

COQUI FROG

Scientific name: *Eleutherodactylus coqui*

Order: Anura Family: Leptodactylidae

Common names: Puerto Rican tree frog, coqui frog

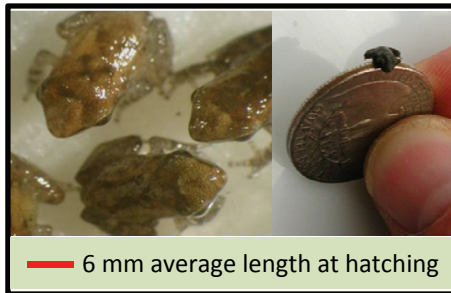


LIFE CYCLE



EGGS

- Egg diameter averages 4 mm
- hatches in 14 -17 days
- clusters of eggs (average 28 eggs) are laid every 2 to 4 weeks year-round
- no free-swimming tadpole stage.



FROGLETS

- can live up to a week after hatching on yolk reserve
- able to reproduce at 8 - 12 months old
- males begin calling from 6 months of age



ADULTS

- females (*upper left*) grow up to 2" in length, while males (*lower right*) grow up to 1.5" long
- entirely terrestrial
- adults may live 4 - 6 years
- males guard eggs to prevent drying and predation

BEHAVIOR

- As amphibians, coqui frogs need to keep their skin **moist** and can tolerate cold better than hot temperatures and direct sunlight.
- They are **nocturnal** and retreat during the day to sites that provide shade and moisture, such as crevices and rock walls (*pictured, top*, irrigated nursery facilities, thick vegetation (*circle*), ground cover, and leaf litter (*left*).
- Coqui frogs "**hitchhike**" from infested areas on plants, construction, landscaping and gardening materials, trash, and vehicles (tire wells, truck beds) and are **spread along roadways** to refuse stations, construction sites, nurseries, garden shops, and residences.
- While adult males can be detected by their call, the presence of eggs, juveniles (< 6 months), and adult females often go **undetected for months** until males mature and begin calling.



Reference: Townsend, D.S. and M.M. Stewart. 1994. Reproductive ecology of the Puerto Rican Frog *Eleutherodactylus coqui*. Journal of Herpetology 28:34-40.

BEST MANAGEMENT PRACTICES FOR COQUI FROGS

	OPTIONS AVAILABLE	
MONITORING TECHNIQUES	- Use sound-activated recorders to detect calling males on-site at night on a monthly basis. - Set out PVC lures (<i>pictured</i>) - Use 3/4" diameter pipe (8-9" length) with a tee-joint. Do not glue. "Weather" the pieces first to reduce PVC odor. Mount no higher than 2-3 ft off the ground at 2-ft intervals. - Check the PVC lures at least every 2 weeks; remove nesting adults and eggs. Conduct visual inspection routinely. - Scan plants, media, leaf litter beneath plants for adults and eggs. - Inspect building materials and nursery supplies before bringing them onto your property. - Inspect your vehicle (tire wells, truck beds) for hitchhiking frogs after leaving infested areas.	 
	Minimize retreat and nesting sites - Avoid stockpiling discarded plant material. - Re-landscape with less broad-leafed plants. - Install screen barriers (<i>pictured</i>) to keep frogs out of designated areas (fine mesh screen at a 90° angle that frogs cannot cross). Hot water "sprench" (spray + drench) - Set hot water heater to 120 °F and "sprench" plants for adults and eggs. Chemical "sprench" with weekly monitoring for frogs - Natural pyrethrins products plus 8% citric acid applied as a contact spray will control eggs and adults. Natural pyrethrins paralyze adults after 1 application but is fatal after 2 applications (1 hour apart). 16% citric acid as contact spray (may burn sensitive plants, including orchids); can be rinsed off 1 hour after application to minimize phytotoxicity but will reduce effectiveness on treated eggs by 15%. - Continue to inspect and listen for frogs weekly after spraying.	
TREATMENT BEFORE MARKET	Hot water shower 109 -113 °F for 5 min for eggs, juveniles, adults - Place treated plants in a coqui-free holding area to prevent re-infestation prior to transport.	
FINAL INSPECTION	- Use sound-activated recorders (<i>pictured</i>) to detect calling males in shipments at night for at least two nights prior to movement/sale. Visually inspect for frogs and eggs in cryptic areas and plant parts.	

PRECAUTIONARY STATEMENT / DISCLAIMER: These recommendations are provided only as a guide.
Please read and follow all label directions

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