ISSN 00-18-456X

# HONEYGUIDE

Journal of Zimbabwean and Regional Ornithology

December 2019, Vol. 65, Part 2

**Ayres' Eagle *Hieraaetus ayresii***
Photographed at the nest; see article by Hustler & Barry (pp. 95-104)

Member of IUCN The World Conservation Union

BirdLife ZIMBABWE
The BirdLife International Partner in Zimbabwe

(See pp.109-111) The Eastern Miombo Sunbird nests *in situ* in a cycad: July 2016 (above left), November 2018 (above right)


(Above left) the 2018 nest split with difficulty because of the binding plastic; (right) outer layer and inner lining

(Above left) Separated lengths of polypropylene; Postscript: not mentioned in the article (see pp.109-111) the sunbirds started a third nest in the same cycad in August 2019. After visiting the site a few times they aborted the nesting attempt after loosly attaching a single length of polypropylene (above right) and are believed to have nesting in a neighbouring garden instead. Photos © I.C. Riddell

# TABLE OF CONTENTS



## GUIDELINES FOR CONTRIBUTORS

*Honeyguide* is an ornithological journal that accepts scientific papers and articles, short notes and observations, as well as contributions of a more general interest. Its primary emphasis is on the birds of Zimbabwe but scientific contributions from other parts of Africa, and general interest contributions from anywhere else will also be accepted. Wherever possible, articles should be submitted electronically, preferably in MS-Word using the language option 'English (Zimbabwe)' or any other variant of British English.

Contributions can be sent to:

**Brian Marshall (Editor) – brian.marshall01@gmail.com**

and/or

**Ian Riddell (Assistant Editor) – gemsaf@mango.zw**

Written communications can be sent to Ian Riddell at 5 Leeds Close, Highlands, Harare, Zimbabwe.

The definitive internationally recognised name for any bird species is its scientific name and this should be included in all contributions except for those of general interest, such as accounts of travel or birdwatching. The scientific name given in *Roberts VII* will generally be followed although contributors should note that many names have been changed since that book was published. The Editor will endeavour to keep up to date with the changes. Common names are more of a problem since there is still some variation amongst different authorities. The journal will be flexible as far as common names are concerned and contributors may use the names they are accustomed to or most familiar with.

Contributors are urged to check previous issues of the journal for the format and style of references although the Editor will check and correct any if necessary. The editor will supply authors with PDF copies of their articles on request.

*Honeyguide* **65**(2): 81-88 (2019)

# Variation in Geographical Coverage of Sampling in Zimbabwe during the SABAP1 Period

**Anthony Cizek**

## Introduction

The Southern African Bird Atlas Project (SABAP1) conducted between the late 1980s and early 1990s was a major effort to map bird distributions in Zimbabwe. It resulted in the publication of two volumes of atlases (Harrison *et al.* 1997) in which the distributions of species occurring in Zimbabwe were mapped by quarter-degree-square (QDS). Degree squares were split into 16 QDSs, with sides measuring about 25 km. Each species seen by an observer or group of observers in a particular QDS in a particular month was recorded on atlas cards by ticks placed next to the relevant species in the checklist, and the card submitted in hard copy to regional committees for collation and vetting. A total of 12,479 cards were submitted by 1,228 different observers in Zimbabwe during the five years between 1987 and 1991. Collective understanding of the distributions of bird species occurring in Zimbabwe was much improved by the project.

For example, Irwin (1981) reported the Cinnamon-breasted Tit *Melaniparus pallidiventris* only as far west as Harare, but data centralised during SABAP1 showed that its range extended to the vicinity of Makuti, while an isolated population at Shurugwi was also identified. However, there were gaps in the geographical coverage of Zimbabwe during SABAP1, which have not been properly documented or explained. Harrison *et al.* (1997) mapped the number of cards submitted per QDS for the whole of the southern African region covered by the project, and noted the poorer coverage of communal lands in Zimbabwe. But they only showed variation in sampling effort to 20 cards, and there was much greater variation across Zimbabwe, with more than 200 cards submitted for some QDSs. Furthermore, it is questionable if the number of cards submitted is the best surrogate of sampling effort since there was wide variation in the effort made by observers for each card submitted. The relationship between the number of cards submitted per QDS and number of species recorded will be explored here. The goal is to better understand the geographical patterns of variation in sampling effort: which parts of the country were well-covered during SABAP1 and which need to be more comprehensively sampled so we can develop better models of the distributions of Zimbabwean birds.

*A note on land-use classification*

Land-use has changed significantly in Zimbabwe since the SABAP1 period, and the terms used here for the different types of land class, and for the names of the Intensive Conservation Areas (ICAs), are those that were in use during the atlas period in the 1980s and 1990s. The major classifications (with abbreviations) were: National Park (NP), Safari Area, Forest Land, Recreational Park, Communal Land, Large-scale Commercial Farming Area, Small-scale Commercial Farming Area, Resettlement Scheme. Intensive Conservation Areas (ICA) were groupings of large-scale commercial farms established for the purposes of soil and water conservation, but were later also concerned with wildlife and other conservation aspects.

## Relationship between the number of cards submitted and the number of species

As might be expected, for the project as a whole, the more cards submitted for a QDS, the more species were recorded in that QDS (Figure 1). The relationship can be described by a non-linear asymptotic curve in which, to begin with, the number of species increases rapidly as effort (i.e. the number of cards) increases, but then begins to slow down until it approaches a theoretical maximum, the asymptote. The asymptote is 353 species, the average maximum number of species possible in a QDS using this sampling method averaged across the whole country. There is a wide scatter around the average, which reflects variation in the effort spent to sample a QDS per card submitted as well as the actual variation in the conditions within a QDS. In some parts of the country diverse topography and vegetation offers a variety of different habitats in a relatively small area, while in others the topography and vegetation are more uniform.

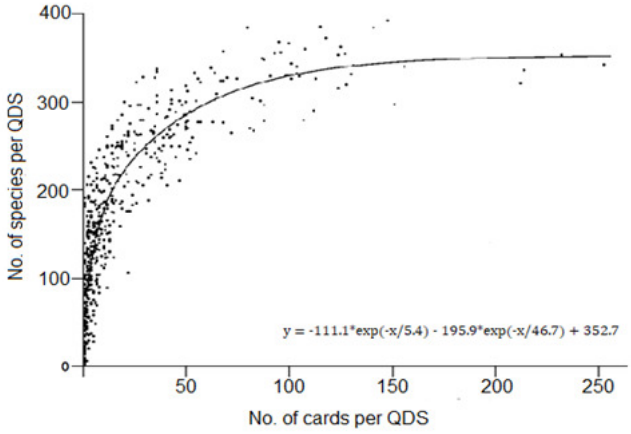



**Figure 1**. The relationship between the number of cards submitted for a QDS and the number of species recorded in that QDS. The curve was fitted by the equation shown on the figure.

The number of species is expected to be greater in the former than the latter. Each QDS covers about 625 km$^2$ and supports a range of habitat types, which requires an appreciable amount of time and effort to explore in any detail, and while some cards were the results of intensive exploration and wide coverage across a QDS, others were submitted after *ad hoc* observations of birds at a single site (even a single garden). Land use also affects the diversity of habitats and species (although the relationship is complex). More than 353 species (more than the potential maximum averaged for the project overall) were recorded in 16 QDSs (Table 1), all of which had active, knowledgeable resident birders submitting cards which are expected to be the result of greater than the average effort for the project. They were also in parts of the country with complex landscapes with a diversity of habitats (including aquatic habitats, which add significantly to the species total).

**Table 1**. The QDS where more than 350 species where recorded during SABAP1.

| QDS | Name of 1:50,000 map sheet | No. of species |
|---|---|---|
| 1832D3 | Mutare | 392 |
| 2131B1 | Chiredzi | 385 |
| 1730D3 | Norton | 384 |
| 1731A3 | Glendale | 384 |
| 1725D4 | Victoria Falls | 372 |
| 1630C1 | Jechenene | 366 |
| 1628D2 | Kariba | 362 |
| 1628B2 | Chirundu | 360 |
| 1725C4 | Kazungula | 358 |
| 2032B3 | Mt Selinda | 357 |
| 2028B2 | Heany Junction | 368 |
| 1730D2 | Mount Hampden | 356 |
| 1730C2 | Trelawney | 355 |
| 1829B4 | Kadoma | 354 |
| 2028B1 | Bulawayo | 353 |
| 1832B3 | Juliasdale | 353 |

The more cards that were submitted the smaller the proportion of new species (i.e. not already recorded) for a QDS. Thus, the model predicts that on average 50 cards will yield 286 species (81% of the theoretical potential total), 100 cards 330 species (93%), 150 cards 345 species (99%) and 200 cards 350 species (99%). This suggests that 50 and 100 cards might give adequate and good representations, respectively, of the avifauna in a QDS. In some cases, however, only a few cards gave an exceptionally large number of species. For example, only 20 cards were submitted for QDS 1825B3 (Kazuma Pan) with 301 species recorded in total, while 29 cards were submitted for QDS 1930C1 (Shurugwi) to give a total of only 205 species. It is unlikely that the potential number of species for the Shurugwi QDS is so much lower than for the Kazuma Pan QDS; the difference is due rather to differences in sampling effort made for each card submitted. The cards submitted for the Kazuma Pan QDS were the result of extensive exploration.

*Estimating sampling effort & coverage*

Harrison *et al.* (1997) considered that 20 cards would result in adequate sampling of a QDS but, for Zimbabwe, the average of 222 species from 20 cards is far fewer than the total number possible. They also based this assessment on "Southern Africa" as a whole, which includes ecosystems like the Nama Karoo that have far fewer bird species than the woodlands typical of tropical south-central Africa. Nearly 400 species were recorded for some QDSs (Figure 1) so, on average, the submission of 20 cards would result in little more than half the potential species being recorded. This potential total will include rarities, like migrant waders, which can pitch up anywhere, but many resident breeding species were also missed when only 20 cards were submitted. Those which are more difficult to find, like cryptic species or habitat specialists localised to a few sites within a QDS, were easily overlooked. This is problematic since habitat specialists are of most conservation concern, making them the most important to map. Thus, for tropical, wooded Zimbabwe with richer bird assemblages, the threshold of 20 cards or 200 species used by Harrison *et al.* (1997) is actually more appropriate for identifying which QDS require *more* exploration.

The variation in the intensity of sampling and coverage of a QDS per card submitted means it is more appropriate to use the number of species recorded as a surrogate for sampling effort in a specific QDS, rather than the number of cards submitted. Ecological conditions are partially responsible for the total number of species and it is unlikely that QDSs in the drier parts of the country will support as many as 400 species. But 300 or more species were recorded in QDSs in even the driest parts with an average rainfall below 400mm (Figure 2). Thus, a total potential number of 300-400 species is possible for QDSs right across the country. Here, a maximum total of 200 species recorded per QDS during SABAP1 is used to identify those QDSs where ⅓ to ½ of all species were missed. This threshold is used below to assess which areas and land-use types in Zimbabwe need to be sampled in more detail. First, though, the broad geographical patterns in sampling effort illustrated by number of cards submitted are explored.

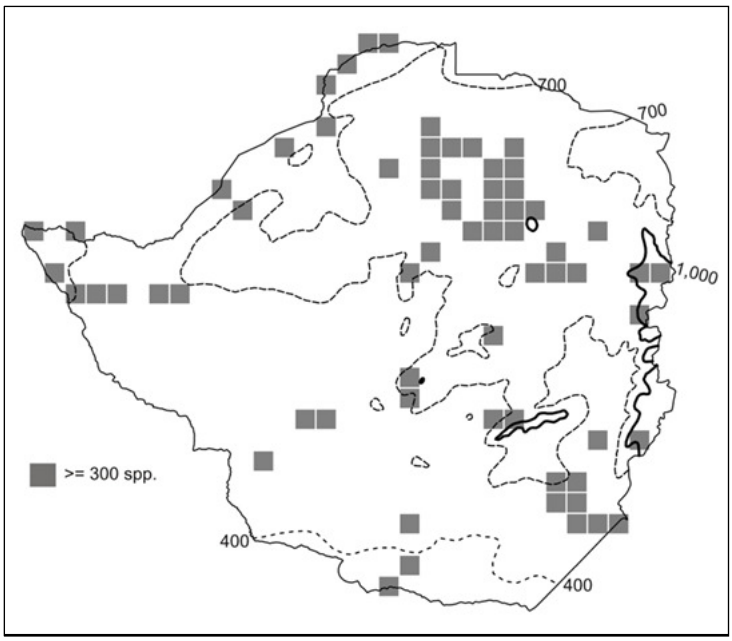



**Figure 2**. The distribution of QDSs from which at least 300 species were recorded, in relation to annual rainfall (mm).

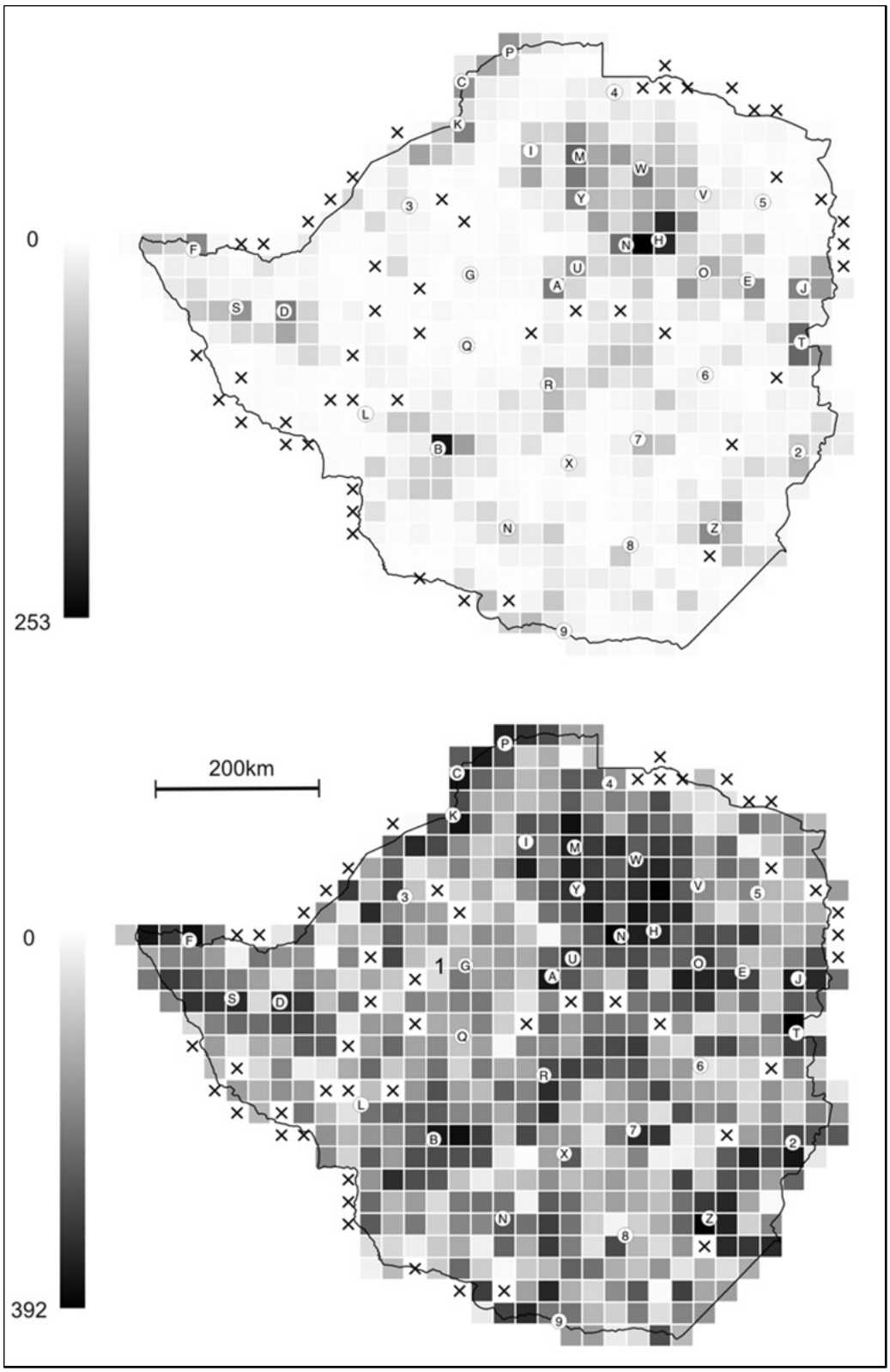



**Figure 3**. The variation across Zimbabwe of (a) the number of cards submitted per QDS and (b) the number of species recorded per QDS during the SABAP1 period. No cards were submitted for the QDS marked with an "x". A: Kadoma, B: Bulawayo, C: Chirundu, D: Dete, E: Headlands, F: Victoria Falls, G: Gokwe, H: Harare, I: Karoi, J: Juliasdale, K: Kariba Town, L: Sholotsho, M: Mhangura, N: Norton, O: Marondera, P: Mana Pools, Nyamepi HQ, Q: Nkayi, R: Gweru, S: Sinamatella Camp, Hwange NP, T: Mutare, U: Chegutu, V: Shamva, W: Mvurwi, X: Zvishavane, Y: Chinhoyi, Z: Chiredzi, 2: Chipinge, 3: Nenyunka, 4: Mushumbi Pools, 5: Mutoko, 6: Matasa, 7: Masvingo, 8: Rutenga, 9: Beitbridge

### Geographical variation in cards submitted per QDS

There was a wide variation in the number of cards submitted per QDS and while more than 200 cards were submitted for some, there were 47 QDS for which no cards were submitted. Of these, 27 were squares along the country's borders that may have included only a small portion of Zimbabwean territory (Figure 3a). The remainder were distributed across the country, mostly in the communal lands, but there was also a QDS from the southwest of Hwange NP and one in Battlefields ICA.

Generally, the well-sampled QDSs came from urban centres and the main tourist areas, reflecting the distribution of observers. Thus, more than 100 cards were submitted from the QDS for Harare, Bulawayo, Mutare, Chinhoyi, Kadoma, Chegutu, Chiredzi, Kariba Town, Chirundu, Mana Pools (QDS 1529C2 with the ZimParks accommodation), Victoria Falls, Hwange National Park (QDS 1826C2 and D2 with Hwange Main and Sinamatella camps), Bvumba and Juliasdale. Similarly, the dams with recreation parks (Chivero and Manyame) and other smaller tourist sites close to Harare, like Ewanrigg Botanical Gardens and Domboshawa also produced more than 100 cards. More than 100 cards were submitted for a number of QDSs in the large-scale commercial farming areas, Headlands-Rusape, Marondera West-Wedza North, Mvurwi-Ayrshire North, Chiredzi and, notably, Doma-Angwa North, Mhangura. Other areas with an appreciable number of cards were the QDS containing Bumi Hills Safari Lodge (Omay Communal Land; n = 91), Falcon College (n = 95) and the Darwendale-Trelawney (n = 93), Murodzi, Tatagura-Gwebi-Hunyani (n = 96) and Tengwe-Karoi Central (n = 88) ICAs.

Although there is broad agreement geographically between the number of cards submitted for a QDS and the number of species recorded (Figure 3b), the wide scatter shows that there were some QDSs where many more species were recorded than expected from the number of cards submitted (Figure 4). Most of these QDSs occur in communal lands and the less frequently visited parts of the conservation estate, where it is likely the data were collected in short, intensive visits, rather than by more long-term recording, and the submission of more cards, by resident observers.

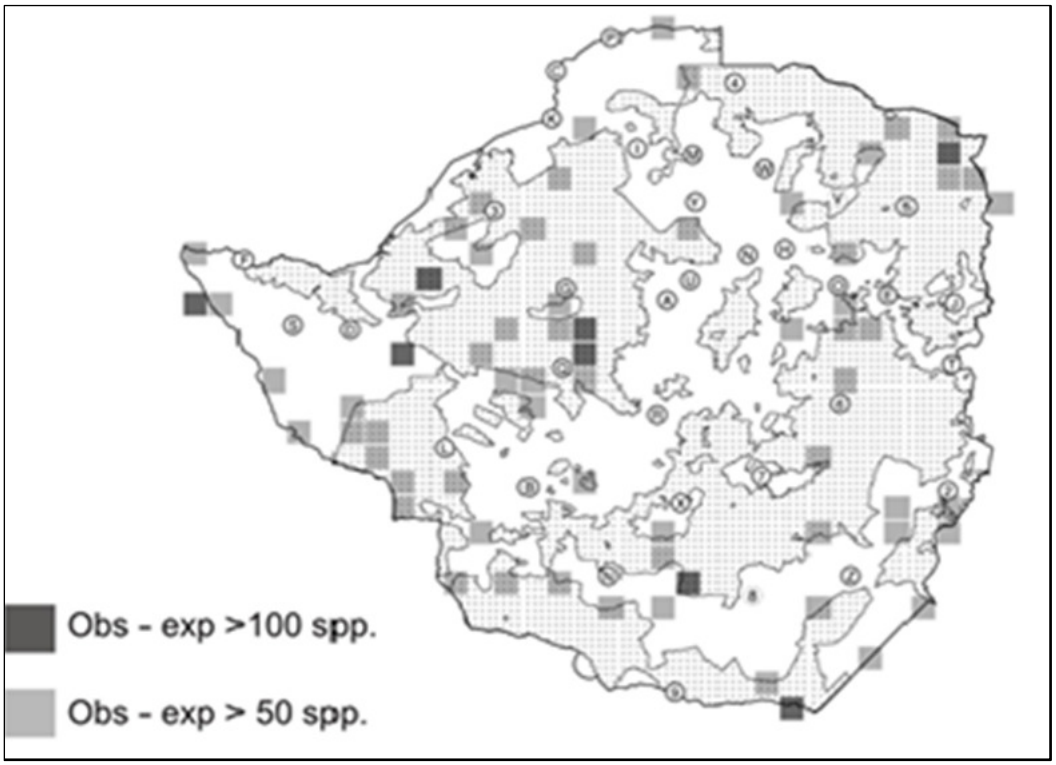



**Figure 4**. The locations of QDS where more than 100 and more than 50 species were recorded than expected from the number of cards submitted, as predicted by the relationship described in Figure 1. The communal lands are indicated by stippling. 'Obs" = observed, 'exp' = expected

### Variation in sampling effort in relation to land-use

***The conservation estate***

Fewer than 200 species were recorded from most of the QDSs covering the Parks and Wildlife Estate and other conservation areas, such as forestry land (Figure 5a). Large parts of Hwange and Gonarezhou national parks, especially the more remote sections away from tourist accommodation sites, were not well-sampled. Similarly, much of the Middle Zambezi Valley between Kariba and Kanyemba was poorly covered, with >200 spp. being recorded from only a few QDSs close to the Zambezi River and tourist accommodation. The same applied to the QDSs covering much of Chizarira National Park and the Chirisa and Chete safari areas, probably also reflecting their remoteness. The forestry estate in the northwest of the country was generally poorly sampled, while fewer than 100 species were recorded in the QDSs that cover the Hartley Safari Area and Mupfure Recreational Park. Both of these areas are seldom visited. In contrast, the Matusadona (except the southern parts) and Zambezi National Parks and much of Matetsi and Umfurudzi Safari Areas were relatively well-sampled. Appreciably more than 200 species would be expected in the smaller national parks and conservation areas in the Eastern Districts if they were sampled fully (except for Forest Land with extensive pine plantations and a depauperate avifauna). Consequently, the relatively low numbers of species recorded in the southern areas suggests that these areas were poorly covered.

***Large-scale commercial farming areas***

The commercial farming areas were relatively well-sampled during SABAP1, with at least 200 species recorded from most QDSs (Figure 5b). Those where fewer than 200 species were

recorded mostly bordered other land-use types, usually communal lands, that may have covered most of the QDS. However, there were significant parts of Mwenezi ICA, the Midlands ICAs (Sessombi, Bembezaan, Umniati-Sebakwe, Battlefields, Sokis, Gweru and Vungu and Mberengwa) and adjacent northern areas of Matabeleland South province (Inyati and Insiza-Shangani ICAs) which were not well-covered (which is also reflected by the number of cards returned from these ICAs; Figure 3a).

***Coverage in relation to major topographical regions***

It is important to assess coverage of major topographical regions since gaps in coverage or particular landscapes could potentially muddy biogeographical assessments of species distributions and their landscape ecology. There is a major distinction between the avifaunas of the Zimbabwe Plateau and major river valleys (Zambezi Valley and Save-Limpopo Valley) (Cizek 2002), and coverage of each is assessed here. The areas of the country with complex topography are also assessed, since species diversity is expected to be greatest in these parts. The major mountain and hill ranges, escarpments and inselberg and kopje massifs are defined in Figure 6ci by plotting all land where slope exceeds 1:20.

The Zambezi Valley was mostly poorly sampled (Figure 6a), except along the eastern shores of Lake Kariba and closer to the Zambezi River between Kariba Gorge and Kanyemba (where are the main tourist centres). Isolated QDSs with better coverage occur in the Dande South and Mzarabani CLs (see above). The Hwange Trough and Sebungwe region, and eastern parts of the Middle Zambezi Valley and Mazowe-Ruenya middleveld were particularly poorly covered, except for the northern parts of Umfurudzi SA and QDS 1632C1 (Rushinga). The Save-Runde Lowveld is better-known overall, but the middleveld communal lands, small-scale commercial farming areas and resettlement schemes of Chivi, Masvingo, Zaka, Bikita, Buhera and Mutare districts were poorly sampled. The Limpopo-Mwenezi middleveld and lowveld region was generally poorly covered, except in Beitbridge ICA and the northern parts of Limpopo ICA (see also Figure 3a).

The Zimbabwean Plateau was much better-sampled than the major river valleys (Figure 6b), especially the Mashonaland Plateau and central, watershed parts of the Central Plateau, where large numbers of cards were submitted from the commercial farming areas (Figure 3a). But the eastern parts of the Mashonaland Plateau, across the Murehwa, Mutoko and Makoni districts were not as well sampled. The northeast of the Mashonaland Plateau, the Mt Darwin and Shamva districts (including the eastern parts of Shamva ICA), were also neglected, as were the parts of Hurungwe District at its western edge. The north-western region, which includes the Mafungabusi Plateau in the east and Chizarira Plateau in the north, was especially poorly sampled. Understanding of bird distributions would benefit appreciably from better sampling of the drier parts of the Zimbabwean Plateau along the western border from the southern parts of Hwange National Park through the Tsholotsho and Bulalima-Mangwe districts into Matobo District at the southwest of the Central Plateau. Fewer than 200 species were recorded for the southern parts of the Central Plateau, too, yet these support a range of mountains and inselberg and kopje massifs (see Figure 6ci) which increase habitat diversity, and therefore avifaunal diversity, suggesting poor coverage (see Cizek 2012).

Appreciable parts of the Manica (=Eastern) Highlands were relatively well-covered (Figure 6c), notably from Nyanga to Mutare and around Chipinge, but other parts of this mountainous region were poorly sampled, especially the Sawunyama, Nyamaropa, Zimbiti and Makoni areas in the north, and the Chimanimani District in the south. Fewer than 200 spp. were recorded for most of the mountainous and hilly regions away from the Manica Highlands, too, except for the western and northern parts of the Matobo Hills (which includes the popular Matobo National Park), the Shurugwi hills and mountains, the hills and mountains in the Limpopo ICA (which includes Mt Towla), the hills and mountains in Masvingo District (including Kyle Recreational Park), the inselbergs in Bikita communal lands and the kopjes and inselbergs in the western parts of the massifs at the north-eastern edges of the Zimbabwean Plateau (Bindura and Mvurwi districts).

## Discussion

The SABAP1 project was a major effort by more than 1,000 people over 5 years to map bird distributions in Zimbabwe. The resultant database is very large with close to 100,000 records and improved knowledge of the distributions of many species occurring in Zimbabwe. Together with other distribution data for the country, e.g. specimens in the Natural History Museum of Zimbabwe, these data must make Zimbabwe one of the ornithologically best-known countries in Africa. Yet an appreciable proportion of species was missed by the SABAP1 sampling across large parts of the country. Birds which require more effort to find, such as cryptic species and habitat specialists localised to specific sites, are disproportionately under-represented in the collective SABAP1 database. The 20 cards or 200 species baseline identified by Harrison *et al.* (1997) is acceptable for common or conspicuous species, but the distribution maps in the atlas are less useful for uncommon, cryptic species and those with localised, patchy distributions. An example was the distribution of the Cinnamon-breasted Tit, where little more than half of the QDSs in which it is known to occur were mapped by the SABAP1 data (Cizek 2014).

Variation in coverage of the country was related both to land-use and accessibility for observers, which exposes some of the limitations of this kind of atlassing project. Birds were recorded where the observers occurred, either as residents or as visitors. The lack of observers in the communal lands, small-scale farming and resettlement areas which cover most of the country exposes the general lack of observation of birds across these areas. Birds were recorded in such areas by itinerant visitors, most likely passing through, while more detailed observations were restricted to special sites, like the "pitta patch" at Masoka, Dande South Communal Land, or by professional field-workers, notably the staff from the Natural History Museum. Security was a serious concern in some of these areas for some of the SABAP1 period, e.g. along the eastern border where the Renamo rebels were active in Mozambique, or along the Limpopo River where there were tensions with the apartheid government in South Africa, or in Matabeleland during the Fifth Brigade's campaign. These curtailed coverage by amateur birders, and were a concern even for civil service staff (Kit Hustler, personal communication, 2018).

While sampling by amateur birders might often be limited by the convenience of established accommodation, sampling by professional museum staff was led by the need to "fill in the

gaps" and the fact that there were relatively few QDSs that were not sampled at all (Figure 3) is testament to their efforts. This was an established feature of the museum's approach, which included the Rhodesian Schools Exploration Society expeditions (mentored by museum staff) that visited, for example, the Bikita and Chivi communal lands in 1969 and 1970 (Irwin 1969, 1970). But while some sites in the communal lands are better-known ornithologically than is reflected in the SABAP1 coverage, there are still very large parts of Zimbabwe which have never been sampled in any detail. This includes large parts of the Parks and Wildlife Estate where many QDSs in Hwange National Park had limited coverage during SABAP1. Gonarezhou National Park was never sampled in any detail by the museums (M.P.S. Irwin personal communication) and was poorly covered during the SABAP1 period. The avifauna of this park is poorly known and much work remains to be done simply to map the distributions of birds across Gonarezhou NP.

How can better coverage of the country be achieved so that the distributions of birds become better known? This is a necessary step towards developing a conservation strategy for the birds of Zimbabwe, since one can only ascertain the effectiveness of the conservation estate if bird distributions across the different parts of the estate are known. Simple checklists are not enough, especially for such vast areas as national parks, since there are patterns to the distributions of birds *within* these extensive parts of the estate. For example, which species have been lost from Gonarezhou National Park due to the extensive cultivation on the basalts in the north (see Cunliffe *et al.* (2012)? Coverage of the parts of estate with dangerous large mammals has always been a challenge for birders, which probably explains the variation in number of species reported from the more remote areas and in QDSs containing the main tourist sites where birders can survey the camps on foot. Access to more remote parts becomes more difficult as roads deteriorate away from the main tourist centres. For example, the poorly maintained roads in central parts of Gonarezhou NP made access from Swimuwini Rest Camp to the very unusual *Julbernardia globiflora* woodlands on the Guluene-Chefu watershed time-consuming, and these woodlands can only be surveyed thoroughly by a dedicated expedition, rather than brief visits by tourists from the nearest official accommodation (Cizek 2013).

Even more significant is the decline of reporting from the commercial farming areas, where the upheaval in the first decades of the 21st century resulted in the extensive loss of observers. Access to these areas is difficult for most observers and what were some of the most observed regions in Zimbabwe (and Africa) are now virtually devoid of birdwatchers. Therefore, there is a need for a strategy for sampling the avifauna in areas that amateur birders cannot reach, especially the very large areas covered by the former commercial farms and remote parts of the conservation estate. But resources are limited at professional institutions like the NHMZ, which only serves to highlight just how much voluntary, self-funded time and resources were spent by amateur birders to observe and record Zimbabwean birds in the 20th century. It is likely that this valuable contribution will continue where possible, including in the communal lands. These areas are now amongst the most accessible parts of the country, and while extensive areas are heavily transformed and may no longer support many habitat specialists, some still include important patches of key habitats and exciting birds. Boniface Magwizi, then of the NHMZ, took a specimen of the Olive Bush Shrike *Chlorophoneus olivaceus* from Mzarabani Communal Land during SABAP1 (Kit Hustler personal communication, 2018). The bird was taken >250 km from the nearest known population, likely from a very small, isolated population, possibly an undescribed subspecies, in the Zimbabwean Zambezi Escarpment. This locality was indicated without any comment in both Harrison *et al.* (1997) and *Roberts 7* – and is left out of the *Handbook of the Birds of the World* altogether (see https://www.hbw.com/species/olive-bush-shrike-chlorophoneus-olivaceus). What other gems wait to be recorded in Zimbabwe's communal lands?


## Acknowledgment

I am grateful to Kit Hustler for background information which helps to make sense of the patterns of sampling during SABAP1.


## References


Cizek, A.F. 2002. Patterns of distribution of Zimbabwean birds – implications for a land resettlement process. MSc thesis, University of Cape Town.

Cizek A. 2012. New records of some species in quarter-degree-squares along the southern edge of the Zimbabwean Plateau, and how can we improve distribution models? *Honeyguide* **58**: 126-130.

Cizek A. 2013. Interesting records from southern Gonarezhou National Park and Manjinji Pan Sanctuary. *Honeyguide* **59**: 95-97.

Cizek, A. 2014. A more complete distribution of the Cinnamon-breasted Tit in southern Africa. *Honeyguide* **60**: 21-29.

Cunliffe, R., Muller, T., & Mapaura, A. 2012. *Vegetation survey of Gonarezhou National Park, Zimbabwe*. Zimbabwe Parks and Wildlife Management Authority, Harare.

Harrison J.A., Allan D.G., Underhill L.G., Herremans M., Tree A.J., Parker V. & Brown C.J. (eds.) 1997. *The Atlas of Southern African Birds, vol. 1. Non-passerines & vol. 2. Passerines*. BirdLife South Africa, Johannesburg.

Irwin M.P.S. 1969. Ornithology report. In: *RSES (Matabeleland Branch) 19th Expedition: Bikita*. Rhodesian Schools Exploration Society, Bulawayo.

Irwin, M.P.S. 1970. Ornithology report. In: *RSES (Matabeleland Branch) 20th Expedition: Chibi*. Rhodesian Schools Exploration Society, Bulawayo.

Irwin, M.P.S. 1981. *Birds of Zimbabwe*. Quest Publishing, Harare



**A.F. Cizek**, *Ormskirk, UK*. ✉ anthonycizek@mac.com

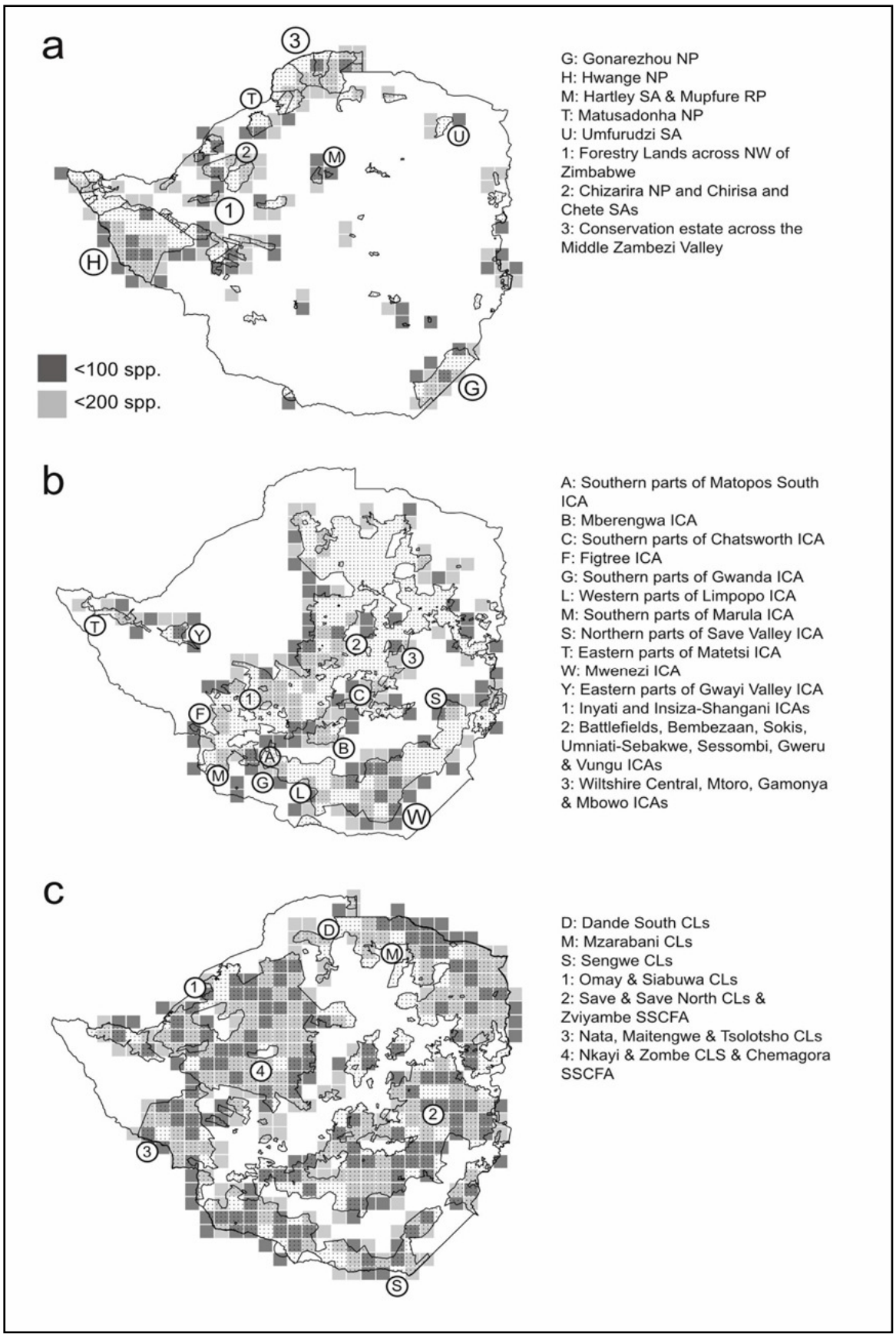



**Figure 5**. The less well-covered parts of Zimbabwe, with fewer than 200 species per QDS, in relation to land use: (a) conservation areas; (b) large-scale commercial farming areas, and (c) communal lands, small-scale commercial farming areas, and resettlement schemes.

