



Fraser Island Fauna

Fraser Island is home to a diverse array of native terrestrial and water fauna. It is not uncommon to see a dingo loping along the beach or a prehistoric looking lizard climbing one of the island's trees. The diversity of the island's natural habitat supports a wide range of animals, many of which are at the northern or southern limit of their distribution or are considered to be rare or vulnerable.

Each animal has a place in nature's ecosystem, be it as a predator or pollinator, soil enricher or seed carrier. Even the smallest animal can cause an environmental imbalance if disturbed and it is for this reason that we should do our best to respect and conserve the native fauna of Fraser Island.

Swamp wallabies (*Wallabia bicolor*) are seen only occasionally on Fraser Island because of the shortage of native grasses for grazing (associated with the simplified food chain of the sandy environment). The short-beaked echidna (*Tachyglossus aculeatus*), identified by the long spines covering its back, is found on Fraser Island, though rarely seen.

The dingoes of Fraser Island are one of the purest strains of dingo surviving in Australia today. Dingoes (*Canis lupus dingo*) are thought to have been introduced to Australia between 3,000-8,000 years ago. They are similar to the domestic dog and the two can inter-breed, though dingoes have only one litter of 3-4 pups a year, usually around August/September.

Dingoes feed on bandicoots and other small mammals and are not traditionally scavengers. However, some visitors feed Fraser Island dingoes which encourages them to depend on humans and leads to scavenging and aggression.

It is vital for the success and health of the dingo population, as well as personal safety, that these wild dogs are not fed. It is also imperative that small children do not become separated from their parents. Extra vigilance is required as dingoes' behaviour can be most unpredictable, especially from January to May when protecting their young, and when young males are fighting for dominance and territory.

Dugong (*Dugong dugon*) are large sea creatures which can travel at speeds of up to 22km per hour, but generally only cover distances of 25km a day. Calves ride on their mothers' backs. Dugong may live for up to 50 years. They are Australia's only marine mammal herbivore and graze the sea grass meadows in the warm, shallow waters of the Great Sandy Strait.

During 1992 Fraser Island experienced two cyclones which caused heavy siltation. This caused the death of large areas of sea grass beds and a resultant reduction in the number of dugong in the area. These sea grass beds are beginning to re-establish and dugong numbers are increasing, though it may take many years for the population to fully recover.



Migrating humpback whales (*Megaptera novaeangliae*) can be seen off the coast of Fraser Island between August and October. Once endangered, their numbers have continued to increase since the cessation of whaling. Daily whale watch trips are conducted from Fraser Island to see these magnificent creatures playing in the calm island waters.

Minke whales (*Balaenoptera acutorostrata*) can often be seen off Fraser Island either singularly or in small groups. The bottlenose dolphin (*Tursiops truncatus*), the common dolphin (*Delphinus delphis*) and the Indo-Pacific humpbacked dolphin (*Sousa chinensis*) are widespread in the area and the Risso's dolphin (*Grampus griseus*) can also be seen.

There are nine species of native rodent found on Fraser Island. The native bush rat (*Rattus fuscipes*) commonly feeds on insects and vegetation. The pale field-rat (*R. tunneyi*) is attractively pale coloured and found abundantly across the island living off grass stems, seeds and roots. Both are nocturnal.

The water rat (*Hydromys chrysogaster*) makes its home near permanent bodies of water from which it feeds on aquatic insects, crustaceans, fish and an occasional water bird. The web-footed water rat is one of the few native rodents that hunt during the day, commonly at sunset, as well as during the night.

Rather than burrow and nest underground, the grassland melomys (*Melomys burtoni*) often constructs a conical nest from shredded leaves woven around grass or other slim plant stalks. Another of these rodents found on Fraser Island, the fawn-footed melomys (*Melomys cervinipes*), is an excellent climber and is usually found in forest areas.

The yellow-footed antechinus (*Antechinus flavipes*) is a carnivorous marsupial that often turns its prey inside out, feasting on the innards. The antechinus mates aggressively - biting, scratching and copulating - for up to twelve hours. This aggressive mating behaviour causes extreme stress to the male antechinus, leading to a breakdown of the immune system and eventual death. This protects the young from competition from adult males.

The sugar glider (*Petaurus breviceps*), the squirrel glider (*P. norfolcensis*) and the feathertail glider (*Acrobates pygmaeus*) are all marsupials that can sometimes be spotted at night gliding between branches among the tree tops in search of nectar and insects. A membrane attached from the fifth finger to the first toe on either side of the body of the glider is held out like a sail.

