

An extra primary feather and abnormal sequence of primary moult in a House Sparrow *Passer domesticus*

J. M. FERNÁNDEZ GARCÍA

On 21.07.97 a first-year (Euring code 3) male House Sparrow Passer domesticus with an extra primary feather in the right wing was trapped at El Corral de las Arrimadas, León (NW Spain). The left wing showed the normal number of feathers. The primaries were in active moult, but the sequence was not typical. A comparison of the wings showed that the probable extra primary was one of the tract 4-6 (descendently).

Key words: House Sparrow, *Passer domesticus*, extra primary, abnormal moult.

José María Fernández García. Instituto Alavés de la Naturaleza. Apartado de correos 2.092. 01080 Vitoria (Álava), Spain.
e-mail: ianani@ctv.es
Rebut: 09.08.99; Acceptat: 28.02.00

Few reports on extra flight-feathers in the wing have been published to date, most of them dealing with additional secondaries in individuals of certain species of passerines. Recently, reports have been made for the Tree Sparrow *Passer montanus* (Bigas & Copete 1992), Serin *Serinus serinus* (Copete et al. 1992), Reed Bunting *Emberiza schoeniclus* (Bertolero et al. 1992), Blackcap *Sylvia atricapilla* (Fernández 1993), Citril Finch *Serinus citrinella*, Reed Warbler *Acrocephalus scirpaceus* and Cirl Bunting *Emberiza cirlus* (Barrioconal et al. 1993). As regards primaries, the papers of Stresemann (1963), Hanmer (1981) and Melville (1985) should be mentioned, but

such references are scarcer. Some of these authors suggest that this phenomenon may be commoner than is generally thought, calling for regular examination of wings by ringers, to ascertain the rate of appearance.

The House Sparrow *Passer domesticus* shows a normal number of 10 primaries, 6 secondaries and a total of 19 wing flight-feathers, like most Palearctic passerines (Snow 1967). On 21.07.97 a first-year (Euring code 3) male House Sparrow was trapped at El Corral de las Arrimadas (42°48' N, 5°14' W), province of León (NW Spain). The bird was aged and sexed according to usual techniques based on plumage

	P10	P9	P8	P7	P6	P+	P5	P4	P3	P2	P1	S1	S2	S3	S4	S5	S6	T1	T2	T3
Left wing	0	0	0	0	2		5	5	2	5	3	0	0	0	0	0	0	0	0	0
Right wing	0	0	0	0	2	5	5	5	3	5	3	0	0	0	0	0	0	0	0	0

Table 1. Moults score of both wings. P: primaries; S: secondaries; T: tertiaries; P+: extra primary.

Taula 1. Puntuació de muda d'ambdues ales. P: primàries; S: secundàries; T: terciàries; P+: primària suplementària, Left wing: ala esquerra; Right wing: ala dreta.

characteristics, showing a mixture of male- and female-type plumages, as is typical for a first-year male House Sparrow in summer while in moult (Svensson 1997).

A careful examination of the bird showed a total of 11 primaries in the right wing. Differences in shape between the extra feather and the rest were not found. The number of feathers in the left wing was normal. The wing feathers were in active moult; moult scores according to Ginn & Melville (1983) are provided in Table 1. The sequence was not typical, with primaries 1, 3 and 6 (descendently) in growth, primaries 2, 4 and 5 completely fresh, and primaries 7-10 old, according to wear.

The moult sequence was symmetrical in the two wings, apart from the presence of the extra primary in the right wing. Its position and insertion was not apparent, but comparison suggested that the probable additional feather was one of the tract 4-6. This case and others of extra [metacarpal] primaries harmoniously inserted (Miller 1924, Stresemann 1963, Melville 1985) agree with the hypothesis put forward by Stresemann (1963), that claimed a lack of evolutionary change in the number of functional primaries in most groups of birds, against the traditional vision that proposed a reduction in the number of digital primaries in the course of evolution (e.g. Stegmann 1962).

The bird was not recaptured subsequently. Thus, some aspects such as possible regularisation of number of feathers in consecutive moult cycles could not be observed. As mentioned above, careful examination of bird wings during ringing would probably help to add evidence about the frequency and possible interpretation of abnormalities in the number of wing feathers: moving from casual findings to evolutionary implications. *

ACKNOWLEDGEMENTS

A. Onrubia checked the draft.

RESUM

Primària suplementària i seqüència anormal de muda de primàries en un Pardal Comú Passer domesticus

El dia 21.07.97 es va capturar a Corral de las Arrimadas, León (nord d'Espanya) un Pardal Comú Passer domesticus mascle de primer any (codi Euring 3) amb una primària addicional a l'ala dreta. L'ala esquerra tenia el nombre normal de plomes. L'ocell mostrava muda activa de primàries, però la seqüència registrada no era típica. La comparació entre ambdues ales va suggerir que la ploma suplementària corresponia probablement a una del tracte 4-6 (numerades descendentment).

REFERENCES

- BARRIOCANAL, C., COPETE, J. L., GALÁN, S. & MARINÉ, R. 1993. New cases of extra secondaries in passerines. *Butll. GCA* 10: 23-24.
- BERTOLERO, A., GUSTAMANTE, L., FIGUEROLA, J. & RIERA, X. 1992. An anomaly in the number of secondary feathers in the Reed Bunting *Emberiza schoeniclus*. *Butll. GCA* 9: 17-18.
- BIGAS, D. & COPETE, J. L. 1992. Tree Sparrow *Passer montanus* with an extra flight feather. *Butll. GCA* 9: 15-16.
- COPETE, J. L., COPETE, L. M., DOMENECH, J. & SENAR, J. C. 1992. A case of a Serin *Serinus serinus* with an extra secondary. *Ring. & Migr.* 13: 177-178.
- FERNÁNDEZ, A. 1993. Una Curruca Capirotada *Sylvia atricapilla* con una secundaria suplementaria. *Butll. GCA* 10: 21-22.
- GINN, H. B. & MELVILLE, D. S. 1983. *Moult in Birds*. Tring: British Trust for Ornithology.
- HANMER, D. B. 1981. Abnormal number of rectrices and a case of an extra primary. *Safring News* 10: 3-5.
- MELVILLE, D. S. 1985. Further examples of abnormal rectrices and a case of an extra primary. *Bull. Brit. Orn. Cl.* 10: 95-96.
- MILLER, W. 1924. Further notes on ptilosis. *Bull. AMNH* 50: 305-331.
- SNOW, D. W. 1967. *A Guide to Moult in British Birds*. Theford: British Trust for Ornithology.
- STEGMANN, B. 1962. Die Verkümmerte distale Handschwinge des Vogelflügels. *J. Orn.* 103: 50-85.
- STRESEMANN, E. 1963. Variations in the number of primaries. *Condor* 65: 449-459.
- SVENSSON, L. 1997. *Guía para la Identificación de los Passeriformes Europeos*. Madrid: Sociedad Española de Ornitología.