

PETITION TO LIST THE
Virgin Islands Coqui (*Eleutherodactylus schwartzi*)
UNDER THE U.S. ENDANGERED SPECIES ACT



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**Petition Submitted to the U.S. Secretary of Interior
Acting through the U.S. Fish and Wildlife Service**

Petitioner:

WildEarth Guardians
1536 Wynkoop Street, Suite 301
Denver, Colorado 80202
303.573.4898

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PETITIONER

WildEarth Guardians is a nonprofit environmental advocacy organization that works to protect wildlife, wild places and wild waters. The organization has more than 12,000 members and supporters and maintains offices in New Mexico, Colorado and Arizona. WildEarth Guardians has an active endangered species program that works to protect imperiled species and their habitat throughout the United States and its territories.

THE ENDANGERED SPECIES ACT AND IMPLEMENTING REGULATIONS

The Endangered Species Act of 1973 (ESA) protects plants and animals that are listed by the federal government as “endangered” or “threatened” (16 U.S.C. § 1531 et seq.). Any interested person may submit a written petition to the Secretary of the Interior requesting him to list a species as “endangered” or “threatened” under the ESA (50 C.F.R. § 424.14(a)). An “endangered species” is “any species that is in danger of extinction throughout all or a significant portion of its range” (16 U.S.C. § 1532(6)). A “threatened species” is defined as “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range” (16 U.S.C. § 1532(20)). “Species” includes subspecies and distinct population segments of sensitive taxa (16 U.S.C. § 1532(16)).

The ESA sets forth listing factors under which a species can qualify for protection (16 U.S.C. § 1533(a)(1)):

- A. The present or threatened destruction, modification, or curtailment of habitat or range;
- B. Overutilization for commercial, recreational, scientific, or educational purposes;
- C. Disease or predation;
- D. The inadequacy of existing regulatory mechanisms; or
- E. Other natural or manmade factors affecting its continued existence.

A taxon need only meet one of the listing criteria outlined in the ESA to qualify for federal listing.

If the Secretary determines that a species warrants a listing as “endangered” or “threatened” under the ESA, he is obligated to designate critical habitat for that species based on the best scientific data available (16 U.S.C. § 1533(b)(2)).

CLASSIFICATION AND NOMENCLATURE

Common name. The common name for *Eleutherodactylus schwartzi* (Thomas 1966) is the “Virgin Islands coqui.” It is also known as the “Virgin Islands bo-peep” (ARKive, undated) and “Virgin Islands frog.”

Taxonomy. We provide the petitioned taxon’s scientific classification in Table 1.

Table 1. Taxonomy of the Virgin Islands Coqui.

Kingdom	Animalia
Phylum	Chordata
Class	Amphibia
Order	Anura
Family	Leptodactylidae
Genus	<i>Eleutherodactylus</i>
Species	<i>Eleutherodactylus schwartzi</i>

SPECIES DESCRIPTION

The Virgin Islands coqui is a tiny frog found only in the British Virgin Islands in the West Indies.

[The Virgin Islands coqui] has yellowish-tan upperparts, with faint black stippling or mottling. A hazy, dark stripe extends along the sides of the body, and a dark bar runs through the eyes to the snout. The inside of the upper-legs are red to bright yellow, and the vent is white with a greenish tinge. Perhaps the most distinctive feature of this frog, however, is its large, conspicuous eyes, which have bright golden irises and dark, elliptical-shaped pupils. Like other frogs of the family leptodactylidae, the Virgin Islands coqui has a broad, flat head, a short body and elongated digits.

(ARKive, undated, internal references omitted).

GEOGRAPHIC DISTRIBUTION

The Virgin Islands coqui occurs on Tortola, Virgin Gorda, and Great Dog in the British Virgin Islands (Hedges and Thomas 2008). The species has also been identified (visibly or aurally) on Beef, Frenchmans Cay, and Jost Van Dyke islands/islets (Ovaska et al. 2000). It once occurred, and is apparently extirpated from St. John in the U.S. Virgin Islands (Platenberg and Boulon 2006).¹

NATURAL HISTORY

The coqui uses terrestrial bromeliads, typically found in dry scrub forests (ARKive, undated). It has been found up to elevations of 227 meters (744.7 feet) (ARKive, undated). Although strongly associated with forested areas (*see* Hedges and Thomas 2008), the species has been identified (visibly or aurally) in gardens, pastures, gullies and dense patches of vegetation (Ovaska et al. 2000). Breeding males advertise to females with two-tone calls emitted from the ground or perched on bromeliads or other vegetation (Ovaska et al. 2000; Hedges and Thomas 2008). Females lay fertilized eggs on the leaf of a bromeliad (ARKive, undated). Young hatch directly from eggs—there is no tadpole stage in this species (ARKive, undated).

¹ *Contra*, Ovaska et al. (2000: 3) stated the Virgin Islands coqui is endemic to the British Virgin Islands. However, most authorities report the species as once having occurred on St. John in the U.S. Virgin Islands.

