

ORPHANED PUP SURVIVAL IN WOOD MICE (*APODEMUS SYLVATICUS*) AND BANK VOLES (*CLETHRIONOMYS GLAREOLUS*)

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Lactating females are often captured when live-trapping is performed during the breeding season. The survival of their unweaned offspring for the length of time they are captive is therefore a cause of concern to field biologists. Indeed, if communal nursing occurs, pups are likely to survive these few hours of separation from their mother. However, if they rely entirely on their mother for food, thermoregulation and protection, a few hours of separation may be lethal.

Between 1995-2002, eight female rodents (*Apodemus flavicollis*, *A. sylvaticus* and *Clethrionomys glareolus*) gave birth in a Longworth live-trap. Some mothers were captive, while other females deliberately chose to give birth in an open prebaited trap. When discovered, mother and pups were left alone in the open, blocked and rebaited trap, thus providing them with a good chance of survival. On two occasions however, the mother was released in the field but pups were not discovered until the traps were cleaned prior to disinfection in the lab. From the label on the traps, it could be determined that one such litter belonged to a female *A. sylvaticus*, while the other belonged to a female *C. glareolus*. These two accidental cases of orphaned litters provide us with preliminary data on pup survival when deprived of their mother.

The *A. sylvaticus* litter was discovered 60 hours after traps were removed from the field, at the end of May. At that time, all six pups were alive and their body mass ranged between 1.30g and 1.47g.

The *C. glareolus* litter was discovered 14 hours after traps were removed from the field, in early May. At that time, all five pups were alive and their body mass ranged between 1.92g and 2.19g.

The critical finding here is that pups of both species survived more than 12 hours with neither milk nor thermoregulation from the mother. This finding suggests that litters left alone while the mother is temporarily captive in a live-trap should not suffer from increased mortality due to starvation or their inability to thermoregulate.

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