Greater Stick-nest Rat

Greater Stick-nest Rat (*Leporillus conditor*)

Now extinct on the mainland, the Greater Stick-nest Rat was recently confined to only two islands off the South Australian coast, East and West Franklin Islands. It has now successfully been re-introduced to Reevesby and St Peters Islands in South Australia, Salutation Island in Western Australia and Arid Recovery.

Physical Characteristics

The Greater Stick-nest Rat has yellowish brown to grey, fluffy fur on its back and creamy white fur on its belly. It has a blunt snout, large, dark eyes and rather long ears. Its tail is long, dark brown on top and lighter brown underneath.

The Greater Stick-nest Rat grows to 260mm in length and can weigh up to 450g.

Feeding

The Greater Stick-nest Rat feeds mainly on the leaves and fruit of succulent plants, Chenopods such as blue bush and salt bush and also on seeds and occasionally insects.

Bladder salt bush in flower

Photo: Yvette Mooney

Stick-nest Rats do not need to drink water as they receive enough from the food that they eat.

Breeding

Baby Greater Stick-nest Rats attach themselves firmly to their mother's teats. They are then dragged along underneath her. This continues until they are weaned (stop drinking milk) and are able to care for themselves at about one month of age. Breeding can occur in any month of the year. At Arid Recovery however, this usually happens only in the cooler months of autumn and winter. Gestation is 30-40 days and 1-3 young are usually born.

Shelter

Greater Stick-nest Rats are best known for their ability to build themselves a home out of sticks. The nest is generally built around a bush and sticks and branches are dragged to the site in the rat's mouth. Larger branches are gnawed down to a manageable size and added to the nest. The sleeping sites within the nest contain soft vegetation and grass. Tunnels are built from the outside to these points.

In other areas of Australia nests could keep growing to include an extended family of up to 10 individuals. Nests can grow to at least 1m high and 1.5m wide. The nest is safe from attacks from eagles and dingos.

Photo: Arid Recovery

Nests at Arid Recovery

A family of Greater Stick-nest Rats at Arid Recovery usually consists of a father, mother and that years offspring.

Further research is being conducted into nest usage as the individual rats using a nest can vary from year to year. Researchers are unsure if it is the offspring who are then occupying the nest or if new rats come in and take over the nest.

Researchers are also trying to determine if the male always stays with the female or if he moves to different nests and different females. It is usually the mature female in the nest who builds and maintains the nest.

Photo: Hafiz Stewart

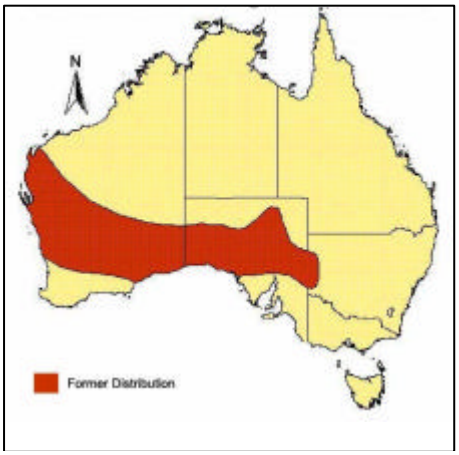
At Arid Recovery the Greater Stick-nest Rat may have one dominant (main) nest and will move to other nests occasionally. Greater Stick-nest Rats don't live exclusively above ground in a nest. They will often live underground in old bilby burrows and bettong warrens and build their own nest in a tunnel

Activity

Although they are a nocturnal animal they are occasionally known to come out of their nest during the day to look for food. When Greater Stick-nest Rats are handled they are a placid animal and rarely bite.

Threats

Before European settlement Greater Stick-nest Rats were believed to have occupied half of South Australia and parts of Western Australia



Former Distribution of the Greater Stick-nest Rat

Source: Department for Environment and Heritage South Australia.

and New South Wales.

Competition for food from grazing by rabbits, sheep and cattle has been the largest threat to the Greater Stick-nest Rat along with predation by cats and foxes.

By the early 1900s the Greater Stick-nest Rat had become rare and was only found where sheep and cattle had not yet been introduced.

Soon afterwards the Greater Stick-nest Rat became extinct on the Australian mainland, however a population survived on the Franklin Islands.

The Lesser Stick-nest Rat was a relative of the Greater Stick-nest Rat. At the beginning of the 1900s they were considered widespread across arid South Australia and the southern half of Western Australia.

The last recorded sighting of the Lesser Stick-nest Rat was in the 1930s, and they are now believed to be completely extinct.

Arid Recovery

In 1998 a trial release of eight Greater Stick-nest Rats occurred at Arid Recovery. The trial was a success and plans were made for a larger release.

In April and June of 1999, 100 Greater Stick-nest Rats from Reevesby Island in Spencer Gulf South Australia, were the first native animal to be reintroduced back into the Arid Recovery Reserve.

Since then the population has boomed and there are now an estimated 250 Greater Stick-nest Rats within the reserve.

The success of this reintroduction has contributed to the Greater Stick-nest Rat's national status being downgraded from endangered to vulnerable.

A baby Stick-nest Rat is called a Twiggy at Arid Recovery

Photo: Jenny Stott

What do Greater Stick-nest Rats eat at Arid Recovery?

A trial by researchers into the foods that Greater Stick-nest Rats eat, found that they have a preference for chenopod shrubs and high water content plants.

They also found that they prefer to eat female Bladder Salt Bush plants as opposed to male ones.

This could be because the female leaves of Bladder Salt Bush have a higher water content than the male of the species.

They also found that the rats browsed lightly on several different plants of the same species rather than eating one plant exclusively.

This type of feeding behaviour may have less impact on the plant species than rabbits,

Find Out More

The Mammals of Australia 1995 edited by Ronald Strahan, Reed Books Chatswood NSW

Website: www.environment.sa.gov.au/biodiversity/sticknestrat.html

Ryan, S.A., Moseby, K.E., Paton, D.C., (2003), Comparative Foraging Preferences of the Greater Stick-nest Rat (*Leporillus conditor*) and the European Rabbit (*Oryctolagus cuniculus*): Implications for Regeneration of Arid Lands, *Australian Mammalogy*, **25**, pp. 135-146

Moseby, K.E., Bice, J.K., (2004), A trial re-introduction of the Greater Stick-nest Rat (*Leporillus conditor*) in arid South Australia**,** *Ecological Management & Restoration,* **5**, pp. 118-124.