

House Sparrow *Passer domesticus* (2 290 dead) at Damietta, but the list of species found in the markets included Avocet, Greater Flamingo and the Bluewinged Teal noted above as the first record for Egypt. There is even a table of prices – the conclusion is drawn that bird meat is expensive relative to beef or fish, and is insignificant as a source of protein for people.

The report provides valuable insights into an area from which up-to-date information was lacking. As an expedition report, it provides a model for how such documents ought to be written (except that it took rather long to pro-

duce). But no less than 29 publications (listed in an appendix) have already resulted from the expedition, so the participants have been hard at work – some of these publications are reprinted as chapters of the report.

The report is one of an important series. WIWO is a Dutch foundation that coordinates waterbird studies, mainly conducted by Dutch postgraduate students, throughout the world. The WIWO report series publishes the results of these expeditions, frequently at a level of detail that would not otherwise be published.

L G Underhill

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**Jenni, L. & Winkler, R. 1994.** *Moult and ageing of European passerines*. London: Academic Press. 224 pp, 514 colour photographs, £40.

Together with breeding and migration, moult is one of the major events in the annual cycle of birds. Moult involves considerable time (on average 1-3 months at least once a year) with major energetic and nutritional implications during which the bird's flying capacity may be partially impaired. It is nevertheless essential for the long term survival and overall success of the individual, and birds have developed various strategies to fit moult into the annual cycle in order to combine it optimally with other priority activities important for the immediate survival of the individual or for the long term success of its genes (reproduction).

These different strategies have resulted in differences in the pattern and extent of moult between species, and even more between age classes within species. Juveniles of many passerines adopt a different moult strategy to adults, and a proper understanding of the moult process and extent, together with the differences in appearance of the different feather generations that can occur simultaneously on a bird, allow differentiation between

age categories in living birds (at least when the moult strategy is known).

This book starts with an extremely comprehensive 57 page review of anything you could wish to know about moult of passerines and everything you need to know in order to understand ageing based on features resulting from moult. The review is based on the authors' extensive experience of ringing large numbers of passerines at migration research stations (particularly in Switzerland), but it also examines the vast literature on the subject exhaustively, including journals previously overlooked as obscure. Papers in 10 different languages have been consulted, thereby breaking through the oft encountered language specific biases and providing a rather rare 'European integration' on the subject. The only aspects of moult not covered, or only marginally so, are those of energetics, nutrition and endocrine control, but these have little direct relevance to age determination, the main objective of the book. Without doubt, this readable and easy to understand treatise is the most comprehensive on the subject I have come across. New insight has also been brought to the subject of moult strategies. Instead of the classical four (summer partial, summer complete, winter partial, winter

complete). meticulous analysis of the available evidence enabled the authors of this book to come up with 14 different moult strategies for the passerines wintering in Africa alone!

The remainder of the book contains species accounts for 58 European passerines. Comprehensive statistics on the extent of post-juvenile, post-breeding and pre-breeding (if any) moults are given and illustrated in easy-to-understand diagrams and figures. Best criteria for ageing during autumn and spring are described, most of them based on contrasts between renewed and retained feather generations in the wing after a partial moult. For each species several magnificent colour photographs illustrate the criteria (sometimes very subtle) and also the possible pitfalls. This section provides painstaking quantitative details on moult extent of the many thousands of birds examined by the authors over several years. Comparisons with other quantitative studies are also provided. Most innovative are the data on the extent of a partial pre-breeding moult and how this relates to the possibilities of ageing birds in spring and summer (a much less explored field), when three feather generations are regularly identified and used for age determination.

The book concludes with an appendix on the use of skull pneumatization for ageing and provides figures summarising the results of skull pneumatization during autumn for 46 species recorded in Switzerland by the authors.

Although focusing on European passerines and only providing a selection of 58 species (though still covering the whole range of moult strategies), this book is also of major relevance to southern African ringers. Not only are 14 species of Palearctic migrants that winter regularly in southern Africa included in the detailed species accounts, but the principals of moult and moult strategies and the resulting ageing techniques are so widely applicable that virtually every page of this book becomes highly relevant for ringers worldwide. The ageing criteria illustrated can be readily extended to southern African members of the

same genera or families in *Riparia*, *Anthus*, *Motacilla*, *Turdus*, *Acrocephalus*, *Parus*, *Oriolus*, *Lanius*, *Serinus*, *Emberiza*, the small Turdidae and Muscicapidae (see my note in *Safring News* 24: 19-22). The book also points to several poorly understood aspects of moult of European migrants in their African winter quarters, some of which can certainly be solved by southern African ringers (such as the sequence and timing of moult of the primary coverts in *Muscicapa striata* and whether individuals of *Lanius collurio*, *Oriolus oriolus* and *Sylvia borin* that replaced some flight feathers in Europe do moult these feathers once again in Africa).