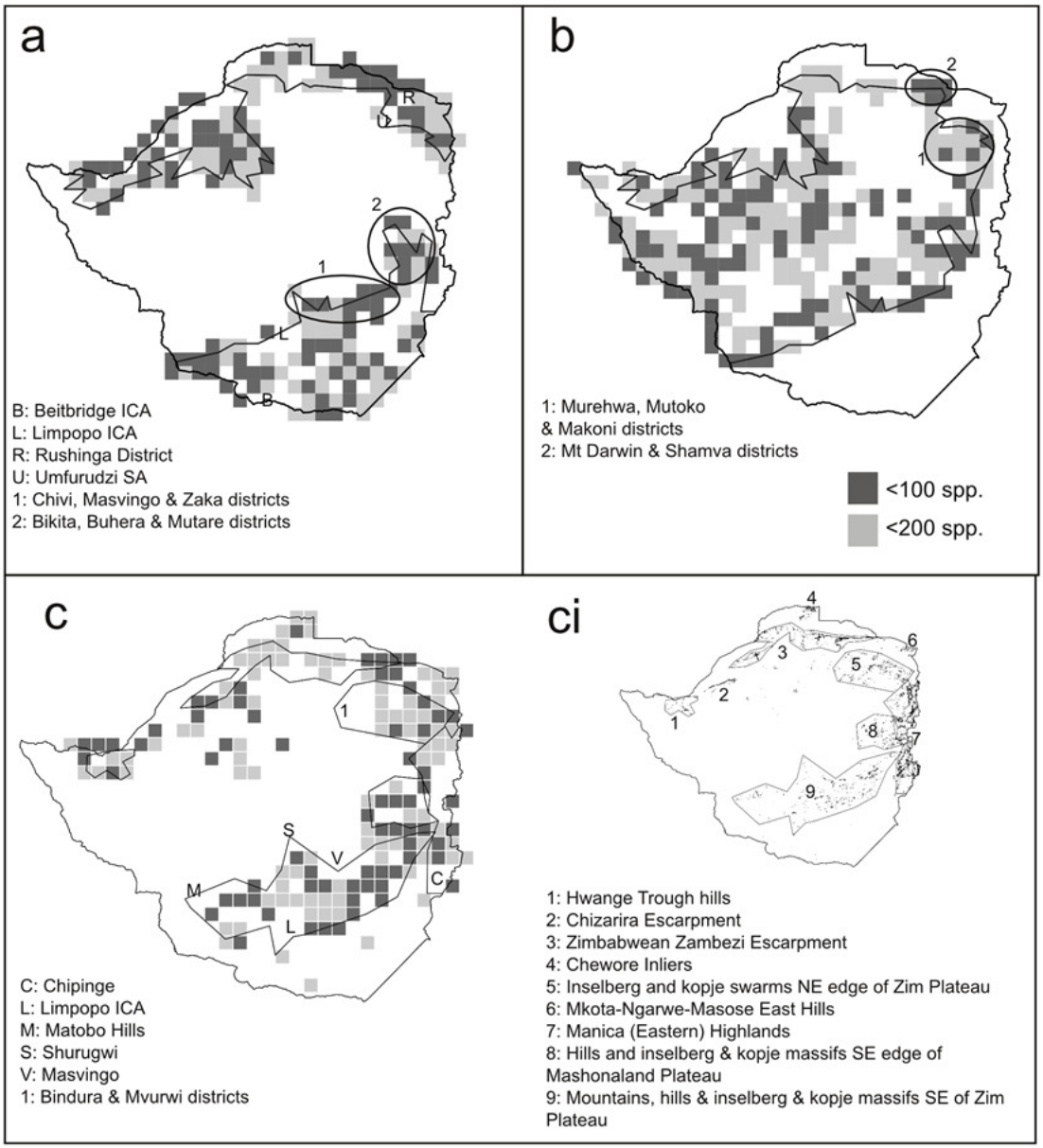



**Figure 6**. The less well-sampled parts of Zimbabwe by topographical region, where fewer than 200 species were recorded in a QDS. (a) The major river valleys (Zambezi Valley in the north, Save-Limpopo Valley in the south); (b) the Zimbabwean Plateau; (c) the major mountain & hill ranges, escarpments, & inselberg & kopje massifs of Zimbabwe – where slope exceeds 1:20 (as described in ci)

*Honeyguide* **65**(2): 89-91 (2019)

# On the Status and Breeding of Cormorants and the Darter in Zimbabwe

**D.A. Ewbank**

## Introduction

Heronries are a feature of many of the larger impoundments in Zimbabwe that were mostly constructed in the 20th century. This paper is the final section of a series of contributions on the breeding of solitary and colonial (both mono- and multi-specific) species in heronries along with solitary breeding by the species in the same families. The first of these contributions dealt with storks, ibises and the spoonbill (Ewbank 2009), the second with herons nesting in monospecific colonies (Ewbank 2013) and the third with herons breeding in multispecific colonies (Ewbank 2015). This paper discusses the three remaining species that breed in such colonies in Zimbabwe; the White-breasted Cormorant *Phalacrocorax lucidus,* Reed Cormorant *Microcarbo africanus* and African Darter *Anhinga rufa*.

These observations were taken from the literature, personal observations and the Nest Record Card System of BirdLife Zimbabwe up to 2001 (Msimanga 2003; Ewbank 2015). All averages are expressed as mean ± standard deviation.

## Results

### *Status*

All three species were generally present in small numbers and low densities at some Zimbabwean localities (Table 1). The White-breasted Cormorant was most numerous on the Manyame lakes (Chivero and Manyame) where nearly 600 birds were reported, with a density of around 2 $km^{-1}$ of shoreline. Much lower densities were recorded on Lake Mutirikwe and the Zambezi River. In contrast, the Reed Cormorant was most numerous on Lake Kariba with an estimated number of almost 5000 birds, with densities occasionally reaching 15 $km^{-1}$ of shoreline. The Darter was present in smaller numbers than the other two species, with the largest numbers being reported on the Manyame lakes. This is no longer the case, however, and darters appear to have disappeared from these lakes owing their susceptibility to fishing nets (Riddell 2014).

**Table 1**. Estimates of the number and densities (expressed as number per kilometre of river or shoreline) at some localities in Zimbabwe.

| | Locality | Date | Mean no. | Density (no $km^{-1}$) | Source |
|---|---|---|---|---|---|
| White-breasted Cormorant | Manyame lakes | 1987/97 | 569 | 2.1 | 1 |
| | L. Mutirikwe | 1966/70 | 58 | 0.2 | 2 |
| | Zambezi R. | Sep 89 | | 0.1 | 3 |
| | Zambezi R. | Apr 85 | | 0.5 | 4, 5 |
| Reed Cormorant | L. Mutirikwe | 1966/70 | 346 | 1.4 | 2 |
| | L. Kariba | 1984/85 | | 0-8.7 | 6 |
| | L. Kariba | 1986/87 | 4978 | 0.5-15.1 | 7 |
| | Umzingwane R. | 1984-90 | | 0.3 | 8 |
| | Zambezi R. | Sep 89 | | 0.7 | 3 |
| Darter | Manyame lakes | 1987/97 | 251 | 0.5 | 1 |
| | L. Mutirikwe | 1966/70 | 130 | 0.5 | 2 |
| | L. Kariba | 1985/86 | | 0.2-1.7 | 6 |
| | L. Kariba | 1986/87 | 94 | 0.1 | 7 |
| | Zambezi R. | Sep 89 | | 0.1-0.4 | 3 |
| | Umzingwane R. | 1984/90 | | 0.1 | 8 |

**Sources**: 1. Tree (1988, 1998); Mundy (1988); 2. Junor and Marshall (1987); 3. Ewbank (1991); 4. Hustler *et al*. (1986); 5. Wood & Tree (1992); 6. Eriksson (1994).

### *Breeding*

#### White-breasted Cormorant

The mean number of nests in the colonies was 21.7 ± 57.6 (n = 29) and 92% of the nest records were shared with other species, the most frequent of which were the Reed Cormorant and Darter (Table 2).

Regular nesting areas include Aisleby Farm, lakes Chivero and Mutirikwe, Manjinji Pan, Mpopoma Dam (Matobo National Park) and Ncema Dam near Esigodini. Less regular breeding was reported from Banket, Endeavour Farm (Gwebi), Gweru, Fort Rixon, Ngezi Dam, Nyamandhlovu, Seke Dam, Plumtree, Sebakwe Dam, Swatadzi R. (Trelawney area), Turk Mine, and Mazowe.

Nests were built in trees, such as *Kirkia, Syzygium* and acacias, either standing in water or on islands. The average height of the nests was 4.8 ± 2.9 m (n=16) and their diameter ranged from 60-120 cm. They were made of sticks, waterweeds, oxygen weed, grass, reeds, leaves, sedges and a few primary feathers. At regular sites the mean clutch size (excluding incomplete clutches of one) was 3.0 ± 0.9 (n = 34), the mean brood size was 2.3 ± 0.9 (n = 18). In contrast, at irregular sites the clutch sizes were slightly larger (3.6 ± 1.2, n

= 31) as were the brood sizes (2.8 ± 0.9, n = 12) but this is probably not a significant difference.

**Reed Cormorant**

The mean number of nests in the colonies was 43.6 ± 85.6 (n = 22) and 73% of nest records came from multispecies colonies. The most frequent species that shared colonies with this species were the White-breasted Cormorant, Darter, Grey Heron and Sacred Ibis (Table 1).

Regular nesting sites include Aisleby Farm, Lakes Chivero and Manyame, Greengrove dam in Harare, Lake Kariba (various localities including Binga) and Lake Mutirikwe. Areas where less regular breeding occurred include Chiredzi, Gonarezhou, Kwekwe, Runde River, Manjinji Pan, Nyamandhlovu, Limpopo River, Seke Dam, Save River, Sebakwe dam, Siachulaba, Swatadzi R., Triangle, Umzingwane River, and Hwedza.

Nests were sited on rocks, islands, anthills in reeds, trees (bamboo, bottlebrush, acacia, mopane, *Dichrostachys* and eucalyptus) and creepers. They were made of sticks, grass, water plants, weeds, sedges, and leaves. They measured 20-30 cm in diameter and 12 cm in depth, and they were located at an average height of 2.8 ± 2.8 m (n = 30). The mean clutch size at Binga in March/April 1960 was 3.2 ± 0.9 (n = 25) (G.F.T. Child) while at Lake Mutirikwe in Aug/Nov 1961 was 4.2 ± 0.9 (n = 28). At Lake Chivero (undated) clutches that were about to hatch, or had just hatched, contained an average of 4.0 ± 1.2 (n = 30) eggs or chicks (R. Jeffrey and C. Bartlett) and in May 1966 the mean clutch size was 2.9 ± 0.7 (n = 29) (R.K. Brooke). In Feb 1969 the average brood size was 3.3 ± 0.8 (n = 33) (J. Cooper). At Aisleby Farm in March/April 1978 the average clutch size was 3.7 eggs (n = 26) (Cooke *et al.* 1978). At other regular breeding sites, the mean clutch size was 3.3 ± 0.9 (n = 31) compared to 3.5 ± SD 0.7 (n = 14) at irregular ones.

**Table 2**. The number of nesting colonies of 13 waterbird species, with numbers not shared with any other species, and the numbers shared with other species. The numbers of the latter may add up to more than the total of shared nests because some colonies included more than two species.

| | | | Number of colonies shared with these species | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. of colonies | Not shared | Spoonbill | Sacred Ibis | Openbill | Black-crowned Night Heron | Yellow-billed Egret | Little Egret | Great White Egret | Cattle Egret | Black-headed Heron | Grey heron | Darter | Reed Cormorant |
| White-breasted Cormorant | 38 | 19 | 1 | 3 | 3 | 1 | 1 | 1 | 5 | 3 | 4 | 7 | 12 | 14 |
| Reed Cormorant | 52 | 3 | 8 | 10 | 4 | 6 | 3 | 5 | 9 | 7 | 19 | 24 | 35 | |
| Darter | 45 | 3 | 1 | 0 | 4 | 4 | 4 | 5 | 8 | 6 | 11 | 27 | | |
| Grey Heron *Ardea cinerea* | 38 | 1 | 1 | 4 | 6 | 4 | 4 | 5 | 8 | 6 | 19 | | | |
| Black-headed Heron *A. melanocephala* | 40 | 0 | 8 | 9 | 2 | 3 | 3 | 5 | 10 | 14 | | | | |
| Cattle Egret *Bubulcus ibis* | 25 | 7 | 0 | 8 | 2 | 3 | 3 | 4 | 5 | | | | | |
| Great White Heron *Egretta alba* | 11 | 5 | 0 | 2 | 3 | 3 | 3 | 3 | | | | | | |
| Little Egret *E. garzetta* | 6 | 1 | 0 | 1 | 1 | 3 | 3 | | | | | | | |
| Yellow-billed Egret *E. intermedia* | 5 | 0 | 0 | 0 | 0 | 3 | | | | | | | | |
| Black-crowned Night Heron *Nycticorax nycticorax* | 8 | 3 | 0 | 0 | 0 | | | | | | | | | |
| African Openbill *Anastomus lamelligerus* | 8 | 1 | 0 | 2 | | | | | | | | | | |
| Sacred Ibis *Threskiornis aethiopicus* | 13 | 0 | 8 | | | | | | | | | | | |
| African Spoonbill *Platalea alba* | 10 | 0 | | | | | | | | | | | | |

**African Darter**

There was an average of 27.4 ± 43.1 (n = 22) nests per colony and 97% of the nest records came from multispecies colonies (Table 1). The species most frequently sharing colonies with darters included Reed and White-breasted Cormorants, and Grey and Black-headed Herons.

Regular breeding sites included Aisleby Farm, Lake Chivero, Lake Kariba (various localities including Binga), Lake Mutirikwe and Sebakwe Dam. Irregular breeding sites include Beit Bridge, Chinhoyi, Chiredzi, Doddieburn Ranch, Esigodini, Fort Rixon, Gweru, Kezi (Matobo Communal Land), Khami Dam, Mandavu Dam (Hwange NP), Manjinji Pan, Mutirikwe R., Mana Pools, Mutare, Nyamandhlovu, Seke Dam, Save-Chinga Pans, Sebungwe, Swatadzi, Tamboharta Pan (Gonarezhou NP), Triangle, and Hwedza.

Nests were built on emergent trees (e.g. musasa, marula, acacia, *Combretum, Ziziphus*) or trees (e.g. figs, acacias) on termite mounds or islands. They were made of sticks, leaves (including those from musasa and mopane trees), grass, roots, reeds and sedges. They measured 22-30 cm in diameter, and were at an average height of 3.5 ± 2.4 m (n = 46). In a colony at Binga there was no difference between mean clutches sizes in

nests at heights below 4 m (3.0 eggs; n = 22) and those above 4 m at (3.1 eggs; n = 15). The average clutch size of eggs laid between 23 February and 01 April 1959 at Binga was 4.1 ± 0.8 (n = 47) and 3.7 ± 0.7 (n = 28) when laid between 22 April and 28 May. At Kariba the average brood size in April was 3.0 ± SD 1.8 (n = 45) compared to 3.5 ± 0.9 (n = 116) in June 1961 (G.F.T. Child). At Lake Chivero in May 1966 the average clutch/brood size was 3.2 ± 0.9 (n = 25) (G.R. Thompson) and 3.1 ± 1.1 (n = 63) in December 1968 and August 1969 (J. Cooper).

## Discussion

These three species, plus the Grey Heron, were the species most regularly recorded in Zimbabwe heronries (Ewbank 2015). White-breasted Cormorants were recorded breeding in almost half of the fifty-year span of this study using a total of ten sites regularly and a further twelve sites irregularly with a mean number of nearly 22 nests in each colony. Reed Cormorants were recorded breeding in almost as many years using a total of at least ten sites regularly and a further fifteen sites irregularly with the mean number of nests being 44 at each colony. Their colonies were therefore approximately twice as large as those of the other two species. Darters bred in over half of the 50-year span but used only five sites regularly and a further 23 sites irregularly, with a mean of around 27 nests per colony. Two of these sites, Lake Chivero and Aisleby Farm, were regular breeding sites for all three species.

Half of the White-breasted Cormorant colonies were monospecific, i.e., not shared with any other species, a much higher proportion than the Reed Cormorant (6%) or Darter (7%). The reason for this may be its larger nests and its propensity to breed in winter; 64% of breeding records are from April to June, compared to 27% and 31% for Reed Cormorants and Darters, respectively (Irwin 1981).

There were apparently few heronries in Zimbabwe prior to colonial occupation and only the Yellow-billed Egret and Openbill were recorded breeding in the Plumtree/Hwange pan area (Ewbank 2009; 2015) and breeding records were scarce until the 1970s (Vernon 1976). The reasons for this scarcity are unclear. Perhaps the seasonality of the rivers did not enable these birds to maintain large populations or else there was a shortage of suitable breeding sites.

Most heronries in Zimbabwe are situated on emergent trees or rocks and nests are constructed from twigs or reeds, which are readily available materials. The importance of suitable nest sites is indicated by the colony of Reed Cormorants that once nested on at Mazowe Dam using a 'gum tree on an ant heap' (Priest 1933). This presumably disappeared at some point and these cormorants no longer breed there. Similarly, White-breasted Cormorants used a tree at Mpopoma Dam (Matobo National Park) between 1980 and 1996 but only in years when the base of the tree was standing in water. These birds have declined at the Manyame Lakes due to poaching (Rockingham-Gill 2015) necessitating a review of numbers elsewhere in Zimbabwe to see if this is a local problem or a wider decline. The White-breasted Cormorant was apparently absent from the Lake Kariba area after construction but appeared in the 1980s apparently in response to low water levels opening up its niche. Breeding was also reported within a mixed colony with Reed Cormorant; these birds had larger nests on the outer branches of the colony (Hustler *et al* 1986).

Lake Kariba and the Manyame lakes are the most important sites in Zimbabwe for all three species. It is unlikely that the population of Reed Cormorant exceeds 10,000 birds in Zimbabwe with the other two species a fraction of this and only a small proportion of these actually breed in the country. The creation of Lake Kariba led to a large increase in the numbers of Reed Cormorant and Darter, but whether the recent increase in White-breasted Cormorant (Hustler *et al.* 1986) will produce significant numbers remains to be seen. The loss of the Manyame lakes as breeding sites is a blow to these otherwise common species.

## Acknowledgements

Thanks to the organisers and contributors to the Nest Record Card system.

## References

Eriksson, M.O.G.1994. Waterbird densities at Lake Kariba during a period of extremely low water level in 1984-1985. *Honeyguide* **40**: 4-15.

Ewbank, D. A. 1991. Numbers of waterbirds over a section of the Zambezi River, Zimbabwe. *Honeyguide* **37**: 160-164.

Ewbank D.A. 2009. Notes on populations and breeding of storks, ibises and spoonbills in Zimbabwe. *Honeyguide* **55**: 22-27.

Ewbank, D.A. 2013. Breeding of herons in Zimbabwe: monospecific colonial & solitary nesters. *Honeyguide* **59**: 104-111.

Ewbank, D.A 2015. Breeding of herons in Zimbabwe: multi-species heronries. *Honeyguide* **60**:16-24.

Ewbank D.A. 2015. Aquatic birds on a mid-altitude river in Zimbabwe. *Honeyguide* **61**: 32- 44.

Hustler, K., Eriksson, M.O.G. & Sharpe, C. 1986. Status of White-breasted Cormorant in the Middle Zambezi Valley. *Honeyguide* **32**: 42.

Hustler, K. & Marshall, B.E. 1996. The abundance and food consumption of piscivorous birds on Lake Kariba, Zimbabwe-Zambia. *Ostrich* **67**: 23-32.

Irwin, M.P.S. 1981. *Birds of Zimbabwe*. Harare: Quest Publications.

Junor, F.J.R. & Marshall, B.E. 1987. Factors influencing the abundance of piscivorous birds on Lake Kyle, Zimbabwe. *Ostrich* **58**: 68-175.

Msimanga A. 2003. Nest Record Card Scheme; report for the period 1995-2001. *Honeyguide* **49**: 213-227.

Mundy, P. 1988. Manyame Lakes waterbird survey. *Honeyguide* **34**: 63-65.

Priest, C.D. 1933. *The birds of Southern Rhodesia*, Volume 1. Edinburgh: William Clowes.

Riddell, I.C. 2014. African Darter mortality from fishing nets at Lake Urema, Gorongosa National Park, Mozambique. *Honeyguide* **60**: 35.

Rockingham-Gill, D.V. 2015. Review of waterbirds in Zimbabwe in 2014-2015. *Honeyguide* **61**: 97-119.

Tree, A.J. 1988. Results of the Manyame Lakes waterbird survey – October 1987. *Honeyguide* **34**: 19-24.

Tree, A.J. 1989. Results of the second Manyame Lakes waterbird survey. *Honeyguide* **35**: 12- 17.

Vernon, C.J. 1976c. Heronries in Rhodesia in 1973/74. *Honeyguide* 86: 25-29.

Wood, P.A. & Tree, A.J. 1992. Zambezi survey – October 1991. *Honeyguide* **36**: 54-59.

**D.A. Ewbank**, *Ely, UK* (edited posthumously).

*Honeyguide* **65**(2): 92-94 (2019)

# Observations on Raptors in the Savannas South of Bulawayo, 1971-78

**David Ewbank**

## Introduction

A checklist of the raptors of the Matobo area (MacDonald & Gargett 1984) includes population estimates for the park area in the hills but there have been no estimates of raptor populations in the surrounding savannas, apart from a six-month study by Aumann (1997). Road counts are a useful technique for surveying diurnal raptor populations and assessing fluctuations but they only give realistic figures for some species (Herremans & Herremans-Tonnoeyr 2001). The only published road counts from Zimbabwe are those of Vernon (1979) and Brandl *et al.* (1985) and this paper reports the results of counts made by Val Gargett between 1971 and 1978. She made a series of 1102 raptor counts along the Bulawayo/Matobo road, a distance of 30 km (giving a total of 33 060 km), between 1971 and 1978, with 70% of them being carried out between April and August (Gargett 1990). The area is mostly combretum and acacia savannas with cattle ranching being the main agricultural activity (Vernon 1967). Cattle densities in Matabeleland average around 13 ha per head (Kay 1970) which compares with around 8 ha per head on Cyrene. Over fifty mammal species (excluding Chiroptera) were recorded by the author on Cyrene in the 1970s, both as sightings and as prey records, while 75 reptile species were reported in the area (Broadley & Wilson 2012).

## Methods

Mean annual rainfall for the Matobo and Bulawayo was obtained from Gargett *et al.* (1995) and Goetz Observatory (personal communication) respectively, and the averages used to estimate the annual rainfall over the survey area [**Editor's note**: These rainfall estimates were not included in the manuscript and David Ewbank died before it was possible to obtain them from him]. These can be divided into lower and higher rainfall years to obtain graphs for the major species. These counts can be used to compare with the unusual situation at Aisleby farm where checklists are available for the period 1963 – 2010 (Ewbank 2014). Black-shouldered Kites were present throughout the year, with more birds being present in years of high rainfall, except for February and March which is the peak laying month (Irwin 1981). There were fewer breeding records west of Gweru in years of lower rainfall (BLZ Nest Record Cards). In 1976 these birds were found to feed mainly on diurnal rodents (Ewbank 2014), the populations of which in wetter seasons in Matabeleland (Wilson 1968).

## Results and Discussion

A total of 1400 birds belonging to 29 species were recorded in the counts with four of them, the Black-shouldered Kite, Yellow-billed Kite, Tawny Eagle and Steppe Buzzard, making up 84% of the total numbers counted (Table 1). Black-shouldered Kites were present throughout the year with more birds in high rainfall years except for February and March (Figure 1a) which is the peak laying month (Irwin 1981). There were fewer breeding records, and none in dry years, from west of Gweru (BLZ nest record cards). The diet of the Black-shouldered Kites on Cyrene in 1976 was mainly diurnal rodents (Ewbank 2014). The populations of these birds fluctuate and can be much higher in wetter years in Matabeleland (Wilson 1968).

The Yellow-billed Kite is a migratory species with a mean arrival date of 3 September, with the earliest arrival being recorded on 10 Aug 1977, and a mean departure date of 4 March with the last bird being recorded on 26 May 1975. The departure dates seem to be rather later in years of higher rainfall (Figure 1b). Birds appear to move on earlier in lower rainfall years as mean higher numbers are recorded in later months. This supports the view in Harrison *et al.* (1997) that the nomadic birds from further north did not pass through the area post-breeding. Breeding is irregular in the area with some sites on Cyrene only being used irregularly for a few years but others, for example, at Maleme or Hillside Dams have a long history of occupancy. This species is known for its catholic diet (Ewbank 2016). The nest record cards list fish, frogs, snakes (road casualty), a gecko, a Grey-hooded Kingfisher *Halcyon leucocephala,* chickens and young ducks (both wild & domestic) and rats at their nests, illustrating the wide range of its diet. There are also records of them taking termites in the area.

More Tawny Eagles were seen between September and March i.e. the non-breeding season (Irwin 1981) with more birds present in higher rainfall years and with more birds being present between April and July in years of lower rainfall (Figure 1c). Breeding sites were usually occupied irregularly, for example, a nest at Lonsdale Kopje was used in 1967 and 1968 but not again until 1981 (personal observation; nest record cards). Prey remains from the area include a wide range of vertebrates such as mammals (including bovid carrion), birds up to the size of Helmeted Guineafowl *Numida meleagris,* and reptiles (including a Snouted Cobra *Naja annulifera*). A proportion of this is taken as carrion including a Secretarybird *Sagittarius serpentarius* whose feathers were found under an active nest site on the Matopos Research Station (MacDonald and Ewbank, unpublished). This is very similar to findings from the Esigodini area, some 30 km to the east (Steyn 1980).

The mean arrival date for Steppe Buzzards was 20 October with the earliest record being 14 October 1977 while the mean departure date was 4 March with the last bird being recorded on 18 April 1975. As with the other species, there were more individuals in years of higher rainfall (Figure 1d). The diet of Steppe Buzzards has not been studied closely in Southern Africa but they appear to take mainly small rodents and insects (Hockey *et al.* 2005).

Another nineteen species were seen more than once, with six being seen more than ten times. Dark Chanting Goshawks were mostly seen between June and October in 1974, while half of the Secretarybird records came from September. The Black-chested Snake Eagle was the next commonest eagle with most records between March and September, followed by Bateleur as the third commonest eagle throughout the year. Two other migrants, the Black Kite and Steppe Eagle were seen between October and February, sometimes in large numbers (although this is not reflected in Table 1). Apart from the five Palaearctic migrants, only the three vulture species and the Long-crested Eagle have not been recorded breeding in the Bulawayo/Matobo area.

**Table 1**. The numbers of raptors counted along the Bulawayo-Matobo road between 1971 and 1978 (from Gargett 1990)

| Species | Number | Comments |
|---|---|---|
| Black-shouldered Kite *Elanus caeruleus* | 582 | More frequent in January to September |
| Yellow-billed Kite *Milvus aegyptiacus* | 324 | Most September to March |
| Tawny Eagle *Aquila rapax* | 136 | Over winter months |
| Steppe Buzzard *Buteo buteo* | 132 | October to March |
| Dark Chanting Goshawk *Melierax metabates* | 35 | April to December |
| Bateleur *Terathopius ecaudatus* | 31 | February to November |
| Black Kite *Milvus migrans* | 26 | November (*c*. 1000 once) to February |
| Black-chested Snake-eagle *Circaetus pectoralis* | 23 | Most March to September |
| Wahlberg's Eagle *Hieraeetus wahlbergi* | 22 | September to March |
| Secretarybird *Sagittarius serpentarius* | 20 | Half in September |
| Brown Snake-eagle *Circaetus cinereus* | 12 | May to August |
| Gymnogene *Polyboroides radiatus* | 8 | February to November |
| Martial Eagle *Polemaetus bellicosus* | 8 | June/July & once November |
| Gabar Goshawk *Melierax gabar* | 5 | September to May |
| Lanner Falcon *Falco biarmicus* | 5 | November to May |
| Steppe Eagle *Aquila nipalensis* | 4 | October to February |
| African Hawk-eagle *Hieraeetus spilogaster* | 4 | June and October |
| Little-banded Goshawk *Accipiter badius* | 4 | March to July |
| Booted Eagle *Hieraeetus pennatus* | 3 | November |
| Rock Kestrel *Falco rupicolus* | 3 | June to September |
| Lizard Buzzard *Kaupifalco monogrammicus* | 2 | July |
| White-backed Vulture *Gyps africanus* | 2 | March (30) and November |
| Eurasian Honey Buzzard *Pernis apivorus* | 2 | February & July |
| Cape Griffon *Gyps coprotheres* | 1 | June |
| Lappet-faced Vulture *Torgos tracheliotos* | 1 | July |
| Lesser Spotted Eagle *Clanga pomerina* | 1 | November |
| Long-crested Eagle *Lophaetus occipitalis* | 1 | October |
| Ovambo Sparrowhawk *Accipiter ovampensis* | 1 | June |
| Peregrine Falcon *Falco peregrinus* | 1 | July |
| Greater Kestrel *Falco rupicoloides* | 1 | April |
| Total | 1400 | |

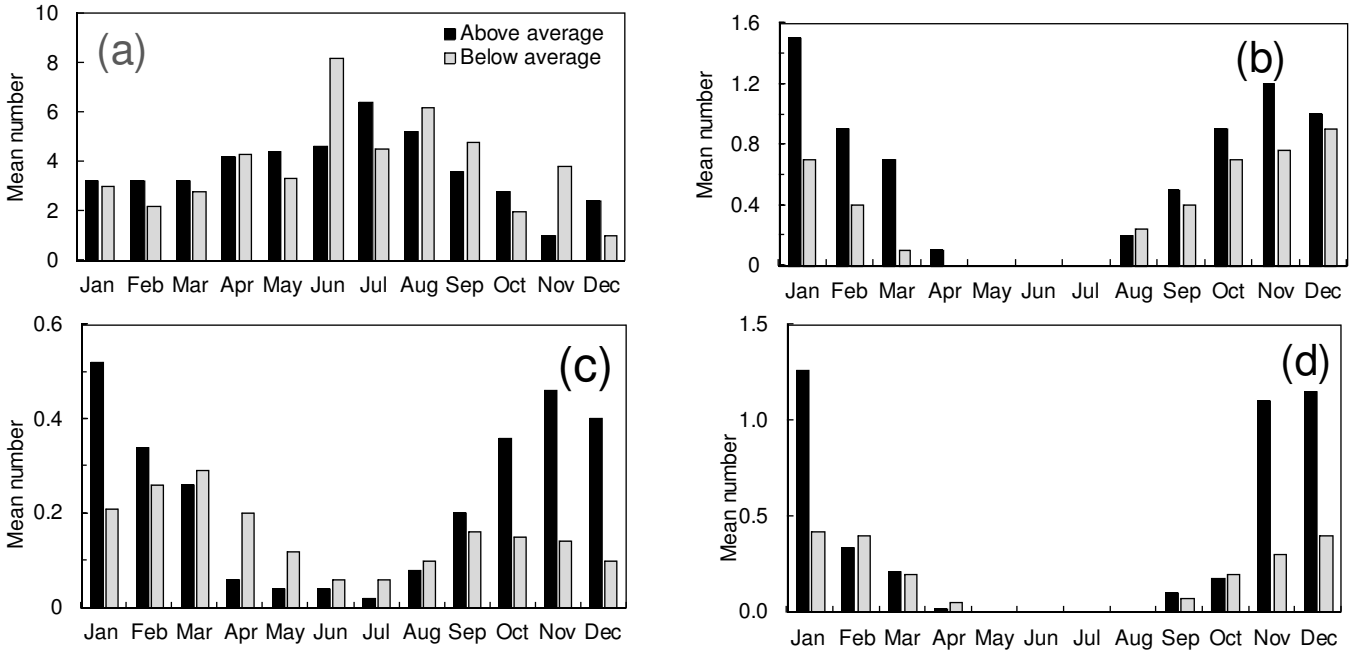



**Figure 1**. Monthly counts of (a) Black-shouldered Kite, (b) Yellow-billed Kite, (c) Tawny Eagle and (d) Steppe Buzzard along the Bulawayo-Matopos Road, 1971-1978. Shading is the same in all panels.

Raptors have been studied in the area for over a hundred years since the first published works by Chubb (1908) and Mouritz (1915). Many of Mouritz's records refer to the Matopos Research Station/Figtree area and he recorded 14 species north of the Matobo Hills. However, he only mentions one record of the Black-shouldered Kite (from Matopos Dam) and there are no records in Shelley (1882), Hellmayr (1902), Chubb (1908), Roberts (1935) or Rudebeck (1955) who report on old collections made in the Bulawayo/Matobo area in the 19th Century. This suggests that this species along with the Yellow-billed Kite (Ewbank 2016) were less common then than they are today.

The results of a raptor study on commercial farmland near Matobo between April and October 1993, after a just below average rainfall season (Aumann 1997) differed to some extent from those reported here. This must reflect habitat differences since the most frequently seen species was the Black Eagle *Aquila verreauxii*, which along with the Augur Buzzard *Buteo augur,* was not seen on the road counts because there were no kopjes along the route. The next commonest species were the Yellow-billed Kite and Wahlberg's Eagle, rather surprisingly, as both species were absent for half the study period. The Brown Snake Eagle was commoner than the Black-chested Snake Eagle, which is the opposite to the findings of this study. This is also a reflection of habitat since the Brown Snake Eagle is more frequent in the Matobo Hills than in the woodland along the Bulawayo-Matobo road (Gargett 1990). The few sightings of Dark Chanting Goshawk confirm the suggestion that these species are more common in high rainfall years. The Greater Kestrel record is the first in the area since Mouritz (1915).

## References


Aumann, T. 1997. Sightings of diurnal raptors in relation to habitat and land use in the Matobo Hills, Zimbabwe. *Journal of African Raptor Biology* **12**: 2-8.

Brandl, R., Utschick, H. & Schmidtke, K. 1985. Raptors and land-use systems in southern Africa. *African Journal of Ecology* **23**: 11-20.

Chubb, E.C. 1908. On the birds of Bulawayo. *Ibis* **51**: 140-172.

Broadley, D.G. & Wilson, V.J. 2012. The reptiles and amphibians of the Matobo Hills, Zimbabwe. *Arnoldia Zimbabwe* **10**(28): 309-340.

Ewbank, D.A. 2014. Changes in the status of raptors on Aisleby Farm, Bulawayo; 1965-2010. *Gabar* **25**: 43-61.

Ewbank, D.A. 2016. Yellow-billed Kite in southern Matabeleland; then and now. *Honeyguide* **62**: 134-135.

Gargett, V.1990. *The Black Eagle: A Study.* Acorn Books and Russel Friedman Books, Johannesburg.

Gargett, V., Gargett, E. & Damania, D. 1995. The influence of rainfall on Black Eagle breeding over 31 years in the Matobo Hills, Zimbabwe. *Ostrich* **66**: 114-121

Harrison, J.A., Allan, D.G., Underhill L.G., Herremans, M., Tree, A.J., Parker, V. & Brown, C.J. 1997. *The atlas of southern African birds*, Volume 1. Johannesburg; BirdLife South Africa.

Hellamyr, C.E. 1902. Übersicht der von Dr. A. Penther in Südafrika gesammelten Vögel. *Journal für Ornithologie* 50: 210-237.

Herremans, M. & Herremans-Tonnoeyr, D. 2001. Roadside abundance of raptors in the Western Cape Province, South Africa: a three-decade comparison. *Ostrich* **71**: 96 -100.

Hockey, P.A.R., Dean, W.R.J., & Ryan, P., eds. 2005. *Roberts' Birds of Southern Africa.* Cape Town: John Voelcker Book Fund.

Irwin, M.P.S. 1981. The Birds of Zimbabwe. Quest Publishing: Salisbury.

Kay, G. 1970. *Rhodesia: a human geography*. London: University of London Press.

MacDonald, I.A.W. & Gargett, V. 1984. Raptor density and diversity in the Matopos. *In*: Ledger, J.A. (ed.) Proceedings of the Fifth Pan-African Ornithological Congress, Lilongwe, Malawi, 1980. Southern African Ornithological Society: Johannesburg: pp. 287-308.

Mouritz, L.B. 1915. Notes on the Ornithology of the Matopo District, Southern Rhodesia. *Ibis* **57**: 185–216.

Roberts, A. 1935. Dr. H. Exton and his unpublished notes on South African birds. *Ostrich* **6**: 1-33.

