

Discussion

The species found were typical of a southern fauna. *C. victoriae* which feeds on mammals, including man, was widespread. *C. bundyensis* which feeds on cattle, horses and marsupials (Muller and Murray 1977) was common in the north-east. *C. angularis*, *C. fulbrighti* and *C. sigmoides* were captured in the forested slopes near Falmouth, and *C. marmoratus*, *C. multimaculatus* and *C. waringi* near to the coast. The fauna of north-east Tasmania was similar to that of south-eastern Victoria. *C. dycei*, a mammal feeder with a wide distribution on the mainland of Australia, was found once but *C. austropalpalis*, a wide spread bird-feeding species, was noticeably absent.

Species of importance in the transmission of arboviruses that cause diseases of livestock were absent, as would be expected as they are all more "tropical" insects. *C. brevitarsis*, which is distributed the most extensively, has a classical megathermic distribution and extends farthest south along the eastern coastal plains but only as far as the south coast of New South Wales (Murray and Nix 1988).

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SWAMP ANTECHINUS — EXTENSION TO RECORDED DISTRIBUTION, HABITAT PREFERENCE AND BODY SIZE

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Green (1972, 1973) gave the Tasmanian distribution of the Swamp Antechinus *Antechinus minimus* as being confined to the western half of the state and also on Maatsuyker Island, Flinders Island and King Island. He gave its preferred habitat as wet sedgeland and swampy drainage areas, ranging from sub-alpine

to coastal. The maximum weight was given as 57 grams and the greatest length, including tail, as 20 centimetres.

Over the last ten years surveys and acquisitions have added much more data and additional specimens to the research collections of the Queen Victoria Museum, extending our knowledge of distribution, habitat preference and maximum body size of the Swamp Antechinus.

Following a ten day field survey and collecting trip to the Sumac Forest, south of the Arthur River, north-west Tasmania, in March 1978 Green (1979) extended the previously recorded habitat of the Swamp Antechinus to include rainforest, finding it there to the exclusion of its near relative, the Dusky Antechinus *A. swainsonii*.

Table 1 gives accession data for twelve recently accessed specimens, all males, and illustrates a wider distribution, more diverse habitat and greater body size than has previously been published, and that males attain a much greater size than females. The largest female we have recorded weighed 62 grams and had a total length of 203 millimetres.

Table 1

Reg. No.	Locality	Date	Weight (gm)	Total Length (mm)
1979/1/32	Bridport, NE Tasmania	2/7/79	100	257
1987/1/29	Bridport, NE Tasmania	19/3/87	70	225
1987/1/81	Bridport, NE Tasmania	24/3/87	73	225
1987/1/82	Bridport, NE Tasmania	24/3/87	73	210
1987/1/72	Swan Bay, East Tamar	5/8/87	117	248
1988/1/28	Dilston	17/3/88	45	176
1988/1/45	Mt. Direction	23/6/88	118	240
1979/1/69	Lunawanna, Bruny Island	16/7/79	124	247
1979/1/70	Lunawanna, Bruny Island	7/79	111	235
1986/1/52	King Island	10/10/86	103	222
1978/1/340	Mt. Maggs	6/9/78	89	240
1979/1/80	Lighthouse, Bruny Island	7/79	85	214
1987/1/80	Elizabeth Town	27/7/79	80	230
1984/1/100	Mt. Arthur, Northern Tasmania	23/3/84	83	223

The material cited in Table 1 now further extends our knowledge of the distribution of and the habitats in which the Swamp Antechinus lives. Some of the localities cited in Table 1 encompass areas of rainforest or wet sedgeland, but others such as Bridport, Swan Bay, Dilston, Lunawanna, King Island, Bruny Island and Elizabeth Town are dry, mixed forest or scrub and atypical of the habitat to which the Swamp Antechinus was previously believed to be restricted.

It is interesting to note that there is a marked bias towards large individuals occurring in the drier habitats and that earlier collecting in wet habitats (Green, 1972, 1973) had failed to produce any of a weight greater than 59 grams.

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NOTES ON *EUCALYPTUS PAUCIFLORA* IN TASMANIA

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INTRODUCTION

The biogeography and population ecology of *Eucalyptus pauciflora* Sieb. ex Spreng., or Snow Gum (for those of us on mainland Australia) or Cabbage/Weeping Gum (in Tasmania), is interesting and instructive. Its geographic distribution exhibits the broadest altitudinal range, and one of the largest latitudinal ranges, of any of the 600 odd extant species of eucalypt. Thus the species spans a multitude of environmental gradients.

On continental, south-east Australia *E. pauciflora* is found throughout the mountains and sub-alpine regions of eastern Victoria, New South Wales and the most southerly part of Queensland. It is the dominant tree at high altitudes and, as pure stands, forms the tree-line. At the same time, populations occur down to close to sea level. In southern Victoria and south-east South Australia, for example, many disjunct populations occur below about 700 metres in elevation (Williams & Ladiges, 1985).

In Tasmania *E. pauciflora* is displaced from its typical position as 'Snow Gum' by endemic *Eucalyptus coccifera* Hook f.. Here *E. coccifera* is typically the tree-line species and *E. pauciflora* is restricted in distribution to the eastern and central regions of the State within the altitudinal range of about 0-730 metres although some extension occurs up to about 1,275 metres (Hall, Johnston & Chippendale 1970).

On a relatively coarse spatial scale, *E. pauciflora* in Tasmania is typically found on more fertile soils as a component of grassy woodland or forest (Kirkpatrick & Backhouse, undated). However in the north-east, for example around Ringarooma Bay, it does occur on sand in situations apparently comparable to those occupied by lowland populations at Wilsons Promontory and Powlett River in coastal, southern Victoria. More widely in mainland Australia *E. pauciflora* is commonly found on shallow rocky soils and well-drained alluvia of relatively moderate quality (Boland *et al.*, 1984).