

Tree frog care

There are many tree frog species native to Australia, with green tree frogs (*Litoria caerulea*) being one of the most commonly kept as a pet. Many health problems in frogs arise from inadequate husbandry conditions, including inappropriate diet. Below is a guide outlining basic requirements for frogs. Speak to your veterinarian about detailed requirements for specific frog species.

Enclosure

- Most tree frogs are kept in glass or plastic vivariums. The size of the vivarium depends on the size and number of frogs. A tight-fitting mesh top allows ventilation and provision of unfiltered UV light, while being escape-proof.
- Provide climbing and hiding furniture (branches, logs, rocks, plants) for security, enrichment and activity.
- There are many substrate options, all having pros and cons. It is essential that the substrate is non-toxic with minimal risk of ingestion. Paper towels can be used, which need to be replaced regularly. Gravel should not be small enough that it can be swallowed. A layer of sphagnum moss provides a naturalistic look and can help with maintaining humidity, but requires regular changing and cleaning.
- The enclosure should be cleaned at least weekly, and spot cleaned as needed.

Temperature and heating

- Monitor the temperature of the “hot” basking spot and the “cool” end.
- Monitor the temperature with at least 2 digital thermometers, one each at the hot and cool ends.
- The preferred temperature depends on the species. Basking spot for a green tree frog should be ~ 28-32C. The cool end should be ~ 20-22C.
- Heating should be provided with a thermostatically-controlled globe. Use a heat mat underneath or on the side of the enclosure if required. Do not use heating rocks.

UV light

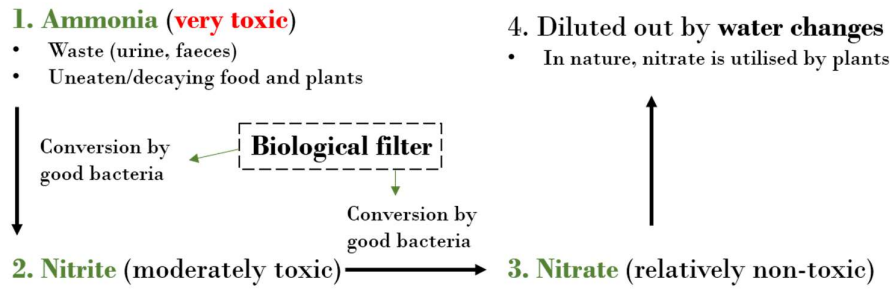
- Provide UVB radiation 290-320nm. This is required for vitamin D3 production in the skin, which allows calcium absorption from the gut, and is also required for stimulation of natural behaviours, including foraging. Recommended light cycle is ~ 12 hours of light/12 hours of darkness. In summer, the light can be increased to 14 hours, in winter reduced to 9 hours.
- UV globes should be positioned within a distance recommended by the manufacturer from the basking spot (usually ~30cm), and not filtered by glass. Replace the globe at least every 6 months (even if it appears to be working).
- No artificial UV globe is a replacement for natural sunshine. Take your frog outside in a secure carrier with shallow water for ~15 minutes of unfiltered sunshine 1-2 times a week. Make sure shade/hide is provided to prevent overheating.

Humidity

- Monitor the humidity with a hygrometer.
- Tree frogs require humidity of ~ 50-70%. This can be provided by having a moist substrate or a moving water source (eg. waterfall).

Water

- Water can be provided in a bowl, which must be replaced daily with aged or dechlorinated/conditioned water.
- Alternatively, a filtration system can be used if the vivarium is aquatic style. Water should be between 24-26C. This can be provided with a water heater or a heat mat positioned under the water source.
- If using a filter, it is important to be familiar with the **nitrogen cycle**. Urine and faeces produced by the frog, and any drowned insects can end up in the water, resulting in poor water quality. The harmful chemicals produced are invisible, so water clarity is not a good indicator of quality.
- A filter removes these harmful products.
 - When needed, accumulated debris in the filter should be cleaned in **aquarium water** to avoid destroying the biological filter (good bacteria).
- Approximately 25% of the water needs to be removed weekly and replaced with conditioned/dechlorinated water.
- Regularly perform water quality testing to ensure that the biological filter is functioning, and the water changes are adequate.
 - **Ammonia and nitrite** should always be **zero** ppm.
 - There should be a small amount of nitrate (~20-30ppm). This is an indicator that the biologic filter is functioning.
 - pH should be ~ 7-8



Diet

- Tree frogs are insectivorous, and many will only eat at night.
- Feed juveniles once a day. Adults only need feeding every 2-3 days. Feed 10-20% of their body weight per week. The food item should be no wider than the distance between your frog's eyes.
- **Insects** include crickets, silkworms, woodies, soldier fly larvae, moths. Gut-load the insects with a high-quality commercial formula prior to feeding out.
- Insects should be lightly dusted with **calcium carbonate** powder each time immediately before being fed.
- To minimise the risk of malnutrition, feed your frog 3 varieties of food items.

Handling

- Wash your hands before and after handling your frog, and between handling of different herps
- Use wet gloves when handling frogs

Health care

- Newly acquired frogs should be quarantined and examined by a vet, which may include parasite testing. Annual check-ups are recommended thereafter, especially if they are used for breeding.
- Weigh your frog regularly (~ once a month) and record the weight.