We are far from a complete documentation of moult strategies in southern African birds, let alone from a comprehensive guide to age criteria resulting from moult. There are major opportunities here for ringers to add a totally new and extremely relevant dimension to their efforts. For those ringers not undertaking specific studies, the routine completion of moult cards should be further encouraged. In addition, analyses of moult cards should be produced more regularly, with a particular emphasis on the extent of a partial moult (if any) and the possibilities for ageing that this may generate.

The book also raises a few broader considerations. It clearly demonstrates the great practical benefits of what some would consider redundant, and merely academic, routine studies of moult progress and extent. It also demonstrates a new way in which bird collections in museums can be of much benefit, other than the traditional sources of biometrical and taxonomic information. 'Open wing' collections should become a standard procedure in new collection management.

I have some minor technical comments on the book. A few of the colour reproductions need to be of better quality to make the subtle differences in feather contrasts, among the marginal and median coverts or in the alula they are meant to illustrate, appreciable to the reader. Some prints have developed 'Newton reflections' on the feathers (particularly in the

*Turdus* species) and apprentices may erroneously take these for growth bars. As far as the range of different illustrations is concerned, it appears odd that even the most striking moult limits in the tail feathers are never illustrated, although they are dealt with quantitatively and included in diagrams and sometimes in the text as among the best criteria for ageing. The complete bias towards the use of wing feathers is not adequately reflected in the title.

In conclusion, this book is a masterpiece of new quantitative information on moult and with its beautiful photographs also a piece of art. It is a most useful book for ringers worldwide, and because age criteria resulting from partial moult are visible in the field in several

species, the book also becomes a must for field ornithologists and birders in general. Despite its price, I strongly recommend that everybody obtains or consults a copy. If you are not yet familiar with the principles of ageing birds on plumage features resulting from a partial moult, this book is very likely to change the way you look at birds, and therefore your life, completely. It stimulates a much more accurate and more detailed style of observation than currently practised in the region (there is certainly much more to birding than listing names!). If you are already familiar with these principles, the book will undoubtedly be a source of renewed inspiration.

*Marc Herremans*

## NOTICE

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### **Wesvaal Bird Ringing Course**

*16-18 February 1996*

The Wesvaal Bird Club presents a bird ringing course for able-bodied persons who want to learn how to catch and ring birds.

The course will be presented over the weekend of 16-18 February 1996 in the mountains next to the Vaal River near Potchefstroom.

It includes lectures on all aspects of bird ringing, practical demonstrations presented by experienced ringers and opportunities to handle nets and birds. Attendants will receive a ringer's handbook in English or Afrikaans. The course will be presented in both English and Afrikaans.

The cost of the weekend will be R50,00 per person. Ringers must bring their own sleeping bags and food.

For more information, contact:

- Sam de Beer: 018-406 3594 (w) 0148-297 1374 (h)
- William Scott: 0148-293 2276 (w) 0148-297 3894 (h)
- Sieg Eiselen: 0148-299 1941 (w) 0148-294 5006 (h)

### **Wesvaal Voëlberingingskursus**

*16-18 Februarie 1996*

Die Wesvaal Voëlklub bied 'n kursus aan vir enige iemand wat wil leer om voëls te vang en te ring.

Die kursus word gedurende die naweek van 16-18 Februarie 1996 in die berge langs die Vaalrivier aangebied.

Daar sal lesings wees oor al die fasette van beringing, praktiese demonstrasies deur ervare ringers en die geleentheid om nette en voëls te hanteer. Kursusgangers sal 'n Afrikaanse of Engelse handboek ontvang. Die kursus sal in Afrikaans en Engels aangebied word.

Die koste vir die naweek sal R50,00 per persoon wees. Ringers moet hulle eie slaapsakke en kos bring.

Vir meer inligting, kontak: