Dental anomalies in five species of North American shrews

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Summary. – Examination of 576 individuals among 5 species of North American shrews from southern Illinois and western Kentucky and Tennessee revealed 29 cases of dental anomalies, including supernumeration, missing, diminutive, displaced, and fused teeth. All anomalies were in the upper dentition. The most common anomaly was missing teeth, which occurred in a greater percentage of individuals from small species (*Sorex longirostris* and *S.* [*Microsorex*] *hoyi*) than large species (*Blarina brevicauda, B. carolinensis* and *Cryptotis parva*). All cases of missing teeth involved the small, structurally simple unicuspids. Loss of these teeth did not appear to affect individual survival. The proportion of older shrews with dental anomalies was 3.5 times greater than the proportion of anomalous young individuals.

Résumé. – L'examen de 576 individus de 5 espèces de musaraignes d'Amérique du Nord (du sud de l'Illinois, de l'ouest du Kentucky et du Tennessee) a révélé 29 cas d'anomalies dentaires, comprenant le surnombre, l'absence, la réduction, le déplacement et la fusion de dents. Toutes les anomalies se trouvaient sur la dentition supérieure. La plus commune était l'absence de dents, qui apparaissait dans un plus grand pourcentage d'individus des petites espèces (*Sorex longirostris* et *S.* (*Microsorex*) *hoyi*) que des grandes espèces (*Blarina brevicauda, B. carolinensis* et *Cryptotis parva*). De plus, tous les cas d'absence de dents n'apparaissaient pas affecter la survie des individus. La proportion des musaraignes âgées avec anomalies était 3,5 fois plus grande que la proportion des jeunes individus anormaux.

INTRODUCTION

Dental anomalies occur in representative species from a variety of mammalian orders (Colyer 1936), although they have been reported to be fairly uncommon in soricids (Jackson 1928, Hall 1940). Dental anomalies in shrews have been described previously by several investigators (Meester 1959, Choate 1968, Dippenaar 1978), with a good introduction to past work provided by French (1985). Apart from intrinsic interest, genetically based dental anomalies are important as part of individual phenotypes