The membrane of the feathertail has a smaller surface area and is attached from elbow to knee. Because of the feathertail glider's rapid movements and small size (approximately 140mm including tail) it can be difficult to observe. The tail is a strong, flattened appendage with stiff barbs along each edge, giving it a featherlike appearance.

Nineteen recorded species of bat regularly visit the island. These are flying foxes (suborder *Megachiroptera*) and insectivorous bats (suborder *Microchiroptera*). Flying foxes feed on the blossoms and the fruit of trees and



shrubs whilst insectivorous bats capture flying insects and generally consume half their body weight in insects nightly.

Flying foxes commute nightly to Fraser Island from daytime roosts - called camps - at Hervey Bay and the mouth of the Mary River on the Australian mainland.

Some of the island's insectivorous bat species are cave dwellers and, as Fraser Island has no caves they too must come from the mainland and it is believed that some may come from as far away as Gympie.

There is a variety of reptiles on Fraser Island some of which are large and frequently observed, like the lace monitor (*Varanus varius*). The most commonly encountered lizards are skinks (*family Scincidae*). The smaller species feed primarily on insects, whilst the larger species are omnivorous.

Fraser Island is home to a number of venomous and non-venomous snakes. Most visitors will never see a poisonous snake because most snakes are secretive and prefer to hide rather than be seen. Occasionally, a python can be seen slowly moving through the vegetation or sunning itself on a warm piste.

Non-venomous snakes include the green tree snake (*Dendrelaphis punctulata*), which varies in colour from olive green to grey along the back with a lemon-yellow belly, and the eastern small-blotched python (*Morelia maculosus*). Even though these snakes are non-venomous they can still bite if provoked and are best not handled.

Venomous snakes include the death adder (*Acanthophis antarcticus*), the taipan (*Oxyuranus scutellatus*), the eastern brown snake (*Pseudonaja textilis*) and the redbellied black snake (*Pseudechis porphyriacus*), with its glossy black back and bright red sides and red underbelly.

Seventeen different species of frog are found on Fraser Island - these include tree, sedge, rocket and southern frogs. Of special interest are four acid frogs - the Cooloola sedge frog, wallum rocket frog, wallum sedge frog and wallum froglet that have adapted to living in areas which have a low pH and high acidity level, as is found in most lakes and swamps of Fraser Island.

Frogs are *bio-indicators*, which means they are sensitive to environmental alterations and are generally one of the first groups of animals to disappear from a disrupted area. The Cooloola sedge frog (*Litoria cooloolensis*) is a small, rare frog only known to occur on Fraser Island and in the Cooloola region in Queensland.

The wallum rocket frog (*L.freycineti*) is aptly named as it is able to jump distances of more than two metres. Found a little further back from the swamp edge, often on the melaleuca trees, is the emerald spotted tree frog (*L.peronii*) which has emerald green spots on its back and a long, loud call.

The copper-backed broodfrog (*Pseudophryne raveni*) and the wallum froglet (*Crinia tinnule*) are harder to find whilst the striped marsh frog (*Limnodynastes peronii*), the green tree frog (*Litoria caerulea*) and the striped rocket frog (*L.*



nasuta) are easily spotted. Australia's native frogs are threatened by the introduced cane toad (*Bufo marinus*), which is also found on Fraser Island.

The lakes and creeks support a diverse range of freshwater fish with Lake Wabby being home to 12 species, including the rare honey blue-eye (*Pseudomugil mellis*).

It is believed that the eggs of fish species arrive at these isolated dune lakes on the feet of birds. The introduced mosquito fish (*Gambusia holbrooki*) competes with native fish for food.

The numerous freshwater lakes provide a habitat for freshwater turtles such as Krefft's river turtle (*Emydura krefftii*), which can be identified by a conspicuous pale yellow streak along the side of its head.

The loggerhead turtle (*Caretta caretta*), a large marine turtle, is also present around the island and comes ashore to lay its eggs between October and May. There are numerous species of invertebrates on Fraser Island and many feature special adaptations to the sandy environment and are native only to Fraser Island and Queensland's Cooloolo region. Giant earthworms (*Digaster keastii*) 80cm long and a native cockroach (*Geoscapheus crenulatus fraserensis*), have both been found burrowing in the sand.

Easily mistaken for small flies are the non-stinging native bees (order Hymenoptera). These are approximately half the size of the common bee and can often be seen collecting nectar from flowering native plants. Native bees live in hives in logs and on trees and play an important role pollinating a wide variety of flowering plants.