

72

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# GIANT TOAD



**T**HE GIANT TOAD (*Bufo marinus*) also called the Queensland toad, and cane toad is a native of South and Central America. Its range extends from Texas in the north to Brazil in the south.

**Distribution:**  
In the 1920's, the giant toad was introduced to Puerto Rico to control a pest of sugar cane, the Rhinoceros beetle. The giant toad was highly effective and was subsequently released in Hawaii and the Phillipines. From Hawaii it was taken to Queensland in 1935 to control the Greyback beetles whose larvae cause "whitegrub" infestation of sugar cane.

The giant toad is now established over much of the east coast of Queensland and northern New South Wales. Its inland distribution is limited by cold and absence of water.

**Description:**  
Giant toads may grow up to 23cm in length and weigh over 1kg. The spawn consists of long double chains of black eggs about 1mm in diameter in a transparent covering, quite unlike any native toads or frogs.  
The toads are heavily built, short in the leg, with no webs between the toes. Adult giant toads have a rough warty skin varying in colour

from tan to dull green, the underside being lighter than the back. The male is slightly smaller than the female with a rougher skin. Large glands are found behind the head which exude or squirt a poisonous milky substance when the frog is attacked. The poison may cause death within 15 minutes if ingested or absorbed through the eyes.  
The tadpoles of the giant toad are distinguished from other species by forming large slow moving or static shoals. Under magnification they can be seen to have two rows of upper and three rows of lower teeth.

(continued overleaf)

# GIANT TOAD *(continued)*

## **Diet:**

Giant toads feed mainly at night. They are indiscriminate feeders, eating what is most abundant; chiefly ground living insects, ants, snails and some vegetable matter. Even immature giant toads may be eaten. Toads react to movement by attacking suitable sized objects with their long tongues. Cases have been reported of pet food being stolen from domestic dogs and cats. Giant toads may subsist without food for several months. They shelter during dry or cold periods, in shallow dugout burrows, often under rocks or logs.

## **Life cycle:**

Mating takes place in still or slowly flowing pools of water at temperatures greater than 25°C. Fertilization takes place externally, females laying eggs in long streams of 10,000 or more. Breeding may be stimulated by transporting adult

toads to new environments.

The eggs hatch in less than three days. Emerging tadpoles become mobile and start to feed within a week. The adult form is reached in 17 days to six months, depending on temperature and food supplies, but it may take up to two years to reach sexual maturity.

## **Predators:**

Few animals in Australia feed on giant toads because of the toad's poison glands. Some birds may eat only internal organs and predation of young toads by snakes has been recorded. There are no known diseases of giant toads in Australia.

## **Significance:**

Giant toads cause problems to apiarists by consuming many bees as they arrive or leave the hive. The toads eat valuable ground-living insects such as dung beetles and compete with native frogs and toads for food and living space.

Domestic dogs, cats and native carnivores may be poisoned when mouthing or biting adult toads. Giant toads may carry diseases such as salmonella and parasites such as roundworms which affect humans. Their habit of close association with human dwellings makes this particularly dangerous. Giant toads are used widely for biology teaching and medical research; several thousand being imported live into W.A. under licence each year. Importation is only permitted under strictly controlled conditions. Small numbers have escaped in the past but vigorous efforts have prevented giant toads becoming established in W.A. It is imperative that all precautions are taken to prevent the establishment of giant toads in Western Australia.