Beating the cold – group hibernation in a species of small skink

While group hibernation in small skinks is probably commonplace, there are relatively few reports on it, or reasons suggested for those cases observed.

At 7.45 am on the morning of 22 July 2008, I stopped on the side of the main highway to Shepparton (adjacent to the Melbourne 146 km signpost) and headed to a paddock that was west of the road and beside a watercourse. My purpose was to lift scattered rubbish and debris in search of insects and worms to feed frogs (held under DSE permit for demonstrations). The habitat was typical of the agricultural landscape in the area, with trees generally absent except along the watercourse and periphery.

The search and collection of insects took approximately 15 minutes, and also yielded 17 lizards, including 15 *Lampropholis ronhoseri* under a single piece of wood (Hoser 2009; keyed as *Lampropholis delicata* in Cogger 2000). Two *Morethia boulengeri* were found separately under pieces of metal.

The aggregating lizards rested in a clump, save for a single 'outlier' resting about 6 cm away under the same piece of wood. There were lizards of all ages, from last season's juveniles to adults.

The weather at the time was cold, with a moderately severe frost on the ground and an ambient air temperature of 1°C. In previous days the weather in the area had been cool (maximum temperatures in low 'teens), with steady rain two days prior. Based on the time of year, it is reasonable to assume that the lizards were hibernating.

Sheets of metal are regarded as good cover for reptiles, but in frosty conditions these are avoided due to the conductivity of the metal. Wood is preferred as cover, especially if of sufficient thickness to afford protection from frosts. The aggregation of skinks was found under a disused wood post between the paddock fence and the road.

No other *L. ronhoseri* was found in the vicinity, even though there were similar bits of wood

nearby. This indicates that the aggregation was deliberate on the part of the lizards, and not a chance gathering of lizards seeking shelter. The lizards, while very torpid, were not frozen as they had been insulated from the frost by the wood. That only two *M. boulengeri* were found separately perhaps suggests that this species is less likely to hibernate in aggregations.

Although lizards are regarded as cold-blooded, their limited biological activity does generate some heat, and grouping might offer protection from frosty conditions.

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References

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Lampropholis ronhoseri. Photo by Raymond Hoser.

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