#### Mammals of Woodlands in NSW

If you are like me you love furry animals, or mammals.

Mammals are animals that are warm-blooded, have fur and feed their babies on milk. Humans are mammals - we have fur (hair) mostly on our heads but also on our bodies - and some people are furrier than others!

In Australia we are lucky to have three kinds of mammals, these are called Eutherian (or Placental) mammals, Marsupials and Monotremes.

Eutherian mammals are like us and our domestic mammals – for example horses, cats, dogs and rabbits but also include many of our native mammals: like native rats, mice and bats. We all nourish our developing young (or embryos) in our tummies by means of a placenta and give birth to young that are fully formed, or almost so. Marsupials give birth to undeveloped (or embryonic) young and suckle them on milk in a pouch. Our marsupials include kangaroos, wallabies, possums, koalas, Tasmanian devils, quolls and marsupial mice.

Monotremes are the Platypus and Echidna. They lay soft shelled eggs that are incubated and hatched - by being held against the tummy of the mother platypus by her tail, or in the pouch of the mother echidna. The babies then lick milk from pores on their mothers' tummy.

#### What kinds of Mammals Occur in Woodlands?

John and Elizabeth Gould were famous naturalists who painted and wrote the first books about the mammals and birds of Australia. They were amazed at the number of mammals they saw while riding their horses through the long grasses and open woodlands of the slopes and plains in 1839 and 1840.

There were little wallabies that they called Dancing Hare-wallabies that nested in the tall grass tussocks, and when disturbed by their dogs one leaped so high it jumped right over John's head.

There were gorgeous silky furred White-footed Tree-rats with long fluffy tails that lived in the hollow, lower branches of the old Eucalypt trees, curled up in warm nests of dried leaves.

There were Bilbies and Barred Bandicoots, spotted Eastern Quolls, four kinds of Bettongs and lots of Beautiful-furred Native-mice.

### What happened to the woodland mammals?

The early settlers who came to Australia noticed a lot of these mammals but they did not realise how special they were.

They complained about the quolls eating their chooks and the bandicoots and Hairy-nosed wombats digging holes. A lot of wallabies and koalas were shot for their skins. The settlers brought large herds of sheep and cattle that grazed and trampled the long grasses and they cut down many of the woodland trees.

Worst of all, they bought rabbits and foxes from England and let their domestic cats run wild.

The native Australian mammals are not used to hiding from cats and foxes and many get eaten.

The rabbits ate the grasses, forbes and lilies that produced seeds, bulbs and fruit that were food for the native mice, bettongs and bilbies and lived in their burrows.

And the native rats and beautiful-furred native mice probably caught diseases from the feral rats and house mice that escaped off the ships.

#### Many native woodland mammals are now very rare or extinct:

Sadly, John and Elizabeths' Dancing Hare Wallaby and beautiful White-footed Treerat became extinct over 100 years ago.

Many of the other mammals are now very rare or endangered and live in small, isolated patches within their former wide ranges.

Some, like the Eastern Barred-bandicoot, Eastern Bettong and Eastern Quoll now live only in Tasmania where (until recently) foxes were not introduced.

#### What woodland mammals do we still have?

Fortunately we do still have some woodland mammals.

The most abundant ones are the possums and gliders and bats that live in the trees out of reach of the foxes and cats.

Also the larger wallabies, kangaroos and Common Wombats that are too big for the foxes and cats to catch. And a few Koalas.

And the Echidna that is well protected by its spines.

And we have some Spotted-tailed Quolls and their relatives: the Brush-tailed Phascogales and tiny Dunnarts and Yellow-footed Antechinuses.

There are some native rats (called Bush Rats) and in some places there are still some Beautiful-furred Native-mice.

## What can we do to protect our remaining woodland mammals?

In 1960, a Zoologist named Basil Marlow was very concerned at how many of our woodland mammals were rare or extinct. He wrote that 'a National Park where woodland species may be preserved and where visitors may be assured of seeing them might be a way of conserving our remaining native mammals'.

Since then we have tried to make as many woodland reserves as we can.

We are also helping landowners to look after woodlands on their properties.

# Can we bring some of the threatened mammals back to our woodlands? Yes – but first we have to make them safe.

Many of our small, ground living mammals can't survive in woodlands if foxes, cats and rabbits are still there.

In some places, like at Mulligan's Flat in the ACT, people have put up tall, electric fences around patches of woodland to keep out cats and foxes.

They have trapped all the cats and foxes from inside the fence to make it safe for the native mammals.

They have also trapped the rabbits and hares so there is now food available for native mammals to eat.

## Now we can give our woodland mammals a second chance:

We have built a 'mouse house' near Bungendore where we have taken some native New Holland Mice from an area where they still live - and have bred lots of baby native mice.

We are now getting ready to let them go at Mulligan's Flat.

We also plan to introduce some Bettongs that we breed from ones that live in Tasmania.

And later on we could get some Barred Bandicoots and spotted Eastern Quolls. And we can breed Smoky Mice and Delicate Mice and Chestnut Mice in our mouse house. In this way we can bring back some of our missing woodland mammals. You could go and see them and learn to love them. And when you grow up you could help look after them – and Basil Marlow's dream will come true.