

Lighting

Frogs, especially nocturnal frogs like White's tree frogs, do not require full-spectrum light for vitamin and mineral absorption. However, they do need some type of lighting to regulate their photoperiod so they know what time of day it is. An incandescent light on a timer works well for this. If there are live plants in the tank, a full spectrum light will not be harmful, as long as it is not too strong and the frog has plenty of places to hide. Blue lights may be used at night to aid with viewing.

Enclosure Set Up

A single adult frog should have a 20-gallon tank or larger. If there is more than one frog in the tank, considerably more space is needed, as they will need space to hide and hunt away from each other. A taller tank is preferred over length. Ventilation is very important, so a secure, latched, screen top is recommended. Be sure the enclosure is escape proof. Escape can lead to the death of the frog.

If using a large enough tank, a water area can be created by using a pre-cut piece of glass or acrylic which can be attached to the bottom using a silicone adhesive. Keep in mind that maintenance of this area will require regular cleaning and siphoning. False bottoms can also be made and can appear more natural. More elaborate setups incorporating waterfalls and filtration systems can also be created.

Substrate

This can be as simple or elaborate as desired. White paper towels are easy to use, clean, and replace. However, they are known to harbor more bacteria, so a strict cleaning schedule needs to be maintained. Any type of gravel should be avoided, as the frog can swallow the rocks and cause a blockage. Sphagnum moss and ground coconut shell are commonly used substrates. These can be used if including live plants. Avoid using potting soil with bark, perlite, or vermiculite in them. Substrate should be soft to avoid trauma to the skin, allow for easy maintenance and be of a particular size to avoid accidental ingestion.

Cage Decoration

Provide branches to climb that are smooth and shelter to hide in. Driftwood and cork bark are good choices and readily available from most pet stores. Be cautious of using naturally obtained items, as they must be properly disinfected without using harmful chemicals before being included. Large, smooth river rocks can also be used for decoration and placed in water for the frog to sit on. Be mindful to choose rocks that are too large for the frog to ingest. Natural or artificial plants can be used both for decoration and for shelter. Use broad-leafed plants the frogs can sit on and hide under. Philodendron and Pothos are commonly used. Plants can either be in pots or planted in substrate.



Other Tips for a Happy Frog

- Prevent close contact to heating and light sources
- Avoid gravel and other object the frog could potentially swallow, being mindful of how large the mouth is.
- Be sure the enclosure is always completely closed and completely escape proof.

Most Common Disorders of White's tree frog

- Obesity
- Trauma
- Internal parasites
- Intestinal impaction/foreign objects
- Metabolic disorders (including nutritional secondary hyperparathyroidism, or metabolic bone disease)
- Infectious skin diseases

Many commonly seen conditions are the result of malnutrition and/or inadequate housing and are preventable.

Regular visits to your reptile veterinarian should be scheduled to check for parasites and other early signs of disease and to promote a long, satisfying relationship with your Whites Tree Frog. For help in finding a reptile/amphibian veterinarian in your area, contact the Association of Reptilian and Amphibian Veterinarians (www.ARAV.org) or contact the American Board of Veterinary Practitioners (www.ABVP.com/diplomate)

Additional Resources

Breeding and Keeping Frogs and Toads, W.P. Mara

Care and Breeding of Popular Tree Frogs,
P. de Vosjoli, R. Mailoux, D. Ready

Keeping and Breeding Amphibians, C. Mattison

Natural Terrariums, P. Purser

Tree Frogs, D. Edmonds

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HOW TO KEEP YOUR WHITE'S TREE FROG HEALTHY, HAPPY AND SAFE!



WHITE'S TREE FROGS

White's tree frogs (*Litoria caerulea*) are also known as white tree frogs, smiling frogs, and dumpy tree frogs. It was first described by John White, an English surgeon, in 1790. The original name, *Rana caerulea*, means "blue frog." Dr. White was describing a preserved specimen in which the preservative had changed the color of the skin, giving it a blue coloration. However, there are some individuals in this species that are more blue in appearance, supposedly due to a lack of yellow pigmentation in their skin. Some captive bred animals are bred with this coloration as a goal. White's tree frogs are found in Northeastern and Eastern Australia, New Guinea, Indonesia, and New Zealand (introduced). They are naturally found in coastal areas, but can also be found in drier areas near reservoirs and other still water sources. They are nocturnal, but can be active during the day, especially during feeding time.

The supratympanic ridge is a thick fold of glandular skin that runs across the bridge of the snout, over the eye, and above the tympanum (eardrum). This can become overgrown with obesity and almost cover the eyes, making it difficult for the frog to see and eat. As is common with most tree frogs, digit pads are well developed and sticky. There is webbing between the digits on all four feet, but is more extensive on the hind feet. These are stocky frogs and can develop folds of skin around the body, causing them to appear obese.