Rudebeck, G.E. 1955. On an old collection of birds from the Western Transvaal and adjoining areas. *In*: Rudebeck, G.E. (ed.) *South African animal life. Results of the Lund University Expedition in 1950-1951.* Stockholm: Lund Museum: pp 552-575.

Shelley, G.E. 1882. On a collection of birds made by Mr. J. S. Jameson in South-eastern Africa, with Notes by Mr. T. Ayres. *Ibis* **24**: 236-265.

Steyn, P. 1980. Further observations on the Tawny Eagle. *Ostrich* **51**: 54-55.

Vernon, C.J. 1967. The acacia savanna avifauna of Bulawayo, Rhodesia. *South African Avifauna Series* No. 43: 45 pp.

Vernon, C.J. 1979. Notes on birds of prey in Zimbabwe-Rhodesia. *Honeyguide* No. 99: 28-30.

Wilson, V. J. 1968. Notes on the breeding and feeding habits of a pair of Barn Owls, *Tyto alba* (Scopoli) in Rhodesia. *Arnoldia (Rhodesia)* **4**(34): 1-4.



**D.A. Ewbank**, *Ely, UK* (edited posthumously).

*Honeyguide* **65**: 95-104 (2019)

# The breeding biology and moult of Ayres' Eagle

**Kit Hustler & Kevin Barry**

## Introduction

Ayres' Eagle *Hieraaetus ayresii* is inexplicably rare across its geographical range and speculation around the reasons for this apparent rarity were published in Brown (1974), at that time based on one of the few known breeding records of the species. Its breeding biology is poorly known (Tarboton 2011) and most breeding records are from Kenya (Brown 1966, 1974), Zimbabwe (Irwin 1981, Hartley & Mundy 2003a) and Zambia (Dowsett *et al*. 2008).

The increased interest in bird watching and twitching has resulted in Ayres' Eagle becoming a desired species on a 'life list' and birders are looking out for them as a result. The corresponding increase in number and accuracy of field guides has led to an increased number of sightings of this eagle, particularly in urban areas. Digital technology has made it much easier to photograph birds and confirm sightings, while social media has enabled these sightings to be recorded with pages dedicated to reporting them. All these have facilitated the recording of sighting of Ayres' Eagle, mostly from urban areas where most bird watchers live.

Some southern African records are of non-breeding individuals, which feed on the numerous feral pigeons in our cities and towns. Their occurrence in urban areas is anticipated by bird watchers and photographers, but loathed by pigeon racers, as they regularly feed on racing pigeons caught in the air, and are often shot as a result (Hartley & Mundy 2003b). This of course is a potential conservation issue that needs to be addressed since raptors are declining almost everywhere. If one goes to the right place, at the right time of year in urban centres like Bulawayo, in Zimbabwe, one is almost guaranteed to find an Ayres' Eagle (Lendrum 1982, KH personal observation). During the breeding season, there are no birds in these 'guaranteed' spots and they appear to leave, presumably for their breeding sites. The large number of sightings in urban areas has not been followed by an increased number of breeding records, however, and breeding sites remain as elusive as ever.

Their rarity has meant that egg collectors have made a concerted effort to find and locate nests and most of them aimed to have at least one clutch of as many local breeding species in their holdings, as possible. These individuals know how to find nests and have the motivation to travel to suitable habitats to look for them. They often have extensive field knowledge of the species they are looking for and when they have found them, have meticulously documented what they have found. These notes often include ecological information, photographs and anecdotal observations about the nests they have found. Some of these notes are so meticulous, that when compiled, it is possible to predict the likelihood of the occurrence of the same species in different parts of the country, with some accuracy. None of this has ever been published or publicised because of fear of being prosecuted and as a result the egg collecting fraternity is a closed shop. Part of the motivation for this publication was to collate as much of this information as possible, before it is taken to the grave and is lost forever. Most egg collectors that we contacted agreed with these sentiments and were very forthcoming with their information.

In this paper, we have collated the information obtained from collectors who have found active Ayres' Eagle nests. They generously provided copies of their field notes, photographs, thoughts about the species and anecdotes, which provided the data that we have used. This included locations (which are not published here), information on nest trees, nest sizes, leaves used for lining, clutch sizes, measurements, patterns, ecological insights and more. Their anecdotes about the habitat in which they found nests and 'gut feelings' about what was going on in the habitat around them, have also been taken into consideration. We analysed the moult of individuals in photographs taken of Ayres' Eagles in different months posted on different group pages on Facebook. These provided an unexpectedly accurate and reasonable data set on the moult sequence of Ayres' Eagles when they visit our cities, mostly during the non-breeding season.

## Methods

Egg collectors thought, or known, to have Ayres' Eagle clutches in their collections were approached for information and they generously provided data on these. Data on tree species, position and dimensions of nests, egg sizes and weights, laying dates and any other information that might have added to the overall information of the breeding biology of the species were recorded. Nests found with young were backdated based on an incubation period of 45 days and nestling period of 75 days to estimate the approximate laying dates (Tarboton 2011). Anecdotal comments made by individual collectors about nests they found, which were repeated independently, were specifically searched for and these are included where deemed relevant. Relevant breeding data for Wahlberg's Eagle *Hieraaetus wahlbergi* and African Hawk Eagle *Aquila spilogaster* were extracted from Simmons (2006a, 2006b).

Natural History museums that were thought to have breeding data, were approached and asked to provide details of any breeding records or egg clutches that were held in their collections. Most of them provided photographs of the data sheets and clutches held in their collections. These photographs were then passed on to egg collectors with experience of Ayres' Eagle's eggs for their informed opinion as to their accuracy. As a result, two clutches were excluded from further consideration. Twelve breeding records, four from August-September and eight from April-June, are given in Irwin (1981). It was assumed that these details were held in the nest record card scheme at the Natural History Museum in Bulawayo but no records were found (K. Dhliwayo personal communication). This is regrettable and so the records have been excluded from this analysis.

Breeding reported at new localities in Hartley & Mundy (2003a) and suspected breeding records in *Honeyguide* (recent reports) were all followed up in attempt to add these to the overall data set. Some of these records were inconclusive and incomplete, while inaccuracies were revealed in some historical records. In the absence of independent confirmation of these breeding sites or an examination of field notes around the

observations, it was felt that they were best left out until additional evidence to support these observations comes to light. The exclusion of the data in Hartley & Mundy (2003a) also avoids any duplication of data provided by egg collectors. Two breeding records in Jenkins (1997) lacked details and have also been excluded.

The presence of Ayres' Eagles in any month from 1987-1992 were extracted from the Zimbabwe bird atlas database, which provided data for the Southern African Bird Atlas (Harrison *et al.* (1997) while observations published in Recent Reports in *Honeyguide,* which included details of adult and/or juvenile eagles were also collated and mapped. Further distributional records were extracted from online bird databases, like eBird (www.ebird.org). Inexperienced observers find it difficult to identify this eagle, especially in its juvenile plumages, and any records with doubts about their validity were excluded.

Hartley & Mundy (2003a) recorded moult in captive birds and state that adult plumage is reached at two years old but give no specific details. This was tested by examining Facebook pages where photographs of Ayres' Eagles, with a variety of plumage types, have been posted. Screen shots of under wing photographs taken of birds in a given month were generated and saved in chronological order. The photographs were examined for evidence of primary, secondary and tail moult and its progression over time. Dates when photographs were taken also allowed the time that these individuals remained in urban centres to be estimated and the speed at which the moult progressed over time.

## Results

### *Nest location*

Few breeding pairs have been found and the data presented below are compiled from a maximum of seven different pairs at four localities in Zimbabwe and one in Zambia.

Nests were located in extensive closed canopy miombo woodland with no obvious larger emergent trees (Figure 1). In well-wooded 'hidden' valleys, nests were on the hill slope close to but not necessarily at the top of the valley. The 'search image' of targeting the largest trees, that is successful when finding other large eagle nests in these situations, was unsuccessful here. This was because of the uniform nature of the woodland and similar height of trees, which formed the canopy. There were no obviously emergent trees and every tree had to be searched, resulting in many man-hours being spent searching for nests. When known nests were not active, alternate nests were searched for and this involved covering a lot of ground and hours spent looking in suitable places, sometimes without success. In some cases, nests that had been used were found the following year.

Nests were mostly constructed on lateral branches derived from the main trunk of the tree and were a metre or less below the canopy. They were difficult to see from the ground, even from as close as 10 m away. The thick canopy and understorey contributed to the difficulty of finding them (Figure 2). Nests in topographically featureless areas were similarly placed and were equally difficult to find. These situations have a similar closed canopy of miombo tree species and no obvious large emergent trees.

### *Nest trees and position*

Nests have been found in *Brachystegia glaucescens* (4), *B. boehmii* (4), *Julbernardia globiflora* (2), *Spirostachys africana* (1) and *Ricinodendron rautanenii* (1) trees. The average height above the ground of nests in these tree species was 14.6 m, 7.4 m, 10.3 m, 21.5 m and 10 m, respectively, and the overall average height was 13.7 ± 5.7 m (n = 14). The nests were on

**Figure 1**. View from a nest, illustrating the uniform nature of the canopy.

**Figure 2**. Ayres' Eagle nest in miombo woodland (top). View of the same nest site from a slightly different angle, illustrating the effect of the understorey in concealing the nest (arrowed), from a different perspective (below).

average 92 cm in diameter, 62 cm deep and with a cup diameter of 30 cm (n = 10). They were all lined with green leaves with a preference for the leaves of *Diplorhynchus condylocarpon* (n = 6). Nests in taller trees (*Brachystegia glaucescens* and *Spirostachys africana*) were on average larger (101.6 x 63.5 x 28.0 cm, n = 6) than those in lower trees (*Brachystegia boehmii*) (80 x 52 x 29.5 cm, n = 4). Discrepancies in sample sizes are due to variability of information recorded for each nest visited.

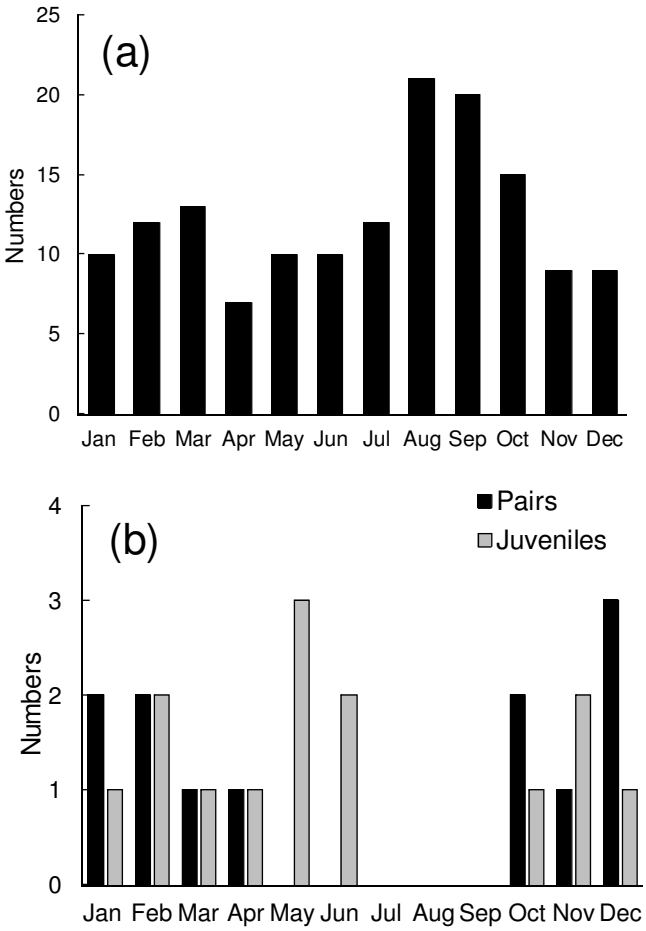



**Figure 3**. (a) Seasonal variation in sightings of Ayres' Eagles in Zimbabwe during the bird atlas period (1987-1992), (b) Seasonal variation in sightings of pairs and juveniles of Ayres' Eagles reported in *Honeyguide* Recent Reports.

***Laying dates and egg sizes***

All clutches recorded consisted of only one egg (n = 29). Eggs were laid in April (9), May (12) and June (3), with replacement clutches being laid in July (3) and August (1). The mean egg dimensions were 59.8 x 49.2 mm (n = 14) with 99% confidence intervals of 58.0-61.7 x 48.1-50.2 mm, and their mean weight was 69 g (n = 7). Clutches laid in lower nests were smaller (59.1 mm x 48.1 mm, n = 5), than those laid in higher ones (60.2 mm x 49.7 mm, n = 9) and of a different shape, being similar in length but slightly wider. In some cases, the same female might be involved and this will exaggerate the effect of sample size and data from nests in different localities would be required to confirm whether this difference has any real biological significance.

Nests are occupied for an extended time, provided they do not fall down. In one case, the breeding area appears to have been occupied for at least 30 years. Other instances indicate that the birds bred in the same locality for at least 15 years.

***Seasonal variation in sightings***

Ayres' Eagles were recorded in every month of the year (Figure 3a), with 147 sightings made during the entire bird atlas project in Zimbabwe (1987-1992); 38 between April-July, 65 between August-November and 44 between December- March. There were only four half-degree squares (i.e. 30' latitude x 30' longitude) in which Ayres' Eagles were recorded in four or more months a year over the 5-year atlas period. There were no sightings from HDS where there were known breeding sites during this time.

There was an increase of pairs seen and the number of juvenile birds recorded in the post-breeding period, from about September onwards (Figure 3b). Eagles were seen in urban areas in most months, with numbers declining between April and September (Figure 4). Numbers increased in rural areas from August to December and then declined, with some records from April-September, when breeding occurs (Hartley & Mundy 2003a). Unfortunately, the localities where these sightings were made were not indicated.

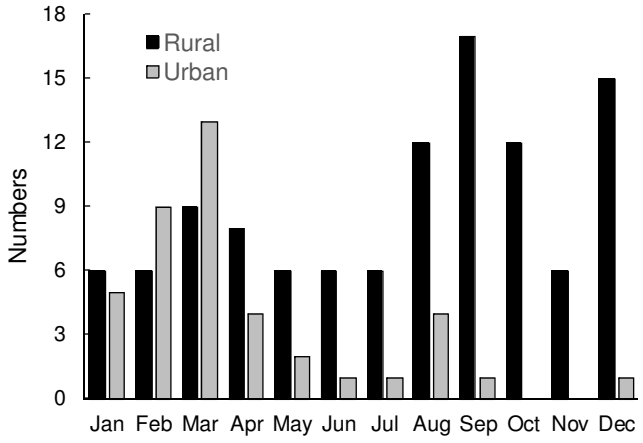



**Figure 4.** Records of Ayres' Eagles from urban and rural locations in Zimbabwe between 1979 and 1998 (from Hartley & Mundy 2003a).

There were no incidental sightings from known Ayres' Eagles breeding areas at any time of year, which confirms their secretive nature when breeding (Dowsett *et al*. 2008). There was an increase in sightings in the miombo woodland areas in the west of the country between January to March prior to breeding, but only two sightings were made in this area during the time when birds should be incubating (Figure 5).

***Plumage and moult***

Recently fledged chicks have a rufous chest, belly and vent and underwing coverts. All flight and tail feathers are well barred and there is an obvious 'dark mask' around the eye and ear coverts. This is well illustrated in the colour plate in Steyn (1982). With time, the rufous coloured feathers fade to a pale tan and almost white in some individuals (see Appendix). This has led to confusion with the similar sized Booted Eagle *Hieraaetus pennatus*, which does not have barred flight or tail feathers.

Soft plumage moult begins 12-14 months from hatching with the underwing coverts, which are replaced by darker feathers. The breast feathers are replaced next, also with much darker feathers, and this seems to occur initially around the throat and neck and proceeds laterally and vertically along the bird's body. This moult can be erratic and does not appear to follow the same pattern for all the birds examined here. Some of them had extensive dark mottling on the underwing with little breast markings, while others had extensive dark breast markings with minimal underwing moult. Primary moult begins soon after this, at approximately 15-18 months after hatching and the flight feathers of birds in this plumage type appear worn and damaged.

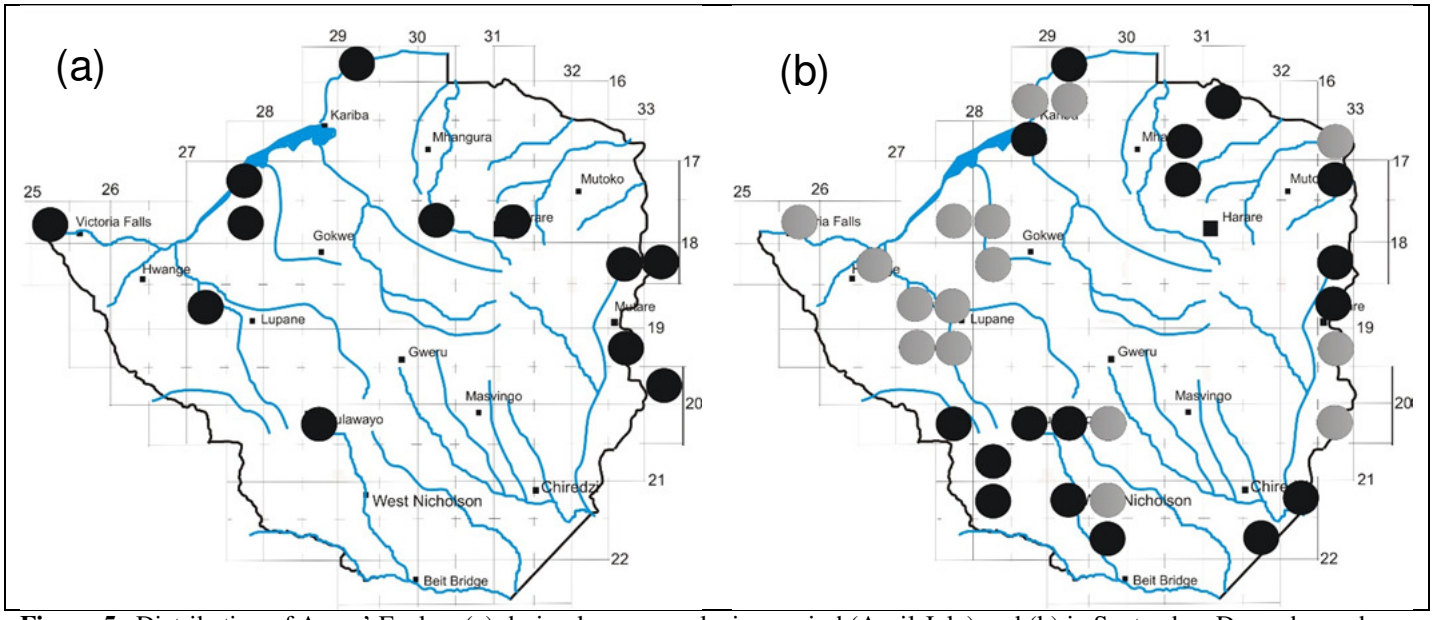



**Figure 5.** Distribution of Ayres' Eagles: (a) during known egg laying period (April-July) and (b) in September-December, when chicks fledge (dark circles) and January-March (grey circles). Data from Recent Reports in *Honeyguide*; there were no sightings from known breeding areas.

Primary moult begins at P1 and moves progressively outwards towards the wing tip. When the first 4 primaries have emerged, secondary moult begins at S3 and moves progressively inwards towards the body, while at the same time, the dark breast markings of the adult plumage progresses down the length of the body, covering the breast and belly. Wing moult is probably completed by June or July, two years after the bird hatched and tail moult is completed after this (see moult sequence in Appendix).

Tail moult is not as clear but appears to start once flight feather moult is almost complete. There is a difference in the barring pattern on the tail of first year and older birds. Adults have a broad sub-terminal bar while in young individuals it is much narrower and includes an extra bar. Progression of tail moult has not been easy to follow because there are very few photographs of birds at this time of year. It appears to start in the centre of the tail and the next feathers that appear to be lost are the outermost feathers. The moult then proceeds towards each other with adjacent feathers lost in order.

There are a number of photographs of different individuals, which indicate that the progression into adult plumage takes more than two years. There is some individual variation in this transition, which is unsurprising, but the general progression into adult plumage appears to follow the same timeline from hatching. The presence of juvenile patterned tail feathers from a bird, which appears to be an adult, is well illustrated in the appendix. In all likelihood, this individual is 24 months old, at a minimum. It would not be part of a breeding pair because it was moulting at the time, when adults would be tending a nest somewhere and could breed the following year, when it was 36 months old.

There were an appreciable number of photographs of Ayres' Eagles with unusual numbers of feathers removed from their wings. We think these are probably as a result of someone taking a shot at them, and this could indicate how prevalent the shooting at Ayres' Eagles might be.

## Discussion

### *Past breeding records*

There are more clutches of Ayres' Eagles held in the collections of private collectors in Africa than in all the collections of natural history museums across the world combined. Their knowledge about the species they have collected is vast, and their holdings are meticulously documented. However, the threat of prosecution for collecting these specimens has led to reluctance to divulge information, and secrecy surrounding their holdings. This has resulted in information, particularly about rare and difficult to find species, remaining unpublicised for years. It has also meant that information that could be used for the conservation of species has remained unavailable.

Ayres' Eagle clutches held in natural history museum collections are rare and some claimed clutches have been misidentified. Early collectors employed locals to collect eggs on their behalf and then quizzed them on the nests that the eggs came from and identified them on this basis. Ayres' Eagle clutches identified in this way, are incorrect. Some early collectors shot the incubating bird as verification, but this has still resulted in misidentification. We believe that any c/2

clutches attributed to Ayres' Eagle are misidentified (e.g. Dowsett *et al*. 2008) and are probably those of the African Hawk Eagle *Aquila spilogaster*, which regularly lays a two-egg clutch.

Ironically, the secrecy surrounding the locations of nests found by falconers and others is supposedly to protect them from egg collectors. Most of them already have clutches in their collections from nests they have found and not divulged for fear of prosecution. There was only one confirmed breeding site that had been located by observers who were not egg collectors in this study. Records of other supposed Ayres' Eagle breeding sites did not stand up to close scrutiny because the information was incomplete and/or contradictory.

Breeding records of Ayres' Eagle have been confused with Wahlberg's Eagle, because they both lay a one single-egg clutch. Ayres' Eagles lay in April/May, when Wahlberg's Eagle is not present in Zimbabwe. There are no verifiable laying dates beyond August for Ayres' Eagle and these are at the early extreme of laying dates for Wahlberg's Eagles (Table 1).

**Table 1.** Comparative data from Ayres' and Wahlberg's Eagles. Data for Wahlberg's Eagle are from Simmons (2006b); morphometric data for Ayres' Eagle from Hartley & Mundy (2003a).

| | **Ayres'** | **Wahlberg's** |
|---|---|---|
| Wing (mean, mm) | Male: 346 (n = 4)<br>Female: 393 (n = 16) | Male 420 (n = 16)<br>Female 431 (n = 15) |
| Tail (mean. mm) | Male: 185 (n = 4)<br>Female: 211 (n = 17) | Male: 216 (n = 7)<br>Female: 221 (n = 9) |
| Mass (mean, g) | Male: 663 (n = 4)<br>Female: 1018 (n = 10) | Male: 1004 (n = 16)<br>Female: 1300 (n = 15) |
| Nest diameter (mm) | 670-1290 (mean 920, n = 10) | 380-700 (mean 600, n = 11) |
| Nest thickness (mm) | 320-900 (mean 620, n = 10) | 160-600 (mean 410, n = 10) |
| Cup diameter (mm) | 240-400 (mean 298, n = 11) | 200-270 (mean 240, n = 14) |
| Egg dimensions (mm) | 51.3-64.7 x 42.9-52.2<br>mean 59.8 x 49.2 (n = 14) | 57.0-66.0 x 44.0-52.9<br>mean 61.5 x 49.0 (n = 167) |
| Egg description | Pale with subtle markings not contrasting with background colour | Pale with significant red/brown markings creating significant contrast with background colour |
| Laying dates (number) | Apr May June July Aug<br>10 19 6 3 1 | Aug Sep Oct Nov Dec<br>0 45 511 367 49 |
| Placement | Lateral branch<br>Within 1 m of canopy | Main stem<br>Well below canopy |
| Breeding habitat | Closed canopy woodland and away from riparian. | Any woodland, including riparian. |

Wahlberg's Eagle eggs are similar in background colouration to Ayres' Eagle eggs, are larger and narrower and often have extensive red/brown markings, which are lacking in Ayres' Eagle eggs (Table 1). The nests of Ayres' Eagles are larger than Wahlberg's Eagles (Table 1) and are placed in different positions in the tree and are in closed canopy miombo woodland only.

There were some anomalies with the breeding records in Hartley & Mundy (2003a). Carl Vernon (personal communication) has never seen an Ayres' Eagle nest so the records of April laying dates reported in Hartley & Mundy (2003a) attributed to him are questionable. There are contradictions between the information for nests given in the text and that appearing in their table 5; Nest 4 is given as being in a clump of *Spirostachys africana* trees but in the table, the nest tree is given as *Brachystegia glaucescens*. Nest 7 in the table is recorded as being in a *Spirostachys africana* tree, but this tree is not known to occur in this geographical area (www.zimbabweflora.co.zw). We could not track down any verifiable evidence of breeding in Umfurudzi in 1976 and the data are conflicting. This nest (number 8) was in a *Julbernardia globiflora*, which was connected with the overall canopy in an area of substantial mature (miombo?) woodland; elsewhere in the same paper, the habitat is identified as riparian. There is no mention of Ayres' Eagle breeding in Umfurudzi in recent surveys (Deacon & Rockingham-Gill 2009, Deacon 2010) although Rockingham-Gill (2010) does record that they were frequently seen there. There were no records of this or the Matusadona site in Ron Hartley's field notebooks, which are stored at the Peregrine Fund (N. Pierry, personal communication). These breeding sites are currently unproven until evidence to the contrary is located or new data become available.

At one locality, adults were seen regularly throughout the year and then were accompanied by a recently fledged juvenile. They were seen close to a nest but not on it and this evidence all points to the possibility of these birds breeding in this vicinity. Given the possibility that the nest could have been made by another large raptor, this record has not been considered either.

The similarity of Ayres' Eagles nests to other smaller raptor nests in *Brachystegia* woodland was mentioned any number of times by collectors. Nests built in *Brachystegia boehmii* trees were all within the size range of those of the Black Sparrowhawk *Accipiter melanoleucus,* which breeds in this type of miombo woodland. A nest, thought to be that of a Black Sparrowhawk was checked in September to see if it was occupied and revealed an Ayres' Eagle feeding a small chick. This raises the possibility that large nests in closed canopy woodland could belong to either of these species.

Breeding data recorded here conforms to that from a couple of pairs in Kenya where the clutch size was one and nests were built on the lateral branches of trees (Brown *et al*. 1982). The eggs measured 53.9-59.0 x 42.5-47.0 mm and were therefore

significantly narrower than those reported in in this study. Areas were occupied for an extended period and there did not appear to be an alternate nest site. Aspects not recorded in Zimbabwe were the presence of pairs at the breeding site 60-90 days before egg laying. Neither have mutual soaring, display flights and calling but perhaps this is because breeding areas were only visited once eggs had been laid and these behaviours might only occur prior to this. Brown *et al*. (1982) record inefficient nest building and collapse as having a major influence on breeding success. We have no data to confirm this. A couple of recently used nest sites were located because of the presence of a recently fledged chick in the vicinity, suggesting that these nests had all lasted long enough for a successful breeding attempt.

More data are required to fill in gaps in our knowledge of the breeding behaviour of Ayres' Eagles, particularly during courtship. Evidence of a northward migration during the austral winter out of South Africa (Brown *et al*. 1982) was not confirmed by an increase in sightings of birds in Zimbabwe at this time. The lack of winter sightings in Zimbabwe is probably because birds are breeding and they are known to be quite secretive at this time. The increase in records in August and September is probably a result of adult and juvenile birds becoming much more visible, prior to them dispersing from their nest sites.

***When is Ayres' Eagle present?***

The juveniles of Ayres' and pale-phase Booted Eagles can be confused but differences in the upperwing are diagnostic. Booted Eagles have pale upperwing coverts reminiscent of a *Milvus* kite, which are absent in juvenile Ayres'. The flight and tail feathers of Ayres' are well barred, while those of the Booted are not. Both species show 'landing lights' on the leading edges of the wings.

Collectors have specifically mentioned that the lack of any aerial displays or activities of breeding pairs makes finding their nests difficult. While they appear to have extensive aerial display flights (Brown *et al*. 1982), we are uncertain about the validity of pairs seen because of issues with identification of African Hawk Eagles, which typically occur in pairs, particularly when not breeding. Ayres' Eagle pairs were rarely seen at nests, except when attacking other species that approached too closely. In these cases, the non-incubating bird appeared suddenly to harass the intruder, but there were no interactions between the breeding pair at this time. No pairs were reported during the peak breeding months in Recent Reports and this confirms the secretive nature of this bird at this time. Juveniles were recorded more often after August when young birds left the nest after a successful breeding attempt.

Old data on the presence of Ayres' Eagles in suitable copses of large trees in Bulawayo show a distinct seasonality and the birds disappeared during the breeding season from April-November (Lendrum 1982). Given that birds were present at their nests 60-90 days before egg laying (Brown *et al.* 1982), it is likely that these individuals would have left Bulawayo some time before April/May (the main egg laying months) and the question about the breeding status of birds that visit urban areas at this time remains. It is likely that they are all non-breeders on this basis. A bird photographed close to a known Black Sparrowhawk nest on 21 April 2016 in Bulawayo (Eric Hartshaw, www:ebird.org checklist S29103488) suggests that breeding in suitable copses of large trees should not be ruled out entirely. It has bred in towns in Kenya (Dewhurst *et al*. 1988), and might eventually breed in towns in southern Africa where pigeons are plentiful and there is no shortage of large trees. There is the possibility that nests of Black Sparrowhawks could be used; they should be checked during April/May for the possible presence of breeding Ayres' Eagles. These eagles were regular in Bulawayo from the 1980's (Lendrum 1982) through to the late 1990's (personal observations) and beyond. Is their regular presence in Pretoria and Harare, for example, a recent occurrence or have they always been there and the increased number of sightings is a consequence of improved observer competence? It might reflect the widespread destruction of woodland, with wandering individuals ending up in towns and staying because of the availability of large trees and prey.

Where are these eagles coming from given the scarcity of known breeding sites? It seems that they are moving south from the miombo habitats in central Africa but why would they do this when there is much more miombo habitat to the north? Is this movement part of a regular event and birds are concentrating in urban areas because of the available food, or are they being attracted to the 'islands' of woodland with the abundant prey capture opportunities that our urban centres provide because previously used habitats are no longer available? They appear to be attracted to pigeons and those that are shot at pigeon lofts are replaced quite quickly (C. Baker, undated). This is confirmed by earlier data in Hartley & Mundy (2003a) who trapped different individuals within hours of each other. This suggests that there are reasonable numbers of eagles in the vicinity and at a much higher density than in the more rural areas at this time of year. Much remains to be learned and a satellite transmitter attached to an Ayres' Eagle would help to answer some of these questions.

***Moult***

Hartley & Mundy (2003a) report that wing moult started in August/September for adults and body moult as early as May for a non-adult bird, which attained adult plumage when two years old. Moult sequences from birds photographed across southern Africa do not support this and suggest that adult plumage is only attained when three years old. The difference in the barring pattern of the tail feathers of adult and non-adult individuals were not appreciated until now. This is an unexpectedly simple tool to determine whether any given bird is of breeding age or not. It might look like an adult in other respects, but if it still has tail feathers with the juvenile feather pattern, it is not. The few photographs found of two-year-old individuals suggest that their moult into full adult plumage could take most of their second year of life, completing this in 30 months or more. This would leave them in new adult plumage in January/February when it seems that pair bonds are established (between 60-90 days before eggs are laid; Brown *et al*. 1982). Adult birds would be tending chicks in August and September and the only photographs of adult Ayres' Eagles that we managed to locate, taken in southern Africa in June and August, showed no signs of any moult.

George Wilson's photographs of birds that are slightly more than a year old (see Appendix) and which show little indication of any moult (July) are interesting and perhaps reflects a later hatching date than the one used in the moult sequence estimates.

**General comments**

Ayres' Eagle seems to be a bird of miombo woodland and this differentiates it from African Hawk Eagles (Dowsett *et al.* 2008). This makes it vulnerable to woodland clearing and extensive deforestation has occurred in all six countries where miombo occurs, notably in Zimbabwe where woodlands are declining most rapidly, at a rate of about 1.6% per annum (Dewees *et al*. 2011). All known Ayres' Eagle nests have been found in areas with extensive closed canopy deciduous woodland and their breeding habitat has been reduced by the clearance of miombo woodland from large tracts of land. These eagles were recorded in proportionately more localities in Zambia (Dowsett *et al.* 2008) than in Zimbabwe (Jenkins 1997) and this reflects the difference in the extent of miombo woodland between the two countries. On this basis it could be argued that Ayres' Eagles are close to the edge of their breeding range in Zimbabwe, in the miombo woodland biome, which is a feature of the vegetation further north. Brown (1966) suggests the home range is of the order of 25 $km^2$. The area of miombo required to support a pair of Ayres' Eagles is not yet known, because no adjacent breeding pairs have yet been found.

Use of satellite telemetry could answer some of the questions posed here. A satellite transmitter on a territorial breeding bird could establish its migratory status and if it moves, where it goes to. The problem here is that so few currently occupied nest sites are known. Adult birds in urban areas could potentially lead researchers to a nesting location. There might be a limited window to catch them and adults in urban areas might be non-breeding birds without a territory. Tracking young Ayres' Eagles, which are visiting our urban centres, would provide insights into their migratory behaviour and could potentially lead us to an active nest site later on.

Multiple photographs of these eagles taken in different urban settings (and not shown here) suggest significant damage to flight feathers, perhaps caused by a close encounter with a firearm. This suggests that shooting of Ayres' Eagles in their urban habitats is a potential conservation issue and engagement with pigeon racing clubs to ascertain the extent of the problem is desirable.

Breeding records reported on here are from a handful of pairs, which have bred in approximately the same locality for an extended period. Much is still to be learned and there are only two breeding records in the past decade (2009-2019) that we know of in Zimbabwe, both from the same pair. Ayres' Eagle is one of the rarest breeding birds in southern Africa with fewer breeding territories known than for Taita Falcons *Falco fasciinucha*. It is probably a flagship species for miombo woodland and given its apparent rarity, warrants some research attention. As far as we are aware, known breeding areas have not been visited for 10 years or more and we need to determine if the pairs that were found in the past are still there, given the large landscape changes that have taken place in the habitat that they occupied.

## Acknowledgments

Curators at the Western Foundation of Vertebrate Zoology, and the curators of the British, Edinburgh, and Delaware museums, and in particular the Natural History Museum of Zimbabwe and Durban Natural History Museum generously provided information, which is incorporated here. Private collectors provided the bulk of the data that has been summarised here and their co-operation and response to requests for information are acknowledged with thanks. They all declined invitations to be co-authors of this publication. Rob Jeffery, George Wilson, Niel Cillié, Jim Mackie, Christa Ada, Mark Muller and Derek Adams gave permission for their photographs to be used. Nicole Piercy searched through Ron Hartley's records at the Peregrine Fund for breeding data on this species on our behalf.

## References

Brown, L.H. 1955. Raptors in Kenya. *Ibis* **97**:58-59.

Brown, L.H. 1966. Observations of some Kenya eagles. *Ibis* **107**: 539-544.

Brown, L.H. 1974. Is poor breeding success a reason for the rarity of Ayres' Hawk Eagle? *Ostrich* **45**: 145-146.

Brown, L.H., Urban, E.K. & Newman, K. 1982. *The birds of Africa*. Vol. 1. London: Academic Press.

Deacon, N. & Rockingham-Gill, D. 2009. Raptor monitoring in Umfurudzi, February 2009. *Honeyguide* **55**: 140-142.

Deacon, N. 2010. Seeing the trees for wood(land): nest site selection of miombo raptors. *Honeyguide* **56**: 99-103.

Dewees, P., Campbell, B., Katerere, Y., Sitoe A., Cunningham A.B., Angelsen, A. & Wunder, S. 2011. *Managing the Miombo Woodlands of Southern Africa: Policies, incentives, and options for the rural poor*. Washington DC: Program on Forests (PROFOR).

Dewhurst, C.E., van Someren, G.R., Allan, R.G. & Thomsett, S. 1988. Observation on the breeding ecology of Ayres' Hawk Eagle *Hieraaetus ayresii* at Karen, Nairobi, Kenya. *Gabar* **3**: 85-93.

Dowsett, R.J, Aspinwall, D.L. & Dowsett-Lemaire, F. 2008. *Birds of Zambia. An atlas and handbook*. Liége: Tauraco Press: pp.138-139.

Harrison, J.A., Allan, D.G., Underhill, L.G., Herremans, M., Tree, A.J., Parker, V. & Brown, C.J. (eds.) 1997. *The atlas of southern African birds. Vol. 1. Non-passerines*. Cape Town: Birdlife South Africa.

Hartley, R.R. & Mundy, P.J. 2003a. Morphometrics and status of Ayres's Hawk-Eagle in Zimbabwe. *Journal of Raptor Research* **37**:44-54.

Hartley, R.R. & Mundy, P.J. 2003b. Ayres' Hawk-Eagle on the receiving end in Zimbabwe. *Honeyguide* **49**: 139-143.

Irwin, M.P.S. 1981. *The birds of Zimbabwe*. Harare: Quest.

