

## Observations on spider diversity in Tai Tokerau

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Collection of spiders during the 1960's and their subsequent description, chiefly by the late Ray Forster, reveals a rich and distinctive spider fauna in Tai Tokerau. During the last decade we have undertaken surveys in various parts of Tai Tokerau by pitfall trapping and collecting by hand. Comparing results of pitfall trapping and hand collecting at Bream Head showed that the two methods sampled different segments of the spider fauna. Not surprisingly, pitfall trapping tended to catch ground-dwelling species, many with limited geographic ranges, while hand-collecting took species that live above ground, and are widely distributed throughout New Zealand (e.g. araneids and clubionids). Many of the genera of ground-dwelling spiders are predominantly northern in distribution (northern half of the North Island). These include Reinga (Amphinectidae), Artoria (Lycosidae) and Pahoroides (Synotaxidae). Several genera, including Pahoroides, Paramamoea (Amphinectidae), Hapona (Desidae), Uliodon (Zoropsidae) and Hypodrassodes (Gnaphosidae), are notably speciose in Tai Tokerau. At Te Paki representatives of several genera of Hahniidae were much more common than in pitfall collections in other parts of the country. Comparisons in species composition between Bream Head and Te Paki using pitfall traps reveal both similarities (e.g. habitat use by identical or similar species) and differences (e.g. habitat use by *Stanwellia* spp., and rarity of mysmenids and hahniids at Bream Head) in the two areas. Further study will help us understand more about the fascinating spider diversity of Tai Tokerau.