Color can vary between individuals and even within an individual, depending on the environment and lighting. Color changes within an individual can be for camouflage or mood, but may also indicate a health issue. The back of the frog is generally green, but can range from almost a drab brown color to a bright vivid green or even blue. There are some that can have white spots on their backs and sides. The underside is white to creamy colored. They will periodically shed their skin and eat it.

Following purchase, a frog should be taken to a veterinarian experienced with exotic animals for a general health check and fecal exam.

What to Expect From Your Frog

Most frogs are delicate and prefer not to be handled. White's tree frogs are relatively calm and can tolerate limited handling. Handling can be stressful and they may injure themselves trying to escape. Also, their skin is very porous and will absorb whatever it contacts, which can make them sick. If it is necessary to handle the frog, hands should be clean and free from lotion, medication, perfumes, and any other substance that could be absorbed. Moisten hands with distilled, dechlorinated, or bottled water (anything other than tap water) to decrease the risk of tearing the skin or leaving particles that can adhere to the skin.

Is Your Frog a Male or Female?

Males are smaller than females. Males will call at night and develop darkened nuptial pads on the inner digits of the front digits during the breeding season.

What and When to Feed Your Frog

White's tree frogs are not picky and will usually eat anything that moves (including other frogs). A varied diet is recommended, as a diet made of a single item will be unbalanced and lead to health issues, even when properly supplemented.

WHAT YOUR VETERINARIAN LOOKS FOR IN A HEALTHY RED-EYED TREE FROGS

Vital Statistics:

Body length

Males 3.0–3.5 inches (7.5–9 cm)

Females 4.0–5.0 inches (10–12.5 cm)

Body weight

50–90 grams

Age of sexual maturity

1 year

Longevity

10–16 years in captivity

● Nose should be free from crusting or discharge

● Mouth should be clear without crusting or redness

● Underbelly should be white to cream in color. Redness may signal disease

● Eyes should be open and clear

● Skin should be smooth and even in texture without wounds present

● Vent area should be clean



NOTE: Most, if not all, reptiles and amphibians carry *Salmonella* bacteria in their intestinal tract and intermittently or continuously shed these bacteria in their feces, so they are unsuitable pets for very young children and those with compromised immune systems. Good hygiene must always be practiced around all reptiles and amphibians, including white tree frogs. For more information, please see the handout, *Salmonella* Information for Reptile Owners at <http://arav.org/salmonella-bacteria-reptiles>.



Food items generally include crickets, mealworms, waxworms, phoenix worms, and captive raised cockroaches (*Blattella dubia* usually). Waxworms are high in fat, so should be used sparingly. Mealworms are high in chitin and if fed too much can lead to intestinal obstruction.

All food items should be "gut loaded" prior to feeding if possible. Juveniles should be supplemented with a multivitamin and a calcium supplement twice weekly. Subadults and adults should be supplemented weekly with a multivitamin and a calcium supplement.

Juveniles should be fed daily, subadults to adults every 2–3 days, and adults 2–3 times a week.

Feed at night when the frog is active and they are more likely to eat right away, especially when supplementing.

Be careful not to overfeed the frog. Obesity is common in White's tree frog and can lead to health problems and a shortened lifespan.

Water

A shallow water dish large enough for the frog to soak in filled with dechlorinated water should be available at all times. The water should be no higher than the height of the frog's nostrils when sitting at rest. Juveniles should have a large rock placed in the dish so they can climb in and out easily. Frogs will often defecate in their water, so it must be replaced daily.

Temperature and Humidity

The daytime temperature of the tank should be between 75–85° F (24–29° C). A lamp that emits heat should be placed above one end of the tank, providing a temperature gradient with one side of the tank warmer than the other. Select the wattage of the bulb to provide the proper temperature within the tank. Under tank heaters may be helpful, depending on your set up and substrate, but should be used with caution so the frog does not get burned. Nighttime temperatures should be between 68–75° F (20–24° C). A ceramic heat emitter or red heat emitting bulb may be needed to maintain these temperatures. Do not use a white light at night for heat, as this will disrupt the frog's photoperiod. Have at least two "dial" type thermometers in the tank to monitor the warm and cooler ends. Place them lower in the tank where the frog sits, not high in the tank next to the heating elements for a more accurate picture of what the frog's environment actually is.

These frogs require a high level of humidity, usually 60–70%. This can usually be achieved by keeping a bowl of dechlorinated water in the tank, slightly damp substrate, and misting the cage with distilled water 1–2 times daily. Do not allow the tank to become excessively wet, as too much humidity can lead to health problems just as too little humidity can. Humidity may reach 80–100% directly after misting, but should decrease to 60–70% within a couple of hours.