

Suspended Wing Moul in a Tree Sparrow

by Max Kasparek

On 2 August 1978, I caught an adult Tree Sparrow *Passer montanus* in a colony of House Martins *Delichon urbica* situated at the 'Biologische Station des Burgenlandes' in Austria. In each wing the first (innermost) primary was new while the other flight feathers were fairly abraded. Both primaries were full grown and no missing or growing wing feathers could be detected. The body plumage was very worn and no new feathers could be found. The bird, presumably a male because of the absence of a brood patch (cf. Selander and Yang 1966 for the House Sparrow *Passer domesticus*) was still feeding its young in a House Martin's nest.

I have found records of arrested wing moult in 21 species of palaeartic passerines:
 Sand Martin *Riparia riparia* (Dowsett 1971, Snow 1967).
 Swallow *Hirundo rustica* (Kasparek 1976 and references therein).
 House Martin *Delichon urbica* (Leisler and Löhrl in Kasparek 1976, Mead and Watmough 1976, Svensson 1975).
 Crag Martin *Ptyonoprogne rupestris* (Elkins and Etheridge 1977, Svensson 1975).
 Richard's Pipit *Anthus novaeseelandiae* (Stresemann 1968).
 Tawny Pipit *A. campestris* (Stresemann 1968).
 Masked Shrike *Lanius nubicus* (Svensson 1975).
 Woodchat Shrike *L. senator* (Mead and Watmough 1976, Ullrich 1974).
 Brown Shrike *L. cristatus* (Stresemann 1971).
 Garden Warbler *Sylvia borin* (Dehaen and Herroelen 1971, Mead and Watmough 1976).
 Whitethroat *S. communis* (Dowsett 1971, Mead and Watmough 1976, Stresemann 1968, Williamson 1974).
 Subalpine Warbler *S. cantillans* (Dowsett 1971).
 Orphean Warbler *S. hortensis* (Mead and Watmough 1976, Svensson 1975).
 Savi's Warbler *Locustella luscinioides* (Mead and Watmough 1976, Thomas 1977).
 Willow Warbler *Phylloscopus trochilus* (Herroelen and Meiren 1966, Mead and Watmough 1976).
 Bonelli's Warbler *P. bonelli* (Mead and Watmough 1976).
 Pied Flycatcher *Ficedula hypoleuca* (Hyytia and Vikberg 1973, Mead and Watmough 1976).
 Spotted Flycatcher *Muscicapa striata* (Hyytia and Vikberg 1973, Mead and Watmough 1976).
 Oortolan Bunting *Emberiza hortulana* (Svensson 1975, Winkler 1975).
 Black-headed Bunting *E. melanocephala* (Stresemann 1969).
 Golden Oriole *Oriolus oriolus* (Mead and Watmough 1976).
 Some other species such as Blyth's Pipit *Anthus godlewskii*, River Warbler *Locustella fluviatilis* and the Booted Warbler *Hippolais caligata* might arrest the wing moult during migration too (Svensson 1975, Tucker 1978) but further examinations are necessary. In the Reed Warbler *Acrocephalus scirpaceus*, the Sedge Warbler *A. schoenobaenus*, the Grasshopper Warbler *Locustella naevia*, the Wood Warbler *Phylloscopus sibilatrix* and perhaps some other species, a variable number of the tertials are renewed during the postnuptial moult on the breeding grounds.

In all these species, moult is apparently suppressed by migration. Interrupted wing

moult in non-migratory birds of the temperate zone seems to be rare. The only previous published reference to non-migratory birds suspending wing moult is the observation of King (1972) and Mewaldt and King (1977) that a small proportion of Nuttall's Sparrow *Zonotrichia leucophrys nuttalli* begin to moult remiges and then suspend further feather loss, apparently during a late season attempt at nesting or re-nesting. According to Payne (1972) sex steroids are responsible for the suppression of moult.

REFERENCES

- DEHAEN, M. and HERROELEN, P. 1971. Enkelte gevallen van onderbroken rui bij de Tuinfluitter (*Sylvia borin*). *Gerfaus*, 61: 104-106.
- DOWSETT, R. J. 1971. Suspended wing moult in migrants. *Bird Study*, 18: 53-54.
- ELKINS, N. and ETHERIDGE, B. 1977. Further studies on wintering Crag Martins. *Ring and Migration*, 1: 158-165.
- HERROELEN, P. and MEIREN, P. V. D. 1966. Vroeg rui en onderbroken rui by de Fitis *Phylloscopus trochilus*. *Gerfaus*, 56: 416.
- HYTTIA, K. and VIKBERG, P. 1973. Autumn migration and moult of the Spotted Flycatcher *Muscicapa striata* and the Pied Flycatcher *Ficedula hypoleuca* at the Signliskar bird station. *Ornis Fenn.*, 50: 134-143.
- KASPAREK, M. 1976. Über Populationsunterschiede im Mauserverhalten der Rauchschwalbe *Hirundo rustica*. *Vogelwelt*, 97: 121-132.
- KING, J. R. 1972. Postnuptial and postjuvenile moult in Rufous Collared Sparrows in northwestern Argentina. *Condor*, 74: 5-16.
- MEAD, C. J. and WATMOUGH, B. R. 1976. Suspended moult of trans-saharan migrants in Iberia. *Bird Study*, 23: 187-196.
- MEWALDT, L. R. and KING, J. R. 1977. The annual cycle of White-crowned Sparrows (*Zonotrichia leucophrys nuttalli*) in coastal California. *Condor*, 79: 445-455.
- SELANDER, R. K. and YANG, S. Y. 1966. The incubation patch of the House Sparrow *Passer domesticus* Linnaeus. *Gen. Comp. Endocrin.*, 6: 325-333.
- SNOW, D. W. 1967. *A guide to moult in British Birds*. British Trust for Ornithology Field Guide. Tring.
- STRESEMANN, E. & V. 1968. Die Mauser von *Anthus campestris* und *Anthus richardi*. *J. Orn.*, 109: 17-21.
- STRESEMANN, E. & V. 1968. Winterquartier und Mauser der Dorngrasmücke *Sylvia communis*. *J. Orn.*, 109: 303-314.
- STRESEMANN, E. & V. 1969. Die Mauser einiger Emberiza-Arten. 1. *Emberiza melanocephala* und *E. bruniceps*. *J. Orn.*, 110: 291-305.
- STRESEMANN, E. & V. 1971. Die postnuptiale und die pränuptiale Vollmauser der asiatischen Würger *Lanius tigrinus* und *L. cristatus*. *J. Orn.*, 112: 373-395.
- SVENSSON, L. 1975. *Identification Guide to European Passerines*. Stockholm.
- THOMAS, D. K. 1977. Wing moult in the Savi's Warbler. *Ring and Migration*, 1: 125-130.
- TUCKER, J. J. 1978. A River Warbler *Locustella fluviatilis* 'wintering' and moulting in Zambia. *Bull. Brit. Orn. Club*, 98: 2-4.
- ULLRICH, B. 1974. Über die postnuptiale Mauser des Rotkopfwürgers (*Lanius senator*). *J. Orn.*, 115: 79-85.
- WILLIAMSON, K. 1974. *Identification for Ringers III*. The Genus *Sylvia*. British Trust for Ornithology. Tring.
- WINKLER, R. 1975. Mauserverhältnisse bei Rauch- und Mehlschwalben auf dem Herbstzug. *Orn. Beob.*, 72: 119-120.

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