## SHORT NOTE

## SCENT MARKING IN FREE-LIVING POLECATS MUSTELA PUTORIUS

The scarcity of data on scent-marking behaviour of free-living polecats (Blandford, 1987; B. Ludwig, Giessen University, pers. comm.) makes it worthwhile to report on two observations of body rubbing. A body-rubbing mustelid presses part of its body against the ground or an object; in the skin of some mustelids (e.g. stoat Mustela erminea and polecat M. putorius) small and widely scattered glands have been found, which are thought to scent the fur with their excretions (B. Ludwig, pers. comm.). Clapperton (1989) has described the various types of scent-marking behaviour and their possible functions in the closely related ferret M. putorius furo as observed in outdoor enclosures.

The observations reported here were made in the North Holland Dune Reserve, about 35 km north-west of Amsterdam, where polecats are not infrequently seen active in broad daylight. The main food source for polecats in these coastal dunes probably consits of rabbits *Oryctolagus cuniculus*, which are eaten as carrion or caught in their burrows.

In spring 1981 a polecat was observed from a parked car, at a distance of about 30 meters. It crossed an open field with very short, rabbit-grazed vegetation, walking in a straight line and relatively fast, suggesting that it was not foraging. Suddenly it pressed the whole length of the ventral side of its body against the ground, for about a second, at a place where a "tussock" of 1-2 cm height stood out against the surrounding vegetation. The polecat walked on without further delay, in the same direction and with the same speed. If it had not been for the very low vegetation, this behaviour would have escaped my attention. It made the impression of being a quick territorial marking "en route".

The second observation was an indirect one, from signs left in the snow. In January 1986 tracks of polecats in about 2 cm of fresh snow were followed. One track crossed the ice of a canal and showed a conspicuous S-shaped impression where it reached the bank, in a place where some snow had gathered to form a 4-5 cm deep drift. Apparently the animal had pressed its body into the snow, meanwhile "walking" on for almost one meter. No traces of urine marking were observed. In contrast to the previous case in which marking seems to be the only satisfactory explanation for the observed behaviour, an alternative explanation is possible in this case, i.e. comfort behaviour (perhaps to clean the fur), probably elicited by the relatively deep snow. Especially the long distance over which the body was held against the surface would suggest comfort behaviour rather than marking.

Both these observations come into the category called "belly crawl" by Clapperton (1989); in the ferret this behaviour is mainly shown by the males in spring, and is thought to play a role in territory defence.

## REFERENCES

BLANDFORD, P.R.S., 1987. Biology of the polecat Mustela putorius: a literature review. — Mammal Review, 17: 155-198.

CLAPPERTON, B.K., 1989. Scent-marking behaviour of the ferret, Mustela furo L. — Animal Behaviour, 38: 436-446.

J.L. MULDER