazima (*DPC*) and completely absent from the high plateau. One exceptional record of three at *c.* 1900 m in *Acacia abyssinica* above the old gate, 30 May 2002 (*WMc*).

#### Bully Canary *Serinus sulphuratus*

**R.** Not uncommon in secondary growth, at forest edges and in wooded grassland on the high plateau (and

escarpments), up to 2400 m (Chelinda Hill). There are two breeding records (egg-laying Sep.), from the Zambian rest house and Chowo (*RJD & FD-L*).

Black-eared Seedeater *Serinus mennelli*

**R.** A miombo endemic, although qualified as “common” by Medland (n.d.), appears very local: found on the lower escarpments in the south-west in the Thazima region, c. 1600 m (*FD-L & RJD*), and curiously still unreported from the north.

Stripe-breasted Seedeater *Serinus reichardi*

**R.** More widespread than last, in miombo woodland in 1033B4 (Jalawe, Chipome, *MD*), with several records in the south-west, including a specimen collected on the western scarp on 9 Nov. 1937 at c. 1950 m (Benson 1940-41). Otherwise seen above Thazima up to at least 1800 m (*RJD & FD-L*) and similarly near Chisanga Falls (*MD*).

Streaky Seedeater *Serinus striolatus*

**R.** A discreet species of forest edges, montane shrubland and locally in dense understorey of riparian forest on the plateau and higher escarpments (east and south-west), mainly from 1900-2400 m, also recorded at Nyamkhowa (Benson 1940-41). In pairs or small family parties, not known to flock. There are six breeding records (one C/3: Benson & Benson 1949), with egg-laying in Sep. (1), Oct. (3), Nov. (1) and Dec. (1), most from the Zambian side.

Oriole Finch *Linurgus olivaceus*

**R.** Very uncommon species confined to the wetter forests of the eastern escarpment, collected at Nyamkhowa in Oct. 1938 (Benson 1940-41) and one seen in Dec. 1982 (*RJD*); it is also known from the bottom of Kasaramba forest (collected by Benson (1940-41) in Dec., and by Loveridge in Nov. 1948 (Peters & Loveridge 1953)). We saw a couple of birds on the edge of two different forest patches on Nkhonjera Hill in Jun. 1983; a female was netted in forest east of Nganda (1033B4) on 11 Apr. 1997 (*JH et al.*). The overall altitudinal range is 1800-2200 m.

Cinnamon-breasted Rock Bunting *Emberiza tahapisi*

**AM.** It is not known to breed anywhere on the high plateau (e.g. completely absent from Chowo Rocks) and clearly all the few records there are of birds on passage, often seen along roads. Most observations are of “spring” passage (when the species arrives to breed in the country) in the months of Apr.-Jul., extreme dates 27 Mar. (1985, *MD*) and 25 Jul. (1994, *DPC*); there are few observations in Dec. to early Jan., extremes being three on 1 Dec. 1994 in Zovochipolo (*DPC*) and one on 11 Jan. 1996 (Zambian side, *DPC*). At lower altitudes one observation in the Jalawe valley (1033B4) in Aug. 1994 (*DPC*) could refer to a locally breeding bird. *DPC* also noted the species near Fingira Rock in May 1994. On passage overall up to 2450 m (Dowsett *et al.* 1974).

Golden-breasted Bunting *Emberiza flaviventris*

**R.** Widespread in miombo woodland on the lower slopes (north and south-west), approaching the upper limit of woodland near Chisanga Falls, Fingira Rock and also found singing in open *Protea/Faurea* montane grassland (Chire valley below Chowo), overall up to 2000 m – *FD-L*.

Cabanis's Bunting *Emberiza cabanisi*

**R.** Widespread in miombo woodland on the lower slopes (north and south-west) up to the upper limits of tall woodland, as near Chisanga Falls, Mbuzinandi (1980 m), near Fingira, but also comes up into *Protea/Faurea* wooded grassland, with two pairs established just below Chowo Rocks at 2150 m (*FD-L*).

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**Appendix. Gazetteer of localities** (map square and coordinates, altitude in metres) with size of some forests; country is Malawi, unless otherwise stated:

