REFERENCES

Godfrey G. K., 1955: A field study of the activity of the Mole, Talpa europaea. Ecology, 36, 10: 678—685. Grulich I., 1959: Význam ryci činnosti krtka obecného (Talpa europaea) v CSR. Prace Brn. Zakl. CSAV, 31, 3: 157—212. Formozov A. N., 1966: Snow cover as an integral factor of the environment and its importance in the ecology of mammals and birds. Occasional Publ. Boreal Inst. Univ. of Alberta, Edmonton, no. 1: 1—176. Jońca E., 1964: Wpływ gryzoni i knetów na erozję gleb na Pogórzu Wałbrzyskim (Sudety Środkowe). Czasop. geograf., 35, 1: 61—72. Jońca E., 1970: O roli zwierząt w kształtowaniu rzeźby powierzchni ziemi. Czasop. geograf., 41, 3: 229—337. Rusakov O. S., 1970: O nekotoryh osobennostiah rojuščej dejatelnosti krota. [In: »Sredoobrazujuščaja dejatelnost živetnyh«]. MOIP — Inst. Geogr., AN SSSR: 78—79. Moskva. Sklarov G. A., 1933: K voprosu o dejatelnosti krotov v počvah dernovo-podzolistoj zony. Počvovederie, 32, 8: 51—57. Skoczeń S., 1958: Tunnel digging by the Mole Talpa europaea. Acta theriol., 2, 11: 235—247. Turček F. J, 1965: The role of animals in baring and soil erosion on karst-land. Acta zool. Acad. Sci. Hungar., 11, 1—2: 203—215. Voronov A. G., 1950: Vlijanie životnyh na počvy i rastitelnost stepnoj zory. [In: »Životnyj mir SSSR«]. Zool. Inst. AN SSSR: 527—538. Moskva.

Wałbrzych, ul. Paderewskiego 23/9, Poland. Accepted, May, 15, 1972.

Walter ULOTH

TO THE HISTOR (OF THE DISTRIBUTION, INTRODUCTION AND CROSS-BREEDING OF THE TYRRHENIS MOUFLON IN EUROPE AND OVERSEA 1

HISTORIA ROZMIESZCZENIA, ZASIEDLANIA I KRZYŻOWANIA MUFLONA

The European or Tyrrhenis mouflon, *Ovis ammon musimon* Schreber, 1782, is one of the 39 kinds of the native sheep, *Ovis ammon* L., 1758, spread over the northern hemisphere of the Old and New Word. While their numbers in their original habitat steadily decreased since the early's of our century as a result of the poachers and commercial overhunting (the present numbers are no more than 200 in the wild for the Corsican and 300 in a private game enclosure for the Sardinian island), many successful introductions was made in Europe since the 18th century.

About 1731 by Prince Eugen of Savoy in the game pasture of Belvedére (nearly Vienna, Austria), the basic stock with further sources from Corsican and Sardinian wilds for the zoological park of Lainz: and about 1858 in the zoological pasture of Hluboka, at present Bohemia, CSSR. The first important introduction in the wild of Europe was made by Karoly Forgach in the mountains of Tribeč (nearly Ghymes, at present Slovakia) in 1868, which build the stock of the present Slovakian po-

¹ This publication is a short abstract of a unpublished paper with the equal title.

pulation of the mouflon and was now described as the Slovakian mouflon, O. a. sinesella Turček, 1949. In the United States the first introductions with the mouflon was made in Texas by Mark Loss (Llano)

in 1946, in California in 1953 and into Hawaii (Lanai) in 1954.

The present stock of the world for 1968 was estimated of approximately 32000 heads, which portaked about to $^2/_3$ on the Old and $^1/_3$ on the New World. However, the mostly populations no more exist as pure mouflon strains (in Texas from 10000 heads less than 500) and are more or less mixed samples of crossings between the mouflon and few races of the domestic and feral sheep (in Hawaii and Texas specially!).

This is a dangerous fact, which is not considered on the international game trophy exhibitions to time. It is recognized, that the crosses have horns with a greater spread, length and basic circumference as well as the pure mouflon rams and also early reached the time of maturity of

their trophies (in Texas 11/2 years early as the pure mouflons).

The »Council International de la Chasse« and the »International Game Union« may be developed a new guide to measure the trophies of few sources on the base of a different system to calculate the fair count of points.

REFERENCES

Uloth, W. 1970: Zur Geschichte der Verbreitung, Einbürgerung und Verkreuzung des Tyrrhenis-Mufflons, Ovis ammon musimon Schreber, 1782, in Europa und Übersee, 54 Seiten, mit 5 Tabellen u. 7 Abbildungen. Unveröffentlichte Diplomarbeit, Sektion Biologie (Chemie der Päd. Hochschule "Dr. Theodor Neubauer", HB Mühlhausen) Thür.

Seeba/Rhön, DDR. Accepted, March 15, 1972.

Helena OKOŁÓW

SOME DESCRIPTIVE CHARACTERS OF THE SKULL IN MICROTUS

NIEKTÓRE CECHY OPISOWE CZASZKI NORNIKÓW (MICROTUS)

Examination was made of the position of foramen mandibulare in mandible material of Microtus oeconomus (n = 2,134) from different localities in Poland. The agrestis type position was found in 20% and the arvalis type in 45% of the specimens. The shape and arrangement of foramina palatina was studied in the collection of skulls of Microtus arvalis and Microtus oeconomus (n = 100), when it was found that this descriptive character permitted objective differentiation between M, oeconomus in 96.4% and M, arvalis in 86.7% of the cases. The position of for, mandibulare is of no taxonomic value.

I. INTRODUCTION

Determination of the species characters of *Microtus* in fossil material, or material obtained from owl pellets, is often rendered difficult by varying degrees of damage to the skull. In these circumstances descrip-