

Activity and Behaviour of Captive *Crocidura suaveolens cassiteridum* (Hinton, 1924)

Aktywność i behavior *Crocidura suaveolens cassiteridum* (Hinton, 1924)

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Pernetta J. C., 1977: Activity and behaviour of captive *Crocidura suaveolens cassiteridum* (Hinton, 1924). Acta theriol., 22, 29: 387—388 [With 1 Fig.].

Measurements of the diurnal activity of 10 captive *C. suaveolens* were made by means of temperature probes placed directly in the nest. Deliberate marking behaviour of two types was observed during the early stages of captivity.

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The activity of *Crocidura suaveolens* was investigated in the laboratory by means of temperature probes from a 12 channel Grant continuous temperature recorder, placed directly in to the nests of captive animals. The resultant cooling and heating curves, based on the average temperature of 6 probes gives a picture of nest usage during the 24 hour period. Light was provided from 0800 to 2000 hours and records made for 10 individuals over one day. The results are presented in Figure 1,

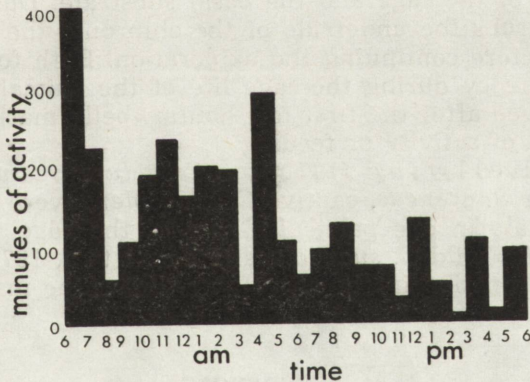


Fig. 1. Summed activity of 10 *S. suaveolens* during 24 hour period.

and show that the animals are active throughout the twenty-four hour period with peaks of activity between 0400 and 0500 hours and again between 1800 and 1900 hours. In general, the activity was higher during the night period than during the day.

Ritualised aggressive behaviour similar to that described by

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Crowcroft (1957) for *Sorex araneus* and *Sorex minutus* was observed both in the wild and in the laboratory. When introduced into the cage of another individual, the introduced animal would rear onto its hind legs, often falling right over, whilst the resident individual would lunge towards the throat or neck of the introduced animal. Such attacks (observed 25 times) resulted in the flight of the introduced animal and chase by the resident.

Definite marking behaviour was also observed in this species but not in captive individuals of the two *Sorex* spp maintained in the laboratory at the same time. When first introduced into a cage *C. suaveolens* performs, typical exploratory behaviour described by Crowcroft (1957) for *Sorex* and by Lorenz (1951) for *Neomys*; namely short exploratory runs with frequent returns to a base point accompanied by vigorous and prolonged activity of the nose and a soft »twittering«. These runs become more extended until the whole area of the cage has been explored. During this phase deliberate marking becomes apparent, the most common being »belly marking«.

In this behaviour the animal spreads the hind feet laterally and pressing the belly and anal area to the ground, drags itself forward for 1—2 cm using the forefeet. Whether marking is occurring by means of secretions from the lateral flank glands or anal area is unknown; since both are in contact with the ground both may be involved.

The second form of marking, »chinning«, is less frequently observed and is usually associated with some prominent feature of the environment such as logs or rocks, unlike »belly marking« which is associated with open areas of the cage and the basal substrate. During this behaviour the animal rubs the underside of the chin onto the rock or log two or three times before continuing the exploration. Both forms of marking decrease in frequency during the cage life of the animal but »chinning« was never observed after the first few hours; »belly marking« frequently preceded a bout of activity or feeding.

As noted by Hellwing (1971) for *Crocidura russula* and Crowcroft (1957) for *S. araneus*, captive *C. suaveolens* were observed by the author to defaecate in one particular part of the cage. Such behaviour is also reported for wild *C. suaveolens* (Pernetta, 1973) and this may have a marking function in the same way that urine marking in canids does.

REFERENCES

- Crowcroft P. 1957. The life of the shrew. Max Reinhardt: 1—166. London.
Hellwing S. 1971. Maintenance and reproduction of the white toothed shrew *Crocidura russula monacha* Thomas in captivity. Z. Säugetierk., 36, 2: 103—113.
Lorenz K. 1951. King Solomon's Ring. London.
Pernetta J. C. 1973. The ecology of *Crocidura suaveolens cassiteridum* in a coastal habitat. Mammalia, 37: 241—256.

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