

Aberrant moult in an adult male Isabelline Shrike *Lanius isabellinus phoenicuroides*

LAURENT DEMONGIN & REUVEN YOSEF

Knowledge of bird moult of European species has progressed enormously (eg Ginn & Melville 1983, Svensson 1992, Jenni & Winkler 1994). Some families of passerines have a rather regular type of moult, whereas others present considerable variations between species as well as within species. Such is the case for the true shrikes (Laniidae). The moult of the Isabelline Shrike *Lanius isabellinus* is particularly complex because of the various subspecies and their respective migration strategies (Lefranc 1993, Lefranc & Worfolk 1997); moreover, the species is relatively poorly known due to its easterly, non-European, distribution (Yosef 2008).

During the regular ringing programme of the International Birding and Research Centre in Eilat (IBRCE), Israel, an adult male of the subspecies *phoenicuroides* was captured on 18 October 2005. Here we report the unusual moult of the wing feathers of this bird. Some regard this subspecies as a full species, the Rufous Shrike (Rasmussen & Anderton 2005); we retain it as one of the four subspecies (*phoenicuroides*, *isabellinus*, *speculigerus*, *tsaidamensis*) of *L. isabellinus* (Lefranc & Worfolk 1997, Harris & Franklin 2000, Yosef 2008).

The primaries and primary coverts and alula were counted descendantly; the secondaries and secondary coverts were counted ascendantly. The feathers moulted during the last partial post-breeding moult were coded A (autumn 2005), those moulted during the complete pre-breeding moult coded S (spring 2005), and an older feather coded O (old). The most internal primary was moulted during the post-breeding moult (code A) as well

Table 1. Extent of post-breeding moult for the wings of an adult male Isabelline Shrike *Lanius isabellinus phoenicuroides* captured 18 October 2005, Eilat, Israel. A = feather moulted during the autumn (partial post-breeding moult), S = feather moulted during the last spring (pre-breeding moult), O = feather moulted before the last spring.

Right Wing

| | | | | | | | | | | | | | | | | | | | | |
|----------------|------------------|---|---|---|---|---|---|---|---|---|---------------|---|---|---|---|-------|---|---|----|--|
| Lesser Coverts | all A | | | | | | | | | | Alula | | | | | all S | | | | |
| Median Coverts | all A except 2 S | | | | | | | | | | Carpal Covert | | | | | A | | | | |
| | Secondaries | | | | | | | | | | Primaries | | | | | | | | | |
| | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| Great Coverts | A | A | A | A | A | S | S | A | S | S | S | S | S | S | S | S | S | S | | |
| Remiges | S | S | S | S | S | S | S | S | S | A | S | S | S | S | S | S | S | S | S | |

Left Wing

| | | | | | | | | | | | | | | | | | | | | |
|---------------|---------------------------|---|---|---|---|---|---|---|---|---|----------------|---|---|---|---|------------------|---|---|---|--|
| Alula | shorter = A; 2 longer = S | | | | | | | | | | Lesser Coverts | | | | | all A | | | | |
| Carpal Covert | A | | | | | | | | | | Median Coverts | | | | | all A except 2 S | | | | |
| | Primaries | | | | | | | | | | Secondaries | | | | | | | | | |
| | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| Great Coverts | | S | S | S | S | O | A | A | A | A | S | A | A | A | A | A | A | A | A | |
| Remiges | S | S | S | S | S | S | S | S | S | A | S | S | S | S | S | S | A | S | S | |



Plate 1. Right wing of an adult male Isabelline Shrike *Lanius isabellinus phoenicuroides* captured 18 October 2005, Eilat, Israel. All small coverts, carpal covert and the majority of the median and greater secondary coverts were moulted in the autumn. © Laurent Demongin

as the longest tertiary of the left wing, whereas all the other remiges were moulted during the complete pre-breeding moult (code S, Table 1). All the small coverts, the carpal covert and the majority of the median and greater secondary coverts were moulted in the autumn (code A, Plate 1). The moult of the primary coverts was very asymmetrical between the wings and three generations were present on the left wing (Plate 2).

To date, two strategies of moult have been distinguished in the Isabelline Shrike (Lefranc 1993, Cramp & Perrins 1993, Jenny & Winkler 1994, Lefranc & Worfolk 1997, Harris & Franklin 2000). The adults of the eastern populations of *isabellinus* and most individuals of *speculigerus* have a complete moult in summer on the breeding grounds. Those of *phoenicuroides* and the other populations of *isabellinus* have a partial post-breeding moult July–September involving body, tertials, tail and many wing-coverts but no flight-feathers, followed by a complete pre-breeding moult in the winter quarters between (October) November and February (April).

The captured individual in Eilat was especially interesting in that it displayed two unusual characteristics as compared to a ‘normal’ individual *phoenicuroides* from the literature:

- 1) The most internal primary was moulted on each wing during the partial post-breeding moult, then the moult was stopped or suspended. The absence of growing feathers allowed us to exclude that it was the beginning of the complete moult, which would, in addition, be exceptionally early.
- 2) The absence of moult of the primary coverts of the right wing was as expected; but, three generations were present on the left wing, the most internal having been moulted during the partial post-breeding moult and the most external during the complete pre-



Plate 2. Left wing of an adult male Isabelline Shrike *Lanius isabellinus phoenicuroides* captured 18 October 2005, Eilat, Israel. The moult of the primary coverts was asymmetrical between the wings and three generations were present on the left wing. © Laurent Demongin

breeding moult. The last one was retained during these two successive moults and was thus older than one year. The pre-breeding moult was thus not absolutely complete.

This individual shows that information available on the moult of the Isabelline Shrike is still incomplete and that each captured individual should be studied and described in detail.

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REFERENCES

- Cramp, S & CM Perrins (eds). 1993. *Handbook of the Birds of Europe, the Middle East and North Africa*. Vol 7. *Flycatchers to Shrikes*. Oxford University Press, NY.
- Ginn, HB & DS Melville. 1983. *Moult in Birds*. BTO Guide 19. British Trust for Ornithology, Tring, UK.
- Harris, T & K Franklin. 2000. *Shrikes and Bush-Shrikes: including Wood-Shrikes, Helmet-Shrikes, Flycatcher-Shrikes, Philentomas, Batises and Wattle-Eyes*. Christopher Helm, London.
- Jenni, L & R Winkler. 1994. *Moult and Ageing of European Passerines*. Academic Press, London.
- Lefranc, N. 1993. *Les pies-grièches d'Europe, d'Afrique du Nord et du Moyen-Orient*. Delachaux et Niestlé, Lausanne.
- Lefranc, N & T Worfolk. 1997. *Shrikes: a Guide to the Shrikes of the World*. Pica Press, Robertsbridge, UK.
- Rasmussen, PC & JC Anderton. 2005. *Birds of South Asia. The Ripley Guide*. 2 vols. Smithsonian Institution/Lynx Edicions, Washington DC/Barcelona.
- Svensson, L. 1992. *Identification Guide to European Passerines*. 4th edition. Lars Svensson, Stockholm.
- Yosef, R. 2008. Family Laniidae. In: del Hoyo, J, A Elliott & DA Christie (eds). *Handbook of the Birds of the World*. Vol 13. *Penduline Tits to Shrikes*. Lynx Edicions, Barcelona, pp732–796.

Laurent Demongin & Reuven Yosef, International Birding & Research Centre in Eilat, PO Box 774, Eilat 88106, Israel. ryosef@eilatcity.co.il