

# TERMITES OF THE TOP END

Northern Australia contains one of the most diverse range of termite mounds found anywhere in the world. These earthen structures range from small cones and domes hidden in the undergrowth, to giant monoliths. However, most termite species do not build mounds, and are totally out of sight. Although termites are often thought of as pests, only a few Australian species fit this description.

## Are termites 'white ants'?

A widespread misconception is that termites are a type of ant, with termites commonly being called 'white ants', and their nest mounds 'anthills'. Termites are a highly specialised group of cockroaches whereas ants are a group of wasps. Like other cockroaches, termites feed on cellulose from dead grass and wood, whereas ants are predators and scavengers.

## How do termites help the environment?

Through their feeding, foraging and burrowing, termites help soils store water and nutrients. Termites are an important food source for other animals and their mounds can provide shelter and nesting sites for a range of animals.

## Aboriginal uses of termites

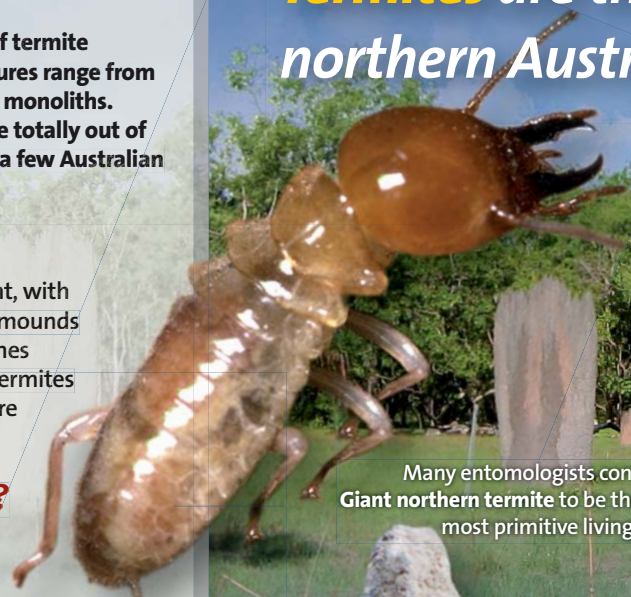
Termite mounds and termite-hollowed branches have traditionally played an important role in Aboriginal life in northern Australia. The inner structure or 'carton' from termite mounds is eaten for medicinal purposes, or burnt for cooking and cultural activities.

The famous Aboriginal musical instrument, the didjeridu, is made from tree branches that have been hollowed out by termites.

Termite-hollowed branches are also a good source of bush tucker: honey can be collected from native bees nesting in the hollows, and small mammals, pythons and goannas use the hollows for shelter.

Although these mounds are different colours, they have both been constructed by the **Cathedral termite** and are located only a kilometre apart. Mound colour is determined by local soil type.

**Termites are the ecosystem engineers of northern Australia's tropical savannas.**



Many entomologists consider the **Giant northern termite** to be the world's most primitive living termite.

**Cathedral termite** (*Nasutitermes triodiae*) mound

## Common Top End termites

### Cathedral Termites

The Cathedral termites (*Nasutitermes triodiae*) of northern Australia build some of the most spectacular of all termite mounds - enormous columnar structures sometimes exceeding six metres in height. The construction of a large cathedral mound by a termite colony is equivalent to a million, blind-folded people joining forces to build a skyscraper covering eight city blocks and towering over a mile into the sky!

### Magnetic Termites

Magnetic termites (*Amitermes meridionalis* and *Amitermes laurensis*) are famous for the remarkable shape and orientation of their mounds. The mounds, which occur in clusters in seasonally flooded areas, look like enormous tombstones and are orientated along a north-south axis. The unusual shape of the mounds helps to create a thermally stable environment for the termites.

### Tree-piping Termites

Many trees in northern Australia's woodlands and open forests have large, earthen mounds at their bases; these are the nests of *Coptotermes acinaciformis*, one of the few termites in northern Australia that attack living trees. More than half of all large eucalypt trees in the Top End of the Northern Territory have been piped by *Coptotermes*. Such piping weakens the trees structurally, making them more prone to damage from fire and during cyclones. The hollows also become important nesting sites for small mammals and birds.

### Giant Northern Termites

The Giant northern termite (*Mastotermes darwiniensis*) is one of the largest and most destructive of Australia's termites. It is probably the most economically important insect pest in northern Australia and has a voracious appetite, attacking almost anything including wood, plastic, electric cables, leather, wool, bitumen and rubber. Giant northern termites attack living plants and can demolish buildings and devastate gardens, crops and orchards.

In some woodlands of the Northern Territory, up to 70% of the trees have branches that have been hollowed out by termites.

**Magnetic termites** are just one of many animal groups which are able to sense the earth's magnetic field.

More than 2600 termite species have been described around the world, with about 350 species found in Australia.

**Tree-piping termite** (*Coptotermes acinaciformis*) mound.

Termites are a food source for many animals, including **Green tree ants**.



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