

Breeding Periods of some Native Terrestrial Isopods

R. R. SCOTT

Department of Entomology, Lincoln College, Canterbury

(Presented by R. M. EMBERSON)

Over a period of a year, monthly samples of leaf litter were obtained from 2 sites. One was situated on the Scenic Drive above Titirangi, Auckland, and the other was the Auckland University Reserve at Swanson. Three species of isopod were obtained in sufficient numbers to determine the characteristics of the breeding period. The species concerned were *Styloniscus phormianus*, *Styloniscus otakensis*, and *Paraphiloscia brevicornis*.

In both sampling sites the peak breeding of *Styloniscus phormianus*, as indicated by the presence of the female brood pouch, occurred over the period July-September, but only 40% of females were involved. On only 1 sampling occasion did the percentage fall below 10%. In the case of *Styloniscus otakensis*, the second most common species at the Scenic Drive site, a similar pattern was observed, but the peak occurred a little later, namely September-November. *Paraphiloscia brevicornis*, the second most common species at the Swanson site, was a little more difficult as few females of a mature size were recovered. However the highest percentage with brood pouches, in September, was less than 30%, and females with brood pouches were recovered on all but 2 sampling occasions. In 1 case only 1 female was of a mature size, and in the other only 2.

The extended breeding period shown in these species contrasts with Northern Hemisphere cases (e.g., Healey 1941; Hatchett 1947) where 4-6 week breeding periods have been reported. With these short Northern Hemisphere breeding periods a characteristically high proportion of females (>90%) have brood pouches, which contrasts with the considerably less than 50% for the 3 New Zealand species.

REFERENCES

- HATCHETT, S. P. 1947: Biology of the Isopoda of Michigan. *Ecological Monographs* 17: 47-79.
- HEELY, W. 1941: Observations on the life-histories of some terrestrial Isopods. *Proceedings of the Zoological Society of London (B)* 111: 79-149.
-