

FAUNA

GROWING SANDALWOOD FOR NATIVE RODENTS?

Rosemary Jasper

THE nuts of the Sandalwood and Quandong are an excellent bush food. Nutritionally they have a similar food value to commercially available nuts (60% oils, 18% protein and 16% carbohydrate). Moreover the nuts fall to the ground when ripe and will stay in good condition for up to 18 months. But for most animals there is one problem – the shell of the nut is thick and not easy to crack.

It is to be expected though, that some animal in the bush is equipped to take advantage of this resource. Humans need two bits of handy rock to deftly break the shell, but which bush animals are able to access this food source?

That some animal does, and indeed makes a habit of it, is evidenced by the photo. This is a collection of empty Sandalwood shells, all of which have been neatly decapitated and the kernel extracted. They are discarded close to a small burrow, which goes back under the small granite rock. The photo was taken in spring, near Ravensthorpe in open woodland vegetation. At the time the gnawed edge of the shell looked fresh and not weathered so it is assumed that the activity was recent.

There were similar small burrows and collections of gnawed Sandalwood nuts under most of the Sandalwood trees, within a radius of about 200 metres.

The question remains as to which particular animal so effectively feasted on these nuts. Such collections of chewed shells is a sign of the Western Mouse, *Pseudomys occidentalis*, and this is possibly the only animal in this area that has teeth strong enough to penetrate the shell and a gape wide enough to get a purchase on the nut.

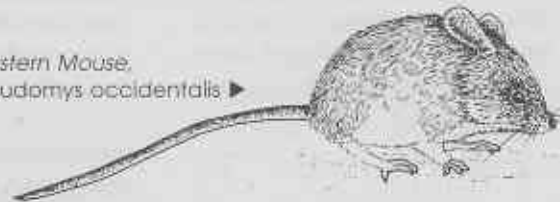
The Western Mouse is known from this general area, having been recorded in the nearby Ravensthorpe Range, and further south. Its known current distribution is restricted to an area around Lake Grace, Hyden, Ravensthorpe and Jerramungup. Historically, it has been recorded further west and the first described specimen came from Tambellup. Sub-fossil evidence suggests that it once inhabited a stretch of country from Margaret River to coastal South Australia. It is listed on the Department of Conservation and Land Management's Priority Fauna list.

The Western Mouse is one of the five native rodents found in this area – the others are the Bush Rat (*Rattus fuscipes*), Ash-grey Mouse (*Pseudomys albocinereus*), Heath Rat (*Pseudomys shortridgei*) and Mitchell's Hopping Mouse (*Notomys mitchelli*).

The Western Mouse is a moderately large nocturnal rodent with a head & body length of about 100 mm. It



Western Mouse, *Pseudomys occidentalis*



is reported to feed on underground tubers, seeds, fruits, flowers and various insects. It has typically been found in long unburnt vegetation (30 – 50 years without fire). The home range of an individual, which is shared with others, is up to 150 ha, and individuals can travel up to 600 metres in a night. They construct burrows, which they use communally.

So whether it is the Western Mouse that is resident at this patch or some other animal, it is exciting to find these signs of a specialist at work. It is worth looking around any Sandalwood or Quandong trees that you come across for evidence of animals eating the kernels. It is always exciting to find out there are animals in the bush that we didn't imagine were there.

P.S. If you do find caches of 'spent shells' like in the photograph contact *Land for Wildlife* or the Department's Wildlife Branch.

For more information, contact: Rosemary Jasper, ph 9838 1890, email, rosemaryj@calm.wa.gov.au]

References:

- Morris, K., Whisson, L., Burbidge, A.A., & Wallace, K. (1993) *A recovery plan for the Western Mouse*, DCLM.
- Strahan, R. (1995) *The Mammals of Australia*, Australian Museum/Reed Books.
- Brand, P. & Jones, P. (May 1999) *Growing Sandalwood* (*Santalum spicatum*) on farmland in WA. Sandalwood Information Sheet, May 1999. CALM