



BUSHLAND NEWS

*KATANDRA BUSHLAND SANCTUARY NEWSLETTER
Spring 2019*

Katandra has been open every Sunday from 10 am to 4pm since the beginning of July. Visitors have been a mix of some who are visiting the Sanctuary for the first time and others who return regularly. They have reported seeing swamp wallabies, one of which is carrying a joey, along with lace monitors, lyrebirds, brush turkeys, black cockatoos and numerous other birds. Katandra will continue to be open every Sunday until the end of October.

The recent rains have been very welcome following a very dry finish to winter. Plants flowering have included the *Pultenea daphnoides*, *P. flexilis*, *Boronia mollis*, *Hardenbergia violacea*, *Hibbertia dentata* (Guinea Flower) *Acacia ulicifolia* (Prickly Moses), *Phebalium dentatum*, *Astrotricha floccose*, *Dendrobium linguiforme* (Tongue Orchid) and *Dendrobium speciosum* (Rock lily).

Pittwater Natural Heritage Association (PNHA) recently held their AGM in Katandra. The guest speaker on the day, Jayden Walsh, spoke about the reptiles living in and around the Pittwater area. Members then enjoyed a picnic lunch on a glorious sunny day.

Katandra's annual Christmas picnic (yes, it is coming up to that time of year again!) will be held on Sunday 1st December from 4.30 pm. Cold meats, drinks and salads are provided, but please feel free to bring along some sweets or savouries to share before or after. Also enter the raffle to win one of Ruth's sort-after Christmas cakes. All are welcome, bring along family and friends.

We look forward to seeing you at Katandra.

David Seymour





Members of the Pittwater Natural Heritage Association enjoying a picnic lunch on a sunny Sunday in Katandra after their recent AGM which was held in the Sanctuary.

Rats in Katandra

It is commonly thought that rats were first introduced into Australia on ships from Europe in the late 1700's. While this is true for the black rat (*Rattus rattus*) and the larger brown rat (*Rattus norvegicus*), there are some closely related species of rats that have been part of the Australian landscape for over a million years. Black rats, which were largely responsible for the spread of the bubonic plague, arrived on the east coast of Australia with the first fleet from Britain in 1778, however skeletons of black rats have also been found in the gun barrels of Dutch ships which sunk off the west coast in earlier years. The black rat is an agile climber and so is often found in the roofs of houses. They are the most common rat in Australian cities although the older inner-city areas can tend to favour the more aggressive brown rat which lives in underground burrows or sewer systems.

The Australian native rats include the the bush



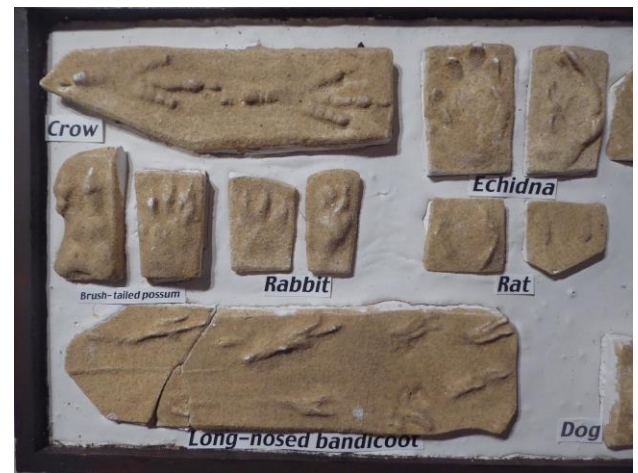
An Elliot trap similar to one used in the fauna survey carried out in Katandra

rat (*Rattus fuscipes*) and the swamp rat (*Rattus lutreolus*), both of which are found in Katandra. Unlike most other Australian native mammals, these rats are not marsupials, they are placental mammals and they are closely related to the black and brown rats.

Bush rats are very shy creatures and so tend to avoid areas impacted by humans. Their strictly nocturnal habit and tendency to prefer living in dense undergrowth mean that the bush rat is not often seen in the wild unless trapped. In fact, this is how both bush rats and swamp rats were identified by George Hangay in the fauna survey that he carried out in Katandra about 20 years ago. They were caught in Elliot traps using a compound bait of peanut butter, honey and rolled oats. To ensure the animals were not harmed the traps were laid at 8pm and inspected before sunrise to allow any trapped individuals to be released. This trapping program used 20 traps over 28 consecutive nights in the month of January, totalling about 5600 trapping hours.

The presence of the rats was also identified by their footprints left in sand-traps which were also used in the survey.

Unfortunately, but not surprisingly, the presence of black rats and brown rats was also confirmed in this survey.



