



Fact Sheet

MOUNTAIN PYGMY-POSSUM, *BURRAMYS PARVUS*

Geographic Range

The Mountain Pygmy-possum (*Burramys parvus*) is the only native mammal that lives in the alpine environment above the treeline. Many other animals visit this area, but the Mountain Pygmy-possum is the only Australian mammal restricted to sub-alpine and alpine environments. The lower limit to the Mountain Pygmy-possums range is about 1400m above sea level.

In the past when Australia's climate was cooler than today the Mountain Pygmy-possums range was considerably larger. Fossil records of Mountain Pygmy-possums found in Jenolan and Buchan Caves have been dated to the last glacial period that ended about 10,000 years ago. As the continent warmed up during the last 10,000 years Mountain Pygmy-possums' range has contracted, moving up the mountains.

Biology

Of the five species of Pygmy-possum, the Mountain Pygmy-possum is the largest, weighing



about 45 grams and measuring about 28cm, including a 16cm tail. It is also the longest-lived mammal of its size, often living to 12 years of age. Males and females are segregated, the females usually occupying high quality habitat at higher altitudes. Each spring, male Mountain Pygmy-possums move uphill into the breeding areas to mate with females.

After the breeding period, males migrate back down to less productive environments, leaving the habitat with the most food and best shelter for the females and their young. Females give birth in November to a litter of four, which remain in the pouch until late December.

Diet

In summer the abundant Bogong moth is the staple of the Mountain Pygmy-possums' diet, supplemented by seeds and fruit of the Mountain Plum Pine and other plants. Bogong moths are very rich in protein and fat, enabling the possums to increase their body fat reserves before the onset of winter. Over winter the Mountain Pygmy-possum hibernates, living off its stored body fat and awakening occasionally to feed on seeds stockpiled nearby. Bogong Moths are therefore an extremely important component of the diet, allowing Mountain Pygmy-possums to survive the cold, harsh winter.

Habitat

Typical habitat for Mountain Pygmy-possums is alpine rock scree and boulderfields characterised by Mountain Plum Pine (*Podocarpus lawrencei*) although they have also been found in other habitat types. At Mt. Buller these are found mostly on the south side near Federation Valley and southern and northern slopes of the summit. The photograph to the right shows typical Mountain Pygmy-possum habitat. This habitat provides excellent protection for Mountain Pygmy-possums, which nest deep down beneath the surface, in the cracks and gaps between boulders. Mountain Plum Pine forms dense thickets that also provide some shelter to animals foraging on the surface.



Mt Buller Population

Due to the fragmented nature of Mountain Pygmy-possum habitat across the Australian Alps, there is no exchange of genetic material between populations. Subsequently, there are three genetically distinct populations recognized at Mt Kosciusko, Mt Bogong/Mt Hotham and Mt Buller. The total surviving population is estimated at 1600 adult females and a smaller number of males; the Mt Buller population is estimated at about 150 adult females and a smaller number of males.

This estimate is based on data collected during a population survey in November 2004. This survey continues the monitoring of the Mountain Pygmy-possum population that has occurred at Mt Buller since 1996. From this work a picture is emerging of continuing decline in the overall number of individuals.

The Mt Buller and Mt Stirling Alpine Resort Management Board is working to reverse this decline by carrying out extensive, ongoing predator control, reconnecting fragmented habitat by installing artificial boulder corridors and enhancing existing habitat through weed control and revegetation.

Bogong Moth

The Bogong Moth, *Agrotis infusa*, migrates to the mountains in summer to escape the heat or aestivate. Aestivation occurs in summer, when the lowlands experience drought and extreme heat and food is scarce. The moths arrive in the mountains between August and November. They leave the mountains usually in March, making the long journey home, to as far away as the northern and western borders of NSW.

Over summer Bogong Moths shelter in crevices and caves. Gripping the rock walls, they line up side by side, the heads of the lower moths beneath the tails of the upper moths. In some areas they are so dense they effectively form a living carpet, estimated to be as dense as 17,000 moths per square metre. They are an integral component of alpine environments, providing food for Mountain Pygmy-possums, ravens and other animals and possibly pollinating flowers such as Swamp Heath (*Epacris paludosa*). Prior to the arrival of Europeans, they provided a seasonal, plentiful food source for the indigenous Australian people that migrated to the mountains in summer.

For further information, please contact the Mt Buller and Mt Stirling Alpine Resort Management Environmental Officer, Louise Perrin on (03) 5777 6077, mobile 0409 417 405, or by email louise@mtbuller.com.au.

References

- Mansergh, Ian and Broom, Linda (1994), *The Mountain Pygmy-possum of the Australian Alps*, UNSW Press Australian Natural History Series.
- Department of Natural Resources and Environment, *Action Statement No. 2, Mountain Pygmy-possum*, *Burramys parvus*.
- Dean Heinze, unpublished information.



The friendly environment