Jenkins, A.R. 1997. Ayres' Eagle. *In*: Harrison, J.A., Allan, D.G., Underhill, L.G., Herremans, M., Tree, A.J., Parker, V. & Brown, C.J. (eds.) *The atlas of southern African birds. Vol. 1. Non-passerines*. Cape Town: Birdlife South Africa: pp. 187.

Lendrum, A.L. 1982. Ayres' Hawk-eagle in Bulawayo, Zimbabwe. *Honeyguide* No. 110: 15-22.

Philips, R. 1978. The nesting of Ayres' Hawk-eagle *Hieraaetus dubius* in the south-eastern Lowveld. *Honeyguide* No. 94: 27-30.

Rockingham-Gill, D. 2010. Status of the birds in the Umfurudzi Safari area, especially around Hippo Pools. *Honeyguide* **56**: 109-123.

Simmons, R.E. 2006a. African Hawk Eagle. *In*: Hockey, P.A.R, Dean, W.R.J. & Ryan P.G. (eds.) *Roberts' birds of southern Africa*. Cape Town: John Voelcker Bird Book Fund: pp. 533-534.

Simmons, R.E. 2006b. Wahlberg's Eagle. *In*: Hockey, P.A.R., Dean, W.R.J. & Ryan P.G. (eds.) *Roberts' birds of southern Africa*. Cape Town: John Voelcker Bird Book Fund: pp 536-537.

Steyn, P. 1982. *Birds of prey of Southern Africa: Their identification and Life histories*. London: Christopher Helm.

Tarboton, W.R. 2011. *Roberts, nests & eggs of southern African birds*. Cape Town: John Voelcker Bird Book Fund.

**Kit Hustler**, *Invercargill, New Zealand*. ✉ kitvix@orcon.net.nz
**Kevin Barry**, *Highfields, Queensland, Australia*. ✉ keltaone@bigpond.net.au

**Appendix:** Moult sequence of Juvenile Ayres' Eagle; all birds assumed to have hatched in June.

Nearly fully grown chick on a nest – October 2019 (D. Adams)

6 months after hatching – photographed in November (Christa Rabe)

8 months after hatching – Photographed on 28 February (Niel Cillié)

10 months after hatching – photographed on 23 April
(Niel Cillié)

10 months after hatching – photographed on 29 April
(George Wilson).

11 months after hatching, photographed on 28 May
(George Wilson)

12 months after hatching, photographed on 7 June
(George Wilson

13 months after hatching, possible gunshot damage to left wing feathers (George Wilson)

15 months after hatching- photographed in September (Niel Cillié). Body and under wing coverts moulting, start of wing moult

24 months after hatching and photographed on 22 June (Jim Mackie). Note the tail moult with the outer and innermost feathers showing adult patterns with a few remaining juvenile feathers with the extra bar and the incomplete flight feather moult (arrowed). This is a non-breeding bird in spite of its adult appearance.

Adult bird, pre-breeding moult complete, photographed in February (Niel Cillié).

# SHORT COMMUNICATIONS

## The Centenary Park Heronry: A Sequel

Further to my report on the heronry in Centenary Park, Bulawayo (Ewbank, 2007. *Honeyguide* **53**: 29-31), Julia Duprée and I visited the Samuel Parirenyatwa Street (formerly Borrow Street) Swimming Pool on 15 July 2017. Black-necked Herons *Ardea melanocephala* were observed calling and carrying sticks into the two tallest trees by the pool. Further investigations revealed some 20 nests in these trees. Two pellets found under the nest contained only hair, probably from rodents. My last visit was in 1996, meaning this heronry has been active for at least 21 years, which is very long-lived for a Zimbabwean heronry (Ewbank, 2015. *Honeyguide* **60**:16-24).

**D.A. Ewbank**, *Ely, UK* (edited posthumously).

## An Early (or Late?) Nesting of the Saddle-billed Stork

In late October 2018 we did one of our surveys on Debshan Ranch, Shangani, for nesting White-backed Vultures *Pseudogyps africanus*. In the afternoon of 25 October, we approached a 'typical' vulture's nest in an *Albizia amara* tree, at the top and about 18 m in height above ground. At first, we could see something (an incubating bird?) in the nest, which we assumed was a vulture, but there were several white feathers on the ground below the nest, including a rather fine right primary feather, wholly white, of length 488 mm. Out with the telescope and we kept it focussed on the nest. Eventually we could see the head and part of the bill moving. The head was black and we could clearly see the yellow and red of the proximal end of the bill, and PJM fancied he could even see a yellow eye. It was a Saddle-billed Stork *Ephippiorhynchus senegalensis* lying tightly in the nest, supposedly the female. The precise locality was 20°00.4'S, 29°29.6'E, at an altitude of 1301 m.

The timing of this presumed breeding attempt is very anomalous. Irwin (1981, *The birds of Zimbabwe*) gives 31 nesting records, of which 28 are in the period January to April. There are few if any more recent records (Dhliwayo, 2017. *Honeyguide* **63**: 57). For southern Africa as a whole, Anderson (in Hockey *et al*., 2005. *Roberts birds of southern Africa,* 7th edition) gives more than 48 records, the majority also in the wet season. Our October sighting is at the end of the hot-dry season, and the first record for this time of year.

The loss of White-backed Vulture nesting sites to Saddle-billed Storks has been noted at least twice before (Mundy, 1982, *The comparative biology of southern African vultures*, p. 114), but not by Anderson (2005. *Biodiversity and Conservation* **14**: 2079-2098). One of these two 'interchanges' is shown in the photograph, taken in the Sengwa Wildlife Research Area in April 1974. The pure white primaries and secondaries are well shown.

We are left with the question as to why these Debshan storks should be nesting so out-of-season.

With thanks to Ranga Huruba for facilitating our visit to the Ranch.

**Figure 1**. A Saddle-billed Stork taking off from a White-backed Vulture's nest, Sengwa Wildlife Research Area. Photo © Peter Mundy

**P.J. Mundy, J. Maringa, M. Nkomo, S. McManmon**, *Bulawayo*, ✉ peter.mundy@nust.ac.zw

## Breeding of the African Cuckoo Hawk in Harare

On 12 August 2018 a single Cuckoo Hawk *Aviceda cuculoides* was spotted in a Musasa (*Brachystegia*) tree in our garden in Mandara, Harare. Whilst this was not unusual, as they have been seen before, it appeared to be scouting the area. Sightings continued over the next week or so until 18 August, when it was seen launching itself at a small branch, using its weight to break the branch free, and then flying off with it. Obviously, this was nesting material but the whereabouts of the

nest was unknown. I was told that August was a bit early for these birds to be nesting, as they normally time hatching to coincide with the onset of the rains.

Eventually, with the help of my gardener, one bird was seen heading up into a tall *Eucalyptus* tree and the nest was seen about 20 m above ground. Placed in a fork of a branch, it was not clearly visible, being obscured by leaves. The birds continued to collect nest material until early September. Around 15 September it was obvious that one of the birds was sitting on egg(s). I then started keeping an irregular watch on the nest. The free adult would bring food for the sitting bird and they may have taken turns on the egg(s), although I cannot be sure of that. [**Editor**: According to Steyn (1982. *Birds of prey of Southern Africa*. David Philip, Cape Town: pp. 51-53) both male and female incubate, with frequent change-overs.]

On 10 October I got my first sighting of a nestling, a fluffy ball of white feathers. On 28 October one of the adults arrived at the nest with a chameleon, known to be a favourite prey of these birds. By 3 November it was obvious that a second nestling was present, probably having hatched two days after the first. Later sightings showed that they were now fledglings and they could be seen moving around in the nest and flexing their wings. On the afternoon of 8 November my gardener reported that one of the fledglings was on the ground. It might have tried to fly too soon or had just fallen down from the tree. I placed it on top of a hedge both to protect it from predators (I have cats) and to ensure that it would be visible to the parents. There were also some Pied Crows *Corvus albus* around that had shown an interest in the nest activities. The fledgling was still there the next morning, but later in the day it had disappeared. The other fledgling remained visible in the nest until 13 November, after which it also disappeared. No further sightings were made of the adults or the two fledglings. Subsequent to all this, an adult Cuckoo Hawk, accompanied by two juvenile birds, visited the garden on 19 March 2019. It is quite possible that these were the two youngsters mentioned in this report.

**James Ball**, *Harare*. ✉ jameszwe@gmail.com

**Figure 1**. The Cuckoo Hawk with a Chameleon in its beak.

**Figure 2**. The fledgling on the ground after falling from the nest.

## Further Comments on Yellow-billed Kites in Matabeleland

With reference to my recent note about Yellow-billed Kites *Milvus aegyptiacus* in southern Matabeleland (Ewbank, 2016. *Honeyguide* **62**:134-135), there are doubtless many causes for their decline but pinpointing the crucial ones is more difficult. Two further suggestions have appeared in the literature. First, this species avoids secondary acacia woodland (Vernon, 1967. *South African Avifauna Series* No. 43: 45 pp.) and much of Matabeleland has been converted into this type of woodland over the last thirty years, thus reducing the habitat available for kites. The second is the early-rising crow hypothesis which suggests that Pied Crows *Corvus albus,* which have increased greatly in recent years, are on the wing earlier in the morning than raptors and they would thus find carrion, especially along the roads, earlier so depriving them of this food source (Macdonald & Macdonald, 1983. *Proceedings of the Birds and Man Symposium.* Johannesburg, Witwatersrand Bird Club: pp 321-325).

**D.A. Ewbank**, *Ely, UK* (edited posthumously).

## A Pathological Case of Avian Coccidiosis in the Gabar Goshawk

On the evening of 7 April 2019, I was birdwatching in Newlands vlei, Harare, when I put up a melanistic Gabar Goshawk *Micronisus gabar* at close quarters in thick grass. The bird flew weakly from an open patch on the ground through the tops of the tall grass and landed some 10 m ahead, though where I could not see because of the obstructed view. This behaviour was odd as there was no evidence that it had recently caught prey and I suspected it was sick or injured. A little later, whilst photographing a frog a little further on, I heard and saw movement in thick grass and wondered if it was a large rodent or perhaps the bird. Sure enough, the goshawk appeared some 2 m ahead, making its way to the path in front of me and proceeded to walk along the path away from me. From what I could see there appeared to be considerable facial damage, perhaps from a collision? I was able to approach it within 1.5 m, where it rested on the path, and then it continued with me cautiously following. When it stopped to rest again, I was able to reach out and catch it by hand. A cursory examination revealed what appeared to be considerable scarring or lumps around the beak and eyes, but, eager to get it to medical attention, I placed it on top of my camera case in a backpack and headed home without further delay.

I contacted Neil Deacon, a falconer, and because of its weakened state he urged that it be taken into care and fed as soon as possible. In order to ascertain the degree of beak damage I extracted it from the backpack, took a few photographs, and placed it in a small cardboard box. It was clear that the beak was undamaged but obscured by skin lesions. When this was relayed to Neil, he was concerned that it might have avian coccidiosis, a highly infectious disease, and that no falconer would want the goshawk anywhere near their hawks. Because of the advanced state of the lesions he thought it would probably die during the night and recommended that I kill the bird and burn the remains in the morning.

Coccidiosis is well-known in cage-birds and poultry, particularly where the latter are raised in close proximity in battery farms. Boughton (1937. *The Auk* **54**: 500-509) says 'Coccidia are one-celled animals [protozoa] which grow and multiply in the epithelial cells of various higher animals, often in the lining of the intestine, causing destruction of host tissues.' Microscopic examination of spores, faeces or intestinal contents is needed to ascertain the species involved but various species of *Eimeria* infect quail, pigeons, and chickens, and *Isospora* are found in many birds, especially passerines. Heavily infected adult birds in nature 'make only feeble attempts to fly away, and when captured and caged, remained quiet, squatting on the abdomen, and would neither eat nor drink. Death usually followed shortly.' In chronic cases a balance is maintained between host and parasite and the bird can continue without apparent discomfort.

In America (Boughton 1937), *Isospora* are known to parasitise raptors and there appears to be host-parasite specificity in birds, with *Eimeria* generally being the dominant form in the lower orders, and *Isospora* in the higher. With *Isospora* known in the Accipitridae it is a possible pathogen in this instance.

**I.C. Riddell**, *Harare*. ✉ gemsaf@mango.zw

**Figure 1**. The head of the Gabar Goshawk showing the lesions on its face and beak. Photos © Ian Riddell.

## Spur-winged Plovers at Salt Pan, Hwange National Park

During the 2014 game count in Hwange National Park, organised by Wildlife and Environment Zimbabwe, I was stationed at Salt Pans, in the Robins camp area (QDS 1826 C1). After the 24-hour observation period finished at noon on 8 October, I walked around a small part of the one flooded pan in order to identify some of the bird species that were present.

Among them were several Blacksmith Plovers *Vanellus armatus*, moving around in their typically conspicuous manner. Suddenly, close to one of these, I spotted two Spur-winged Plovers *V. spinosus*. I had no hesitation about identifying the species as I had seen it many times in and around Sokoto when I lived in northern Nigeria (Mundy & Cook, 1972. *Bulletin of the Nigerian Ornithologists' Society* **9**(35): 26-47). The two birds were slightly smaller than a nearby Blacksmith, and were walking on the dried mud together. Their folded wings and backs were of a pale brownish colour; the crowns were black;

there was a black line down the throat; and very conspicuously there were large white patches on the 'cheeks' and sides of the neck. Regrettably in my excitement, I noticed nothing else. Chittenden (2007. *Roberts' Bird Guide*, p. 122) shows a spot for the species in Hwange National Park, presumably taken from Courteney Johnson (2004, *Honeyguide* **50**: 185-186). Spur-winged Plovers are increasingly being spotted in southern Africa since the first sighting in northern Botswana in July 1989 (Aspinwall, 1989. *Babbler* **18**: 34-35). It is 'properly' a species of West and East Africa, south to about 5°S (Snow, 1978, *An atlas of speciation in African non-passerine birds*).

**P.J. Mundy**, *Bulawayo*. ✉ mundy@gatorzw.com

Editor's note: This is the record referred to in Riddell (2018. *Honeyguide* **64**: 55).

## Does the Grass Owl Occur in Southern Matabeleland?

The African Grass Owl *Tyto capensis* usually occurs in grasslands in higher rainfall areas, being recorded as far west as Lalapanzi and Masvingo in Zimbabwe (Irwin 1981). It was said to be 'frequent' in short grassland and vleis in the Gweru district (Harwin 1967), most probably in the Somabhula Flats and Vungu River wetlands. This owl would not normally be expected to occur in southern Matabeleland but there are in fact a few reports of this bird in this area.

The first is a breeding record of a nest with two eggs found on 27 October at Strathmore, about 15 km south of Mbalabala (Nest Record Card, J.S. Carlisle) and although listed in the register the card cannot be found (K. Dhliwayo, personal communication). This record appears to have been re-identified as a Marsh Owl *Asio capensis* by James (1970) who commented that Carlisle's Marsh owl records included "many misidentifications."

Although Grass Owl eggs are more elongate than those of Marsh Owls (Table 1) the differences between them are very small and there is a considerable overlap (Table 1). Consequently, it is not possible to distinguish the eggs of these two species on the basis of size and in view of the uncertainties of identification this Strathmore record should probably be rejected.

**Table 1**. The dimensions of Grass and Marsh Owl eggs (Maclean 1984). Values are averages, with the range given in brackets).

| | Length (mm) | Breadth (mm) |
|---|---|---|
| Grass Owl (n = 44) | 41.8 (39.0-45.3) | 33.6 (31.3-35.8) |
| Marsh Owl (n = 55) | 40.4 (37.9-43.0) | 34.1 (32.4-36.0) |

The second was a Grass Owl reported as a new bird species for Bulawayo (Anon. 1980) and this record was traced to George Banfield. This bird was seen in his garden on 15 April 1979 in a cassia tree where it was being mobbed by other birds (Hubbard, personal communication). This is an improbable record since it is not a typical habitat for this species, which in any case is unlikely to perch in a tree and it can be rejected. The third was from the Matopos Research Station on 10 January 1952 (Plowes notebook, examined by author). Other records are from just west of Fort Rixon in QDS 2029 A1 (Napier) and northwest of Bulawayo in QDS 1928 C4 (Nyamandhlovu), both reported in the Atlas (Harrison *et al.* 1997).

There are three Botswana records (one supported by a specimen) from the Gaborone area in 1971, 1978 and July 1998 and another from Francistown in Oct 2000 (Tyler *et al.* 2000). The record from Francistown in particular suggests that the Grass Owl can occur in low rainfall areas similar to those in southern Matabeleland. These records seem to occur in exceptionally wet rainy seasons. The Matobo record occurred in the wettest January recorded between 1896 and 1986 (Goetz Observatory, personal communication) while Botswana experienced very heavy rainfall from January to March 2000. The Francistown record was clearly before the start of the 2000-2001 summer which was dry (S.J. Tyler, personal communication). One was seen in a year of exceptionally high rainfall at Kalahari Gemsbok National Park (Mills & Haagner 1990).

In conclusion, there is little evidence that the Grass Owl is likely to occur in southern Matabeleland, except as an occasional vagrant during years of good rainfall.

### Acknowledgements

Thanks to Goetz Observatory for rainfall data, Cecilia Hubbard for tracing the Bulawayo record in her files and Steph Tyler for details of the Botswana records.

### References

Anon. 1980. Matabeleland notes. *Honeyguide* No. 103/104: 61-62.

Harrison, J.A., Allan, D.G., Underhill, L.G., Herremans, M., Tree, A.J., Parker, V. & Brown, C.J. (eds.) 1997. *The Atlas of Southern African Birds. Volume 1*. BirdLife South Africa, Johannesburg.

Harwin, R.M. 1967. A preliminary list of the birds of Gwelo district. *South African Avifauna Series* No. 47: 43 pp.

Irwin, M.P.S. 1981. *Birds of Zimbabwe*. Quest Publishers: Harare:

James, H.W. 1970. *Catalogue of birds eggs in the collection of the National Museums*. Trustees of the National Museums of Rhodesia: Salisbury.

Maclean, G.L. 1985. *Roberts' birds of southern Africa,* 5th edition. John Voelcker Bird Book Fund, Cape Town.

Mills, G. and Haagner, C. 1990. *Guide to Kalahari Gemsbok National Park*. Southern Book Publishers: Johannesburg.

Tyler, S.J., Randall, R.D. & Brewster, C.A. 2008. New bird records for Botswana and additional information on some rarities. *Bulletin of the African Bird Club* **15**: 36-52.

**D.A. Ewbank,** *Ely UK*. (edited posthumously).

## An Insomniac Heuglin's Robin

We suppose that everyone would welcome having a Heuglin's Robin (White-browed Robin-chat) *Cossypha heuglini* in their garden. We had a pair in our previous premises on the outskirts of southeast Bulawayo, and were often awakened by its lovely calls at or just after dawn. In 2018 we relocated to the Qalisa Retirement Home, next to the Bulawayo Golf Club, and close to the CBD, and we immediately appreciated how completely quiet the place was at night time. However, we very quickly became aware that we were awakened during the night by a noisy Heuglin's Robin, which seemed to be outside the bedroom window. After a while we got its pattern: usually from about 3 to 4 a.m., but sometimes any time between 1 and 5 a.m., and the song went on for about an hour and would then abruptly stop. We could lie awake listening to the bird going through its repertoire of phrases, all laced one way or the other with its delightful style of crescendos and diminuendos. At dawn it would have been a wonderful concert, but not in the early hours of every morning, night after night, with dawn coming just after six. At least two other occupants had told us about their own nocturnal robins. We presumed it was a male and perhaps indeed the same male. Qalisa has a good development of security lights – there is a bright one next to our house – and we could only suppose that the lights provided a false dawn to the robin. This insomniac was active in July and August, and one night around that time the robin started at midnight and finished at 4.00 a.m. – PM was awake listening to it the whole time!

**Peter & Verity Mundy**, Bulawayo. ✉ mundy@gatorzw.com

**Editor's note**: The impacts of light pollution on avian ecology are becoming well-known. For examples on the effects of light on bird song, see:

Da Silva, A., Valcu, M. & Kempenaers, B. 2015. Light pollution alters the phenology of dawn and dusk singing in common European songbirds. *Philosophical Transactions of the Royal Society* B **370**: 2014026.

Derryberry, E.P. 2017. Dawn song in natural and artificial continuous day: Light pollution affects songbirds at high latitudes. *Journal of Animal Ecology* **86**:1283-1285.

## A Southern Hyliota at Victoria Falls

On the morning of 3 August 2019, I was birding along a dirt road just outside Victoria Falls in QDS 1725 D4. This road runs between the (dry) Masuwe River and the Chamabonda Vlei through open deciduous woodland dominated by mopane, most of which is stunted due to elephant activity. As I drove slowly along my attention was drawn to a flock of Southern Masked Weavers *Ploceus velatus* as they foraged and gleaned insects from one of the larger trees. Also present was a Brubru *Nilaus afer* and as I watched, a dark bird with white underparts came into view. It was also leaf gleaning with quick short darts within the foliage. Having recently moved to the Falls from Harare, I am well acquainted with Southern Hyliotas *Hyliota australis*, and my first inclination was that this was indeed a Hyliota.

By coincidence, I had done some research on Southern Hyliotas during the previous week for Jean-Michel Blake who was working with Kit Hustler on an updated checklist for Hwange National Park. In particular, I had in mind the record of a Southern Hyliota found in 1987 upstream of Victoria Falls in the Zambezi National Park (Mundy, 1989. *Honeyguide* **35**: 118-119), and the subsequent speculation following this sighting over which species of Hyliota was actually involved. Both the Southern and the Yellow-bellied *H. flavigaster* occur in Zambia and have been recorded close to Victoria Falls. In addition, Irwin (1981. *Birds of Zimbabwe*, pp. 282-283) indicated that 28°E, i.e. around the Sengwa River and the Chizarira National Park, was the approximate western limit of the Southern Hyliota's range in this country.

I therefore took particular note of the underparts that were white with only a slight pale yellowish wash. It was not the darker yellow-orange that defines the Yellow-bellied *H. flavigaster*. The weavers and the Brubru provided a good comparison of the size of this bird and I have no doubt it was a Southern Hyliota.

**Colin Baker**, *Victoria Falls*. ✉ pratincole306@hotmail.com.

## An Eastern Miombo Sunbird Uses Plastic in the Nest: What are the Dangers and What Other Birds are Building with Garbage?

In July to August 2016, a pair of Eastern Miombo Sunbirds *Cinnyris manoensis*, nested in a Madagascar cycad *Cycas thouarsii* in a garden in Newlands, Harare. An unknown number of chicks were heard in the nest on 6 August and at least one later fledged successfully, seen being fed in the garden. On 2 October 2018, what is believed to be the same female was building a new nest in the same cycad, about half a metre from the 2016 nest. On 3 November, an unknown number of chicks were being fed in the nest by the female.

Both nests faced in an easterly direction and were in the inside of the 'funnel' formed by the cycad leaves, the 2016 nest being 2m high and the 2018 nest 2.6 m high. In both instances polypropylene strips from woven bags were used in nest construction in addition to normal plant material. These were

particularly evident when the 2016 nest eventually fell down and started decaying, the white plastic standing out in stark contrast to the dark grey plant matter.

On 8 December 2018, I removed the second nest to see if the plastic presented any threat of entanglement to the chicks. The nest was attached to the midrib of the cycad leaf with plant fibres and thin lengths of plastic. The nest was a typical elongated ball comprised of interwoven leaf petioles, grass and other lengths of plant material. Included in this was the plastic, with a long 'beard' hanging down the front of the nest (Figure 1).


**Figure 1.** The nest of the Eastern Miombo Sunbird, showing the plastic strips incorporated into the nest and hanging in strips below the entrance.

The outer layer was separated from the inner lining with ease and, as one would expect, the lining was built in onion-like layers. The outermost was of soft, silky seed comas (Apocynaceae), next was a layer of stamens, the few red ones of bottlebrush *Callistemon viminalis* being easily recognised; the mass of golden stamens at the top of the lining formed the top of this layer. This was followed by a few white and many greyish feathers, all mixed with a few of the silky seed comas as found in the outermost layer. The lining was relatively thick, with the outer layer weighing 5.4 g and the inner 5.0 g.

Most of the polypropylene was separated from the outer layer. All wide strips (*c*.2.8 mm) and most of the thinner ones, apart from a few too well integrated lengths, were removed. There seemed to be no selectivity for length in the wide strips although the narrow ones were shorter (Table 1). Some of the very thin lengths used to attach the nest to the leaf were of an unidentified plastic, whiter than the polypropylene, more flexible and more elastic, and resembled PTFE tape.

The amount of plastic in the 2016 sunbird nest was not measured, but there appeared to be more of it in the 2018 nest. The plastic lent greater strength to the outer layer and tearing it apart required some effort and it could be a useful adaptation, especially in an enclosed sunbird nest. The threat to the chicks appears to be minimal since, being well isolated in the inner lining, they would have no contact with it, although the threat of entanglement to the female during construction is real.

**Table 1**. The number of plastic strips of various lengths removed from the sunbird's nest.

| Length (cm) | Wide | Narrow |
|---|---|---|
| 1-20 | 4 | 5 |
| 21-40 | 2 | 1 |
| 41-60 | 3 | |
| 61-80 | 5 | |
| 81+ | 1 | |
| Total | 15 | 6 |

Little is known about the effects of 'garbage' on birds in Zimbabwe and they may be under-reported. African Darters *Anhinga rufa* (Riddell, 2014), Goliath Heron *Ardea goliath* (Riddell, 2012), African Fish-eagle *Haliaeetus vocifer* (Riddell, 2015) and other waterbirds (Rockingham-Gill, 2015) are threatened by entanglement in gillnets, much of this discarded and categorised as garbage. Whether Fish-eagles suffer mortality from gillnets in the nest has not been ascertained, but on the positive side, they appear to benefit from scavenging fish in discarded nets (Riddell, 2015). The threat to Ospreys *Pandion haliaetus* is unknown but birds over much of Montana (USA) incorporate large amounts of bailing twine in their nests and Blem *et al*. (2002) observed 12 cases of entanglement in 260 nests during a three-year study. Montevecchi (1991) noted that 97% of the nests of Northern Gannets *Sula bassana* examined in eastern Newfoundland had plastic incorporated in them. A small percentage of adult and chick mortality resulted from entanglement in synthetic materials incorporated in the nests.

The use of garbage in nests appears to be increasingly reported globally. In Zimbabwe, Pied Crows *Corvus albus* also use anthropogenic material in nest construction (Riddell, 2011) and one was seen hanging by the leg from a length of cord or string tangled around the branch of a *Eucalyptus* in Harare (personal observation 2017). Anthropogenic material was used in 85.2% of nests of the American Crow *C. brachyrhynchos*, and 11 of 195 nestlings (5.6%) were found entangled in their nests (Townsend & Barker 2014). The length of the material was greater in nests in agricultural territories than in urban territories, and the odds of entanglement increased by 7.6 times for each metre of anthropogenic material in the nest. Fledging success was significantly lower for entangled nestlings.

In Poland, plastic string was widely used as nest material by Great Grey Shrikes *Lanius excubitor* and in some cases it is a major nest component. Plastic (polypropylene) string was commonly used in agriculture from 1982 onwards and the shrikes started to use this new material approximately three years after it became commonly used in farming and they probably switched to this new source of nest material as soon as it appeared in farmland. The entanglement of nestlings in the plastic string became an important source of mortality; 14 out of 153 nestlings (9.1%) died from their legs becoming tangled in the string. At least four females also died after becoming tangled in the string while manipulating nest material during nest building (Antczak *et al*. 2010).

The American Mourning Dove *Zenaida macroura* constructs a mainly stick nest but a gravid female was found to have died after become entangled in a monofilament used as nesting material (Parker & Blomme 2007). The Laughing Dove *Spilopelia senegalensis* and Red-eyed Dove *Streptopelia semitorquata* nest extensively in Harare suburbs in equally flimsy nests but the threat of entanglement, though it appears minimal, is unknown.

The use of garbage as nesting material varies within the same species. In urban areas, some central American Clay-coloured Thrushes *Turdus grayi* use garbage as nesting materials, but others do not. This might reflect differences in the abundance of garbage around the nesting area, or differences in the availability of suitable materials for nesting. The use of artificial materials could be related to urban landscapes where garbage is commonly available, but there is an interesting individual selection of materials for nesting that is poorly understood (Corrales & Sandoval, 2016).

The entanglement and choking of terrestrial wildlife might be difficult to detect without deliberate effort, and opportunistic observations may go unreported (Townsend & Barker 2014). Available data suggest that the impacts of debris on terrestrial organisms are similar to those in marine environments, including the sorption of chemicals and mortality linked to ingestion. Likewise, a number of studies report entanglement of terrestrial animals, including snakes in beer can tabs, tortoises in balloon ribbon, and birds in anthropogenic nest material. These examples are but the tiniest reflection of the extent of the problem and the formal documentation of instances from the region should be made.

The effects of garbage used in the nests of birds in cities has both positive and negative effects, and it is necessary to determine whether the garbage is a new adaptation that improves survival and breeding success in an urban world, or if it occurs solely as a result of the lack of natural materials in urban areas (Corrales & Sandoval 2016). In the case of the Eastern Miombo Sunbird discussed here, it is not known if there is a lack of natural material. I would be tempted to say that this is not the case here but that may not be the sunbird's view! Perhaps it is becoming marginal.

### References


Corrales, J. & Sandoval, L. 2016. Our Garbage, Their Homes: Artificial Material as Nesting Material. San José, Costa Rica. https://www.thenatureofcities.com/2016/12/11/garbage-homes-use-artificial-material-nesting-material-birds/

Townsend, A.K. & Barker, C.M. 2014. Plastic and the nest entanglement of urban and agricultural crows. *PLOS One* **9**(1): e88006.

Montevecchi, W.A. 1991. Incidence and types of plastic in gannet's nests in the Northwest Atlantic. *Canadian Journal of Zoology* **69**: 295–297.

Blem, C.R., Blem, L.B. & Harmata, P.J. 2002. Twine causes significant mortality in nestling ospreys. *Wilson Bulletin* **114**: 528–529.

Parker, G.H. & Blomme, C.G. 2007. Fish-line entanglement of nesting mourning dove, *Zenaida macroura*. *Canadian Field Naturalist* **121**: 436–437.

Antczak, M., Hromada, M., Czechowski, P., Tabor, J., Zabłocki, P., Grzybek, J. & Tryjanowski, P. 2010. A new material for old solution – the case of plastic string used in Great Grey Shrike nests. *Acta Ethologica* **13**: 87-91.

Riddell, I.C. 2011. Feathering your nest? Pied Crows use fuzzy logic. *Honeyguide* **57**: 43.

Riddell, I.C. 2012. The demise of a Goliath Heron. *Honeyguide* **58**: 65-66.

Riddell, I.C. 2014. African Darter mortality from fishing nets at Lake Urema, Gorongosa National Park, Mozambique. *Honeyguide* **60**: 35.

Riddell, I.C. 2015. Fish Eagles and fishing nets on Lake Chivero. *Honeyguide* **61**: 29-30.

Rockingham-Gill, D.V. 2015. Review of waterbirds in Zimbabwe 2014-2015. *Honeyguide* **61**: 97-119.



**I.C. Riddell**, *Harare*. ✉ gemsaf@mango.zw


## Red-throated Twinspots at Victoria Falls

On 13 July 2019, at about 08h30, we were on a path that runs from the main footpath along the face of the Victoria Falls towards the Park exit gate (in QDS 1725 D4). Once this path leaves the rain forest it goes through open deciduous woodland. About 350 m from the exit we stopped to watch a mixed bird party as it worked its way through trees and bushes in this open woodland. Blue Waxbills *Uraeginthus angolensis* and Jameson's Firefinches *Lagonosticta rhodopareia* were feeding on bare ground just off the path and we also noticed a pair of Red-throated Twinspots *Hypargos niveoguttatus* similarly feeding a few metres ahead of us. The pair edged closer as they fed and came to within about a metre and a half of where we stood, apparently unconcerned about us. We took cell phone photographs and the pair only moved a short distance away when we resumed our walk after watching them for over five minutes.

We suspected this sighting to be unusual and this was confirmed by reference to Harrison *et al*. (1997. *The atlas of southern African birds*, p. 600) that shows the nearest known Zimbabwe population occurring over 150 km downstream of the Falls in the Milibizi/Sebungwe Narrows area (1727 C3). This conforms exactly with Irwin (1981. *Birds of Zimbabwe,* p. 407) who gives the vicinity of Zambezi Mission (17° 52'S, 27° 10'E) as the furthest upstream locality for this species along the Zambezi. In Zambia, however, the Xeno.Canto.org website shows that the Zambian population extends along the north bank of the Zambezi as far upstream as the eastern tip of the Caprivi. It is therefore probable that birds seen at Victoria Falls originate from the Zambian population.

We could find only one previous record from the Victoria Falls area, a male mist-netted near the Victoria Falls Hotel (a short walk from our sighting) on 18 October 1981 (Pollard, 1985. *Honeyguide* **31**: 221-222). There are two unsubstantiated records in the SABAP2 database for pentad 1745_2540, on 15-12-2013 and 6-11-2014.


**Colin and Julia Baker**, *Victoria Falls*. ✉ pratincole306@hotmail.com

## A Second Grasshopper Buzzard for Zimbabwe

The first Zimbabwean and regional record of a Grasshopper Buzzard *Butastur rufipennis* was seen and photographed by Brendan Ryan at Ngamo Pans, Hwange National Park on 7 December 2014 (Riddell, 2015. *Honeyguide* **61**: 50-51).

On 2 November 2017 a second bird was photographed by Siraaj Gardner at Kavinga Safari Camp in southern Mana Pools National Park (1629A2), where a bird was at the spring just in front of the camp. It didn't fly away while the observers were parked nearby so the red in its wings was not seen. The identification has been confirmed by the Kenyan Rarities Committee who say the photos are of a young Grasshopper Buzzard based on the following features: the white throat with the distinct black border; the pale cinnamon underparts with black flecks; and the long tail.

Thanks to Siraaj Gardner for sending me his photographs and to Nigel Hunter and Brian Finch of East Africa for their assistance.

**I.C. Riddell**, Zimbabwe Rarities Committee, Harare. ✉ gemsaf@mango.zw


The juvenile Grasshopper Buzzard photographed at Mana Pools. Photo © Siraaj Gardner (above).

The Red-headed Weaver removing grass from the Masked Weaver's nest. Photo © Ian Riddell (right).

## Red-headed Weaver Dismantles Southern Masked Weaver's Nest

On the morning of 12 January 2018, whilst driving in the Sango Ranch area of the Save Valley Conservancy, we came across a non-breeding or female Red-headed Weaver *Anaplectes rubriceps* at a nest of a Southern Masked Weaver *Ploceus velatus*. The latter, a male, was nest-building in a knobthorn *Senegalia nigrescens* over the road and was busy swizzling away at a nest a mere 5m from the Red-headed Weaver, yet was paying it no heed. At the same time the Red-headed Weaver was hanging onto the bottom of the other nest, or occasionally entering it, and pulling bits of grass from it (see photograph above). The nest appeared newly completed and the grass of the bottom third or so, around the entrance, was still green. It seemed amazing that the Masked Weaver was not reacting to this intrusion. We saw no sign of a Red-headed Weaver nest or colony in the vicinity.

**I.C. Riddell**, Harare. ✉ gemsaf@mango.zw

# Records of Black and Yellow-billed Kites: July 2018 to April 2019

**C.T. Baker**

**Black** *Milvus migrans* and **Yellow-billed Kite** *Milvus aegyptius* records submitted for inclusion in Field Observations and sightings drawn from elsewhere are shown separately here.

The first Yellow-billed was sighted on 28 July (8 August last year). Most had departed by the third week of March although a straggler passed through Mana Pools on 24 April. Breeding activity was noted in Hwange NP and at Victoria Falls. An end of season juvenile was at Victoria Falls on 20 March.

The sightings shown below are of single birds except where noted otherwise.

**Black Kite**

September

9 Msuna (1826 B2) CB
12 Robins Camp, Hwange NP (1825 D2) CB
24-25 Two at Sable Sands Lodge, Dete vlei (1826 D2) HGC

February

6 Chamabonda vlei, Victoria Falls (1725 D4) G&MB

**Yellow-billed Kite**

According to the Hwange Game Count Report they were recorded at 58 pans on 24 and 25 September and proved to be the second most highly reported bird after Blacksmith Lapwings. Several pairs mated at Verney's Pan (1826 D4) and nest building was noted at Mandavu Dam (1826 C2). The two Black Kites mentioned above at Sable Sands Lodge attacked a Yellow-billed Kite.

