An anomaly in the number of secondary feathers in the Reed Bunting *Emberiza schoeniclus*

A. BERTOLERO, L. GUSTAMANTE, J. FIGUEROLA & X. RIERA

A Reed Bunting with an extra secondary in the right wing was captured on 01.02.92 at Canal Vell (Deltebre, Tarragona). This extra secondary was heavily obraded and was unharmoniously situated between the fifth and the sixth secondaries. The most probable explanation for this feather was that it could be a "one off", produced during juvenile development with no ensheathed tip of the next feather generation at the base of the calamus.

Key words: Reed Bunting, *Emberiza schoeniclus*, feather number anomalies, secondary leathers.

Albert Bertolero, Lluís Gustamante, Jordi Figuerola & Xavier Riera. Parc Natural delta de l'Ebre. Plaça 20 de maig, s/n. 43580 Deltebre (Tarragona). Spain. Rebut: 16.12.92; Acceptat: 26.01.93.

Several anomalies in the number of flight feathers, mainly anisorectricyly, have been reported previously (Snow 1967, Hanmer 1981, Somadikarta 1984, Borràs & Senar 1985, Melville 1985, Baucells 1990). However, descriptions of anomalies related to the number of flightfeathers of the wing are less frequent [e.g. Stresemann 1963, Melville 1985, Copete et al. 1992].

On February 1st 1992 an adult (EU-RING code 6) male Reed Bunting (*Emberiza* schoeniclus) was captured at the Estació Biológica del Canal Vell in the Parc Natural del Delta de l'Ebre (40.43N 00.41E). This individual had seven secondaries in the right wing, whereas the left wing had the normal number of feathers for this species: 10 pp, 6 ss, 3 tert. (Ginn & Melville 1983). There was a very worn feather between the fifth and the sixth secondaries, which was roughly one third shorter than the other secondaries, showing just part of the rachis and some barbules without barbicels. Its position was abnormal, sticking out from the normal level of the rest of the feathers. The calamus was inserted between the fifth and the sixth secondaries in a slightly higher position than the rest of the secondaries. All other flightfeathers of the wing were normally developed.

The number of greater coverts was normal (nine), the 5th being displaced to the right, due to the presence of this anomalous feather.

This supplementary feather could be a "one off" produced during juvenile develop-

ment with no ensheathed tip of the next feather generation at the base of the calamus. Therefore renewal of this feather during the first (and subsequent) complete moults would not take place (S.C. Norman com. pers.).

Another explanation for the greater wear that this feather showed could be its more exposed position to rubbing and other abrasive factors. The lack of some components in the diet could also produce a disturbance in the constitution and resistance of the feathers, but this would have affected the structure of a greater number of feathers in both wings (Murphy & King 1987).

Recently, Copete et al. (1992) have also described an extra secondary in the Serin (Serinus sorinus). The main differences between their report and our bird was that in their case the feathers were harmoniously distributed without any anomaly in the disposition of the feathers, while the extra secondary of our Reed Bunting was most unharmoniously located.

RESUMEN

Anomalia en el número de secundarias de un Escribano palustre Emberiza schoeniclus.

El 01.02.93 fue capturado en el Canal Vell (Deltebre, Tarragona) un escribano polustre con una secundaria suplementaria en el ala derecha. Esta pluma presentaba un gran desgaste y sobresalía entre la quinta y sexta secundarias. La explicación más probable de la presencia de esta pluma, es que se tratase de una pluma "fuera de sitio", producida durante el desarrollo juvenil sin la punto de la vaina de la pluma de la siguiente generación en la base del calamus.

REFERENCES

BAUCELLS, J. 1990. Anisorrectricilia en el Pinsà (*Fringilla coelbs*). Butll. GCA 7: 25-26.

BORRAS, A. & SENAR, J.C. 1985. Anisorrectricilia en el Verderón Serrano (*Serinus citrinella*). *Misc. Zool.* 9: 412.

COPETE, J.L., COPETE, L.M., DOME-NECH, J. & SENAR, J.C. 1992. A case of a Serin (*Serinus serinus*) with an extra secondary. *Ring. & Migr.* 13: 177-178.

GINN, H.B. & MELVILLE, D.S. 1983. Moult in birds. BTO Guide 10. Tring: BTO.

HANMER, D.B. 1981. Abnormal numbers of recirices. Safring News 10: 3-5.

MELVILLE, D.S. 1985. Further examples of abnormal rectrices and a case of an extra primary. *Bull. Brit. Orn. Club* 105: 95-96.

MURPHY, M.E. & KING, J.R. 1987. Dictary discrimination by moulting Whitecrowned Sparrows given diets differing only in sulphur amino acid concentration. *Physiol. Zool.* 60 (2): 279-289.

SNOW, D.W. 1967. A Guide to Moult in British Birds. BTO Field Guide 11. Tring: BTO.

SOMADIKARTA, S. 1984. Polyrectricyly. Bull. Brit. Orn. Club 104: 60-61.

STRESEMANN, E. 1963. Variation in the number of primaries. *Condor* 65: 449-459.