1. *Within Nyika National Park:*

Locality	Square	Coordinates	Alt. (m)
Chelinda or Chilinda (Camp and Dam 1):	1033D2	10°35'S, 33°48'E	2270-2300
Chelinda Dam 2:	1033D2	10°35'S, 33°48'E	2270
Chelinda Dam 3:	1033D2	10°36'S, 33°48'E	2260
Chelinda bridge:	1033D2	10°40'S, 33°51'E	2220
Chelinda Hill:	1033D2	10°40'S, 33°52'E	2400
Chelinda stream:	1033D2	from Chelinda to Chelinda bridge	
Chelinda/Chitipa road junction:	1033D1	10°35'S, 33°42'E	2220
Chipome valley/stream:	1033B4	10°19'S, 33°47'-33°49'E	1400
Chisanga Falls (North Rukuru):	1033D1	10°32'S, 33°41'E	1600-1800
Chisimuka valley:	1033D1	10°43'S, 33°37'E	1700-1800
Chire stream (Zambia):	1033D1		c. 2100 to 1500
Chosi Rock:	1033D2	10°37'S, 33°46'E	2380
Chowo forest (Zambia, 90 ha):	1033D1	10°35'S, 33°41'E	2090-2200
Chowo Rocks (Zambia/Malawi):	1033D1	10°35'S, 33°42'E	2150-2220
Dembo bridge:	1033D2	10°34'S, 33°54'E	2300
Dembo stream:	1033D2		2300 to 1800
Domwe point:	1033B3	10°25'S, 33°44'E	2340
Fingira Rock:	1033D4	10°47'S, 33°46'E	2000-2050
Jalawe Rock:	1033B4	10°21'S, 33°47'E	c. 2100-2200
Jalawe valley:	1033B4	10°20'S, 33°47'E	c. 1500
Juniper Forest (9 ha):	1033D2	10°45'S, 33°53'E	2130-2220
Kalambwe:	1033D2	10°40'S, 33°45'E	2240
Kaperekezi (gate):	1033D1	10°32'S, 33°39'E	1500

Locality	Square	Coordinates	Alt. (m)
Kasaramba point:	1033D2	10°44'S, 33°58'E	2350
Kasoma forest (Zambia):	1033D1	10°37'S, 33°40'E	1980-2050
Kaswerera stream, see Thazima			
Kasyaula forest (40 ha):	1033D1	10°37'S, 33°41'E	1980-2050
Katizi (= Mbululuji stream):	1033D1	10°44'S, 33°43'E	1680
Kawozya Mtn:	1033B4	10°16'S, 33°50'E	2200
Lake Kaulime:	1033D2	10°34'S, 33°45'E	2350
Lusero (Luselo) forest:	1033D1	10°40'S, 33°38'E	1950
Luvini river, see Thazima			
Manyenjere forest (Zambia, 75 ha):	1033D1	10°35'S, 33°39'E	1970-2070
Mbululuji valley, see Katizi			
Mbuzinandi:	1033D2	10°44'S, 33°47'E	1980
“Mbuzinandi road”: from old gate (1033D1) to Mbuzinandi (1033D2)			
Mpanda Mtn:	1033B2	10°12'S, 33°48'E	2017
Mpopoti turn-off:	1033D2	10°31'S, 33°52'E	2350
Mwanda Mtn (Zambia):	1033D1	10°42'S, 33°34'E	2150
Mwenembwe (Mwenembe) forest (1350 ha):	1033D2	10°42'S, 33°59'E	2000-2350
Nganda Hill:	1033B4	10°27'S, 33°52'E	2606
Nkhonjera (Nkhonjela) Hill:	1033D4	10°54'S, 33°48'E	2200
North Rukuru River: from 1033B4 (source west of Nganda) through 1033B3, 1033D1, north to 1033B1-2			2350 to <i>c.</i> 1000
North Rumpi (Rumpi) stream:	1033B4/1033D2/1034C1		2400 to 1400
Nyamkhowa (Nyankhowa) Mtn:	1034C1	10°34'S, 34°04'E	1700-2050
Old gate:	1033D1	10°43'S, 33°39'E	1930
Ruwile stream:	1034A3	10°20'S, 34°02'E	700
Thazima (Tazima):	1033D3	10°50'S, 33°35'E	1600
Uledi:	1033B1/B2	10°10'S, 33°45'E	1000
Ulera:	1033D4	10°50'S, 33°48'E	1800
Ulozga valley:	1033B4	Tributary of the Chipome, not located precisely	
Vipiri Rock:	1033D2	10°40'S, 33°48'E	2300
Vitumbi forest (Vitumbi-Kasaramba block, 1300 ha):	1033D4	10°50'S, 33°56'E	2000
Wovwe valley:	1034A3	10°27'S, 34°01'-34°04'E	1500 to 1000
Zambian rest house:	1033D1	10°34'S, 33°42'E	2150
Zovochipolo: 1033D1 (area of forest patches between Zambian rest house and border road to Kaulime ridge)			2150-2250
Zungwara Falls (North Rukuru):	1033D1	10°31'S, 33°43'E	2000-2050

## 2. Localities outside Nyika N.P.:

Locality	Square	Coordinates	Alt. (m)
Gamba:	1033B3	10°28'S, 33°39'E	1500
Karonga:	0933D4	9°56'S, 33°56'E	474
Livingstonia:	1034C1	10°36'S, 34°06'E	1200
Nchenachena:	1034C3	10°45'S, 34°02'E	1200
Njakwa Gorge (Rumphi):	1133B2	11°02'S, 33°54'E	1100
Nthalire:	1033B3	10°21'S, 33°38'E	1300
Mwavumwe stream (Zambia):	1033D1	10°32'S, 33°37'E	1400