July

28 about 35 km along Harare-Banket road (1730 D1) IL

August

2 A breeding pair, Victoria Falls residential area (1725 D4) DT
5 35 km from Beitbridge towards Bubye (2130 C3) RL
6 Battlefields, Harare-Bulawayo road (1829 D2) ND
7 Musango, Lake Kariba (1628 C4) SE
Rifa Camp, Chirundu (1628 B2) NH
Deka Safari Area (1826 C2) JM-B
Mana Pools airstrip (1529 C4) TA
Mcheni 2 Camp, Mana Pools (1529 C4) TA
14 Great Dyke, Harare-Chinhoyi road (1730 D1) IL
Two at Rifa Camp (1628 B2) NH
17 Nyamepi, Mana Pools (1529 C2) IL
Matobo-Kezi road before Hazelside turn-off (2028 C2) JV
18 & 21 Rhino Safari Camp, Matusadona (1628 C4) Pte
22 Two at Hillside, Harare (1731 C3) KW
25 Mteri Dam, Chiredzi (2131 B3) JD

September

1 Spurwing Island, Lake Kariba (1628 D1) CM
2 Two at Mukuvisi Woodlands, Harare (1731 C3) JW
7 Mukuvisi Woodlands TW
9 4 km from Hwange on Victoria Falls road (1826 A4) CB
Msuna (1826 B2) CB
10 Near Matetsi River, Hwange-Victoria Falls road (1826 A3) CB
Near Robins Camp, Hwange NP (1825 D2) CB
11 Two in Big Toms area, Hwange NP (1825 D2) CB
Dolilo Pan, Hwange NP (1826 C1) CB
12 Big Toms, Hwange NP (1825 D2) CB
13 Victoria Falls town (1725 D4) CB
14 Two upstream of Victoria Falls (1725 D4) CB
16 Two in Zambezi NP, Victoria Falls (1725 D4), one carrying twigs CB
Two at Musango, Lake Kariba (1628 C4) SE
20 Nyamepi, Mana Pools (1529 C2) IR
23 Mvuma-Masvingo road IL
Two at Mvuma Mine (1930 B3)
Two over Mtao forest, south of Mvuma (1930 B3)
38 km and 24 km from Masvingo (1930 D3)
10 km from Masvingo (2030 B2)

October

7 Two at Mukuvisi Woodlands, Harare (1731 C3) IR
26 Mvuma (1930 B3) IR
Between Masvingo and Ngundu Halt (2030 B3) IR
27 Christmas Pass, Mutare (1832 D3) IL
30 km along Mutare-Birchenough Bridge road (1932 B1) IL
28 Gorhwe Pan, Gonarezhou NP (2131 D3) IR
29 Gutu-Buhera road (1931 C1) IR

November

7 20 km from Chivhu on Harare road (1830 D2) JP
22 6 km SE of Bromley at veld fire (1831 A2) IR
26 Two at Rifa Camp (1628 B2) NH
28 Bulawayo-Victoria Falls road IL
110 km near Mbembezi River (1928 A3)
130 km (1927 B2)
200 km (1827 C2)

December

1 Newlands, Harare (1731 C3) IR
24 Flocks of 20-30 at Nyamandhlovu Pan, Hwange NP (1826 D4) MBe
Two at Fothergill Island (1628 D1) CM

February

1 Several in Main Camp-Livingi area, Hwange NP (1826 D2) JV
14-17 Up to four seen daily at Victoria Falls (1725 D4) CB
28 Mukuvisi Woodlands (1731 C3) PT

March

1 Mandara, Harare (1731 C3) JBa
Near Glendale (1731 A3) RK
19 Musango, Lake Kariba (1628 C4) SE
5 km before Bindura on Harare road (1731 A4) CB JB
20 A juvenile at Victoria Falls (1725 D4) CBr
20 Kazungula (1725 C4) SC

April

24 Long Pool, Mana Pools (1529 C2) NH

**Observers**
TA – Tessa Arkwright, CB – Colin Baker, JB – Julia Baker, JBa – James Ball, MBe – Miriam Bell, G&MB – Gavin and Marjorie Blair, J-MB – Jean-Michel Blake, CBr – Charles Brightman, SC – Stan Chizipi, JD – Jordan Delourie, ND – Neil Deacon, SE – Steve Edwards, NH – Nkululeko Hlongwane, RK – Rebecca Kilner, IL – Innes Louw, RL – Riana Louw, CM – Cliffy Mhandu, JP – Julia Pierini, IR – Ian Riddell, PT – Pete Taylor, PTe – Peter Tetlow, DT – Daryl Tiran, JV – James Varden, JW – Johnny Whitfield, TW – Tony Wood, KW – Ken Worsley, HGC – Hwange Game Count

**Colin Baker**, *Victoria Falls*. ✉ pratincole306@hotmail.com

# Field Observations: June 2018 to May 2019

**C.T. Baker**

When the text mentions 'the Atlas' it refers to Harrison *et al*. 1997. *The atlas of southern African birds* and not to the current SABAP2 exercise. Birds reported from a quarter degree square in which they do not appear in Harrison *et al*. are shown with the symbol † after the QDS code. Records submitted by Ian Riddell from input to SABAP2 are identified with the observers' initials. Reports have also been obtained from BLZ's Special Species site on WhatsApp. Records of species marked * are subject to ratification by the Rarities Committee.

## Part 1: June to November 2018

These observations include a number of records from the Bubye Valley Conservancy (2129 D2 and 2130 C1) and the Gorhwe Pan area of Gonarezhou (2131 D3). These sightings appear to indicate range expansion although it is likely these relatively remote areas in the south of the country have been under-recorded previously, not least during the Atlas years. No comment is made against these sightings in the text below unless it appears to be a genuine range expansion.

### Waterbirds and allied species

In the northwest, **Great White Pelicans** *Pelecanus onocrotalus* were on the Lukosi River, Deka Safari Area (1826 A4†), at the end of July (SL), seven were at Camp Hwange (1826 C4) on 7 August (J-MB) and one at Ngamo 2 Pan, Hwange NP (1927 A2†), on 25-26 September (HGC). Scattered across the country, singles were in the Mukadzapela Bay area, Matusadona (1628 D3†), on 9 August (PTe) and on Kent Estate, Norton (1830 B1†), between 23 and 26 August (GL IR), a flock of six on Nyamoro Dam, Troutbeck (1832 B2†) in the first week of September is a scarce Eastern Highlands record (Facebook) and two were at Chamuluvati Causeway, Runde River, Gonarezhou on 11 September (TM).

Nesting together on 28 June near Kipling's Safari Camp, Ume River (1628 C4), were 29 **White-breasted Cormorants** *Phalacrocorax lucidus*, 14 **Reed Cormorants** *Microcarbo africanus* and 38 **African Darters** *Anhinga rufa*, all with chicks (PTe).

**Goliath Herons** *Ardea goliath* were found in the Bubye Valley Conservancy (2130 C1†) in October and November (WG). A **Black Heron** *Egretta ardesiaca* was on Kent Estate on 26 August (JVe). They are mostly absent during the winter, only arriving in any number from October onwards. In November **Squacco Herons** *Ardeola ralloides* recorded in the Deka Safari Area (1826 A4†) (MB) and on the Lukosi River (1826 C2†) (SL), indicate an extension of range from the south. No less than 11 **Black-crowned Night Herons** *Nycticorax nycticorax* were at the Kariba Bream Farm (1628 D2) on 22 September (CN). Along the Matusadona lake frontage in the Bumi Hills QDS (1628 C4†), **White-backed Night Herons** *Gorsachius leuconotus* were in the area around Rhino Safari Camp on 7 June (PTe) and 29 August (GD) and at Musango on 26 August and 5 September (SE).

The only **Dwarf Bittern** *Ixobrychus sturmii* reported was in the Deka Safari Area (1826 C2†) in November (MB).

**White Storks** *Ciconia ciconia* numbering from one to twelve were reported by various observers from many different sites from June to August. The 35 noted at Sanyati West Bay (1628 D1) on 14 September (CM) may have been early arriving birds, as with the 25 at Back Pan on the Hwange NP boundary (1927 A2) on 24-25 September (HGC). Thereafter the only sizeable group numbered 30 over Spurwing Island (1628 D1) on 20 November (CM); low numbers indeed for the start of the season. Four and five **Black Storks** *C. nigra* were at the Salt Pan, Hwange NP (1826 C1), on 4 July (J-MB) and 11 September (CB JB) respectively, and nine were noted there during the 24-hour game count on 24-25 September (HGC). Somewhat unusual was a **Woolly-necked Stork** *C. episcopus* within the Borrowdale Brooke, Harare (1731 C1), residential estate and golf course on 13 August (BB). It remained there, being reported by various observers, into November.

On Kent Estate Dam **African Openbills** *Anastomus lamelligerus* numbered two on 26 August (IR) and 20 on 26 October (JVe), while on the former date 20 **Marabou Storks** *Leptoptilos crumenifer* were present (IR) followed by 32 on 27 October (RD). About 60 **Marabou** in two groups were near the Enterprise Road tollgate, Harare (1731 C3), on 23 June (JW). A winter flock of 21 **Yellow-billed Storks** *Mycteria ibis* was at the Kariba Bream Farm on 24 June when 113 **African Sacred Ibis** *Threskiornis aethiopicus* were also present (CN).

**African Spoonbills** *Platalea alba* are seldom reported in any number so five at Mteri Dam, Chiredzi (2131 B3), on 24-26 August (JD) and ten on Kent Estate on 26 August (JVe) are

of interest, as is the occurrence of this species in the Bubye Valley Conservancy (2130 C1†) in November (WG). In Gonarezhou, **Lesser Flamingos** *Phoeniconaias minor* were found on the Save River in the Chilojo Cliffs area (2132 A3†) at the end of August (RB) and at Chitove (2132 A4†), a large flock of about 30, on 8 September (RD).

Numbers of **White-faced Ducks** *Dendrocygna viduata* can build up on the central watershed during the dry season and the 250 at the Lake Chivero Bird Sanctuary (1730 D4) on 8 July was a larger group than usual. 150 were still there on 11 November (RD).

A solitary **Cape Teal** *Anas capensis* was at David Whitehead Ponds, Chegutu (1830 A1), on 7 July (IR). Five **Hottentot Teal** *A. hottentota* were at the Lake Chivero Sanctuary on 8 July and on Manyame three were at The Hideaway (1730 D3) on the 22nd (RD). A **Red-billed Teal** *A. erythrorhyncha* at Musango on 23 October (SE) was a scarce Lake Kariba record, and 300 at the Lake Chivero Sanctuary on 11 November (RD) was the largest number recorded there for many years.

A pair of **African Pygmy Geese** *Nettapus auritus* was at Gletwyn Dam, Mandara (1731 C3), on 11 July (JBa), and at Drummond Farm Bay, Lake Manyame (1730 D3), five were seen on 13 August (ND). About 60 **Knob-billed Ducks** *Sarkidiornis melanotos* on Kent Estate Dam on 27 October (RD) were part of the influx that takes place ahead of the main December to February breeding period.

## Raptors

A **Secretarybird** *Sagittarius serpentarius* on Art Farm, Teviotdale, Harare (1731 C1), on 14 August (JW) could be the first seen there since CB's last record in December 1994. It was still present on 24 November (CB) and one at Marlborough Ponds, Harare (1730 D2), on 25 August (LS) was possibly the same bird. More individuals were on the Gweru-Bulawayo road near the Somabhula turnoff (1929 D1) in August (MBe), on the Botswana border near Imbabala Lodge (1725 C4) on 24 August (SC) and about 15 km from Chivhu towards Umvuma (1930 B2) on 23 September (IL); two were on Kent Estate on 2 November (GL).

No fewer than three **Egyptian Vultures** *Neophron percnopterus** were reported. The first was at Kavinga Safari Camp, Mana Pools (1629 A2), on 28 October (LW), a juvenile was at Rifa Camp, Chirundu (1628 B2), on 13 November (NH) and one at Big Toms, Hwange NP (1825 D2), on 19 November was at an elephant carcass with four other vulture species (SR JV).

The largest **Vulture** flocks comprised 130 **White-backed** *Gyps africanus* and three **Lappet-faced** *Torgos tracheliotus* at the Tuli Circle (2129 C3) on 29 July (DK); *c.* 130 **White-backed** at Kent Estate on 26 August (IR); and 126 **White-backed** (including many immature birds), 11 **Hooded** *Necrosyrtes monachus*, 6 **Lappet-faced**, 1 **White-headed** *Trigonoceps occipitalis* at Rifa on 7 August (NH). In a group of four species on a young elephant carcass near Masuma Dam, Hwange NP (1826 C2), on 15 August a **Lappet-faced** wore a yellow wing tag number A251 (JM-B). At two active **Lappet-faced** nests at Cawston Block Wildlife Ranch (1928 C2), on 14 August one contained a chick and the other an egg (SN).

Several **African Cuckoo Hawks** *Aviceda cuculoides* were reported but singles about 6 km past Makumbi Mission, Domboshawa-Bindura road (1731 C2†), on 3 September (DS) and at the Ngezi Mine bridge on the Mupfure River (1830 A2†) on 8 September (KW) were the only records from less usual localities. On the Zambezi, **Bat Hawks** *Macheiramphus alcinus* were at Chewore (1529 D2) on 16 August (DS) and at Rifa on 28 August (JW) and 19 November (NH); in Hwange NP at Main Camp (1826 D2) on 13 September (JV) and Mahohoma 2 Seep, Robins Camp area, on 24-25 September (HGC); one was on a nest at Chisipite, Harare (1731 C3), on 30 October (JBa).

Two **Verreaux's Eagles** *Aquila verreauxii* were near Mbala gate, Deka Safari Area (1826 C2), on 23 June (J-MB). At Mana Pools an adult **Tawny Eagle** *A. rapax* was standing on a nest off the entry road (1629 A2) on 23 July and another with a full crop was at a nest in a knobthorn southwest of Long Pool (1529 C2) on the 27th (IR). April to June is this eagle's prime breeding period. An **Ayres' Hawk-eagle** *Hieraaetus ayresii* southeast of Kenmaur, Bulawayo-Victoria Falls road (1928 A4†), in November (MB) adds another isolated dot to this bird's fragmented distribution.

Most unusual was a **Martial Eagle** *Polemaetus bellicosus* that ventured onto a large Hatfield, Harare (1731 C3†) property on 18 July to hunt **Helmeted Guineafowl** *Numida meleagris* (PT). On 29 July a pair of **African Crowned Eagles** *Stephanoaetus coronatus* was at the Umvumvumvu Bridge, 15 km along Chimanimani road (1932 D1) where, according to KW, they nested in the 1970s. A first-year bird was at Hippo Pools (1731 B2) on 2 October (TN).

**Black-chested Snake Eagles** *Circaetus pectoralis* were recorded in the Gorhwe Pan area (2131 D3†) in the last week October (IR). A thriving **Western Banded Snake Eagle** *Circaetus cinerascens* population has developed in the Honde Valley and pairs at Wamba Dam, Aberfoyle (1832 B4†) on 14 June (CM) and Katiyo Estate, Honde Valley (1833 A3†) on 13 October (MS) are the latest records. At Mana Pools two vocal birds were at Nyamepi Camp (1529 C2) in the early morning of 25 July (IR), and in mid-August singles were at Chine Pool (1529 C2) (IL) and Chewore (DS). One or two were seen at Hippo Pools in August (IL PT) and one at Ronwe Farm, 8 km east of Chinhoyi (1730 A4†), on 16 September was mobbed by a **Peregrine Falcon** *Falco peregrinus* (JoF). One caught a boomslang at Musango on 1 August and then attacked an **African Fish Eagle** *Haliaeetus vocifer* (SE).

The most notable of several Lake Kariba **Bateleur** *Terathopius ecaudatus* records was a pair nesting at Fothergill Island (1628 D1) on 14 August (CM). At Hippo Pools a female was noted on 5 August (IL) and a pair on 20 September (TN). In Mana Pools NP eight juveniles, ten immatures, one sub-adult, seven adult males, 11 adult females and five unclassified birds were recorded from 23 to 27 July (IR); a female was at Trichilia (1529 C4) and a male at Chine Pool in mid-August (IL); at Skull Pan (1529 C2) an adult male was seen at noon on 22 September and possibly the same bird in the evening. An adult female appeared on the 23rd with another sighting, possibly the same bird, 1½ hours later (IR). In the northwest, female adults were 11 km from Hwange town (1826 A4) on the road from Victoria Falls on 9 September and near the Salt Pans on the 11th (CB). In the southeast, two unclassified birds were seen on 26 October, a pre-adult male on the 27th, and then on the 28th two immatures, three juveniles, an adult female, and two adult males together at Gorhwe Pan (IR); one was near the Chilojo Cliffs (2132 A3) on 8 November, a female the following day at Massasanya Dam, Gonarezhou (2131 B4), and

a juvenile at Sango, Save Valley Conservancy (2032 A2), on the 10th (JP).

**Palm-nut Vultures** *Gypohierax angolensis** are reported more frequently from the Gonarezhou these days, perhaps an indication that this isolated population is on the increase; it may not have existed 40 years ago as there is no record of it in Irwin (1981, p. 76). Individuals were in QDS 2132 A4† at Tambahata Pan on 22 August and Mahove Camp five days later (TM).

Towards the end of October, **Steppe Buzzards** *Buteo buteo* were found in the Gorhwe Pan area (2131 D3†) (IR) and the Bubye Valley Conservancy (2130 C1†), and in November an **Ovambo Sparrowhawk** *Accipiter ovampensis* was reported from the latter site (WG). Single **African Marsh Harriers** *Circus ranivorus* were on Marlborough vlei on 2 June and between 25 August and 3 November (RC LS), at Drummond Farm Bay, Lake Manyame, on 13 August (ND) and Ronwe Farm, Chinhoyi, on 16 September (JoF).

In the Rhino Safari Camp area, Lake Kariba, from one to three **Ospreys** *Pandion haliaetus* were seen four times in June and once in October (PTe). Elsewhere on the lake three were on Fothergill on 1 June (CM), followed by singles in the same month at Elephant Point (1628 C4) (IL) and Starvation Island (1628 C4); at Musango one or two were around from 1 August to 23 October (SE) and two were at Palm Bay (1628 D3) on 3 August (GD). A juvenile spent the winter at Mazvikadei Dam, Banket (1730 A2) (BM) and one not far away on Biri Dam, Chinhoyi (1730 A3) in September had a yellow ring marked JXC. A pair has apparently been resident there for five years (JD, IL). Two were at Mteri Dam, Chiredzi (2131 B3†), on 24-26 August (JD), one at Mayfair Dam, Mbalabala (2029 A1), on 5 October (ND) and another in the Bubye Valley Conservancy (2130 C1†) in November (WG).

At Mana Pools, two **Red-necked Falcons** *Falco ruficollis* were in the Rukomechi River palms (1529 C3) on 24 July (IR). **Dickinson's Kestrels** *Falco dickinsoni* found in less usual areas were two near Shumba Pan, Hwange NP (1826 C4), on 27 June (J-MB) and one at the Chirundu Banana Farm on 11 August (TA).

## Gamebirds, Rails and Cranes

**African Blue Quails** *Synoicus adansonii* are wet season visitors arriving here to breed and, except in years of above average rainfall, they are seldom numerous. Two in wheat stubble at Old Mutare (1832 D3†) on 27 September and possibly the same pair on 1 October (GD) were somewhat early. With poor rainfall this season, however, one wonders if they attempted to breed. A flock of about 30 **Crested Guineafowl** *Guttera pucherani* was just south of Mana Pools on 26 July and 23 visited Skull Pan (1529 C2) on 22 September (IR). Seven in the Robins area between Bhejane and Manzibomvu Pans (1826 C4†) on 1 October (J-MB) were further south in Hwange NP than expected.

On 6 October an **African Rail** *Rallus caerulescens* at the top end of Cleveland Dam, Harare (1731 C3), could be the first record from there (DD). **Baillon's Crakes** *Porzana pusilla* are sparse summer visitors that can occur anywhere in suitable habitat when conditions are right (Irwin 1981, page 107). The Atlas data bears this out, recording them between December and April in only 22 quarter degree squares that are spread countrywide. A few records outside those months have occurred previously, however, to which can now be added one at Tambahata Pan, Gonarezhou (2132 A4†), on 7 September (RD). A **Lesser Moorhen** *Gallinula angulata* on a farm dam at the 34 km peg, Harare-Shamva road (1731 C2), on 17 November had arrived earlier than normal (CB).

An **African Finfoot** *Podica senegalensis* was on the Mupfure River, Beatrice (1830 B4†), on 25 July (AD) and four different individuals were seen upstream of Victoria Falls (1725 D4) on 14 September (CB JB). Few, if any, **Black-bellied Bustard** *Lissotis melanogaster* records have been posted within Zimbabwe south of 21°S so sightings in November from the Mutandahwe 2132 A1† and Fishan 2132 A3† squares, Gonarezhou, (DP) are exceptional.

## Waders, Gulls and Terns

A total of 73 **African Jacana** *Actophilornis africanus* were counted on a cruise on the Ume River on 28 June (PTe). A **Lesser Jacana** *Microparra capensis* was at The Hideaway on 22 July (RD). Single **Greater Painted-snipe** *Rostratula benghalensis* were at the Kariba Bream Farm on 24 June (CN) and Rhino Safari Camp on 2 August (PTe), four were at Imbabala on 21 August (SC) and groups of three were on an old farm dam near Mazvikadei on 7 August (BM) and Kavinga on 22 October (KvL).

In Hwange NP a **Common Ringed Plover** *Charadrius hiaticula* was at Mandavu Dam (1826 C2†) on 26 September and three sightings were made at the Salt Pan in October and November (J-MB); one was on the Kariba shoreline near Bumi airstrip on 28 September (SCh), six were at the Lake Chivero Sanctuary on 11 November (RD) in which month they were noted in the Bubye Valley Conservancy (2130 C1†) (WG). The only **White-fronted Plover** *Charadrius marginatus* reported was at Musango on 6 November (SE). A **Kittlitz's Plover** *Charadrius pecuarius* at Msuna (1826 B2†) on 10 September (CB) marks an extension of range downstream on the Zambezi and others were seen in the Bubye Valley Conservancy (2130 C1†) in October and November (WG).

There has been a sharp decline in the number of **Caspian Plovers** *Charadrius asiaticus* recorded in this column over the past 25 years or so, and we have to go back to 1992 to find the last record of a group that numbered more than ten. Reporting trends and habits may have changed during that time but there is enough evidence here to suggest the true status of this migrant in Zimbabwe is in decline. That said, more were reported in this period than for several years, possibly a result of dry conditions following a below average rainy season. Four were at Fothergill from 13 to 26 September (CM), one in the Robins Camp area during 24-25 September (HGC), two at Guvalala Pan, Hwange NP (1826 D3†) on 13 October and one there 4 November, and another individual was at Camp Hwange Pan (1826 C4) on 11 November (J-MB).

Two **Senegal Lapwings** *Vanellus lugubris* were near Muchaniwa Pan, Gonarezhou (2132 A4), on 5 September (RD). At the Kariba Bream Farm two **Long-toed Lapwings** *Vanellus crassirostris* were present on 24 June (CN) with the same number at the Rifa bream pools on 21 August (NH). Single **Spur-winged Lapwings** *Vanellus spinosus** were at Ruckomechi Camp (1529 C3†) on 14 September (AT) and at Bumi Hills (1628 C4†) on 18 October (SCh). Both birds were photographed and become the 5th and 6th Zimbabwe sightings.

The only wintering **Common Greenshank** *Tringa nebularia* reported was at Rhino Safari Camp on 7 June (PTe). **Curlew Sandpiper** *Calidris ferruginea* and **Little Stint** *Calidris minuta* were both recorded in the Bubye Valley

Conservancy (2130 C1†) in November (WG). A possible **Pectoral Sandpiper** *Calidris melanotos** near the Victoria Falls Crocodile Farm (1725 D4†) on 9 September (DT) will become the 4th Zimbabwean record if accepted (IR).

**Ruff** *Philomachus pugnax* were recorded in the Deka Safari Area (1826 A4†) in November (MB). A **Eurasian Curlew** *Numenius arquata** at Fothergill (1628 D1†) on 27 August and on the mainland shoreline opposite the island on 24 September (CM) were most likely different birds as they are only recorded here while on passage. A **Common Whimbrel** *Numenius phaeopus** at Ngamo Pan (1927 A2†) on 1 October (DMacD) was probably only the second Hwange NP record. The vast majority of sightings in Zimbabwe have occurred in the eastern half of the country.

**Pied Avocets** *Recurvirostra avosetta* reported from Hwange NP comprised six and four at Kennedy No 2 Pan (1827 C3) on 29 July (DK) and 11 August (JV) respectively, and a loner at Guvalala Pan between 3 October and 4 November (J-MB). In the Bubye Valley Conservancy (2130 C1†) **Black-winged Stilts** *Himantopus himantopus* were reported in November and **Water Thick-knees** *Burhinus vermiculatus* in October and November (WG).

A **Bronze-winged Courser** *Rhinoptilus chalcopterus* sighting in July extends its Zambezi valley range to the east of Rukomechi (1629 A2†) (JV). Another was seen on the road near the crossing of the stream that ends at Mana Mouth on the evening of 20 September (IR). On Lake Kariba over 1000 **Collared Pratincoles** *Glareola pratincola* were at Musango on the evening of 12 June (SE) and more than 200 were at Fothergill a day later (CM). About ten were on Kent Estate dam on 26 August (IR).

Apart from occasional sightings on the Limpopo at Beitbridge and Sentinel Ranch, **Grey-headed Gulls** *Chroicocephalus cirrocephalus* are virtually unknown in the southern half of the country. A November record from south of Triangle in the Chivumburu QDS (2131 A4†) (EvdW) is therefore exceptional. Where this wanderer may have come from is unclear as this gull largely a vagrant to northern South Africa and its status in Mozambique is uncertain.

**African Skimmers** *Rynchops flavirostris* have become more widespread and numerous in Gonarezhou since the Atlas years. Parties of three were at Mahove, Runde River (2132 A4†), on 9 July (TM), on the Save River (2132 A4) on 6 August (JP), at Chilo (2132 A2†) on 7 August and at Chamuluvati causeway, Runde River, on 26 August (TM); up to six were at Massasanya Dam (2131 B4) and three at the Bopomela crossing on the last few days of September (KvL). The largest flocks seen elsewhere were 29 at Imbabala on 12 August (SC) and 17 at Long Pool on 17 November (TA).

### Other non-Passerines

Flocks of **Yellow-throated Sandgrouse** *Pterocles gutturalis* were seen by a number of observers during September at Big Toms, Hwange NP (1825 D2).

A **Speckled Pigeon** *Columba guinea* at Fothergill (1628 D1†) on 20 October (CM) was probably a wanderer from the isolated Sanyati Gorge (1628 D4) population. **African Mourning Doves** *Streptopelia decipiens* still frequent the island just north of Nyamepi Camp where noted between 24 and 28 July (IR). But what compelled two to appear on Alison Randell's Umguza farm, north of Bulawayo, on 22 August (JV)? This sighting is far removed from the known populations along the northwest and southwest border areas, although there is an isolated August 2013 record from Gwanda (2028 D4) (Hubbard, 2014. *Honeyguide* **60**: 58) which lies approximately mid-way between the Limpopo population and Umguza. Further advances northwards from there would be possible. Otherwise southward movement, albeit over a long distance, from the Zambezi along the Gwayi and Umguza river systems is another possibility. Whatever their provenance, this is a remarkable record. A **Tambourine Dove** *Turtur tympanistria* found dead in a Marlborough garden on 13 August (JP) is an unusual urban record.

In Hwange NP two **Grey-headed Parrots** *Poicephalus fuscicollis* were near Tshompani Pan (1826 D1†) in June and at Masuma Dam on 15 August (JM-B). On the Zambezi, eight flew over Nyamepi Camp towards Zambia on the morning of 24 July and four did likewise the following day; some were heard at Nyamepi on 21 September and at Skull Pan on the 22nd with two being seen at the latter site on the 23rd (IR). Six were reported from the Runde River at Mahove (2132 A4) on 9 July (TM).

A hepatic morph **Common Cuckoo** *Cuculus canorus* at Imbabala on 29 November (SC) was probably a recent arrival. **African Cuckoos** *C. gularis* found a number of times in the Camp Hwange area (1826 C4†), in the first half of November (J-MB), were a little further south than noted previously. Highly unusual was an over-wintering **Great Spotted Cuckoo** *Clamator glandarius* at Mahove, Gonarezhou, on 9 July (TM). **Thick-billed Cuckoos** *Pachycoccyx audeberti* were reported from Kuimba Shiri, Lake Chivero (1730 D4), on 5 August (TC), Hippo Pools in September, October and November, one sighting in each month (TN), and Masoka, near the Mkanga-Angwa confluence, Zambezi valley (1630 A1), on 29 November (MZ).

An **African Emerald Cuckoo** *Chrysococcyx cupreus* at Seldomseen, Vumba (1932 B2) on 19 July (BMb) replicates a July record from there three years previously. Irwin 1981, page 164 thought they may be resident in the eastern highlands, and that could well be the case. The same author noted they can occur sporadically on the Mashonaland central watershed in suitable riparian growth, and one such individual was at Kuimba Shiri on 16 October (TC). Vocal **Klaas's Cuckoos** *C. klaas* were at Hillside, Harare (1731 C3), on 10 June (SW), Mazvikadei Dam on 1 August (BM) and Concession (1730 B4) on 8 August (JW), all of which were South African visitors. One in the 1927 A2† Ngamo square in mid-September (RB) represents a slight expansion of range and was probably a newly-arrived member of our breeding population.

A **White-browed Coucal** *Centropus superciliosus* reported from Shumba Pan (1826 C4†) in November (J-MB) was further south in Hwange NP than expected.

Single **African Grass Owls** *Tyto capensis* were on Kent Estate on 28 October (RD) and Marlborough Vlei on 20 November (RC). Between 6 and 30 August, **African Wood Owls** *Strix woodfordii* were noted on four occasions at Newlands where their occurrence is somewhat erratic. An **African Scops Owl** *Otus senegalensis* at Kent Estate (1830 B1†) on 26 August was slightly out of range, and a **Pearl-spotted Owlet** *Glaucidium perlatum* was also present. **Southern White-faced Scops Owls** *Ptilopsis granti* were found at a couple of localities in the Gorhwe Pan area (2131 D3†) in October (IR). **Pel's Fishing Owls** *Scotopelia peli* heard in Mana Pools were just below Nyamepi early in July (GP) and

at Elephant Creek on 15 August (SMu); another record came from Musango on 5 September (SE).

Most unusual was a flock of at least 50 **Nightjars**, possibly **Fiery-necked** *Caprimulgus pectoralis*, at twilight over the Zambezi at Rifa on 27 and 28 August (JW EB). A **Rufous-cheeked Nightjar** *C. rufigena* was heard at Gorhwe Pan (2131 D3†) on 27 October (IR). This nightjar is known from only a few scattered areas of Gonarezhou. It was also reported from the Bubye Valley Conservancy (2129 D2†) in September (WG).

Scarce Harare (1731 C3†) **Horus Swift** *Apus horus* records were obtained in November from two different areas (J-MB), these birds most likely being part of the population that breeds on the highveld in the summer. **Little Swifts** *A. affinis* were seen on more than one occasion in the Gorhwe Pan area (2131 D3†) in October (IR). Seven **Böhm's Spinetails** *Neafrapus boehmi* were on the Ume River on 28 June (PTe).

The Mutoko area is scarcely mentioned these days so **Speckled Mousebirds** *Colius striatus* at Chitora Dam (1732 A3†) on 24 October (AK) provide a useful record of this bird's range expansion in the northeast. A **Narina Trogon** *Apaloderma narina* in the Chipinda Pools area, Gonarezhou (2131 B4†), in November (EvdW) represents a slight expansion of range.

A **Giant Kingfisher** *Megaceryle maxima* was in the Bubye Valley Conservancy (2130 C1†) in October (WG). The first arriving **Woodland Kingfisher** *Halcyon senegalensis* was noted in the Robins Camp area in mid-November (JV). Then followed a clutch of records concentrated over three days: on 24 November at Gache Gache, Lake Kariba (1628 D4) (CN), Rifa (EB) and Umguza (HL); 25 November at Chiredzi (2131 B1) (NM); and 26 November in Gonarezhou at Tambahata Pan (TM) and Chipinda Pools (EvdW). Somewhat unusual in a Hogerty Hill, Borrowdale (1731 C1) garden were a **Grey-headed Kingfisher** *H. leucocephala* that dipped twice in the swimming pool on 27 October, and two **Little Bee-eaters** *Merops pusillus* on 19 August, one of which also took a dip (CB, JB).

Early **European Bee-eaters** *M. apiaster* at Mazvikadei on 26 August (BM) were most likely South African birds and some in Mandara, Harare (1731 C3), on 20 September (JBa) were probably Palearctic ones. Four over-wintering **Southern Carmine Bee-eaters** *M. nubicoides* were on the Ume River on 2 June (SC). Breeding birds arrived from early August onwards (see Arrivals below), and a large flock of 300-400 flew over Musango on 21 September (SE). **Swallow-tailed Bee-eaters** *M. hirundineus* in the Gorhwana Pan square (2131 D1†) on 25 August (RB) extend their range southwards by some distance.

Three **Crowned Hornbills** *Tockus alboterminatus* at Kotwa, Mudzi district (1632 D3†), in early October (AK) were a little south of their range on the north-eastern border. November sightings of **Acacia Pied Barbets** *Tricholaema leucomelas* in the Mutandahwe 2132 A1† and Fishan 2132 A3† squares (DP) indicate expansion eastwards in the extreme southeast of the country. **Lesser Honeyguides** *Indicator minor* were reported from the Bubye Valley Conservancy (2129 D2†) in November and **Bennett's Woodpeckers** *Campethera bennettii* in October and November (WG).

As usual, **Brown-backed** *Prodotiscus regulus* and **Green-backed Honeybirds** *P. zambesiae* were well reported from in and around Harare. The only record from elsewhere was a **Brown-backed** in the Deka Safari area (1826 C2) in November (MB).

## Passerines

**African Pitta** *Pitta angolensis* pairs were reported from Masoka (MZ) and Kavinga (LMcD) in November. **Chestnut-backed Sparrowlarks** *Eremopterix leucotis* were at Kent Estate Dam on 26 August (IR). In years of below average rainfall they will move further into Mashonaland from the west than in wetter years. A flock of about 100 was on the Musango foreshore on 2 November (SE).

Slightly out of range in Hwange NP were a **White-throated Swallow** *Hirundo albigularis* at Deteema Dam (1826 C1†) in September and **Sand Martins** *Riparia riparia* in the Shumba Pans area (1826 C4†) in the second week of November (J-MB). **Banded Martins** *R. cincta* are uncommon in the extreme southeast but were recorded more than once in the Gorhwe Pan area (2131 D3†) towards the end of October (IR).

Wintering **Black Cuckooshrikes** *Campephaga flava* were at Hippo Pools on 17 June (TN) and at the Lake Chivero Sanctuary on 8 July (RD), while a pair remained in Mandara throughout the winter (JBa). An **African Golden Oriole** *Oriolus auratus* was on the south-eastern side of the Matopos (2028 D1†) in November (KL). They were seen during July at Mana Pools where some are known to over-winter (IR) while a 17 August record from there (IL) could relate to a wintering bird or an early arrival. One in Mandara on 31 August (JBa) was probably an arriving bird.

At the Mukuvisi Woodlands, Harare (1731 C3) a pair of **Miombo Rock Thrushes** *Monticola angolensis* was seen in September and October (IR), and on 17 November they had a juvenile with them (KD). **Boulder Chats** *Pinarornis plumosus* at Stapleford, Mount Hampden (1730 D2) on 12 September were new to the area (ND).

A remarkable record was a **Garden Warbler** *Sylvia borin* in the Deka Safari Area (1826 C2†) in November (MB). This species went unrecorded in the entire 18°S, 26°E full degree square during the Atlas period and is notably scarce in the western third of the country. Similarly, the Atlas contains no **Chestnut-vented Tit-babbler** *S. subcaerulea* records in the 17°S, 31°E full degree square, but a couple were found at the 34 km peg Harare-Shamva road (1731 C2†) in September and November (CB).

July and September **Lesser Swamp Warbler** *Acrocephalus gracilirostris* records at the Salt Pan (1826 C1†) (J-MB CB) mark a southward expansion of range within Hwange NP. An unexpected sighting, both as to date and behaviour, was a displaying **Broad-tailed Warbler** *Schoenicola brevirostris* in wet conditions opposite Ewanrigg Botanical Gardens, (1731 C2), on the extremely early date of 7 September (IR). The first one reported from elsewhere was at Haka Park, Harare (1731 C3), on 24 November (J-MB).

A July **Yellow-breasted Apalis** *Apalis flavida* record from near Connemara, south of Kwekwe (1929 B2†) (AH) marks a significant extension of range, possibly from the west. **Eremomelas** in new areas were **Burnt-necked** *Eremomela usticollis* in the Rukomechi 1529 C4† QDS in the last week of July (IR) and **Yellow-bellied** *E. icteropygialis* in the Bubye Valley Conservancy (2129 D2†) in September where a **Stierling's Wren-warbler** *Calamonastes stierlingi* was noted in November (WG).

The only **Pale-crowned Cisticola** *Cisticola cinnamomeus* reported was at Marlborough vlei on 20 November (AK). It was probably too dry a year for them to muster in any number. A **Luapula Cisticola** *C. luapula* (previously a sub-species of the Black-backed Cisticola *C. galactotes*) was reported from Kazungula (1725 C4), on 4 September (SC). This is the only locality in Zimbabwe at which this marsh and wetland bird can be found. The Black-backed Cisticola *C. galactotes* has been split into a number of species within Africa, including the **Rufous-winged Cisticola** *C. galactotes*, which inhabits the extreme southeast of Zimbabwe.

**Spotted Flycatchers** *Muscicapa striata* may have arrived late this year, only being reported on 10 November from the National Botanic Gardens, Harare (1731 C3) (IL) and Umguza Irrigation Scheme. **Livingstone's Flycatchers** *Erythrocercus livingstonei* seen in July (1629 A2†) (JV) follow a September 2014 record from the same area. This bird is increasingly found on the valley floor inland from the Zambezi. In June wintering **African Paradise Flycatchers** *Terpsiphone viridis* were at Rhino Safari Camp (PTe) and Hippo Pools (TN).