Plaster casts of some of the imprints left in the sand-traps used in the Katandra survey are now on display in the Yurt in the Sanctuary

Bush Rat

The bush rat (*Rattus fuscipes*) is a small nocturnal animal primarily found in the coastal regions of south and eastern Australia. While it is mainly found in the lowlands, the species is also found at higher altitudes in the Australian Alps. Bush rats are omnivores, their diet consisting of insects, fungi, seeds and vegetation such as



A bush rat (Rattus fuscipes)

roots and plant stems, in fact this mammal will eat anything it can find if food is scarce.

Weighing between 50 to 230 grams, its body length ranges between 100 to 200 mm with the tail being slightly shorter than the body. The males are larger than the females. The black rat is similar in body size however its tail is longer than its body. Bush rats vary greatly in colour, grey to black or reddish brown on top with a lighter grey or cream coloured underside. The tail is a pink shade of brown, almost free of hair, with scales that overlap and give an obvious ringed appearance. Other differences between the bush rat and the black rat are in the feet and ears. Both have 5 toes on each foot, however in the bush rat, the three middle toes on the hind feet are all the same length, they are different lengths in the



The hind foot of a juvenile bush rat
Photo – Wires Northern Rivers

black rat. Bush rats also have ears that are more rounded.

The bush rat constructs a shallow burrow in dense undergrowth that leads down into a nest chamber lined with grass and other vegetation. Breeding usually begins around November and litter sizes are usually 4 or 5. The gestation period of the bush rat varies between 22 and 24 days. The majority of individuals living in the wild do not live to a second breeding cycle due to their short life span.

One hectare of forest can support up to 10 bush rats, and it is not unusual for a male to travel up to 1 km a night foraging for food. During breeding time, he may travel up to 2 km in search of a female. A bush rat can fairly easily survive a bush fire if it shelters in its burrow or a rock crevice while the fire passes.

Australian Swamp Rat

The Australian swamp rat (*Rattus lutreolus*) is similar in appearance though slightly larger than the bush rat. One discernible difference is the swamp rat's foot pads are dark brown, whereas the bush rat's foot pads are a pink colour. Also swamp rats have smaller ears which are nearly concealed by hair.

Swamp rats are also found along the Australian south eastern coastal areas. Their preferred habitat is thick vegetation along watercourses and in swamps, although they do also live in areas of coastal heath, dune scrub and grasslands. These rats form tunnels through the vegetation through which they can then move. Being partly nocturnal and diurnal, swamp rats are active during the day and night. It is thought that this behaviour results from them not collecting sufficient food during the night and so they must also collect during the day.



An Australian swamp rat (Rattus lutreolus)
Photo – Museum Victoria

Katandra website: www.katandra.org

KATANDRA BUSHLAND SANCTUARY

Foley's Hill, Lane Cove Rd, Ingleside NSW
Department of Lands Reserve No 86487
Founder: the late Harold Alfred Seymour
Managed by Katandra Bushland Sanctuary Trust.
Phone: 0431857407

OPEN: Every Sunday: July, August, September,
October

HOURS: 10 am — 4 pm

ADMISSION: \$3 donation

KATANDRA BUSHLAND SANCTUARY TRUST PO Box 365 Mona Vale NSW 1660

President: David Seymour
Vice-President: David James
Secretary: (acting) David Seymour
Treasurer: Peter Hammond
Minutes Secretary: David Malin
Bushland News Editor: Marita Macrae

(Cover Design by the late Walter Cunningham)

**Enquiries: phone 0431857407 or by email
information@katandra.org**

Volunteers are needed

If you can assist on maintenance days or with
welcoming visitors to Katandra on open days,
please phone 0431857407

DIARY DATES 2019

SAUSAGE SIZZLE

Sunday 5th May, 12 noon

Enjoy a sausage sandwich and
drinks provided by the Trust.

FOUNDER'S DAY

Sunday 18th August, 12 noon

Bring your lunch to cook on the wood burning
BBQs. The trust will provide 'dessert', drinks, tea
and coffee.

CHRISTMAS PARTY

Sunday 1st December, 4.30 pm

Cold meats, drinks and salads are provided, but
please feel free to bring along some sweets or
savouries to share before or after. Also enter the
raffle to win one of Ruth's sort-after Christmas
cakes.

SANCTUARY MAINTENANCE 2019

(3rd Sunday March–November)

9 am Sunday 17 March

9 am Sunday 21 April

9 am Sunday 19 May

9 am Sunday 16 June

9 am Sunday 21 July

9 am Sunday 15 September

9 am Sunday 20 October

9 am Sunday 17 November

PUBLIC OPEN DAYS 2019

Each Sunday of July–October

10 am – 4 pm

Katandra Bushland Sanctuary Trust
PO Box 365 Mona Vale NSW 1660