

Litoria gracilentata

Sally Thomson, 2002

Authority: Peters, 1869

Common Name: Dainty Green Tree Frog, also known as the Graceful Tree Frog.

Description: (Barker *et al.*, 1995; Cogger, 2000; Frith and Frith, 1987; www.geocities.com; www.qmuseum.qld.gov.au; www.wildsuburbia.net); The dorsal surface of *Litoria gracilentata* is light to dark green with the ventral surface a creamy yellow colour. The fingers, toes, webbing and upper arm surfaces are coloured bright yellow. The lower forearm has a green shield like patch that is surrounded by bright yellow. The colour of the posterior surface of their thighs is purplish-brown and sometimes has a bluish tinge. The frogs have large toe and finger discs, fully webbed toes and the fingers are three-quarters webbed. The frogs have a pale yellow-green ridge that crosses from the nostrils over the eye and tympanum. There is a granular skin layer over the tympanum, although the tympanum remains distinct. The iris is orange to red in colour and the lips are yellow. "Vomerine teeth prominent, largely between the choanae" (Cogger, 2000). The dorsal surface of the frog has a fine granular appearance and the ventral surface is coarsely granular. It is possible, that there are small tubercles on the sides of the frog and on the limbs, but the metatarsal tubercles are absent. The pectoral fold is also absent. *Litoria gracilentata* grows up to 45mm in length. However, males tend to be slightly smaller than the females. Males range from 31-42mm in length, and females range from 32-45mm. The first finger is shorter than the second. The mating call resembles a "long, drawn out 'waaaaa'". The frog only calls during or after rainy periods. When lek density is high, an extra part of the call can be heard. The call then resembles "waaaaaaa ruk-ruk" (A. Backer, *pers. comm*).

Similar species: (Barker *et al.*, 1995; Cogger, 1975; Frith and Frith, 1987; Griffiths, 1997; www.wildsuburbia.net; www.dpiwe.tas.gov.au; www.wildlife.faanet.gov.au); *Litoria gracilentata* is seemingly similar to *L. chloris* (Red-eyed Green Tree Frog) and *L. xanthomera* (Orange-thighed Frog). It is the size of *L. gracilentata* that makes it distinguishable from these other two species. *Litoria gracilentata* is often relatively small (45mm) compared to these species. The pale yellow-green line that crosses from the frogs nostrils over the eye and tympanum is a feature of *L. gracilentata* that also distinguishes it from other frogs. Other distinguishing features include *L. gracilentata*'s course, granular skin, and the colour of the posterior surface of their thighs, a purplish-brown and sometimes with a bluish tinge. Whereas, *L. xanthomera* has orange thighs and *L. chloris* has purplish-red thighs. *Litoria caerulea* is also similar to *L. gracilentata*, the main distinguishing factor between these two, is the large amount of yellow found on the underside of *L. gracilentata*.

Range: (Cogger, 2000; Frith and Frith, 1987): Eastern Australia, along the coastal regions from the tip of Cape York Peninsula to just north of Sydney (Gosford area). Also found in the southern areas of Papua New Guinea.

Ecology and behaviour: (Barker *et al.*, 1995; Cogger, 2000; Frith and Frith, 1987; Hero, 2002; www.dpiwe.tas.gov.au; www.wildsuburbia.net); *Litoria gracilentata* inhabits moist forests or woodlands. It "is found on floating vegetation, on reeds in swamps and streams, or in shrub or tree foliage along river systems" (Frith and Frith, 1987). It is possible to find these frogs in the hollows of the *Eucalyptus tereticornis* during the winter period, which are long distances away from water. It is not uncommon to find this frog in banana plantations as well. They often turn up in fruit produce that has been sent to shops. The majority of the time, *Litoria gracilentata* is active at night and during the day exhibits cryptic behaviour. The frog will get into a flattened posture, close and retract its eyes and tuck its limbs in close to its body, revealing only its green colouration. One reason for this cryptic behaviour is

thought to be to avoid predators, and the frog is capable of changing the colouration of its body to match the vegetation it is on to make them harder to find. There are no known declines in *Litoria gracilenta* populations, and they occur in approximately 320500km².

Breeding biology: (Barker *et al*, 1995; www.frdproject.org; www.wildsuburbia.net; www.geocities.com): Sexual maturity is reached within the first year of life for *Litoria gracilenta*. It is not unusual for *L. gracilenta* to call and lay 6 times in a year. Mating usually occurs after heavy rains. The male attracts the females by calling and moves around while doing so. They then get into the amplexus position and the female carries him to the water, where she deposits the eggs and he fertilizes them. This occurs during November, and the eggs may be laid in clumps or singly. The eggs are brown in colour, approximately 1mm in diameter and they attach to vegetation stems in the pond. *Litoria gracilenta* tends to deposit between 500 and 1000 eggs. The tadpoles are uniformly coloured and are dark brown to black. Fourteen weeks is the approximate life span period of a tadpole and the maximum length attained is 34mm. The metamorphs do not look like the adult frog as they have a golden tan to brown colouration. They generally change their colourations to resemble the adult frogs within a few weeks.

Literature cited:

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