Up to four **Mountain Wagtails** *Motacilla clara* were at Lions Head Dam, 45 km peg Harare-Shamva road (1731 D1), on 11 August (CB). On 4 November a **Tree Pipit** *Anthus trivialis* was at Camp Hwange (1826 C4†) where the only **Lesser Grey Shrike** *Lanius minor* reported was seen on 26 October (J-MB). Two **Cape Longclaws** *Macronyx capensis* on Monavale vlei on 19 October were the first seen there by (JM) for several years.

The **Common Fiscal** *Lanius collaris* is not a Middle Zambezi Valley bird so one near Long Pool, Mana (1529 C2†), on 19 August (IL) raises the question of its provenance. A September 1994 record from downstream of Vundu Camp (1529 C3) was considered a possible wanderer from Zambia where the opening up of bush could allow this bird to penetrate into hitherto unsuitable areas (Tree 1995, *Honeyguide* **41**: 127). A considerable length of time has elapsed since then, apparently with no further records coming to light. This latest bird may have flown south from Zambia but this is by no means certain.

On 13 October three **Marsh [Anchieta's] Tchagra** *Bocagia minuta anchietae* pairs were found at a new spot on Katiyo Estate (1833 A3) which adjoins the Aberfoyle Tea Estate (MS). This is an important record given the number of pairs involved and because this bird's range is limited in southern Africa to a few places in the Aberfoyle eastern border area and southern Mozambique.

Six **Violet-backed Starlings** *Cinnyricinclus leucogaster* at Mazvikadei on 3 June (DK) and others at Newlands on 19 August (IR) were winter flocks. A spate of mid-September records would indicate arriving birds: on the 11th at Mazvikadei (BM), 13th at Victoria Falls (1725 D4) (CB) and the 15th at Highlands, Harare (JoF). In Hwange NP, **Red-winged Starlings** *Onychognathus morio* were on the Kennedy loop road (1927 A1†) in mid-September (RB), a south-easterly movement of some distance since the Atlas years, and 30 or more **Yellow-billed Oxpeckers** *Buphagus africanus* were on 38 giraffe at Sinanga Pan (1827 C3) on 6 July (RR).

**Gurney's Sugarbirds** *Promerops gurneyi* were reported from Chimanimani Hotel (1932 D4) on 12 July (TMu) and Froggy Farm, Juliasdale (1832 D3), on 11 August (AMacD). **Marico Sunbirds** *Cinnyris mariquensis* were at Chegutu Primary School (1830 A1) on 7 July and a female **Western Violet-backed Sunbird** *Anthreptes longuemarei* was at Ewanrigg on 7 September (IR).

About eight **Red-billed Buffalo-weavers** *Bubalornis niger* on the Mvuma side of Chivhu (1930 B2†) on 26 October (IR) mark a significant move eastward. The **White-browed Sparrow-weaver** *Plocepasser mahali* is not expected east of 31°E in the southeast lowveld so an August record from the Gorhwana Pan 2131 D1† square (RB) is of note. A male **House Sparrow** *Passer domesticus* at Gutu (1931 C1†) on 29 October was out of range (IR), while **Cape Sparrows** *P. melanurus* have moved northwards from the Limpopo being found in the Bubye Valley Conservancy (2129 D2†) in September (WG).

**Southern Masked Weavers** *Ploceus velatus* were found at Gorhwe Pan (2131 D3†) towards the end of October (IR) and three **Lesser Masked Weavers** *P. intermedius* were at The Hideaway, Lake Manyame, on 22 July (RD).

The **Orange-winged Pytilia** *Pytilia afra* population in the south of the country is sparse and fragmented, and a mid-August record to the west of the Lion and Elephant Motel in the Sangokwe 2130 C2† QDS (WG) adds another apparently isolated area to its distribution. Other unexpected records came from Kent Estate with one on 26 August (IR) and from the Deka Safari Area (1826 C2†) in November (MB). In October **Red-throated Twinspots** *Hypargos niveoguttatus* were at Chitora Dam, Mutoko (1732 A3†) (AK) where slightly east of their known range, and at Charara, Lake Kariba (1628 D2) (GP).

**Orange-breasted Waxbills** *Amandava subflavus* were recorded on the southern shore of Lake Kyle (2030 B2†) in September (JJ). They are shown in the Atlas as being sparsely reported from the Lake's northern margins. A **Magpie Mannikin** *Lonchura fringilloides* was at Ewanrigg on 7 September (IR) and five were in the National Botanic Gardens on 10 November (IL). A July **Brimstone Canary** *Crithagra sulphurata* record from near Connemara, south of Kwekwe (1929 B2†) (AH) represents a slight extension of range in the central part of the country.

## Arrivals

**Abdim's Stork** *Ciconia abdimii* 18 October Harare (DeW), 24 October Hwange NP (J-MB), 31 October Mutare (GD); **Lesser Spotted Eagle** *Clanga pomarina* 22 November near Mount Hampden (1730 D2) (J-MB); **Wahlberg's Eagle** *Hieraaetus wahlbergi* 3 August Umguza (JV), 5 August Harare (CB), 11 August Hippo Pools (TN) and Lions Head Dam (1731 D1) (CB); **Steppe Buzzard** 13 October Harare (KvL); **Eurasian Hobby** *Falco subbuteo* 3 November Hwange NP (J-MB); **Common Sandpiper** *Actitis hypoleucos* 2 August Lake Kariba (PTe), 11 August Lions Head Dam (1731 B3) (CB); **Wood Sandpiper** *Tringa glareola* 2 August Lake Kariba (PTe), 7 August near Mazvikadei (BM); **Marsh Sandpiper** *T. stagnatilis* 3 August Hwange NP; **Common Greenshank** 4 July Hwange NP (J-MB), 7 July Whitehead Ponds, Chegutu (IR), 1 August Lake Kariba (SE); **Ruff** 3 August Lake Kariba (GD) and Hwange NP (J-MB); **Red-chested Cuckoo** *Cuculus solitarius* 20 September Aberfoyle Tea Estates (MS), 23 September Mazowe Dam (1730 D2) (BLZ Youth Club), 6 October Harare (DD), 17 October Mutare (JC), 18 October Mazvikadei (BM); **Black Cuckoo** *C. clamosus* 22 October Claw Dam, Kadoma (1829 B4) (JoF); **Levaillant's Cuckoo** *Clamator levaillantii* 16 October Kazungula (SC), 21 October Harare (JBa); **African Emerald Cuckoo** 14 August Vumba

(KW) and Nyanga (RK), 17 August Aberfoyle (MS); **Diderick Cuckoo** *Chrysococcyx caprius* 14 November Monavale vlei (JM) and Marlborough vlei; **Black Coucal** *Centropus grillii* 3 November Marlborough vlei (RC); **Pennant-winged Nightjar** *Macrodipteryx vexillarius* 24 September Hwange NP (HGC); **African Pygmy Kingfisher** *Ispidina picta* 9 October Harare (RD); **Grey-headed Kingfisher** 1 October Lake Chivero (LS), 22 October Musango (SE) and Claw Dam, Kadoma (JoF); **Southern Carmine Bee-eater** 7 August Mana Pools (TA), 28 August Umguza (JV); **Broad-billed Roller** *Eurystomus glaucurus* 1 October Lake Kariba (PTe), 7 October Kuimba Shiri (TC) and Hwange NP (SH), 16 October Mana Pools (TA); **Red-capped Lark** *Calandrella cinerea* 9 June Komani Airstrip (1730 D2) (IR); **Barn Swallow** *Hirundo rustica* 7 September Harare (JoF IR); **White-throated Swallow** 14 August Harare (CB); **Blue Swallow** *H. atrocaerulea* 8 September Connemara Lakes, Troutbeck (1832 B2) (RK); **House Martin** *Delichon urbicum* and **Sand Martin** 6 October Harare; **Black Cuckooshrike** 18 August Harare (CB); **Capped Wheatear** *Oenanthe pileata* 1 June Fothergill Island (CM), 9 June Komani Airstrip (IR); **Garden Warbler** 18 October Vumba (BMb); **Barratt's Warbler** *Bradypterus barratti* 5 September Vumba (KW); **Willow Warbler** *Phylloscopus trochilus* 10 October Harare (JoF); **African Paradise Flycatcher** 6 September Gonarezhou (CD), 12 September Harare (JBa); **Yellow Wagtail** *Motacilla flava* 19 October Lake Kariba (a juvenile) (SE), 23 October Mana Pools (KvL); **Red-backed Shrike** *Lanius collurio* 14 November Harare (JM), 29 November Gonarezhou (TM).

### Departures

**Capped Wheatear** 24 November Crowborough Ponds, Harare (1730 D4) (IL) and Art Farm (CB); **Purple-banded Sunbird** *Cinnyris bifasciatus* 11 November Lake Chivero (RD).

## Part 2: December 2018 to May 2019

Rainfall was generally well below average this season. Following as it did from the previous year's indifferent rains, many wetland areas dried up well before the end of summer. The effect on some of the waterfowl, waders and the like can be seen in a number of the reports below. As can occur when dry conditions affect the region as a whole, some species will move in from Botswana. G&MB travelled the length of the Deka/Binga/Magunje road, south of Lake Kariba, in December. A number of out-of-range records were obtained, and as with comments made in the introduction to Part 1, some of these species may well have been overlooked previously along this somewhat remote stretch of road.

### Waterbirds and allied species

Seven **Great White Pelicans** *Pelecanus onocrotalus* were at the Kariba Bream Farm (1628 D2) on 21 March (CN).

A **Purple Heron** *Ardea purpurea* at Hippo Pools (1731 B2†) in the last week of December (IL) was an addition to the Camp's list. This is a fairly sedentary species so it may not have moved from far away. On Lake Kariba at least 32 **Black Herons** *Egretta ardesiaca* were at Wild Heritage, Charara, (1628 D2), on 30 December (GD). **Slaty Egrets** *E. vinaceigula* found in Hwange NP in QDS 1826 C4†, possibly having moved across from Botswana, were two at Shumba Pan on 13 March (J-MB), and single birds at Scova Pan, Nehimba, on 6 April (BJ) and Camp Hwange (J-MB). Eight **Black-crowned Night Herons** *Nycticorax nycticorax* were on the Gache Gache River, Lake Kariba (1628 D4), on 23 December (CN).

At Gletwyn Dam, Mandara, Harare (1731 C3), **Little Bitterns** *Ixobrychus minutus* were found at two different places early in December, with another seen there on 11 April (JBa) and three were at the Kariba Bream Farm on 9 February (CN). The only **Dwarf Bitterns** *I. sturmii* recorded outside Harare were one at Biri Dam, Portelet Farm, Chinhoyi (1730 A3†), and two at Masuma Dam, Hwange NP (1826 C2), in January (IWC). All the Harare records came from QDS 1731 C3. In December single birds were in the vlei near the Newlands roundabout on the 2nd (IR), at Staley Dam on the 4th and 10th (JBa) and at Monavale vlei on the 20th (JM); thereafter individuals were at Ballantyne Park on 3 January, Greengrove Dam on 23 January and 17 February (DD) and Gletwyn Dam on 17 February (TW).

**White Storks** *Ciconia ciconia* in three loose groups numbering about 120 in all were around the old Harare South Country Club on 11 January (IL), 100 or more were at Kavinga Safari Camp, Mana Pools (1629 A2), on 25 February (TA) and 26 March (LMcD). Over 500 roosted near Chikwenya, Mana Pools (1529 D1), on 7 April and headed north the following morning (ST) and about 100 perching on rocks and trees at Mvurwi (1730 B2) on 16 April were probably heading north but grounded in heavy rain. Two at Umguza Irrigation Scheme, north of Bulawayo, on 12 May were the last reported. Numbers of **Abdim's Storks** *C. abdimii* were lower than normal, almost certainly because of poor rains; about 400 at Umguza on 13 January (JV) was the only sizeable group. Apart from a straggler at Camp Hwange on 13 May (J-MB), they had all moved north by the end of March with the last ones noted at Mount Pleasant, Harare (1730 D4), on the 23rd (LS) and at Umguza on the 27th (JV). It was obviously too dry a season for them to remain any longer. 300 or more **Woolly-necked Storks** *C. episcopus* roosted in tall trees at Mongwe Camp, downstream of Chirundu (1528 D4), on 13 December (BM). They are little more than vagrants along the central watershed but January records came from Gletwyn Dam (1731 C3†) (JBa) and the northern outskirts of Bulawayo (1928 D3†) (JV).

**Ibis** flocks at Crowborough Ponds, Harare South (1730 D4), on 29 December numbered at least 75 **African Sacred** *Threskiornis aethiopicus* and 105 **Glossy** *Plegadis falcinellus* (IL). A flock of 17 **Hadeda Ibises** *Bostrychia hagedash* at the Umguza Irrigation Scheme on 17 May (JV) was a nice concentration of this rather sparse resident. A **Lesser Flamingo** *Phoeniconaias minor* appeared at Guvalala Pan, Hwange NP (1826 D3), on 20 February (J-MB).

Two separate **African Black Duck** *Anas sparsa* pairs were on Monavale vlei on 4 May (IR). Ten **Hottentot Teal** *A. hottentota* were at Camp Hwange in January (IWC); nine, including youngsters, were on Gletwyn Dam on 27 March (JBa) and two were at the Salt Pan, Hwange NP (1826 C1), on 20 April (PD JeB). **Cape Shovelers** *A. smithii* are seldom

reported from the northwest so a pair at Shumba Pan (1826 C4†) on 10 April (J-MB) is of considerable interest.

**African Pygmy Geese** *Nettapus auritus* found at less usual places were at Gwebi Dam, Arden Farm, Nyabira (1730 D2), on 9 December (ND), Matobo Dam, south of Bulawayo (2028 B3†) (HL) and just north of the city in the Nyamandhlovu QDS (1928 C4†) in January (HL JV), downstream of Chirundu (1528 D4†) in mid-February (DN) and at Muchaniwa Pan, Gonarezhou (2132 A4), on 8 April (TM).

## Raptors

Following the juvenile **Egyptian Vulture** *Neophron percnopterus** in November at Rifa Camp, Chirundu (1628 B2), in Part 1 above, possibly the same juvenile was seen there on 1 January (EB). Three **Lappet-faced** *Torgos tracheliotus*, a **White-headed** *Trigonoceps occipitalis* and 53 **White-backed Vultures** *Gyps africanus* were at a zebra carcass on Cawston Block Wildlife Ranch (1928 C2) on 17 March (SN).

An **African Cuckoo Hawk** *Aviceda cuculoides* was on Kew Drive, Highlands (1731 C3), on 17 February (IR) and an adult and two juveniles were in a Mandara garden (1731 C3) on 19 March (JBa). **Bat Hawks** *Macheiramphus alcinus* are not often reported from the southwest so a January record just north of Bulawayo (1928 D3†) (JV) is of interest. A juvenile was seen to catch two bats on the wing and swallow them whole at Kavinga on 28 May (LMcD).

A large number of the relatively scarce **European Honey Buzzard** *Pernis apivorus* was reported from across the country with singles at Mazvikadei Dam, Banket (1730 A2†), on 17 December (BM) and 1 January (RMacD), Umguza (1928 D3†) on 19 December (JV), Christon Bank (1731 C1†) on 28 January (TW), Connemara Lakes, Troutbeck (1832 B2), on 13 February (LS), Zambezi NP, Victoria Falls (1725 D4†), on 19 February (CBr), Chimanimani (1932 D4†) early in March (TMu), Berea farm, Mazowe West, on 21 March (JW) and at Chewore Campsite on 21 April (ST).

A pair of **African Hawk-eagles** *Aquila spilogaster* with a juvenile in tow were hunting at Musango, Lake Kariba (1628 C4), on 24 March (SE). A **Long-crested Eagle** *Lophaetus occipitalis* at Umguza (1928 D3†) on 9 April was north of its known range in that part of Matabeleland (JV). A **Martial Eagle** *Polemaetus bellicosus* near Manjolo on the Binga-Milibizi road (1727 C4†) in November (G&MB) was slightly out of range. On 10 May, a sub-adult circled over the Hazelside gate area, Matobo NP (2028 C2), and a pair of **African Crowned Eagles** *Stephanoaetus coronatus* was over Rowallan (2028 B3) in the same Park (JV).

**Western Banded Snake Eagles** *Circaetus cinerascens* were reported from west of Chinhoyi (1730 A3†) on 21 February (RB), Chenje Camp, Chewore (1629 B2), on 19 March (MZ), Kanga Pan, Mana Pools (1529 C4), on 24 March (CM), Katiyo Tea Estate, Honde Valley (1833 A3†), a pair on 4 May (MS), and Long Pool, Mana Pools (1529 C2), on 20 May (CM).

A **Bateleur** *Terathopius ecaudatus* was on Chamabonda vlei, Victoria Falls NP (1725 D3), on 25 December (MA); two juveniles were in the Rifa Camp area at the end of February (IL); on Lake Kariba one was at Musango on 24 March (SE) and a pair at Rhino Safari Camp, Matusadona (1628 C4), on 2 May (TT); two immature birds and an adult male were at Chikwenya (1529 D1) on 20 April followed by a juvenile on 22 April (DS); and an adult male was over the first gorges below Victoria Falls (1725 D4) on 30 May (CB).

An **African Goshawk** *Accipiter tachiro* was on the Magunje-Binga road at the Sanyati River (1728 B2†) in December (G&MB).

Lone **Western Marsh Harriers** *Circus aeruginosus* were on Marlborough vlei, Harare (1730 D2), on 19 December (RC) and Monavale vlei on 7 January (IR). Single **African Marsh Harriers** *C. ranivorus* were found at Monavale vlei on 19 December (JM), Marlborough vlei on 28 December (RC) and south of Harare at a dam near Chitungwiza on 5 April (AK); another individual was at Gwebi dam on 9 December as was a **Montagu's Harrier** *C. pygargus* (ND). The only **Pallid Harrier** *C. macrourus* noted was near Shumba Pan on 8 December (J-MB). It was a poor year indeed for our three visiting Palaearctic harriers.

**Ospreys** *Pandion haliaetus* reported from Lake Kariba comprised four at Sanyati West (1628 D1) on 9 December (LS), three on the Gache Gache River on 23 December (CN), a pair at Rhino Safari Camp, on 23 April (TT) followed by three sightings in May (PTe), and one at Musango on 27 and 30 May (SE). Singles were on Gwebi dam on 9 December (ND) and Mandavu Dam, Hwange NP (1826 C2), on 8 May (J-MB) while at Victoria Falls two were in Zambezi NP on 25 February (CBr) and one on Cataract Island in March (BN).

The **Lanner Falcon** *Falco biarmicus* and **Eurasian Hobby** *F. subbuteo* have scattered distribution patterns in central Matabeleland and records from Umguza (1928 D3†) in April and December respectively (JV) add another QDS to their territories. A **Red-footed Falcon** *F. vespertinus* was seen at Shapi Pan, Hwange NP (1826 D3), on 14 December (J-MB). The only large **Amur Falcon** *F. amurensis* flocks comprised 'hundreds' at Nyamandhlovu Pan, Hwange NP (1826 D4), on 24 December (MBe) and about 1000 on power lines at Mufakose, Harare (1730 D4) on 24 March (RD). The roost at Mwanandishe Primary School, Tafara, where *c*. 25000 were counted in February 2012, has been destroyed. There is a new roost somewhere east of Harare but the exact locality is unknown (IR).

No less than four **Dickinson's Kestrels** *Falco dickinsoni* were noted in Zambezi NP on 10 April (CBr).

## Gamebirds, Rails and Cranes

Six **Crested Guineafowl** *Guttera pucherani* were on Chamabonda vlei (1725 D3) on 28 December (BN) and a **Kurrichane Buttonquail** *Turnix sylvaticus* was at Haka Park (1731 C3) on 23 February (DD).

Despite the poor rainfall **Corn Crakes** *Crex crex* were well reported around Harare with singles at Haka Park on 4 January, Monavale vlei on 5 and 28 January and 24 February (TW), Marlborough vlei on 6 January (RC) and two on Borrowdale vlei (1731 C3) on 17 January (JoF). A migrating individual touched down at Umguza (1928 D3†) on 28 March (JV) to provide a scarce Matabeleland record.

A **Spotted Crake** *Porzana porzana* was seen by a number of observers at Ballantyne Park (1731 C3†) for a few days at the end of January. At Monavale vlei on 23 December a female **Striped Crake** *Aenigmatolimnas marginalis* was seen, followed by a male and female, and then another male. Although most of the vlei was dry, broken water pipes saturated part of the area thus attracting these early migrants (IR). With such dry conditions across the country this is a

notable record given the number of birds involved and December sightings being highly unusual these days. Despite the vlei remaining relatively dry throughout the season one was recorded on 24 February and as many as three on 3 March (TW).

The first **Streaky-breasted Flufftail** *Sarothrura boehmi* reported was at Pomona rubbish dump, Harare (1731 C1), on 22 December (KD) while at Monavale vlei they were noted between 4 January and 3 March with three being the largest count (TW IR).

During March a **Purple Swamphen** *Porphyrio madagascariensis* was on the northern side of Mazvikadei (1730 A2†) (BM) where, surprisingly perhaps, not recorded during the Atlas years. An **Allen's Gallinule** *P. alleni* was on this dam on 1 January (RMacD), another was on Marlborough vlei on 6 January (RC) and two were at the Kariba Bream Farm on 10 February (CN).

**Common Moorhens** *Gallinula chloropus* are not at all common in the low-lying areas of the country but a record at *c.* 500 m comes from approximately 50 km east of Binga along the Mucheni River on the Magunje road (1727 D2†) in December (G&MB). Various observers reported one or two **Lesser Moorhens** *G. angulata* at Ballantyne Park between 22 December and 28 January, and one was at Mazvikadei on 1 January (RMacD). A pair of **African Finfoot** *Podica senegalensis* was at Umfuli Creek, Chegutu (1830 A1), on 26 May (JW).

A **Denham's Bustard** *Neotis denhami* was reported from Spurwing Island, Lake Kariba (1628 D1), on 16 April (Facebook). Visitors at that time of year are believed to come across from Zambia. A male **Black-bellied Bustard** *Lissotis melanogaster* was close to Harare on Thetford Estate, Glen Forest (1731 C1), on 26 December (DS).

## Waders, Gulls and Terns

Single **Lesser Jacanas** *Microparra capensis* were at Mazvikadei on 24 December (AMacD) and 1 January (RMacD), and Reedbuck vlei, Camp Hwange, on 14 April (J-MB). A pair of **Greater Painted-snipes** *Rostratula benghalensis* was at Art Farm, Teviotdale, Harare (1731 C1), on 21 December (JW) and two were on Marlborough vlei on 28 December (RC); one was at Mazvikadei on 28 December and 1 January (RMacD); and in Mana Pools NP four were seen at Kavinga (LMcD) and one at Trichilia Island (1529 C4) in April (NH).

Six **Common Ringed Plovers** *Charadrius hiaticula* on Starvation Island, Lake Kariba (1628 C4), on 24 March (SE) were no doubt moving north. Following the October and November **Caspian Plover** *C. asiaticus* records in Part 1, another individual was at Guvalala Pan on 28 February (J-MB).

A **Green Sandpiper** *Tringa ochropus* near Inyantue Dam, Hwange NP (1826 D1†) on 6 December (J-MB) was the only one reported. The last **Common Greenshank** *T. nebularia* noted at Kavinga was on 24 April (LMcD), while one at Camp Hwange (J-MB) and two at Rhino Safari Camp (PTe) on the late date of 30 May were either in transit or lingering into the winter.

A possible **Sanderling** *Calidris alba* at Rhino Safari Camp on 30 December could not be positively identified (KWr). 61 **Ruff** *Philomachus pugnax* were counted at Mandavu Dam and 59 at Kadoma Textiles Dye Ponds (1829 B4) in January (IWC).

**Pied Avocets** *Recurvirostra avosetta* found in unusual areas were an individual at Marlborough ponds on 28 December and 5 January (RC) and three at Xanadu Farm (McDonald Timbers), Ruwa (1731 C3), on 26 May (JBa). Also unusual was a **Black-winged Stilt** *Himantopus himantopus* near Wild Geese Lodge, Wingate (1731 C1), on 29 December (CB); as many as 115 were at Crowborough Ponds on 12 January (IL).

**Black-winged Pratincoles** *Glareola nordmanni* moving north through Hwange NP were an individual at Shumba Pan on 13 March (J-MB) and several at the Salt Pan on 20 April (PD JeB). A **Caspian Tern** *Hydroprogne caspia* was on Lake Kariba at Musango on 22 March when **Whiskered Terns** *Chlidonias hybrida* were also present (SE). 50 or more **African Skimmers** *Rynchops flavirostris* at the Kariba Crocodile Farm (1628 D2) on 29 December (SH) was the largest flock reported for some considerable time; three were at Chilo Gorge, Gonarezhou (2132 A2), on 15 April (TM).

## Other non-Passerines

On 24 December eight **Yellow-throated Sandgrouse** *Pterocles gutturalis* were on Chamabonda vlei (BN) where only occasionally recorded.

A flock of 12 **Speckled Pigeons** *Columba guinea* at Kuimba Shiri (1730 D4†) on 24 December (GS) is believed to be the first Lake Chivero record. They continue to extend their range in the northwest where three at the old fire station at Victoria Falls Airport (1825 B2†) on 20 May were assumed to be nesting (BN). **Rock Doves (Feral Pigeons)** *C. livia* at Msampakaruma on the Magunje-Binga road (1728 B2†) in December (G&MB) were quite some distance from the few localities immediately south of Lake Kariba where noted previously. **African Green Pigeons** *Treron calvus* were heard in the early morning of 22 December at Newlands (IR).

A flock of six **Grey-headed Parrots** *Poicephalus fuscicollis* flew through Stapleford, Mount Hampden (1730 D2†), on 6 December (ND); three fed on *Terminalia* pods at Charara, Lake Kariba (1628 D2), on 22 February (GP) and between 16 and 25 flew at 0600 on a few days during February from above the Chilojo Cliffs towards the Pombadzi Wilderness Area, Gonarezhou (2132 A3) (GD). Up to 19 were watched for an hour on the Rifa floodplain on 23 February (KD); three were in Zambezi NP on 3 March (CBr) and 11 in three separate flocks were seen in the early evening on 18 and 19 May in the Chewore Safari Area (1630 A2) (SE). About 15 **Lilian's Lovebirds** *Agapornis lilianae* were near Vundu Camp, downstream of Ruckomechi (1529 C3), on 24 December (NH) and 25 were recorded at Kanga Pan on 1 April (CM).

A **Lesser Cuckoo** *Cuculus poliocephalus** was on the Aberfoyle golf course (1832 B4†) on 17 February (MS). The eastern districts hold the bulk of the records of this extremely scarce Palearctic migrant, and there is a February 1997 record from the same Tea Estates. A **Black Cuckoo** *C. clamosus* downstream of Chirundu (1528 D4†) in mid-February (DN) was marginally out of range. **Black** and **Klaas's Cuckoos** *Chrysococcyx klaas* were found east of Deka Safari Area in QDS 1827 A1† in December with the **Klaas's** also noted in the adjoining 1826 B2† square (G&MB). This is an area where both species have only been sporadically recorded previously.

Single **Thick-billed Cuckoos** *Pachycoccyx audeberti* were at the Kamasoro River, Masoka (1630 A1), on 10 December (MZ); a young bird at Haka Park (1731 C3†) in the second

week in January (LW); Hippo Pools on 5 February (TN) and at Chenje camp, Chewore, on 19 March (MZ). **African Emerald Cuckoos** *Chrysococcyx cupreus* found on the Magunje-Binga road at the Sanyati River and just west of there at Msampakaruma (1728 B2†) in December (G&MB) were a little further upstream than noted previously. The Atlas is devoid of records in the entire southwest of the country so one north of Bulawayo on the Umguza River (1928 D3†) in January (JV) is exceptional.

As many as seven **Green Malkohas** *Ceuthmochares australis* were found in the Chilo sand forest, Gonarezhou, on 29 December (TM). This is a prime locality for this bird which has a very restricted range in this country.

Up to three **Pel's Fishing Owl** *Scotopelia peli* were heard at Chikwenya on 22 April (DS), one was at Chewore Camp on 23 April (JP) and another was flushed upstream of the Zambezi NP chalets on 17 May (CB JB).

On the Magunje-Binga road in December a **Verreaux's Eagle Owl** *Bubo lacteus* at the Sanyati River (1728 B2†) was a little further upstream than noted previously; a **Pennant-winged Nightjar** *Macrodipteryx vexillarius* in the same area (1728 B2†) was south and east of previous records in that remote part of the country; and **Common Swifts** *Apus apus* were seen in the vicinity of the Ume River (1728 A2†) and at Binga (1727 C2†) (G&MB). Up to 1000 **Common Swifts** feeding on the wing at Musango on 24 December were accompanied by one **Mottled Spinetail** *Telacanthura ussheri* (SE). **Horus Swifts** *A. horus* were a little to the south of Victoria Falls (1825 B2†) on 8 March (YS) where perhaps overlooked previously. Six **Böhm's Spinetails** *Neafrapus boehmi* were at Chikwenya on 22 April (DS).

**Speckled Mousebirds** *Colius striatus* continue to occupy new areas in the northeast, being recorded at Hippo Pools (1731 B2†) in the last week December (IL). A **Half-collared Kingfisher** *Alcedo semitorquata* was at Berea Farm, Mazowe West, on 4 April (JW). Passage of **Woodland Kingfishers** *Halcyon senegalensis* was reported in April from Chitungwiza on the 5th (AK), Rhino Safari Camp on the 20th (KWr) and two birds at Chikwenya on the 22nd (DS).

Post-breeding southward movement of **Southern Carmine Bee-eaters** *Merops nubicoides* was noted at Mukuvisi Woodlands, Harare (1731 C3), with three on 6 January (DD) and Monavale vlei where two were seen the following day (IR). Two north-bound birds were over Highlands on 27 March (JoF) and a juvenile with **European Bee-eaters** *M. apiaster* was at Mandara on 3 April (JBa). An unseasonal **Swallow-tailed Bee-eater** *M. hirundineus* was seen between Ngweshla and Somalisa Camps, Hwange NP (1927 A1), on 16 February (CM).

A **European Roller** *Coracias garrulus* upstream of Mana Pools (1529 C2†) in December (PS) represents a slight expansion of range. The last of the season were two on 19 March at Umguza (2028 B1) (JV) and 23 in a loose flock over Mutare (1832 D3) on 24 March (GD). **Broad-billed Rollers** *Eurystomus glaucurus* were found a couple of times in January on the northern edge of Bulawayo (1928 D3†) (JV). An **African Hoopoe** *Upupa africana* fed a juvenile **Greater Honeyguide** *Indicator indicator* at Newlands on 11 December (IR).

In the 1990s, **Trumpeter Hornbills** *Bycanistes bucinator* were known to occur occasionally below the Mazowe Dam wall (Tree 1994, *Honeyguide* **40**(3): 194) although it seems there have been no records since then. Of great interest therefore is a record from upstream of the dam, on Thetford Estate (1731 C1†), on 26 December (DS), not least as it brings the range of this large tree specialist closer to Harare. The waterbird count at Mazvikadei ponds on 26 January turned up both **Trumpeter** and **Crowned** *Tockus alboterminatus* **Hornbills** (IWC). Most unusual, and probably the first for IR's Newlands garden, was an **African Grey Hornbill** *T. nasutus* on 18 January. Also surprising were two **Southern Ground Hornbills** *Bucorvus leadbeateri* that flew through Mutoko (1732 A3†) on 7 December (AK).

Single **Brown-backed Honeybirds** *Prodotiscus regulus* were at Newlands on 4 December (IR) and Mandara on 25 February (JBa). Two separate **Green-backed Honeybirds** *P. zambesiae* were recorded on 3 March at the Mukuvisi Woodlands (IR).

## Passerines

**African Broadbills** *Smithornis capensis* were reported from Masoka on 17 December (MZ) and the Chilo sand forest on 28 March (TM). Single **African Pittas** *Pitta angolensis* were seen at different places at Charara on 1 and 3 December (CN). They were reported from Masoka from 10 December onwards (MZ) and were seen mating in the Camp area on the 16th; they were still present in numbers in the first week of February (TW) and a chick was seen on the 9th (MZ).

Southward movement of **Dusky Larks** *Pinarocorys nigricans* is usually over by November so one at Camp Hwange and two at Shapi Pan on 14 December (J-MB) were later than normal. One heading north was at Rhino Safari Camp on 23 April (TT). As well as being slightly out of range, **Red-capped Larks** *Calandrella cinerea* just outside Bulawayo (1928 D3†) on 21 January (JV) were also unseasonal, no doubt a reflection of poor rainfall.

Hundreds of **Barn Swallows** *Hirundo rustica* at Starvation Island on 24 March (SE) was probably a pre-migratory gathering with the main exodus occurring between 10 and 24 April (see Departures below). One or two stragglers were in the Dopi Pan area, Hwange NP (1827 C3), on 16 May (JV). **Mosque Swallows** *Cecropis senegalensis* are not known along the Zambezi from the Milibizi/Msuna area westwards to the Chobe River in north-eastern Botswana. A March record from just south of Victoria Falls (1825 B1†) (YS) is therefore a major extension of range. The Atlas contains no **Banded Martin** *Riparia cincta* records in the entire 19°S 28°E full degree square so an April record from Umguza (1928 D3†) (JV) is of some significance.

A nice urban record was a male and two female **Eurasian Golden Orioles** *Oriolus oriolus* catching termite alates at Newlands on 1 December (IR). The last **African Golden Oriole** *O. auratus* at Kavinga Pan was noted on 24 April (LMcD) while one on 29 May at Victoria Falls (CB) may have been overwintering. A **Pied Crow** *Corvus albus* record from Manjolo on the Binga-Milibizi road (1727 C4†) in December (G&MB) is probably an extension of range from Milibizi. The only **Cinnamon-breasted Tit** *Melaniparus rufiventris* reported was on Tom Hulley road, Vumba (1932 B1), on 16 December (TW).

An **Eastern Nicator** *Nicator gularis* was found east of Deka on the dirt road leading to the Dete-Milibizi tar road (1826 B2†) in December (G&MB). At the Mukuvisi Woodlands on 3 February the usual female **Miombo Rock**

**Thrush** *Monticola angolensis* with her deformed beak was seen along with two males (IR).

Two **Mocking Cliff-chats** *Thamnolaea cinnamomeiventris* on a wetland near Mabvuku, Harare (1731 C3), on 1 March (RC) were in unusual habitat, and in similar vein a **Boulder Chat** *Pinarornis plumosus* was in an open area with scattered rocks between Greengrove Dam and the Mutare road (1731 C3) on 27 March (AD).

A **Red-capped Robin-chat** *Cossypha natalensis* at Hippo Pools (1731 B2†) on 14 May (TN) was far south of the Zambezi valley population, presumably having wandered upstream on the Mazowe for some considerable distance. **Thrush Nightingales** *Luscinia luscinia* were reported from the Banket area on 12 January (DK), downstream of Chirundu (1529 C3†) early in February (DN), and from the pan at Mbala gate on the Hwange NP-Deka Safari Area boundary (1826 A4) on 15 February (J-MB). Only one **Common Whitethroat** *Sylvia communis* was reported, that being at Haka Park on 1 January (AD).

**Icterine Warblers** *Hippolais icterina* were found a little to the north of Bulawayo in QDS 1928 C4† and in the adjoining 1928 D3† square in January (JV). A **River Warbler** *Locustella fluviatilis** occupying a dense overgrown area in a Chisipite, Harare (1731 C3), garden between 14 and 25 March could well be the same individual that visited at a similar time the previous year (TW). A **Marsh Warbler** *Acrocephalus palustris* on end-of-season migration normally passes through a Newlands garden each year. Unusual this season however, and possibly because of the poor rains, one was present from 17-26 January and throughout February to the 27th. The usual north-bound bird was noted between 22 March and 1 April, and as with the River Warbler, it is probably the same individual that visits this garden annually (IR). A **Sedge Warbler** *Acrocephalus schoenobaenus* was recorded in the Nyamandhlovu QDS 1928 C4†, north of Bulawayo, in January (JV).

**Chirinda Apalises** *Apalis chirindensis* were on the Vumba along Tom Hulley road on 16 December (TW). **Burnt-necked Eremomelas** *Eremomela usticollis* were found just below Mana Pools (1529 C2†) in December (PS), a slight expansion of range downstream. A **Croaking Cisticola** *Cisticola natalensis* at the Umguza Irrigation Scheme (1928 D3†) on 19 December (JV) was a little to the north of its known range. A **Short-winged Cisticola** *C. brachypterus* in the Burma valley on 17 December (BMb) is a reminder this restricted-range bird can be found in this unique part of the country.

**Collared Flycatchers** *Ficedula albicollis* were seen at Christon Bank on 9 December and 4 January (TW) and a **Grey Tit-flycatcher** *Myioparus plumbeus* was in the same area on 28 April (RD). **Black-throated Wattle-eyes** *Platysteira peltata* were at the Mukuvisi Woodlands on 6 January (DD) and two adults and a juvenile were there on 3 April (TW).

At Mana Pools **Yellow Wagtails** *Motacilla flava* were reported from QDS 1529 C2† in December (PS) where known from adjoining squares along the river. Unusual at Monavale vlei were two **Rosy-throated Longclaws** *Macronyx ameliae* on 20 January (IR). Passage of **Lesser Grey Shrikes** *Lanius minor* was noted in April in Gonarezhou at Muchaniwa Pan on the 8th (TM) and Chipinda Pools (2131 B4) on the 19th (EvdW), and elsewhere at Umguza on the 13th (JV) and Chikwenya a day later (DS).

**Thick-billed Weavers** *Amblyospiza albifrons* nested at the Kariba Bream Farm near Charara (1628 D2†) in December (PD). This weaver has moved steadily north and northwest from the Eastern Highlands over the past thirty years. It was noted at Mutorashanga (1730 B1) in March 2015, the most northerly record thus far but still a long way from Kariba's eastern basin. IR knows of old Lake Kariba records from closer to Binga as well as from Zambia near the escarpment, so the provenance of these latest birds can only be a matter of speculation. With breeding taking place they could establish there and any future records from the Lake will be of great importance.

**Cuckoo Finches** *Anomalospiza imberbis* in small numbers were seen on Newlands vlei in December and January (IR). **Yellow-crowned Bishops** *Euplectes afer* in the Kazungula area (1725 C4) in February (YS) are worth mentioning as they are only infrequent visitors there, these individuals having probably moved in from Botswana. A **White-winged Widowbird** *E. albonotatus* record from a vlei off the Kennedy loop road, Hwange NP (1927 A1†), in April (JV) represents a slight southward extension of range.

**Red-throated Twinspots** *Hypargos niveoguttatus* found on the Magunje-Binga road at the Sanyati River (1728 B2†) in December (G&MB) were mid-way between the widespread northern population and the smaller Binga-Milibizi concentration. Three were at Umfuli Creek, Chegutu (1830 A1), on 26 May (JW), this being the only QDS in the entire 18°S, 30°E full degree square in which this species has been recorded. A **Swee Waxbill** *Coccopygia melanotis* at Cloudlands, Vumba (1932 B1†), on 9 December (BMb) was most likely the first Vumba record.

**Red-backed Mannikins** *Lonchura nigriceps* seen in March near Ruwa (1731 C4†) (JBa) mark a slight expansion of range south-eastwards. Six **Magpie Mannikins** *L. fringilloides* at Umfuli Creek (1830 A1†) on 8 December (JW) follow an August 2017 record from there. This area is quite some distance to the southeast of the main, albeit sparse, Mashonaland population.

**Pin-tailed Whydahs** *Vidua macroura* were found south of the Matusadona NP on the Magunje-Binga road (1728 B1†) in December (G&MB). A male **Long-tailed Paradise Whydah** *V. paradisaea* in a Hogerty Hill garden on 19 February was the first seen there for well over 20 years (CB JB). **Village Indigobirds** *V. chalybeata* have moved southwards within the Umfurudzi Safari Area being seen near Hippo Pools (1731 B2†) in March (DD). A **Twinspot Indigobird** *V. codringtoni* was on the Eastern Highlands Tea Estate, Honde Valley (1832 B4†), on 30 January (MS).

A **Cabanis's Bunting** *Emberiza cabanisi* was at Christon Bank on 17 February and a **Cinnamon-breasted Bunting** *E. tahapisi* was on the edge of Monavale vlei on 20 January (IR).

### Arrivals

**Amur Falcon** 3 December Harare (RD), 5 December Lake Kariba (KWr); **African Crake** *Crecopsis egregia* 2 December Hwange NP (J-MB), 28 December Harare (RC); **Swallow-tailed Bee-eater** 24 April Mana Pools (LMcD), 28 April Christon Bank (RD), 1 May Harare (IR); **Great Reed Warbler** *Acrocephalus arundinaceus* 10 December Harare (RC).

### Departures

**Wahlberg's Eagle** *Hieraaetus wahlbergi* 20 March Harare (RC); **Eurasian Hobby** 4 March Harare (IR); **Amur Falcon** 25 March Komani Farm (1730 D2) (LS), 30 March Lake Chivero (JoF); **African Crake** 20 March Harare (RC), 21 March

Mazowe West (JW); **Wood Sandpiper** *Tringa glareola* 22 April Chikwenya (DS), 24 April Kavinga Pan (LMcD); **Ruff** 8 May Hwange NP (CBr); **White-winged Tern** *Chlidonias leucopterus* 9 April Gonarezhou (TM); **Common Cuckoo** *Cuculus canorus* 30 March Lake Chivero (JoF); **Levaillant's Cuckoo** *Clamator levaillantii* 27 April Harare (LS); **Jacobin Cuckoo** *C. jacobinus* 1 April Harare (TW), 23 May Gonarezhou (TM); **Black Coucal** *Centropus grillii* 3 March Harare (TW), 4 April Mazowe West (JW); **African Pygmy Kingfisher** *Ispidina picta* 30 April Lake Chivero (TC), 11 May Lake Kariba (TT); **Grey-headed Kingfisher** *Halcyon leucocephala* 24 April Mana Pools (LMcD), 29 May Victoria Falls (CB JB); **European Bee-eater** 31 March Vumba (PM) and Gonarezhou (EvdW), 1 April Hwange NP (JV), 7 April Ewanrigg (1731 C2) (KW), 10 April Smallbridge dam, Sheba Estates (1832 D3) and Mutare (GD), 13 April Umguza (JV), 17 April Harare (IR); **Broad-billed Roller** 14 March Harare (KD), 19 March Lake Kariba (CN); **Barn Swallow** 31 March Gonarezhou (EvdW), 10 April Mutare (GD) and Chamabonda vlei (MA), 11 April Macheke (1831 B2) (JeF), 13 April Umguza, 24 April Mana Pools (LMcD); **White-throated Swallow** *Hirundo albigularis* and **House Martin** *Delichon urbicum* 13 April Umguza; **Banded Martin** 16 May Hwange NP (JV); **Great Reed Warbler** 3 March Harare (TW); **Willow Warbler** *Phylloscopus trochilus* 15 April Harare (LS); **Spotted Flycatcher** *Muscicapa striata* 28 March Umguza (JV), 4 April Victoria Falls (CB); **African Paradise Flycatcher** *Terpsiphone viridis* 18 April Gonarezhou (EvdW), 20 April Lake Kariba (KWr), 24 April Mana Pools (LMcD), 28 April Christon Bank (RD), 4 May Harare (PT); **Red-backed Shrike** *Lanius collurio* 10 April Harare (TW), 20 April Umguza (JV) and Mana Pools (DS); **Violet-backed Starling** *Cinnyricinclus leucogaster* 30 April Harare (JBa).

### Observers

TA – Tessa Arkwright ; MA – Matt Austen; EB – Elspeth Baillie; RB – Rachel Bain; CB – Colin Baker; JB – Julia Baker; JBa – James Ball; MBe – Miriam Bell; G&MB – Gavin and Marjorie Blair; J-MB – Jean-Michel Blake; JeB – Jenny Brebner; BB – Bazil Brent; MB – Mike Bridgeford; CBr – Charles Brightman; RC – Ronnie Chirimuta; SCh – Steve Chinhoi; SC – Stan Chizipi; JC – Jane Clegg; TC – Tracey Couto; DD – D Dalziel; AD – Asher Dare; ND – Neil Deacon; PD – Paula Dell; JD – Jordan Delourie; CD – Carolyn Dennison; RD – Richard Dennison; KD – Ken Dixon; GD – Gary Douglas; SE – Steve Edwards; JeF – Jen Francis; JoF – Jonathan Francis; WG – Wesley Gush; AH – Andrew Hester; SH – Sean Hind; NH – Nkululeko Hlongwane; JJ – Jorrie Jordaan; BJ – Brendan Judge; AK – Abigail Karimanzira; RK – Dr Ralph Kitkat; DK – Doug Kok; KL – Karen Learmonth; HL – Helen Lewis; SL – Stephen Long; IL – Innes Louw; GL – Geoff Lowe; AMacD – Ali MacDonald; DMacD – Doug MacDonald; RMacD – Roger MacDonald; LMcD – Luke MacDonald; PM – Peter Magosvongwe; NM – Norman Mellett; CM – Cliffy Mhandu; BM – Bev Morgan; SMu – Sally Mucklow; TMu – Timothy Mudhluyi; BMb – Buluwesi Murambiwa; JM – Jimmy Muropa; TM – Thomas Mutombeni; BN – Bhekizulu Ncube; TN – Tadious Ndadziira; DN – Damian Newmarch; CN – Carl Nicholson; SN – Sean Nicolle; JP – Julia Pierini; DP – Darren Pietersen; GP – Gordon Putterill; RR – Rob Rees; IR – Ian Riddell; SR – Sean Ross; YS – Yakov Sabag; MS – Morgan Saineti; PS – Patrick Shadwell; GS – Gary Stafford; LS – Lowden Stoole; DS – Debbie Swales; TT – Tatenda Tainga; PT – Pete Taylor; PTe – Peter Tetlow; DT – Darryl Tiran; ST – Shaun Torr; AT – Arnold Tshipa; EvdW – Elsabe van der Westhuizen KvL – Karl van Laeren; JV – James Varden; JVe – John Vekris; JW – Johnny Whitfield; DeW – Debbie Wiggins; LW – Luke Wilson; TW – Tony Wood; KW – Ken Worsley; SW – Sue Worsley; KWr – Karl Wright; MZ – MacKenzie Zirota.
HGC – Hwange Game Count
IWC – International Waterbird Census

## Black Eagle Breeding Report 2017

### Introduction

2017 marked the 54th consecutive year of formal reporting of the Black Eagle *Aquila verreauxii* in the Matobo Hills, a World Heritage Site and one of the Important Bird Areas identified by BirdLife Zimbabwe. As in previous years, the survey work was undertaken by the Matabeleland Branch of BirdLife Zimbabwe, which this year was granted research Permit No. 23(1) (C) (11) 28 /2017 by the Parks and Wildlife Management Authority. Technical information was recorded as before with nest locations logged on a Global Positioning Satellite system. Digital photo imaging with both six figure grid references and GPS information of nests continued.

### Methods

Monitoring was undertaken at nest sites within the established Survey area of approximately 620km². The total of 109 known nest sites in 48 territories were allocated to 6 survey teams of which 60 were monitored. If the first nest site within a territory was found to be active, the remainder were not checked. The sites continued to be monitored by the organisers throughout the breeding season, and they and teams made additional visits as required.

The research permit allowed survey participants access to nest sites on foot, which enabled them to investigate territories and to study nests hitherto inaccessible. Each team was required to submit a minimum of three reports by specific key dates, the first to establish occupancy and the other two to provide details of ongoing breeding activity. The results are divided into three land-use categories in the study area, namely

(a) National Park, (b) Communal Land and (c) commercial farmland.

## Results

Survey teams submitted 206 reports which revealed the data presented in Table 1. Of the 60 nest sites monitored, 24 (40%) were occupied. 19 pairs (79%) rebuilt their nests, compared to 20 (69%) last season. There were 13 (54%) breeding attempts – which resulted in 8 confirmed fledglings. The reproductive rate of 0.33 is well below what can be considered to be the norm. This result, however, is comparable to the 2015 breeding season. Fledging was rather later in 2017, with all occurring early to mid-October, and none being fledged in August or September as in the two preceding years (Table 2).

The rainfall for this season was the highest recorded in six years (Table 3), being nearly four times greater than in the previous season.

### Hyrax Population Census

A hyrax (dassie) Population Census was undertaken in May by the Black Eagle survey teams who covered 13 sites. A total of 278 hyraxes (both species) were counted, compared to 386 animals at 19 sites in 2016. Weather conditions on the mornings of the survey were ideal but because of the heavy rains the vegetation was very thick and visibility poor, making it difficult to spot the animals. Some of them were heard but not seen and therefore not counted. The average numbers of hyraxes per site were 31.5 (2015), 20.3 (2016) and 21.4 (2017).

**Table 1.** Breeding statistics of the Black Eagle in the Matobo Hills for the year 2017 compared to the 2015 and 2016 breeding seasons. Percentages have not been calculated for nests in commercial farming or communal land owing to the small sample sizes.

| | National Park | | | Communal Land | | | Commercial Farmland | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2015 | 2016 | 2017 | 2015 | 2016 | 2017 | 2015 | 2016 | 2017 | 2015 | 2016 | 2017 |
| No. of nest sites allocated | 88 | 88 | 97 | 4 | 4 | 2 | 11 | 11 | 10 | 103 | 103 | 109 |
| No of nests monitored | 80 | 66 | 54 | 6 | 4 | 1 | 4 | 4 | 5 | 90 | 74 | 60 |
| No. of nest sites occupied | 26<br>33% | 26<br>39% | 21<br>39% | 0 | 0 | 0 | 3 | 3 | 3 | 29<br>32% | 29<br>39% | 24<br>40% |
| No. of nests rebuilt | 14<br>54% | 18<br>69% | 18<br>86% | 0 | 0 | 0 | 1 | 2 | 1 | 15<br>52% | 20<br>69% | 19<br>79% |
| No. of breeding attempts | 11<br>42% | 16<br>62% | 12<br>57% | 0 | 0 | 0 | 0 | 2 | 1 | 11<br>38% | 18<br>62% | 13<br>54% |
| No. of failures | 3<br>12% | 2<br>8% | 7<br>33% | 0 | 0 | 0 | 0 | 0 | 0 | 3<br>10% | 2<br>7% | 7<br>29% |
| No. raised to fledging | 8<br>31% | 13<br>50% | 8<br>38% | 0 | 0 | 0 | 0 | 2 | 0 | 8<br>28% | 15<br>52% | 8<br>33% |
| Reproductive rate per pair | 0.31 | 0.50 | 0.38 | 0 | 0 | 0 | 0 | 0.67 | 0 | 0.28 | 0.52 | 0.33 |

**Table 2**. The estimated fledging dates for the years 2015, 2016 and 2017.

| Year | August | | | September | | | October | | | Unknown |
|---|---|---|---|---|---|---|---|---|---|---|
| | early | mid | late | early | mid | late | early | mid | late | |
| 2015 | | 2 | 2 | 3 | 1 | | | | | 0 |
| 2016 | | | | | | | | | | 0 |
| 2017 | | | | | | | 6 | 2 | | 0 |

**Table 3.** Annual rainfall (July-June) at three sites in the Matobo National Park, 2011-2012 – 2015/2016. The symbol * denotes incomplete rainfall records that have been excluded from the average value.

| Year | Whitewaters | Hazelside | Maleme | Average |
|---|---|---|---|---|
| 2011/2012 | 169.0* | 520.0 | 495.5 | 507.8 |
| 2012/2013 | 411.8 | 371.8 | 370.0 | 384.5 |
| 2013/2014 | 802.6 | 48.0* | 845.5 | 824.0 |
| 2014/2015 | 345.0 | 150.0* | 401.5 | 373.3 |
| 2015/2016 | 259.0 | 174.0* | 237.0 | 248.0 |
| 2016/2017 | 955.0 | | 1026.0 | 990.5 |

## General Comments

Unfortunately, co-ordinating of this 2017 season proved to be very difficult. Firstly, the co-coordinator, Cecilia Hubbard, was ill and subsequently passed away. Cecilia had been an integral part of the survey for many years, having built up an incredible knowledge of the various nest sites, old and new, and her passing leaves the survey much the poorer. Secondly, our teams were thin on the ground and some did not have the financial wherewithal or the transport to complete their required visits. Along with this, the heavy rains experienced in the park made the roads extremely difficult with some areas that required monitoring becoming inaccessible. Coverage of the nests was inadequate but participating teams did the best they could under trying circumstances.


## Appreciation

We thank the following BirdLife members and their friends for their invaluable support of the Black Eagle Breeding and Raptor Surveys and the Dassie Population Census during 2016.

J. & J Brebner, T. & J. Cranston, K. Dhliwayo, C.B. Hubbard, C.J. Hubbard, P.D. Hubbard, D. & K. Learmonth, B. & H. Lewis, E. & G. Lightfoot, N. Pegg, H. & C. Sellick, D. Sullivan, J. Sullivan, A. Wharam.

We thank the Parks and Wildlife Management Authority for the issue of a research permit enabling us to gain access to many hitherto off-limits nest sites, and the Area Managers of the Matobo National Park for their support and assistance.


# Black Eagle Breeding Report 2018

## Introduction

2018 marked the 55th consecutive year of formal reporting of the Black Eagle *Aquila verreauxii* in the Matobo Hills, a World Heritage Site and one of the Important Bird Areas identified by BirdLife Zimbabwe. As in previous years, the survey work was undertaken by the Matabeleland Branch of BirdLife Zimbabwe, which this year was granted research Permit No. 23(1) (C) (II)14/2018 by the Parks and Wildlife Management Authority. Technical information was recorded as before with nest locations logged on a Global Positioning Satellite system. Digital photo imaging with both six figure grid references and GPS information of nests continued.

## Methods

Monitoring was undertaken at nest sites within the established Survey area of approximately 620km². The total of 107 known nest sites were allocated to 8 survey teams, of which 69 were monitored. If the first nest site within a territory was found to be active, the remainder were not checked. The sites continued to be monitored by the organisers throughout the breeding season, and they and teams made additional visits as required.

The research permit allowed survey participants access to nest sites on foot, which enabled them to investigate territories and to study nests hitherto inaccessible. Each team was required to submit a minimum of three reports by specific key dates, the first to establish occupancy and the other two to provide details of ongoing breeding activity. The results are divided into three land-use categories in the study area, namely (a) National Park, (b) commercial farmland and (c) communal land.

## Results

A total of 196 reports were received from survey teams (Table 1). Of the 69 nest sites monitored, 23 (33%) were occupied. 18 pairs (78%) rebuilt their nests, compared to 19 (79%) last season. There were 14 (77%) breeding attempts, which resulted in 12 confirmed fledglings. The reproductive rate for the year is satisfactory when compared to previous years. Rainfall for this season was significantly lower than in the year before (Table 2). However, it was a reasonable season, being higher than three of the preceding seasons. Data from Hazelside have not been recorded regularly since 2012/13 and have been excluded from the average value.

**Table 1.** Breeding statistics of the Black Eagle in the Matobo Hills for the year 2018 compared to the 2016 and 2017 breeding seasons. Percentages have not been calculated for nests in commercial farmland or communal land owing to the small sample sizes.

| | National Park | | | Communal Land | | | Commercial Farmland | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 |
| No. of nest sites allocated | 88 | 97 | 92 | 4 | 2 | 5 | 11 | 10 | 10 | 103 | 109 | 107 |
| No of nests monitored | 66 | 54 | 62 | 4 | 1 | 1 | 4 | 5 | 6 | 74 | 60 | 69 |
| No. of nest sites occupied | 26<br>39% | 21<br>39% | 20<br>32% | 0 | 0 | 0 | 3 | 3 | 3 | 29<br>39% | 24<br>40% | 23<br>33% |
| No. of nests rebuilt | 18<br>69% | 18<br>86% | 15<br>75% | 0 | 0 | 0 | 2 | 1 | 3 | 20<br>69% | 19<br>79% | 18<br>78% |
| No. of breeding attempts | 16<br>62% | 12<br>57% | 12<br>60% | 0 | 0 | 0 | 2 | 1 | 2 | 18<br>62% | 13<br>54% | 14<br>77% |
| No. of failures | 2<br>8% | 7<br>33% | | 0 | 0 | 0 | 0 | 0 | | 2<br>7% | 7<br>29% | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. raised to fledging | 13<br>50% | 8<br>38% | 10<br>50% | 0 | 0 | 0 | 2 | 0 | 2 | 15<br>52% | 8<br>33% | 12<br>52% |
| Reproductive rate per pair | 0.50 | 0.38 | 0.52 | 0 | 0 | 0 | 0.67 | 0 | 0.67 | 0.52 | 0.33 | 0.52 |

**Table 2**. Annual rainfall (July-June) in the Matobo National Park, 2013-2018. Hazelside station has not been maintained since 2013.

| Year | Whitewaters | Maleme | Average |
|---|---|---|---|
| 2013/2014 | 802.6 | 845.5 | 824.0 |
| 2014/2015 | 345.0 | 401.5 | 373.3 |
| 2015/2016 | 259.0 | 237.0 | 248.0 |
| 2016/2017 | 955.0 | 1026.0 | 990.5 |
| 2017/2018 | 439.7 | 517.8 | 478.8 |

## Hyrax Population Census

A hyrax (dassie) population census was undertaken in May by the Black Eagle survey teams who covered 10 sites. The number of hyrax (both species) counted was 176 animals, compared to 281 at 13 sites in 2017. Weather conditions on the mornings of the survey were ideal but the vegetation was still very thick and visibility difficult. Animals were heard but not seen and therefore not counted. The average number of hyraxes per count was 20.3 (2016), 21.4 (2017) and 17.6 (2018). While there seems to be a reduction in their numbers, this may reflect that fewer sites were counted and visibility was much reduced.

## General Comments

Co-ordination of the 2018 season was, again, not without its problems. Once again, our teams were thin on the ground with some not having the financial wherewithal or the transport to complete their required visits. Although some of the roads in the park had been attended to, others that our teams had to travel along to reach nest sites were all but impossible to use, making access difficult. Coverage of the nests was inadequate but participating teams did the best they could under trying circumstances and each member should be thanked for their continued support.


## Appreciation

We thank the following BirdLife members and their friends for their invaluable support of the Black Eagle Breeding and Raptor Surveys and the Dassie Population Census during 2018: J. & J. Brebner, K. Dhliwayo, J. & C. Dicey, M. FitzPatrick, C.J. Hubbard, P.D. Hubbard, D. & K. Learmonth, H. Lewis, E. & G. Lightfoot, N. Pegg, J. Ross, H. & C. Sellick, D. Sullivan, J. Sullivan, A. Wharam.

We thank the Parks and Wildlife Management Authority for the issue of a research permit enabling us to gain access to many hitherto off-limits nest sites, and the area Managers of the Matobo National Park for their support and assistance.



**J. Brebner**, Co-ordinator of the Black Eagle Survey, BirdLife Zimbabwe, Matabeleland Branch


Skull of a hyrax from Khamera Farm, west of Bulawayo. The long and sharp incisors are effective for defence and aggression and their triangular shape indicate this is a male. Photo © I.C. Riddell

# OBITUARIES

## Anthony John Tree, 1937-2018

Tony Tree, the big, bluff Irishman, was actually born in London but his family moved to Belfast when he was three years old. He always regarded himself as an Ulsterman and lived there until October 1958 when he moved to Africa. His first memory of birds was seeing a pair of Blue Tits pecking through the tops of the milk bottles on his kitchen window sill, trying to get at the cream inside. This was relatively new behaviour since these birds were observed doing this in Northern Ireland only in 1937. He began his birding career with *The Observer's Book of British Birds* and a pair of ex-military binoculars given to him when he left school. In 1956, while on holiday at Saltee Island Bird Observatory in the south-east of Ireland, he was introduced to bird-ringing and was immediately hooked, obtaining his ringing permit by the end of 1957.

He began his working life with Eagle Star, an insurance company based in London but with overseas interests, and in 1958 he went to their Bulawayo office. He moved to Harare in the following year, maintaining his interest in birds and publishing his first known contribution, a short note in the cyclostyled *Bulletin of the Rhodesian Ornithological Society* No. 29, in which he reported a Bat Hawk seen from the Victoria Falls bridge, a Little Bittern at Lake Chivero and at least 16,000 falcons near Harare (at least 4,000 Amur Falcons, one Red-footed, and one Lesser Kestrel). A trip to the Kafue Flats, with its huge variety of waterbirds, convinced him that the bush was where he wanted to be. He left Eagle Star to become a technical assistant with Chartered Exploration (the exploration unit of Anglo American) to work in the field in Zambia.

He briefly returned to Northern Ireland to look at the potential for establishing a bird observatory on Rathlin Island. Between spring and autumn visits he and Tommy Ennis travelled to Iceland ringing mostly passerines, but also some waders and other species. His first publication in *Ostrich,* an account of migrants seen in Northern Rhodesia, was published in 1961 with his Belfast address. But he returned to Africa where he would remain for the rest of his life. His fieldwork as a geological assistant, living in bush camps in various parts of Zambia enabled him combine work with his growing passion of birding.

In 1966, Tony enrolled at Rhodes University where he graduated with a BSc in Geology and Geography. He was then employed as a geologist with Anglo-Vaal between 1969 and 1971 in Namibia and Botswana, before returning to Zimbabwe, where he continued his geological work with Messina Development Corporation, and studied for a MSc in Tropical Resource Ecology at the University of Zimbabwe. His dissertation was a comparative ecological study of the Kittlitz's and Three-banded Plovers at Lake Chivero. During the 1970s his geological career was cut short by the war, so he changed careers, becoming a geography teacher at Marlborough High School, Harare, obtaining a Graduate Certificate in Education from the University of Rhodesia in 1979. After a brief spell in Bathurst in the Eastern Cape, where he and his wife Maggie had earlier purchased a property, Tony returned to Zimbabwe in 1986 and began a very different career as a cattle rancher on a farm in Darwendale. Over the next eight years he continued with his ornithological interests, particularly bird ringing. Tony retired to Bathurst in the Eastern Cape in 1994, moving to Port Alfred in 2007.

Tony was known in Zimbabwe as a stalwart member of the Rhodesian Ornithological Society and served as its Chairman during its transformation into the Ornithological Association of Zimbabwe. He was a diligent reporter of his observations and a complete bibliography, which accompanies the obituary by Whittington & Craig (2019. *Ostrich* **90**: 189-190), lists 431 published items. He was a major contributor to *Honeyguide*, publishing 149 articles, notes and recent reports between 1959 and 2015. Some of his major publications elsewhere include 122 species texts in *The Complete Book of Southern African Birds* compiled by Ginn, McIlleron and Milstein (1989); he was one of the editors of the *Atlas of Southern African Birds* (1997); a co-author of the *Review of Ring Recoveries of Waterbirds in Southern Africa* (1999), and he contributed 70 species texts to the 7th edition of *Roberts' Birds of Southern Africa* (2005).

Most birders in Zimbabwe knew him for his expertise on waders. On the few occasions I went into the field with him I was always astonished by his ability to identify waders by sight – frequently being able to distinguish adults from juveniles. His interest in waders extended to all members of the Charadriiformes and he published notes on plovers, gulls and terns, avocets and the like. But he was interested in all birds, with sunbirds and swallows being another speciality, and his publications deal with a wide variety of species

He was also one of southern Africa's most prolific bird-ringers and it has been estimated that he may have ringed 50,000 birds during his lifetime. Whittington & Craig cite ringing reports which show that he ringed 29,982 birds in 18 years between 1974 and 2005, and since he was active in Zimbabwe for much of this time, he may have ringed at least 20,000 birds in this country alone. He must have spent many hours in wet, uncomfortable and possibly hazardous situations while trapping birds for ringing. However, the only time I went ringing with him was actually quite exciting. He was after nightjars at Kariba and this entailed driving along dirt roads at night in a Land Rover. I was driving while he sat on the bonnet with a large butterfly-type net. When a nightjar was spotted, I had to approach at a reasonably high speed until we got close to the bird, and then slam on the brakes whereupon Tony made a death-defying leap to catch the bird while it was still dazzled by the headlights. Apart from the possible consequences of brake failure, there could easily have been a lion, or some other large disgruntled beast, lurking in the dark!

Tony was a big man, with a big voice and forthright opinions, who frequently livened-up ornithological society meetings. He was not afraid of controversy, with some examples in *Honeyguide* that now make entertaining reading. These include his review of the Bird Atlas of Natal (1981. *Honeyguide* No. 105: 25-26) which elicited an indignant, and equally forthright, response from the authors (1981. *Honeyguide* No. 107/108: 4-5). Another example was his sighting of a Red-throated Pipit at Chirundu along with three other observers, one of whom subsequently disagreed with it being added to the Zimbabwean list along with some arguments over who had seen what, and whether or not it had been

properly reviewed by the rarities committee (1991-92. *Honeyguide* **37**: 117-120, **38**: 28-29 and **38**: 191-193).

Nevertheless, if you liked birds, then Tony was an interesting and interested person to know and was always willing to share his knowledge and expertise. He played an important part, for instance, in developing the birding programme at the Rifa Educational Centre at Chirundu, as recognised by Maasdorp & Cotton in their recent account of the birds of that area (2019. *Honeyguide* **65**: 1-79). Although ornithology has become a much more rigorous scientific discipline dominated by academically-trained professionals it remains a field where non-professionals are able to make major contributions. Tony was an exemplar of the enthusiastic amateur, never employed as a professional ornithologist, but nonetheless able to make a significant contribution to ornithology in Zimbabwe and southern Africa. His loss will be felt by the ornithological community throughout the region and BLZ extends their condolences to his wife Maggie and son Anthony.

Tony Tree, here clutching an animal that he must have encountered often on his wader expeditions – a young crocodile – at the (then) Zoology Department, University of Rhodesia. The others are (from L to R): Peter Woodall, Russell Taylor; John Loveridge (lecturer), Tony, Peter Guy, Bob Norris and Patrick Osborne. Photo: Peter Woodall.

**Tony Tree: *Honeyguide* Contributions**


Tree, A.J. 1959. Miscellaneous records. *Rhodesian Ornithological Society Bulletin* 29: 4.

----- 1962. Black Sunbird. *Honeyguide* No. 39: 28.

Brooke, R.K., Grabandt, C. & Tree, A.J. 963. Warblers. *Honeyguide* No. 40: 2-3.

Tree, A.J. 1972. Olive-tree Warblers. *Honeyguide* No. 71: 28-29.

----- 1973. A new race of Quelea in Rhodesia? *Honeyguide* No. 73: 31.

----- 1973. Lesser Black-backed Gulls at Lake McIlwaine. *Honeyguide* No. 73: 32.

----- 1973. Birds on Lake McIlwaine. *Honeyguide* No. 76: 32-35.

----- 1974. Waders in the Salisbury area 1972/74. *Honeyguide* No. 80: 13-27.

----- 1975. Letter to the editor: Osprey. *Honeyguide* No. 84: 46.

----- 1976. Waders in central Mashonaland 1974/75. *Honeyguide* No. 85: 17-27.

----- 1976. Fork-tailed Drongo preying on Bronze Mannikin. *Honeyguide* No. 85: 40.

----- 1976. Some recent interesting duck records from Mashonaland. *Honeyguide* No. 86: 42

----- 1976. Movements of the Grey-rumped Swallow. *Honeyguide* No. 87: 35.

----- 1977. Albino Black-throated Canary. *Honeyguide* No. 90: 41.

----- 1977. Gymnogene preying on Little Swift colony. *Honeyguide* No. 90: 41.

----- 1977. Lesser Black-backed Gull catching a Reed Cormorant in flight. *Honeyguide* No. 90: 41.

----- 1977. Some recent local records of interest. *Honeyguide* No. 90: 35-37.
----- 1977. Waders in central Mashonaland 1975/77. *Honeyguide* No. 92: 31-41.
----- 1978. Whither the Bateleur? *Honeyguide* No. 95: 37-38.
----- 1978. A visit to Makgadikgadi Pan in April 1974. *Honeyguide* No. 95: 39-41.
----- 1978. Little known plovers in Rhodesia. *Honeyguide* No. 96: 23.
----- 1979. Recent interesting observations in Mashonaland. *Honeyguide* No. 97: 18-24.
----- 1979. Grey Hornbill *Tockus nasutus* preying on nestling weavers. *Honeyguide* No. 100: 6.
----- 1979. Occurrence of the Ringed Plover in Zimbabwe-Rhodesia. *Honeyguide* No. 100: 14-19.
-----, Foggin, B.J.M. & Boulton, R. 1979. The new Species Survey Project. *Honeyguide* No. 100: 44-46.
----- 1980. The Lake McIlwaine bird sanctuary. *Honeyguide* No. 101: 16.
----- 1980. Beware – pesticides. *Honeyguide* No. 101: 33.
----- 1980. Migration as an ecological adaptation in Central African Charadrii. *Honeyguide* No. 102: 16-25.
----- 1980. Bar-tailed Godwit at Lake McIlwaine – a species new to Zimbabwe. *Honeyguide* No. 102: 37.
----- 1980. What bird is that? *Honeyguide* No. 102: 38.
----- 1980. Ringing report for the society, 1978 to 1980. *Honeyguide* No. 103/104: 28-36.
----- 1981. Book Review: Bird Atlas of Natal. *Honeyguide* No. 105: 25-26.
----- 1981. Blacksmith Plover laying a blue egg. *Honeyguide* No. 106: 32.
----- 1981. Records of albinism. *Honeyguide* No. 106: 33.
----- 1981. Birds swimming underwater. *Honeyguide* No. 106: 34.
----- 1981. Book Review: Aids to bird identification in southern Africa. *Honeyguide* No. 107/108: 63.
----- 1982. The Black Stork in Zimbabwe. *Honeyguide* No. 109: 18-19.
----- 1982. Ringing report for the association, 1980-81. *Honeyguide* No. 110: 32-36.
----- & Kieser, J.A. 1982. Field separation of Lesser Yellowlegs and Wood Sandpiper. *Honeyguide* No. 110: 40-41.
----- 1983. Ringing report for the association, 1981/82, including an analysis of White Stork recoveries. *Honeyguide* No. 113: 23-31.
----- 1983. Lake McIlwaine bird sanctuary report – 1982. *Honeyguide* No. 114/115: 5-6.
----- 1983. Another record of nominate Jacobin Cuckoo from Zimbabwe. *Honeyguide* No. 114/115: 59.
----- & Kieser, J.A. 1983. Letter to the editor. Field separation of Lesser Yellowlegs and Wood Sandpiper. *Honeyguide* No. 116: 3.
----- 1984. Ringing report for the Association 1982/83. *Honeyguide* **30**: 82-85.
----- 1986. The European Sand Martin in Zimbabwe. *Honeyguide* **32**: 5-9.
----- 1986. The Banded Sand Martin in Zimbabwe. *Honeyguide* **32**: 10-12.
----- 1986. What is the status of the Pearl-breasted Swallow in Zimbabwe? *Honeyguide* **32**: 65-67.
----- 1987. Red-winged Pratincoles breeding on Darwendale Dam in 1986. *Honeyguide* **33**: 16-17.
----- 1987. Ringing Reports for the Association 1983/86. *Honeyguide* **33**: 26-30.
----- 1987. Further notes on the 1986 Red-winged Pratincole season on Darwendale Dam. *Honeyguide* **33**: 59-60.
----- 1987. Book Review: The birds of Africa, Vol. 2, 1986. *Honeyguide* **33**: 162-164.
----- 1988. Results of the Manyame Lakes waterbird survey – October 1987. *Honeyguide* **34**: 19-24.
----- 1988. Ringing Report for the Association 1986/87. *Honeyguide* **34**: 86-88.
----- 1988. The Sunbird enquiry. *Honeyguide* **34**: 107-108.
----- 1988. Drought, Kariba and their effect on sandbank nesters of the Middle Zambezi. *Honeyguide* **34**: 116-118.
----- 1989. Results of the second Manyame Lakes waterbird survey – November 1988. *Honeyguide* **35**: 12-17.
----- & Cary, R.C. 1989. Unusual nesting site of Little Swift. *Honeyguide* **35**: 22-23.
----- 1989. Steppe Buzzard with unusual plumage. *Honeyguide* **35**: 168-169.
----- 1989. Atypical bee-eater plumages. *Honeyguide* **35**: 169.
----- 1990. Notes on sunbird movements and nectar sources in Zimbabwe. *Honeyguide* **36**: 171-182.
----- 1991. Ringing report for the Association 1987-1990. *Honeyguide* **37**: 27-32.
Wright, B.K. & Tree, A.J. 1991. Caspian Plovers resting in water. *Honeyguide* **37**: 179-180.
Hustler, K., Tree, A.J. & Irwin, M.P.S. 1990. Second report of the OAZ rarities committee. *Honeyguide* **36**: 113-117.
-----, Aspinwall, D.R., Hustler, K. & Fernsby, N. 1991. Red-throated Pipit – an addition to the Zimbabwean avifauna. *Honeyguide* **37**: 117-120.
-----, Aspinwall, D.R., Hustler, K. & Fernsby, N. 1991. Shelley's Sunbird in Zimbabwe: the first certain record south of the Zambezi. *Honeyguide* **37**: 120-122.
Hustler, K., Irwin, M.P.S. & Tree, A.J. 1991. Third report of the OAZ Rarities Committee. *Honeyguide* **37**: 165-170.
Hustler, K., Tree, A.J. & Irwin, M.P.S. 1992. Fourth report of the OAZ Rarities Committee. *Honeyguide* **38**: 113-118.
Tree, A.J. 1992. Some results of a ten day canoe trip along the Middle Zambezi – October 1991. *Honeyguide* **38**: 12-17.
----- 1992. Eye colour in southern African Avocets. *Honeyguide* **38**: 22.
----- 1992. The first successful breeding of Avocets in Zimbabwe. *Honeyguide* **38**: 22-23.
Wood, P.A. & Tree, A.J. 1992. Zambezi River survey October 1991. *Honeyguide* **38**: 54-63.
Tree, A.J. 1992. Long-toed Plovers at Lake Manyame. *Honeyguide* **38**: 121-122.
----- 1992. Pallid western race of the Mozambique Nightjar at Lake Manyame. *Honeyguide* **38**: 125-126.
----- 1992. The Red-throated Pipit controversy – a response to Kit Hustler. *Honeyguide* **38**: 191-193.
----- & de la Harpe, D. 1995. Ringing Report for the Association 1992-1994. *Honeyguide* **41**: 256-262.
----- 1998. Movements of the Blacksmith Plover in south-central Africa. *Honeyguide* **44**: 199-203.
----- 1999. The occurrence of the White-fronted Plover in Zimbabwe in the latter part of the 20th Century. *Honeyguide* **45**: 5-9.
----- 1999. An analysis of the occurrence of some rare or scarce palaearctic waders in Zimbabwe. *Honeyguide* **45**: 120-126.
----- 2000. The changing status of the Curlew Sandpiper in Zimbabwe. *Honeyguide* **46**: 19-22.

