## Ressenyes / Reviews

DOI: 10.2436/20.8100.01.27

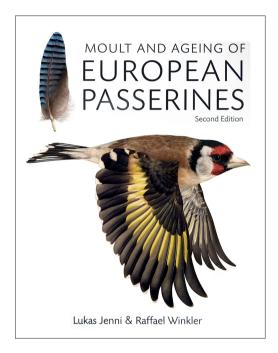
Jenni, L. & Winkler, R. 2019. *Moult and Ageing of European Passerines*. London: Bloomsbury Publishing, 304 pp. Second Edition.

The publication of the first edition of Moult and Ageing of European Passerines in 1994 was a breakthrough in knowledge of moult and ageing in birds. It soon sold out and wasn't reprinted until 2011, an edition that was unfortunately characterized by the low quality of its images.

Finally, twenty-six years after the initial publication, a second edition has been published with several updates that make this work probably the best book on moult and ageing ever published. It is divided into two parts, the first consisting of four chapters that discuss in detail the process of moulting and describe the moulting strategies of European passerines; the second comprises the species accounts, which are especially valuable due to the description of moult extension (or moults, depending in the species) and comments on age determination. The figures that are included in this second part are excellent: standardised high-quality photographs of wings with concise comments on ageing, and precise and easy-to-understand diagrams showing the moult extensions of the species that undergo partial moults.

Moult is a very important process in the biological cycle of birds. Feathers are dead structures, so they need to be replaced periodically whenever they become degraded, usually through wear and tear. Every species has evolved a moult strategy adapted to its biology and ecological needs that hinders as little as possible its chances of survival. Therefore, knowledge of moult strategies is key to understanding birds' biological cycles; furthermore, moult times are an excellent source of information for researchers and ringers. Additionally, the correct age determination of individuals, be they captured for study, observed in the field (from distance), or found dead or injured, is a very important variable that enriches research, for example on population dynamics.

In this new edition, the text has been fully revised, the figures updated, and new sections



added to the introductory chapters and species accounts. The format has also changed and, importantly, the photographs are of very high quality like in the first 1994 edition. Because of all this fresh information, the second edition is slightly larger, running to 322 pages (the first edition had 224).

The first part of the book (chapters 1–4) has new figures and text, with, for instance, a new section on moult analysis in chapter 2. The second part (chapters 5 and 6) includes 16 species that were not covered in the first edition: Woodchat Shrike Lanius senator, Masked Shrike Lanius nubicus, Magpie Pica pica, Nutcracker Nucifraga caryocatactes, Waxwing Bombycilla garrulus, Sedge Warbler Acrocephalus schoenobaenus, Marsh Warbler Acrocephalus palustris, Grasshopper Warbler Locustella naevia, River Warbler Locustella fluviatilis, Barred Warbler Sylvia nisoria, Common Starling Sturnus vulgaris,

Thrush Nightingale Luscinia luscinia, Dipper Cinclus cinclus, House Sparrow Passer domesticus, Tree Sparrow Passer montanus and Lesser Redpoll Acanthis cabaret. In total, 74 species are now covered in detail and for some of these species the published information is completely new. The species account that most attracted my attention (and interest) was the Grasshopper Warbler and the age determination of second calendar year individuals in spring based on the presence of unmoulted feathers, following the previously unpublished work by Prünter (2009). As well, there are new, highly interesting insights into the suspended and pre-breeding moults of certain long-distance migrants to Africa, including a number of Acrocephalus species. Prior to the publication of this second edition, the authors visited ringing stations outside Switzerland (from where most of the information in the first edition was collected) in Kenya, Israel, Russia and Italy.

The text has been revised in detail and updated, with new references to several studies published after the first edition. Of interest are the number of references to Catalan ringers and researchers in contributions to the *Butlletí del Grup Català d'Anellament*, the *Revista Catalana d'Ornitologia* and other journals.

Although this book does not cover as many species as other field guides on ageing and sexing birds in the hand, the 74 species included in this second edition are covered in greater detail. Although the size of this book (and also its price) does not make it a perfect field companion, it does warrant a place on the bookshelf of anybody interested in moult and ageing, especially ringers and researchers working with passerines.

Marc Illa