MOUNTAIN PYGMY-POSSUM

Scientific name: *Burramys parvus*
Conservation status: Nationally Endangered (*EPBC Act*)
Endangered in Victoria (Advisory List of Rare or Threatened Vertebrate Fauna, Department of Sustainability and Environment 2003, and also listed under the FFG Act)

What do they look like?
The mountain pygmy-possum is the largest of Australia’s five species of pygmy-possum, yet weighs just 45 grams and can easily fit in the palm of your hand. Its mouse-like body is covered in thick grey-ish fur, which among the slightly larger males becomes more orange during the breeding season. The possum has a long tail, very agile front feet designed for gathering food, gripping back feet and enlarged front teeth, which it uses proficiently to crack seeds.

What do they eat?
The mountain pygmy-possum scurries about at night during the short alpine spring and summer months, building up fat reserves by feeding mostly on rich Bogong moths (*Agrotis infusa*). At other times of the year it is more opportunistic, supplementing this diet with the seeds and fruit of plants like the mountain plum pine, rambling bramble and snow beard-heath. During hibernation in the snow season, between April and October, the possum feeds from a hidden cache of stored seeds and nuts.

Did you know?
It is the only mammal restricted to the alpine and sub-alpine areas of mainland Australia and the longest-living small terrestrial mammal known (females can reach an age of more than 12 years). It was thought to be extinct until discovered in 1966 in a ski chalet at Mt Higginbotham in Victoria.

During hibernation, the mountain pygmy-possum’s metabolic rate is reduced by about 98 per cent. At the beginning of winter, its torpor might last for several days before the hungry possum wakes to dine from its food cache – a storage facility rare among marsupials. This period is extended as the winter progresses, lasting as long as three weeks during the coldest months.
Building resilience: Saving the Mountain Pygmy Possum

One of the key threatening processes that may be affecting the mountain pygmy possum includes the loss or modification of habitat and biological processes due to climate change. Computer models predicting the impact of climate change suggest that arctic and alpine regions will be greatly reduced in extent because of increases in temperature and a reduction in snow cover. Studies of the Snowy Mountains suggests that even a modest amount of warming (only 0.6°C) would result in a 39 per cent reduction in the area that receives 30 days of snow per year.

Because the mountain pygmy-possum needs a snow depth of at least 1 metre to provide adequate insulation during its winter hibernation, it is threatened by any climate change that fragments or thins the snow cover and exposes it to cold temperatures.

Evidence from the Snowy Mountains also suggests that feral animals are going to be more able to access higher-altitude areas, with potentially disastrous consequences for many native species, including pygmy possums.

As our world warms, weeds such as blackberry and English broom are expected to have an advantage at higher-altitude areas, where it is feared they will encroach further on native plants and possibly cause the mountain pygmy possum to lose its competitive advantage over other small mammals like the bush rat (Rattus fuscipes).

What’s being done?

Staff from the Victorian and New South Wales environment departments, in conjunction with alpine resort managers from Parks Victoria and the New South Wales National Parks and Wildlife Service continues to closely monitor the mountain pygmy-possum populations and their sensitive habitat. Management plans for the ski resorts have or are currently being developed to maintain and enhance habitat and NSW and Victoria have their own state-based possum recovery plans.

Over the past decade specific constraints have been placed on development within the mountain pygmy-possum’s range and national park boundaries have been extended to protect some of its vital habitat. Artificial corridors and tunnels have been constructed to link fragmented populations and some habitat rehabilitation has been carried out. Weed control work continues and there are regulations controlling pets. Continued monitoring, protection and rehabilitation of pygmy possum habitat and removal of key threats will be needed to help this species build its resilience against the impacts of climate change.

How you can help

- Drive with care in alpine areas.
- Carefully dispose of rubbish so as not to encourage foxes and cats
- Be a responsible pet owner: abide by regulations that prohibit cats and dogs on the ski fields.
- When staying on the snow learn to distinguish the possum from rats and house mice, and report any sightings to the resort environmental officer.
- Stop the spread of weeds. Always try to make sure that seeds are removed from any clothing, footwear or other equipment before heading into the Alps.
- Be a wise energy user by switching to Green Power. Go to: wwf.org.au/ourwork/climatechange/powerswitch/
- For tips on saving energy around the home, go to the Australian Government Greenhouse Office’s www.greenhouse.gov.au/gwci/index.html
- Avoid driving a car when possible; take public transport or ride a bicycle.

You can also find out more information about Australia’s threatened species by visiting www.deh.gov.au/biodiversity/threatened or contacting the Department of the Environment and Heritage Community Information Unit, email ciu@deh.gov.au, or free call 1800 803 772.

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