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SEXUAL MATURATION IN YOUNG MALE OF THE COMMON SHREW

DOJRZEWANIE PŁCIOWE MŁODEGO SAMCA RYJÓWKI AKSAMITNEJ

During the captures of small mammals made near Werbkowice in the Hrubieszów district a young male shrew (*Sorex araneus* Linnaeus, 1758), the sex organs of which were distinctly enlarged, was caught on August 3rd, 1966. The dimensions of the individual (body length 58 mm, body weight 6 g) and also the small degree of wear of the teeth, appearance of the skull sutures and fur showed clearly that it was a young individual from the first litters of that year.

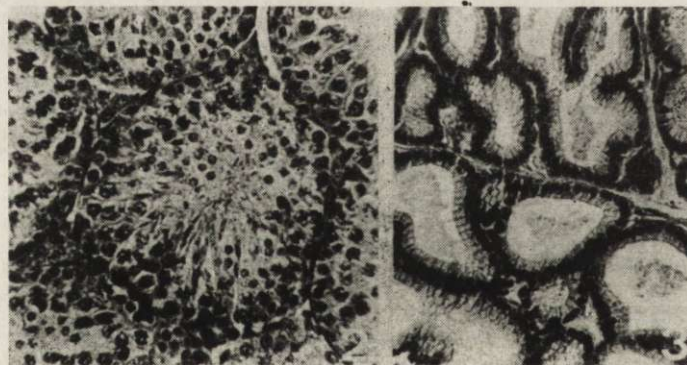
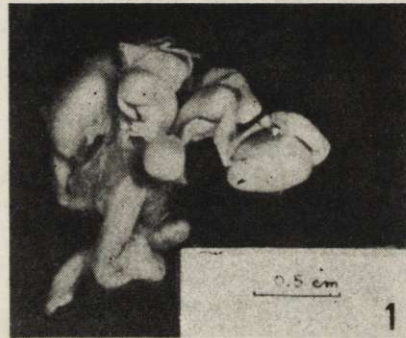


Fig. 1. The urogenital system of sexual mature young male of *S. araneus*.

Fig. 2. Section of testis. In the seminiferous tubules spermatogenesis is going on. One sees Leydig cells in interstitial tissue.

Fig. 3. Section of tubules of prostatic gland. Epithelium in a state of secretion. Secretion to be seen inside.

The additional sex glands such as the prostate, *gl. ampullarum* and *gl. bulbo-urethrales*, are all well developed (Photo. 1); the proximal thickening of the spermaduct is also distinct, this not being observed in sexually immature young males. The testes measure 6×3.3 mm.

Spermatogonia, spermatocytes of the I and II order and spermatids were observed in the majority of the sperm ducts of the testis. Only a few ducts (mostly circumferential) contained spermatozoa also (Photo. 2). Numerous active Leydig's cells can be seen in the interstitial tissue. The epithelium of the head of the epididymis exhibited intensive secretory activity. The prostate (Photo. 3) and glandular epithelium of *gl. ampullarum* exhibited intensive secretory activity, as did the epithelium of the vesicles of *gl. bulbo-urethrales*.

The first, and up to the present the only, mention made of sexual maturation of young males of *S. araneus* in the first calendar year of life was made by Bauer (1960). This author caught two sexually active young males on September 4th and November 8th in the Neusiedlersee district in Austria. Their weight was respectively 11.5 and 11.6 g, the testes measured 8×5 mm. Weaker progression of the gonads in young males was observed by Pucek (1960), but in these cases no spermatozoa were found in the testicles.

The individual described above was in process of sexual maturation. Probably, if it had been caught a month later, it would have been a fully sexually active male. The low body weight (6.0 g) of this individual, characteristic of young sexually immature shrews, would seem to indicate that the sexual maturation of young animals is not necessarily accompanied by a jump in weight (cf. Pucek, 1960).

REFERENCES

Bauer K., 1960: Die Säugetiere des Neusiedlersee-Gebietes. Bonn. zool. Beitr., 11, 2—4: 141—352. Pucek Z., 1960: Sexual maturation and variability of the reproductive system in young Shrews (*Sorex L.*) in the first calendar year of life. Acta theriol., 3: 269—296.

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FOUR CASES OF »HOME INSTINCT« IN THE EUROPEAN HARE

CZTERY PRZYPADKI »INSTYNKTU DOMU« U ZAJĄCA

There were described four cases of returning European hares to their place of origin from the distance of 230 and 460 km.

Some species of animals have the ability to find certain places and especially the places in which they were recently settled. The return to the place of origin was first described in *Peromyscus maniculatus* by Johnson (1926). The same species was later studied by Murie & Murie (1931). They named this phenomenon »home instinct« and defined it as the tendency of some animal species to return to the habitat they were previously forced to leave. Subsequently »home instinct« was described by numerous investigators (Fenjuk, 1941; Fenjuk & Popova, 1940; Schmid, 1936; Townsend, 1935 and others).

The problem whether »home instinct« occurs in European hare was not studied to date, although individual cases of return of an introduced hare to its place of origin were reported (Koenen, 1956; Szczer-