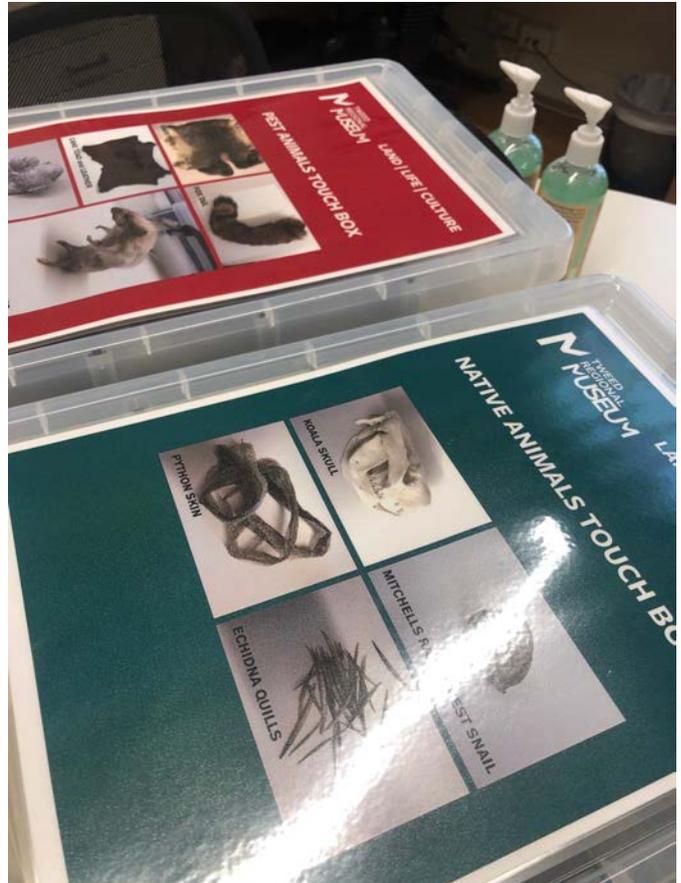


# Land | Life | Culture

## NATIVE AND PEST SPECIES

### Teachers' notes

These touch boxes can be used to teach children about animals that are native to Australia and animals that are introduced. You can break into two groups (one for pest and one for native) then swap, or explore each animal as one big group.



- Please let children know to be CAREFUL when handling the pieces.
- Please let staff know of any damage so we can replace items

# Land | Life | Culture

## TOUCH BOXES

### [Teachers' notes](#)

Australia is home to some of the world's most extraordinary native animals; many living in the Tweed Valley are endangered.

Since European settlement began in 1788, more than 3000 non-native species have been introduced. The Northern Rivers has the second largest number of invasive animal issues in Australia. These species impact land and water resources and through disease, predation and competition for food and shelter can adversely affect native populations.

Before the arrival of Europeans, Aboriginal people had spent tens of thousands of years developing practices that managed their natural resources, including native wildlife. The introduction of invasive animals threatened native animal food sources, bushfoods, and medicinal plants, however Aboriginal people did not separate the impact of feral animals from that of native species, but saw the ecosystem as an integrated whole.

**Explore each of the following animals using the touch specimen inside the touch box:**

# PEST SPECIES

## **Fox**



Introduced to Australia in the 1800s to hunt for sport, foxes now occur across most of the Australian mainland, including the Tweed. Foxes carry disease and prey on farm animals as well as native mammals, birds, amphibians, rodents and reptiles.

On the Tweed Coast, ground and beach-nesting birds including the Pied Oystercatcher and Beach and Bush Stone-curlews are at particular risk of attack and disturbance.

## **Rabbit**



Rabbits are a popular pet. However, free-roaming domestic rabbits, originating from escaped or dumped pets, are known to exist in many locations in the Tweed, and are becoming more common, posing significant environmental problems. Rabbits cause severe land degradation and soil erosion, they graze on native seedlings and shrubs, and compete with native wildlife for food and water.

# PEST SPECIES

## **Cane Toad**



Cane Toads are prolific breeders and opportunistic feeders, outcompeting native wildlife for food and habitat. They prey on native wildlife and are highly poisonous at all stages of their life cycle. Cane Toads have no natural predators.

## **Wild Dog**



This wild dog print was taken by pouring plaster into a footprint found in the Tweed area.

Cats and dogs, both domestic and wild, impact native fauna by preying on them and disturbing nesting areas. Cats in particular have been linked to the decline and extinction of over 130 species of native fauna. On the Tweed Coast, ground and beach-nesting birds like the Pied Oystercatcher and Beach and Bush Stone-curlews are at high risk from cats and dogs during the breeding season.