----- 2001. Kittlitz's Plover as an intra-African migrant. *Honeyguide* **47**: 10-16.
----- 2001. The occurrence of the Painted Snipe in Zimbabwe and neighbouring countries. *Honeyguide* **47**: 165-169.
----- 2002. The status of the Brown-throated Martin in Zimbabwe and neighbouring countries. *Honeyguide* **48**: 69-77.
----- 2003. Movements of the Treble-banded Plover within and through Zimbabwe, with observations from elsewhere in southern Africa. *Honeyguide* **49**: 50-61.
----- 2004. Movement of savanna sunbirds based on a ringing study at Chirawanoo farm, Darwendale. *Honeyguide* **50**: 143-159.
----- 2006. The occurrence of terns (Sternidae) in Zimbabwe. *Honeyguide* **52**: 40-46.
----- 2004. The Common Sandpiper in Zimbabwe. *Honeyguide* **54**: 40-51.
----- 2011. The Black-winged Stilt in Zimbabwe and southern Africa. *Honeyguide* **57**: 5-9.
----- 2011. Recapture rates of Ruff at two southern African localities. *Honeyguide* **57**: 116-120.
----- 2011. Another Gorongosa Double-collared Sunbird in the eastern highlands? *Honeyguide* **57**: 140.
----- 2014. Probable Upcher's Warbler at Aisleby. *Honeyguide* **60**: 19-20.
----- 2014. The Wood Sandpiper in Zimbabwe. *Honeyguide* **60**: 38-48.
----- 2014. Ostrich chicks as prey of Martial Eagle. *Honeyguide* **60**: 56.
----- 2015. On Grey Sunbird sightings in the Eastern Highlands of Zimbabwe. *Honeyguide* **61**: 8-10.
----- 2015. Letter to the Editor: Factors influencing the distribution of the African Mourning Dove. *Honeyguide* **61**: 74-75.

**Recent Reports**: Tony also produced no fewer than 56 "Recent Reports" (three of them together with Michael Irwin) between 1980 and 1998. These amount to more than 500 pages of text and would form a fairly substantial book if they were compiled into one text. I cannot imagine how many individual records there might be in these reports, probably many hundreds of them.

**Brian Marshall**, *Auckland, NZ.* ✉ brian.marshall01@gmail.com

## David Arthur Ewbank, 1952-2019

David Ewbank died unexpectedly on a train in India, having travelled there to revisit areas that he had been to 20 years earlier to see how the birdlife had changed. He was born in Boston, Lincolnshire, but grew up on Cyrene Mission near Figtree in Zimbabwe. Living a fairly isolated life there he and his brothers had to entertain themselves and it was here that he developed his interest in birds. As a boy, he was a remarkably agile tree and rock climber, able to reach seemingly inaccessible bird's nests (although he never collected eggs). This may have ended when he fell and suffered a brain injury, apparently a result of trying to stand on one foot.

He did not enjoy school, especially the restrictions of boarding school, and made two attempts at university life. The first ended when he was deported from South Africa, having failed to convince the police that the exotic plants in his flat were actually tomatoes. He eventually obtained a teaching qualification from the Teacher's College in Bulawayo and spent the next ten years teaching at remote schools in the West Nicholson area. In his spare time, he studied birds along the Umzingwane River and the results were eventually published (2015. *Honeyguide* **61**: 32-44). During this period, he also worked together with Ian MacDonald, on birds on dams in Matabeleland.

He left Zimbabwe in 1991 to teach English as a Foreign Language and taught in Poland, Egypt, Tajikistan, Saudi Arabia and China. He also travelled extensively, visiting 66 countries and recording the birds that he saw. Perhaps not surprisingly, he also built up a collection of several hundred bird books and was apparently well known in local charity shops where he searched for rare, discarded books.

David was a major contributor to *Honeyguide*, publishing 48 articles, 11 travel notes and 12 book reviews. He also published in other journals, and I am aware of papers on the Long-crested Eagle in Matabeleland and raptors at Aisleby, both in *Gabar*, and Blacksmith Plovers in *Bulletin of the Wader Study Group*, but there may have been others. His major interests were water birds (but not waders!) and raptors, but his published notes discuss a wide range of other species.

His brother Tim, who provided me with a copy of his eulogy which I relied on for this obituary, wrote of him: 'He truly was a "one-off" who lived life on his own terms. He will be remembered in many ways, not least by some of his unusual phrases and mannerisms. A rare spot of colour in an increasingly conventional, monochrome world; like a kingfisher across a pond.'

### *Honeyguide* Contributions: David Ewbank

Ewbank, D.A. 1978. The Great Crested Grebe nesting in Rhodesia. *Honeyguide* No. 94: 41.
----- & Gargett, V. 1978. Letter to the editor: Cape Sparrows at Beit Bridge. *Honeyguide* No. 94: 46.
----- 1984. Garganey in Matabeleland. *Honeyguide* **30**: 119.
----- 1984. Barn Owl behaviour. *Honeyguide* **30**: 124.
----- 1984. Birding in the Sudan. *Honeyguide* **30:** 138-142.
----- 1985. Predation by Senegal Coucal. *Honeyguide* **31**: 218.
----- 1985. Book Review: The status and conservation of birds of prey in the Transvaal. *Honeyguide* **31**: 236.
----- 1987. Great Snipe at Lake Kyle. *Honeyguide* **33**: 15.
----- & Kuilder, J. 1987. Yellow-throated Longclaw in the Matobo Hills. *Honeyguide* **33**: 18.
----- & Kuilder, J. 1987. White-browed (or Burchell's) Coucal in southern Matabeleland. *Honeyguide* **33**: 151.
----- 1989. Book Review: Distribution atlas of Sudan's birds with notes on habitat and status. *Honeyguide* **35**: 135.
----- & Ratcliffe, K.A. 1990. On enigmatic Long-tailed viduines. *Honeyguide* **36**: 42-43.
----- 1990. Attempted mating by Common Sandpipers in winter quarters. *Honeyguide* **36**: 190.

-----1991. Numbers of waterbirds over a section of the Zambezi River, Zimbabwe. *Honeyguide* **37**: 160-164.
----- 1993. Book Review: Herons of Europe. *Honeyguide* **39**: 46-47.
----- 1993. Book Review: Cooperative breeding in birds: long-term studies of ecology and behaviour. *Honeyguide* **39**: 47-48.
----- 1993. Waterbirds at Beit Bridge. *Honeyguide* **39**: 94.
----- 1994. Memories of time spent in India. *Honeyguide* **40**: 47-52.
----- 1994. Book Review: a bibliography of storks, ibises and spoonbills. *Honeyguide* **40**: 57-58.
----- 1994. Book Review: Working bibliography of the grebes of the world. *Honeyguide* **40**: 57-58.
----- 1995. Notes and comments on the birds of Madagascar made in 1992. *Honeyguide* **41**: 41-46.
----- 1996. Reviews: Raptor conservation today, Proceedings of the IV World conference on birds of prey and owls. *Honeyguide* **42**: 184-185.
----- 1996. Reviews: bird population studies. *Honeyguide* **42**: 185-186.
----- 1998. Black Buffalo Weavers in southern Matabeleland. *Honeyguide* **44**: 95.
-----1998. Book Review: Bird families of the world – the Hornbills. *Honeyguide* **44**: 184-185.
----- 1998. A journey through Africa, especially Ethiopia in 1996. *Honeyguide* **44**: 241-245.
----- 1999. Adventures in Indonesia – June to August 1994. *Honeyguide* **45**: 166-172.
----- 2000. Remarks on the use of exotic woodlands by birds in Zimbabwe. *Honeyguide* **46**: 40-41.
----- 2000. Book Review: Pleistocene birds of the Palearctic: A catalogue. *Honeyguide* **46**: 61-63.
----- 2002. Unusual swimming posture by Darter. *Honeyguide* **48**: 78.
----- 2002. Constraints on Masked Weaver breeding. *Honeyguide* **48**: 93.
----- 2003. Enjoying vultures – Old World memories mostly. *Honeyguide* **49**: 110-113.
----- 2003. Book reviews: Raptors at risk. *Honeyguide* **49**: 118-120.
----- 2005. A history of Egyptian Geese in Zimbabwe. *Honeyguide* **51**: 31-32.
-----2006. Further remarks on the birds of exotic woodland. *Honeyguide* **52**: 68-69.
----- 2007. Boom and bust: observations on rodent-eating birds in Matabeleland. *Honeyguide* **53**: 25-27.
----- 2007. Observations on herons breeding in and around Bulawayo. *Honeyguide* **53**: 29-31.
----- 2007. Wahlberg's Eagle prey in Mashonaland. *Honeyguide* **53**: 33-34.
----- 2009. Notes on populations and breeding of storks, ibises, and spoonbills in Zimbabwe. *Honeyguide* **55**: 22-27.
----- 2010. Valerie Gargett; an appreciation of her scientific contribution. *Honeyguide* **56**: 29-30.
----- 2010. Memories of time spent in Egypt. *Honeyguide* **56**: 78-81.
----- 2011. West Africa in winter. *Honeyguide* **57**: 78-80.
----- 2011. Some remarks on drongos associating with domestic livestock. *Honeyguide* **57**: 135.
----- 2012. The status of the African Finfoot in Zimbabwe. *Honeyguide* **58**: 59-64.
----- 2012. The effects of rainfall on the numbers of waterbirds in the Matobo National Park. *Honeyguide* **58**: 131-135.
----- 2012. Birding adventures in eastern Europe and the highlands of central Asia. *Honeyguide* **58**: 183-186.
----- 2014. What waterbirds were present on the Matabeleland plateau in the 19th century? *Honeyguide* **60**: 53-55.
----- 2014. Breeding of herons in Zimbabwe: multi-species heronries. *Honeyguide* **60**: 16-24.
----- 2014. Birding in Iceland. *Honeyguide* **60**: 63-65.
----- 2015. Status of the Caspian Plover in Zimbabwe. *Honeyguide* **61**: 27-28.
----- 2014. Book review: Extinct birds. *Honeyguide* **60**: 68-69.
----- 2015. Aquatic birds on a mid-altitude river in Zimbabwe. *Honeyguide* **61**: 32-44.
-----2015. Status and distribution of the Red-necked Falcon in Zimbabwe. *Honeyguide* **61**: 80-83.
----- 2016. Obituary: Don Broadley. *Honeyguide* **62**: 17.
----- 2016. Questions concerning the Long-crested Eagle in northwest Zimbabwe. *Honeyguide* **62**: 29.
----- 2016. Corvid conundrum. *Honeyguide* **62**: 33-34.
----- 2016. Pied Crow and Egyptian Goose interaction. *Honeyguide* **62**: 34.
----- 2016. Over the mountains from Nepal into China. *Honeyguide* **62**: 93-95.
----- 2016. Status and breeding record of the African Barred Owlet in southern Matabeleland. *Honeyguide* **62**: 112-113.
----- 2016. Status and nesting sites of kingfishers in Zimbabwe. *Honeyguide* **62**: 120-125.
-----2016. Prey and nest habitat selection of five eagle species in the Gonarezhou National Park, Zimbabwe. *Honeyguide* **62**: 126-132.
----- 2016. Yellow-billed Kites in southern Matabeleland: then and now. *Honeyguide* **62**: 134-135.
----- 2016. Long-term use of nest sites by the Spotted Eagle Owl in Bulawayo. *Honeyguide* **62**: 140-141.
----- 2016. The annual cycle of the Little Grebe can be linked to environmental changes in three dams in the Cyrene area. *Honeyguide* **62**: 168-171.
----- 2016. My time in Poland and the Baltic states. *Honeyguide* **62**: 172-174.
----- 2018. Farewell to Michael Irwin. *Honeyguide* **64**: 3
----- 2018. Arrival and departure times of migrants in Zimbabwe. *Honeyguide* **64**: 16-17.
----- 2018. Seasonal and diurnal changes in feeding behaviour of Red-billed Teal and Red-knobbed Coot at two dams near Figtree. *Honeyguide* **64**: 18-20
----- 2018. On the aquatic avifauna of artificial impoundments in the Matobo area. *Honeyguide* **64**: 21-24.
----- 2019. The Centenary Park Heronry: A Sequel. *Honeyguide* **65**: 105.
----- 2019. Further Comments on Yellow-billed Kites in Matabeleland. *Honeyguide* **65**: 106.
----- 2019. Does the Grass Owl Occur in Southern Matabeleland? *Honeyguide* **65**: 108.

**Brian Marshall**, *Auckland, NZ.* ✉ brian.marshall01@gmail.com

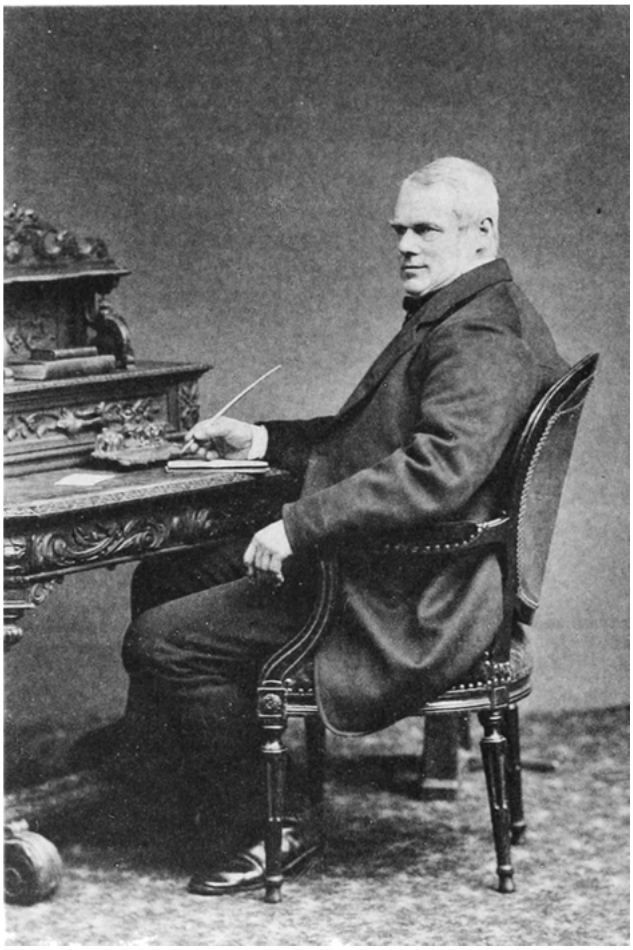
# TRAVEL

## From West to East and Back to (Further) West Again

**Peter Mundy and Clive Slater**

John Henry Gurney (1819-1890) was a 19th century banker, domiciled in Norwich, England, with a lifetime of interest in birds, and from an older age a consuming interest in birds of prey. Over a span of nearly 40 years he amassed the largest collection of raptor specimens ever made by one man, numbering nearly 5000 birds of prey. We have developed an interest in Gurney and hope to write his biography, slanted towards his interest in the raptors. Seven species or subspecies of birds have been named in his honour, three of them from southern Africa, namely

Orange Ground Thrush *Turdus* (now *Geokichla*) *gurneyi* G. Hartlaub, 1864, from Natal (the subspecies *disruptans* was named in 1955 by Phillip Clancey, from Vumba = Bvumba);



Gurney's Sugarbird *Promerops gurneyi* Jules Verreaux, 1871, from Natal (the subspecies *ardens* was named in 1952 by Herbert Friedmann, from Melsetter = Chimanimani);

Black-necked Grebe *Podiceps nigricollis gurneyi* Austin Roberts, 1919, from South Africa.

Clive thought it appropriate that we went in search of these birds to consider their current fortunes. Thus, we concocted trips first to the Eastern Highlands, and then to Swakopmund in Namibia. We'll say at the outset that regretfully we saw only two of the three birds, but that the contexts and other species in the areas were exhilarating.

Clive arrived in Bulawayo on 13 October 2016, and by the 18th we were departing for the Vumba. We stayed at Seldomseen, at Swynnerton Cottage, for three nights, and as many readers will know, this place is thoroughly to be recommended. The resident bird guide, Buluwezi Murambiwa, was ready to take us around at any time. Within a day or two we had very good views of the Orange Ground Thrush in the patch of forest just below the cottages. There it was, perched high on the branch of a forest tree, and then lower down in a bush. We thought of it as a noisy bird, calling frequently, but of course to begin with Buluwezi had to persistently point out the calls to us. Right next to one of the paths was a nest with two eggs, blue with blackish spots, at 1.5 m height in a tangled bush. Irwin (1981) notes 23 breeding records in November to January, and currently there are 44 cards (including this one) in the collection of the Natural History Museum, Bulawayo. In its foraging on the forest floor among the leaf litter, the Orange Ground Thrush is in competition with four other species: Swynnerton's and Starred Robins, Olive Thrush and Terrestrial Bulbul. We saw three of these four.

Periodically, then frequently, even frantically, we went to the small field of proteas on the outside of the forest, and waited for Gurney's Sugarbird there. Many proteas were blooming, and Buluwezi repeatedly whistled like the sugarbird. But to no avail, so we went rushing around the district and visited any abandoned protea field hoping to see the sugarbird. Unlike the Seldomseen field, there were few other proteas in flower. In the part of the Vumba that we searched, with several abandoned protea fields, the sugarbird is a thing of the past.

We assumed that the so-called Fast Track Land Reform programme, dating from March 2000, had dispossessed the protea industry and its farmers. However, Buluwezi pointed out a 2015 nest to us in a bush next to the Seldomseen protea field, at a height of 3 m. Sue Worsley later told us that both the land invasions and fierce competition from South Africa doomed the industry. Prior to 2000, a wide range of protea varieties were being exported through a central depot. A small consolation was a lovely photo of a Gurney's Sugarbird taken at Seldomseen by Pat Kelly, which the company uses on one of the cards it sells. We note that Michael Irwin had already sounded something of a 'death-knell' for this Eastern Highlands population (*Honeyguide*, 2013, **59**: 29-33).

Of course, one shouldn't get too down-hearted about missing out on one species; there are plenty of other 'specials' in the forest and surrounding bush. In fact, we clocked up 28 species in all that were at least special to PM; almost all of our sightings were special to CS. Interestingly, five species were only heard, and identified by Buluwezi. These were the Red-necked Francolin (surprisingly we never got to see is bird), Wailing Cisticola, Olive Bush Shrike and Yellow-rumped Tinkerbird with its 4-5 note call, but can you spot this

'ventriloquist' in a tree? We were sorry to miss seeing the endemic Chirinda Apalis.

Meantime the noisy Livingstone's Lourie gave us many a good view as we walked to and fro, its flashing crimson wings being conspicuous as it flew from tree to tree. By contrast, both Lemon and Tambourine Doves were on the floor and difficult to see, but the Rameron Pigeon, pest that it is, was another we missed.

The place was alive with passerines. We had several good views of the White-starred Robin, though not its 'star' and a flash and a blur of a special Swynnerton's Robin. The dark Olive Thrush could be considered as 'common' – hasn't this Eastern species moved into Harare years ago? The Striped-cheeked Greenbul gave us some good views, but recognizing a Yellow-streaked Greenbul was rather more of a leap of faith. We saw a single Square-tailed Drongo a couple of times; such a different *persona* from its larger and noisier cousin – is it really aggressive to birds of prey? It is always a thrill to see a saw-wing, in this case an Eastern Saw-wing Swallow flashing its white underwing coverts. The colourful Black-fronted Bush Shrike deigned to show itself to us once, though once is enough with this spectacular bird. Almost as spectacular, but in monochrome, was our single encounter with the diminutive and hyper-active White-tailed Crested Flycatcher.

Ten other species were special to us, coming from semi-arid Matabeleland. Of course, there were the sunbirds, but only three species, being the lovely Malachite and Bronze males (does anyone look at female sunbirds?) and the contrastingly drab Olive. One would bother with this last only to add to one's list. The pretty little Cape Batis is always a pleasure to see, a presumed pair and a near-endemic in southern Africa; we can see it in the Matopos, an unusual western extension of its range. Then there was the Cape Robin-chat, three species of warblers (Cape Grassbird, Barratt's, and Roberts's) all endemic to southern Africa, and therefore important to see, and the Cape Canary, yet another endemic. Finally, we had perfect views of the pretty and very tiny Yellow-bellied Waxbill (East African Swee), at a weight of 6.5 g you could hardly find anything smaller. We saw it a couple of times around the protea field. That was our visit to the Vumba, disappointing for the sugarbird, but a wonderful array of Eastern specials.

On Friday 21st October we had returned to Bulawayo. On 23rd while bird-watching in the Buena Vista area, around the old dam site, we had a great view of two adult African Hawk Eagles and their juvenile circling together over the small copse of gum trees. The adults quickly disappeared, but the juvenile eventually returned to perch in one of the gum trees near to its nest. Fortunately, no Pied Crows were around at the time. To our amazement and disgust, someone had cut down the nesting gum tree with a chain saw, by 20 November! We didn't see the hawk eagles in the remainder of 2016, but an adult was back on territory on 25 January.

Meanwhile we flew to Johannesburg on Monday 24th October, to visit the Brenthurst library (owned by the Oppenheimer family). Here we did some research on Thomas Ayres (1828-1913), who is well known in South Africa. He collected very many birds, most of which were sent to J.H. Gurney in Norwich. He 'discovered' both the Orange Ground Thrush and the Gurney's Sugarbird in Natal.

We also delved into Charles John Andersson (1827-1867) who had started his explorations in what was to become South West Africa. He also collected birds, and his script "The birds of Damara Land" was edited for publication in 1872 by Gurney. Andersson saw the Black-necked Grebe on the coast, and it was painted by the young Thomas Baines who, incidentally, was born, like Gurney, in Norfolk. This grebe has a huge near-global distribution, and eventually in 1919, Austin Roberts himself demarcated sub-Saharan birds (Sudan and Ethiopia south to South Africa) as a separate subspecies, the type being from Lambert's Bay.

We therefore visited the Transvaal (now Ditsong) Museum in Pretoria to look at specimens. Through the kind favour of Dr Martin Krüger we were able to examine some paratypes, but not the actual type specimen(s) which are always in a special lock-up in museums. Among others, we examined a breeding male and female grebe that had been collected at Swakopmund back in January 1925 by R.D. Bradfield. They had been shot in the sea, near Rand Rifle siding (specimen TM 13579 and TM 13580).

On 1 November we departed for the far west, i.e. Namibia, first being stalled for two hours on Botswana's border post of Ramokgwebana, and later over-nighting at Maun. In Botswana we had a number of sightings of Ostrich by the roadside, including one group of about 20 birds. The southern African Ostrich (subspecies *australis*) was named by Gurney in 1868, and is still recognised today. By contrast we were only half an hour at the next border post. Conspicuously there were livestock on the road everywhere in Botswana, but not a single one in Namibia! Eventually by evening we at last arrived in Swakopmund, 2000 km later, to be met with kind hospitality by Mr Mark Boorman, the local bird *fundi*.

Early next morning Mark took us to the vast salt pans at 'Mile 4' and there they were, about 100 Black-necked Grebes! All very orderly, swimming this way and that on the salty water, and diving now and again, presumably for food. Every so often little skirmishes erupted between two birds but they were quiet, unlike their cousin the Dabchick. They exhibited a variety of plumages, with some being in the colourful breeding condition with conspicuous and bright yellow ear tufts, and others being in paler non-breeding plumage. All had striking red eyes. At one time all the birds were frantically pecking at the water surface, in all directions; were they taking invertebrates? At other times they were diving and coming up with weedy vegetation which they swished from side to side before eating. Very noticeably, Cape Teals were also busily feeding in the same area.

Altogether, and including this grebe, we sighted 21 species new to us, all except one being marine birds, which we barely expect to see in Zimbabwe! Thus, at Mile 4 we saw three endemic cormorants, the Crowned, Cape and Bank. Apparently all black but with a white rump when it turns away from you, the Bank is said to be Endangered, because of a strong decline over a period of 25 years. Second in weight only to the White-breasted among cormorants, this is quite a striking bird. The Crowned is a marine version of the freshwater Reed, and we are not sure that we could have identified it correctly without Mark's direction. The Cape also appears all black except for a conspicuous orange patch on its throat.

Of course, we were thrilled to see the African Black Oystercatcher, such a strikingly coloured bird, mostly in pairs. This is another endemic to southern Africa. Mark was excited to see Franklin's Gull, actually easily noticeable with its black 'hangman's 'hood' and white eye ring. This is a rare vagrant to southern Africa from the Americas, although the field guide thinks of it as 'almost annually… at Walvis Bay.' The similarly sized Hartlaub's Gull, an endemic, and the large Kelp Gull

were also seen. This latter is very similar to the Lesser Black-backed Gull (which we didn't see), which can be sighted in Zimbabwe. Probably these two species are rather tricky to differentiate.

In the same family as gulls are the terns, with the latter having twice as many species in southern Africa as the former. Probably it's not possible to think of the one group without the other. We sighted four species of terns at Mile 4. Almost the smallest is the near-endemic, endangered (and famous?) Damara Tern (with a small black bill). A recent estimate puts the population at about 5000 breeding birds. Although there is said to be no breeding pairs at Mile 4, we did watch two black-capped adults mating on the sand, not many metres from us viewing them from a car. The other three species were the rather large Swift Tern (with a large yellow bill), Sandwich Tern (a yellow-tipped black bill), and the Common Tern (red bill). Can all terns be identified on bill colour and shape?

We were rather delighted to spot the small Chestnut-banded Plover. It is seen occasionally at fresh water in Zimbabwe, but the salty west coast is its preferred habitat. We also saw the White-fronted Plover (but didn't notice any pinkish chest), and the Common Ringed Plover, a Palaearctic migrant.

We also saw five wader species, three at Mile 4, namely the Ruddy Turnstone, Bar-tailed Godwit and Common Whimbrel, all Palaearctic migrants. On Friday morning, 4 November, Mark took us southwards along the coast to Walvis Bay, the original big harbour for ships, and incidentally where both Andersson and Baines started their careers from the coast and going inland. Here we spotted the Eurasian Curlew with its super-long bill (twice the length of the similar Whimbrel, including that amazing bill), and the so-called vagrant Red-necked Phalarope, smallest of the three species of phalaropes seen in southern Africa. Quite probably we would not have noticed this bird (only one), were it not for Mark's sharp eyes, and him pointing out the black eye/ear patch. But try as we might we could not get the critter to spin. That would surely have been a lovely behaviour to watch. Perhaps it was not hungry and therefore not foraging. All these five species of sandpipers can occasionally be seen inland at fresh water. There were also a few Black-necked Grebes here, but we had already 'twitched' them! The salt works at Mile 4 and Walvis Bay are criss-crossed with tracks suitable for any vehicle, but there are the occasional locked gates across them. Mark had keys for these gates as the authorities recognised him as the local bird watcher, so we could go where we wanted to.

Back on the promenade at Walvis Bay, Mark again got very excited when he spotted a ringed (and with a tracker!) Sanderling which he had seen in the same place every year for the past eight or ten years. Out came the telescope and all of us could feast our eyes on this intrepid traveller which was happy to give us perfect views of itself. Back home Mark showed us on the computer the annual dialogue on this bird with someone in Netherlands who had ringed the Sanderling, though its origin was thought to be Greenland. Every year, apparently, it goes from Greenland to coastal western Europe, thence southwards to Namibia where it enjoys not breeding in our austral summer. All on an average weight of 55 g, though it probably does pre-migratory fattening (both ways?). What a privilege to see this remarkable bird.

Finally, the only non-marine species, and a rare passerine to boot, that we bothered with was the Tractrac Chat, a near-endemic, but a thoroughly grey and nondescript bird. Seen at Swakopmund, we were happy to add it to our list, but really what can be said about this little thing?

To go on a return trip of 4000 km mainly to see one particular species of bird seems to be crazy in the extreme. But we were splendidly guided by Mark Boorman, *sine qua non*, and able to see many other new species. We did a transect virtually across the width of southern Africa at 20° - 23°S, from Vumba to Swakopmund, much of which was quite fun in itself. If there was a regret it was that we couldn't stop by Lake Ngami, south-west of Maun, which has been filling in the last few years. This place was a destination (and book) for Andersson. The last resting place for Ayres in Potchefstroom could still be on the itinerary.

**Peter Mundy**, *Bulawayo*. ✉ mundy@gatorzw.com
**Clive Slater**, *Norwich, England*. ✉ slaterclive@hotmail.com

## Recent Research: Changes in land-use and its impact on birds

Most Zimbabwean birders will be concerned about the changed land-use across the country brought about by the land redistribution that began almost 20 years ago, and its possible impact on bird populations. I have come across three papers on this aspect, which may be of interest to readers. They are:

Fakarayi, T., Mashapa, C., Gandiwa, E. & Kativu, S. 2015. Pattern of land-use and land cover changes in Driefontein Grassland Important Bird Area, Zimbabwe. *Tropical Conservation Science* **8**: 274-283. https://doi.org/10.1177%2F194008291500800120.

Fakarayi, T., Mashapa, C., Gandiwa, E. & Kativu, S. 2016. Varying land-use has an influence on Wattled and Grey Crowned Cranes' abundance and distribution in Driefontein Grasslands Important Bird Area, Zimbabwe. *PLoS ONE* **11**: e0166209. https://doi.org/10.1371/journal.pone.0166209.

Pringle, S., Chiweshe, N., Steward, P.R., Mundy, P.J. & Dallmer, M. 2019. Rapid redistribution of agricultural land alters avian richness, abundance, and functional diversity. *Ecology and Evolution* (Early View):https://doi.org/10.1002/ece3.5713.

These papers can all be downloaded from the internet, either by typing the reference into Google, or by using the digital object identifier (doi).

# BOOK REVIEWS

## The 2015 Eskom Red Data Book of birds of South Africa, Lesotho and Swaziland

M.R. Taylor, F. Peacock, & R.M. Wanless (eds.)
2015. BirdLife South Africa, Johannesburg. 464 pp. ISBN 978-0-620-68259-6

This is South Africa's fourth Red Data Book for birds, after Siegfried *et al.* (1976) (108 pp.), Brooke (1984) (211 pp.), and Barnes (ed.) (2000) (169 pp.), when most countries, indeed almost all, in Africa have not produced even their first yet. This fourth edition is far more than four times the size of the first, and now hosts 132 species, with 13 in the critically endangered category (e.g. Taita Falcon), 38 endangered (e.g. Bateleur), 33 vulnerable (e.g. Black Stork), and 48 near threatened (e.g. European Roller). Finally, there is a list of 237 'special interest species' such as endemics and peripherals. The book ends with 29 pages of references for approximately 1560 of them. The individual species' accounts range from two pages (including a map) to six pages (White-backed Vulture). Altogether this is a *tour de force*, and one wonders how it could be improved in the fifth edition?

In each account there are up to 12 sub-heads, but all start with a short Justification and end with a box of Research Priorities and Questions in bullet-point format. In the Black Eagle (herein Verreauxs' Eagle, but Verreaux's in the Index), for example, a Vulnerable species, the box proposes density estimates in different biomes, revised estimates for a more accurate population size, and to evaluate the awareness campaigns. In the Introduction, the book singles out seabirds (45 spp.), raptors (22 spp.), waterbirds (20 spp.), and large terrestrial birds (e.g. bustards and cranes) (13 spp.) as being 'over-represented' in the lists of threatened species. Also in the Introduction, the IUCN criteria of endangerment are adequately explained; but the 'generation length' is, I believe, wrongly defined and lengthened to absurd levels. All species are measured against this criterion of estimated decline over 'the longer of 10 years or three generations.'

Many of the species, almost 60 of them, in this book are of interest to BLZ members, from the Kori Bustard and Wattled Crane to the buttonquails and Blue Swallow. To read these accounts comprising data from so many South African bird watchers and ornithologists, is to understand how one should locate and describe threatened species, from an 'initial screening' (pp. 13-14) to a full-blown analysis. Each account is by one to three assessors, and up to six reviewers. Various threats are discussed (pp. 21-23). These are habitat degradation and loss, poisoning, prey base, electricity powerlines, alien species, and 'predicted impact of climate change,' which of course is already occurring. Then there are priorities for bird conservation, which among other topics looks at the current protected area network. The maps are very detailed and each has several comments superimposed. The book is entirely in black-and-white throughout, and is adorned by many drawings by Faansie Peacock.

Are we still on track for trying this initiative in Zimbabwe?

**P.J. Mundy**

## Birds to Watch in Namibia. Red, Rare and Endemic species

R.E. Simmons, C.J. Brown & J. Kemper, J.
2015. Ministry of Environment and Tourism, and Namibian, Nature Foundation, Windhoek. 320 pp. ISBN 978-9-9945-0082-6.

Having been promised for several years, the Namibian red data book has at last appeared, and it is in a beautiful format and very nice to the 'feel'. The front cover is graced by a painting of five Violet Wood-hoopoes by Graeme Arnott. (A taxonomic note on p. 41 discusses the genetic similarity of the Violet and the Green Wood-hoopoes, and calls for 'further molecular research' while maintaining the Violet as a full species.) The book is in full colour throughout, and each species has its photograph and a detailed ('smoothed') distribution map in three abundances, plus text, which makes for a comfortable read.

On p. 10 is a one-page Summary of the book, which is a helpful feature. There it states that 687 species have been seen in Namibia, of which 61 are vagrants. From the remaining total, 71 species are red data species (Chapter 2), there are 16 endemic or near-endemic species in Namibia (Chapter 3), and 108 species are rare or peripheral (Chapter 4). For the Red Data species, each account is 2-4 pages in length, and holds five sub-heads; each begins with a short 'fact-box' and ends with an Actions sub-head. The Black Eagle (herein Verreaux's Eagle), for example, ranges over most of Namibia and is estimated at "500 to 1000 pairs"; it is considered as near threatened. Actions for its conservation include banning of poisons in the control of predators, and promoting farmer awareness and school education programmes.

The Egyptian Vulture is extinct as a breeding species, nine species are CR (e.g. Grey Crowned Crane), 25 are EN (e.g. Yellow-billed Oxpecker), 13 are VU (e.g. African Skimmer), and 23 are NT (e.g. Kori Bustard). Of all these, 19 are seabirds, 20 are birds of prey, and 22 are waterbirds, for a very strong preponderance of these groups. Most species are given a population estimate and an area of occupancy, for example "up to 3000 birds" and 258 400 $km^2$ for the Bateleur. Of all these 71 red data species, 43 are of interest to BLZ members. To take as an example, one species that occurs on both the Namibian and the South African lists: Southern Ground Hornbill. It is considered EN by both, with about 1100 birds in 35 200 $km^2$ in Namibia and < 1500 adults in 67 125 $km^2$ in South Africa. Namibia considers it to be 'one of the most difficult birds to conserve'; artificial nest boxes might help, reduce veld fires, and it is in urgent need of study. South Africa wants to study its habitat requirements, update the population estimates, study the population dynamics; investigate the trade in the species, and appraise the likely effects of climate change. Not the same listings!

Nevertheless, it's a marvellous compilation, and certainly something for Zimbabwe to emulate!

**P.J. Mundy**

## BIRDLIFE ZIMBABWE COUNCIL 2019-2020

| | | | |
|---|---|---|---|
| **President** | Neil Deacon | neilrobindeacon@gmail.com | 0772-363369 |
| **Vice-President** | Ken Worsley | worsley.ken@gmail.com | 0773-777142 |
| **Hon. Treasurer** | James Ball | jameszwe@gmail.com | 024-2494409 |
| | | | 0772-310351 |
| **Acting Hon. Secretary** | Paula Dell | paula.dell@strachansphoto.com | 0712-610746 |
| **Councillor, Finance** | Russell Clark | jrclark000@gmail.com | 024-2496554 |
| | | | 0772-338077 |
| **Councillor, Mashonaland** | Innes Louw | hararebirdwalks@gmail.com | 0776-190795 |
| **Fundraising** | Dave Dell | david.dell@strachansphoto.com | 0712-630152 |
| **Councillor, Matabeleland** | John Brebner | brebnerj@acolchem.co.zw | 029-2242634 |
| | | | 0782-781108 |
| **Councillor, Education** | Leslee Maasdorp | dorothywakeling@gmail.com | 024-2883316 |

### BLZ Member Consultants

| | | | |
|---|---|---|---|
| **Library & Wetlands** | Dorothy Wakeling | dorothywakeling@gmail.com | 024-2304298 |
| | | | 0772-376506 |
| **National Membership** | Sylvia Muzavazi | sylvia@blz.co.zw | 024-2481496 |
| **Waterbirds, SABAP 2** | Ian Riddell | gemsaf@mango.zw | 0772-117054 |
| **Special Species Survey** | Peta Ditchburn | specialspecies@blz.co.zw | 029-244596 |
| | | | 0775-940714 |

### Publications

| | | | |
|---|---|---|---|
| **Editor, *Honeyguide*** | Brian Marshall | brian.marshall01@gmail.com | |
| ***Honeyguide* Design & Production** | Vacant | | |
| **Editor, *The Babbler*** | Ian Riddell | gemsaf@mango.zw | 0772-117054 |

## BLZ NATIONAL OFFICE

| | | | |
|---|---|---|---|
| Chief Executive Officer | Julia Pierini | juliapierini@birdlifezimbabwe.org | 0772-894562 |
| Finance & Administration | Sylvia Muzavazi | sylvia@blz.co.zw | 024-2481496 |
| Conservation Officer, Special Species | Fadzai Matsvimbo | fadzai@blz.co.zw | 024-2481496 |
| Research Projects | Togarasei Fakarayi | toga@blz.co.zw | 024-2481496 |
| Messenger/Caretaker | Vengai Dengu | | 024-2481496 |

35 Clyde Road, Eastlea, Harare – PO Box RVL 100, Runiville, Harare
Telephones: +263 (024) 2481496 – E-mail: birds@zol.co.zw
Web: www.birdlifezimbabwe.org – Facebook: www.Facebook.com/BirdLifeZimbabwe