

Fragmenta Theriologica

Stanisław SKOCZEŃ

A NEW KEEPING ARRANGEMENT FOR THE MOLE,
TALPA EUROPAEA LINNAEUS 1758, IN CAPTIVITY¹
NOWY SPOSÓB TRZYMANIA KRETA,
TALPA EUROPAEA LINNAEUS 1758 W NIEWOLI¹

After several years of experiments on the keeping of the mole (*Talpa europaea* L.) in captivity (Skoczeń, 1957), I present a short description of the arrangement in which I kept moles during the last years. This arrangement proved to be adequate and I suppose that it could be used for keeping all species of moles in laboratories and zoological gardens. The arrangement described below enables satisfactory observation of the mole.

The entire arrangement is composed of the following elements:

The cage with dimensions of 40×40×30 cm is built of wood and has a glass lid opening upwards. The lateral walls are covered externally, up to $\frac{3}{4}$ of their height, with a net of zinc-coated wire 1 mm thick, with meshes of 0.5 cm. The cages used in my investigations had a bottom which could be removed, but practice proved this to be superfluous. The bottom of the cage is of wood. In the front of the wooden bottom part there are two openings, 5 cm in diameter. The two ends of a run built of a wire net enter into those openings, as seen on Fig. 1.

The tunnels are made of a zinc-coated wire net 1 mm thick, with meshes of 0.5 cm. The diameter of the tunnel is of 5 cm. I used to contrive these tunnels in the following manner: I sewed together with wire a band of net of suitable dimensions, so as to leave all ends of the wires on the exterior of the corridor, the animal not being then exposed to wounding. Such a tunnel could be bent in all directions.

The runs could be joined to the cage by means of a muff made of zinc-coated tin (Fig. 2), with a collar 1 cm high which insured the muff from being pushed out of the cage by the mole. If the runs were well-adjusted to the muffs, they held so strongly that their pushing out by the mole did

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not occur. The muffs at the extremities protect the mole from wounds caused by the ends of the wire. Besides this type of joining, I also contrived another one, with a number of ramifications (Fig. 2), allowing different combinations in the coupling of the runs.

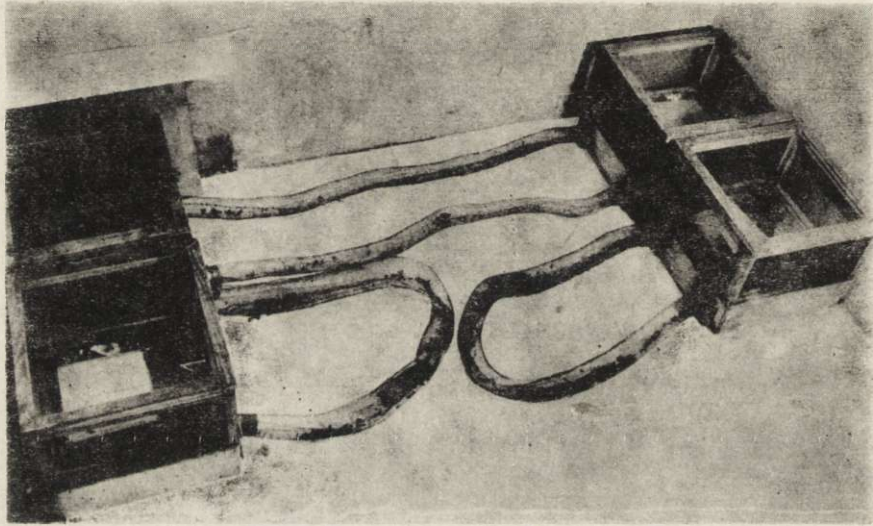


Fig. 1. Cages with tunnels (Phot. by L. Sych).

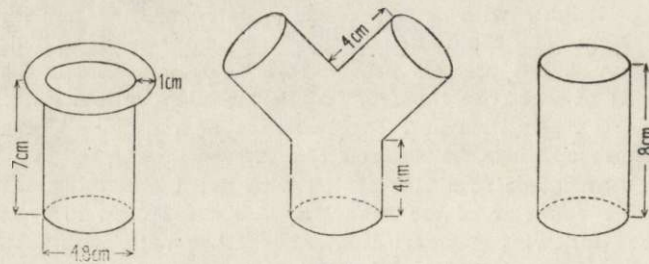


Fig. 2. Joining arrangements for tunnels.

Equipment of the interior of the cage: Initially, I gave the moles dry grass, paper, lignine etc., of which the mole, using the kind that suited it, built its nest in the shape of a ball, of the size of a child's head, usually in a corner of the cage. Lately, I introduced into a corner of the cage a box, mostly a cardboard one, $20 \times 20 \times 15$ cm in size, placing the bottom upwards. The moles used these boxes willingly and built their nests therein. The box had two outlets in the walls that did not adhere to the walls of the cage.

A corridor was usually made out of a felt plate, uniting the interior of the cage with the runs, reaching the first outlet. The second one led from the nest to the interior of the cage, where food and water were placed.

The litter: The essential aim in my experiments was the complete elimination of earth from the cages. Numerous were the opinions voiced in discussions or found in literature (Godfrey & Crowcroft, 1960), that the mole must be kept in earth. I am, as before, of a contrary opinion. The results of my investigations, published in 1957, and of those undertaken later, confirm my assumptions.

If moles are kept on food as natural as possible, with an addition of flesh of small mammals (as mice or rats) there ought to be no difficulty in keeping them alive in a good condition of health. In my experiments, when giving the moles food not resembling in the least a natural one (horsemeat), I managed to keep them alive up to 15 months, their death being caused by quite secondary reasons (mostly flight from the cage and bites inflicted by other individuals).

I replaced earth, which provides additional work, by sawdust in a sufficient amount for the moles to be able to bury themselves in it. Owing to the use of sawdust the characteristic and disagreeable odour of the moles disappeared.

Only sick individuals left their excrements and urinated in the cage. All healthy moles sought out, for these functions, places situated as far as possible from the nest, usually in the blind ends of the runs. Urine trickled through the net to the floor covered with sawdust, under the runs. Because of this, the runs were situated slightly above the floor, resting on pieces of board.

Cleansing of the cages and runs did not present any difficulties. Once in a week the used-up sawdust was removed with a small shovel and a brush and replaced by fresh damp sawdust. The content of the box with the nest was not changed. I exchanged for clean fresh ones the polluted runs which I placed in the sun. Their contents, when dry, could easily be removed.

The application of runs in the shape of tunnels proved to be appropriate as moles, when brought in from their habitat and let into the cage, always sought shelter in the corridors and remained there for hours. Moreover, if a human being entered the room, they always and invariably left the nest during the entire period of their captivity, when disturbed by the entrance and hid in the corridors, from which it was even sometimes difficult to extricate them. Summarising, I am of the opinion that the proposed solution is useful for the development of all kinds of investigations on these very mysterious and secretive animals.

REFERENCES

- Godfrey, G. & Crowcroft, P., 1960: The life of the Mole. Latimer Trend & Co., Ltd.: 1—186. London. Skoczeń, S., 1957: Próba chowu kreta (*Talpa europaea* L.) w warunkach sztucznych. Zesz. Nauk. WSR 3, Zootechn., 1:11—34. Kraków.

Dept. of Zoology, Coll. of Agriculture, Kraków, Św. Marka 37.