# PEST SPECIES

## Mouse

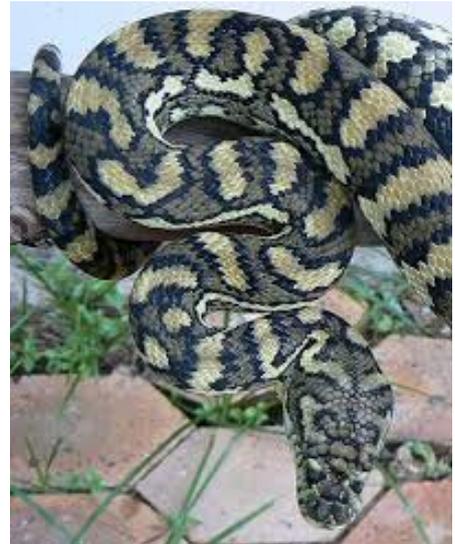
Black rats, brown rats, and house mice are present almost everywhere in Australia, including the Tweed Shire. The Black rat is among the world's most invasive species, having spread across the globe in close association with the spread of human settlement.



Rats and mice are omnivorous; they feed on a variety of food of both plant and animal origin. In particular, Black rats prey on almost any small animal they come across, including their eggs and young. Rats and mice prey on nestlings and juvenile birds. They are considered a serious threat to threatened species. In Tweed Shire, they eat a number of threatened species, including the Mitchell's Rainforest Snail (there is a shell in the native animal touch box). Rats and mice compete with native animals for food, particularly insects and seeds, as well as nesting sites and nesting materials. Their consumption of native seed can inhibit native regeneration. They carry diseases that can affect both native mammals and humans.

# NATIVE SPECIES

## Pythons



This python skin was found on the property of a Museum staff member!

There are 15 species of native python in Australia, making up a quarter of all the snakes that live here. Pythons are probably the most commonly seen snake in suburban backyards. One of the best places for a Carpet Python to find food (mice) is in your roof!

If a Carpet Python is in your roof, it's looking for rodents to eat. Pythons are shy and non-poisonous and moult regularly, and the roofs of some old houses are full of shed skins, just like this one.

# NATIVE SPECIES

## Echidna



These echidna quills came from an animal that had sadly been hit by a car.

Echidnas and platypus are the world's only monotremes, or egg-laying mammals. The Short-beaked Echidna's stiffened snout enables it to break up logs and termite mounds to search for food. Echidnas are powerful diggers, wedging themselves beneath rocks, or burrowing into soft soil to escape predators such as dogs, eagles and dingos. In the Tweed, the Short-beaked Echidna, while not considered endangered, is vulnerable to cars and to dog attack.

## Mitchell's Rainforest Snail



These snail shells were found by Council's Biodiversity Officers. The Critically Endangered Mitchell's Rainforest Snail is found in remnant lowland subtropical rainforest and swamp forest on the coastal plain between the Richmond and Tweed Rivers. Due to extensive land clearance, the snail is now restricted to small remnant areas of habitat. Stotts Island Nature Reserve (Tweed River) provides the largest single area of remaining habitat and the largest known population of the species.

# NATIVE SPECIES

## Koala



This skull has been made by a 3D printer using plastic.

Koalas are an iconic Australian animal and are totemic species featuring in many Aboriginal dreaming and creation stories. Populations are rapidly declining in NSW and Queensland, and are under extreme threat on the Tweed Coast.

Koalas are fussy eaters. In the Tweed they feed primarily on the leaves of only a select few gum (Eucalyptus) trees, but need other trees for resting, shelter, breeding and dispersal.

Preferred habitat includes most types of gum and paperbark forest.

The biggest threats to Tweed Coast populations are bushfire, dogs, disease, and motor vehicles.

# NATIVE SPECIES

## Platypus



This skeleton has been made by a 3D printer using plastic.

Platypus are well adapted for a semi-aquatic lifestyle. A streamline body and a broad, flat tail are covered with dense waterproof fur, providing thermal insulation. Behind its distinctive bill are the grooves that house the ear openings and the eyes which close when the animal dives.

Platypus feed on worms, insect larvae, freshwater shrimp and crayfish. Electoreceptors in its bill detect tiny electric currents generated by muscular contractions of its prey. They prefer soft, undercut riverbanks with overhanging native vegetation.

The biggest threat to the Platypus is predation and the loss of habitat, especially land clearing and dams that disrupt the natural water flow. Natural enemies of the Platypus include native species such as snakes, water rats, goannas; pest species such as foxes, cats and dogs also prey on them. Entanglement in litter, especially discarded fishing line, and yabby traps cause many drowning deaths of Platypus. In the Tweed, Platypus are found in major rivers and streams in the mid to upper catchment.

# Land | Life | Culture

## **SORTING GAME**

Using what you learned inside the touch boxes, sort the animals into native or pest species