POPULATION STATUS AND TRENDS

The population of the Virgin Islands coqui is decreasing (Hedges and Thomas 2008). The decline may be associated with the spread of the predatory Cuban treefrog (*Osteopilus septentrionalis*) (Hedges and Thomas 2008). The small, distinct population of the coqui on Great Dog (*see* Ovaska et al. 2000) is particularly vulnerable to development and other threats (Perry and Gerber 2006).

CONSERVATION STATUS

Almost a quarter of amphibian species in the British Virgin Islands are considered imperiled. The International Union for the Conservation of Nature (IUCN) designated the Virgin Islands coqui as “endangered” in 2004, citing the species’ limited range and ongoing threats to its habitat (Hedges and Thomas 2008).

THREATS TO THE SPECIES

The Virgin Islands coqui meets at least three criteria for listing identified in ESA Section 4 (16 U.S.C. §1533(a)(1)).

(Factor A) The Present or Threatened Destruction, Modification, or Curtailment of its Habitat or Range

Habitat for the Virgin Islands coqui is threatened by development for tourism and housing; agriculture; and road construction (Hedges and Thomas 2008). These land uses are ongoing and have severely fragmented the species’ habitat (Hedges and Thomas 2008). The frog is believed to occupy less than 500 square kilometers (193 square miles) on three British Virgin Islands (Hedges and Thomas 2008). Moist habitats with bromeliads appear to be critical to the species persistence (Ovaska et al. 2000).

(Factor C) Disease or Predation

Predation by the nonnative Cuban treefrog appears to have significant negative effects on the Virgin Islands coqui (Hedges and Thomas 2008; Platenberg 2007). Rats and mongoose may also predate on the species (ARKive, undated). The potential spread of the fungus chytridiomycosis could also be a concern for coqui (ARKive, undated).

(Factor D) The Inadequacy of Existing Regulatory Mechanisms

The British Virgin Islands has an environmental charter, committed to a list of environmental tenets (with the United Kingdom), finalized a Protected Areas System Plan (Gardner 2007), promulgated environmental ordinances, and drafted a National Integrated Development Plan. The government has also adopted a National Environmental Action Plan (BVI 2004). Still, experts cautioned in 2006 that additional protection for the Virgin Islands coqui may be warranted, especially the population on Great Dog (Perry and Gerber 2006). Other references cite a lack of regulation for continued habitat fragmentation on Tortola and Virgin Gorda (*e.g.*,

Hedges and Thomas 2008). A presentation posted on the British Virgin Islands Ministry of Natural Resources and Labour, Department of Environment and Fisheries website (www.bvifed.org/main/images/downloads/env_deg.pdf) depicts continued habitat loss and degradation throughout the islands. The fact that this presentation is posted on a government website may be evidence that current regulatory mechanisms are insufficient to protect species and habitat in the British Virgin Islands.

REQUESTED DESIGNATION

WildEarth Guardians respectfully requests the U.S. Fish and Wildlife Service to list the Virgin Islands coqui as “endangered” or “threatened” under the Endangered Species Act. We also request designation of critical habitat in the U.S. Virgin Islands, particularly in Virgin Islands National Park, where the coqui reportedly once occurred (Platenberg and Boulon 2006). Continued habitat loss and fragmentation, predation and apparently ineffective regulatory protections in the British Virgin Islands may require reintroducing the frog in the U.S. Virgin Islands to prevent its extinction.

LITERATURE CITED

_____. (undated). "Environmental Degradation of the British Virgin Islands" (presentation). Downloaded on Sept. 23, 2011; www.bvifed.org/main/images/downloads/env_deg.pdf.

ARKive. (undated). Virgin Islands coqui (*Eleutherodactylus schwartzi*). www.arkive.com. Downloaded on Sept. 21, 2011.

British Virgin Islands. 2004. National Environmental Action Plan. Conservation and Fisheries Department, Ministry of Natural Resources and Labour, Government of the Virgin Islands.

Hedges, B. and R. Thomas. 2008. *Eleutherodactylus schwartzi*. IUCN Red List of Threatened Species. Ver. 2011.1. Downloaded on Sept. 22, 2011.

Gardner, L. 2007. British Virgin Islands Protected Areas System Plan 2007-2017. British Virgin Islands. National Parks Trust. Tortola, BVI.

Ovaska, K. E., J. Caldbeck, J. Lazell. 2000. New records and distributional and ecological notes of leptodactylid frogs, *Leptodactylus* and *Eleutherodactylus*, from the British Virgin Islands. *Breviora: Museum of Comparative Zoology* 508: 1-25.

Perry, G. and G. P. Gerber. 2006. Conservation of amphibians and reptiles in the British Virgin Islands: status and patterns. *Applied Herpetology* 3: 237-256.

Platenberg, R. J. 2007. Impacts of introduced species on an island ecosystem: non-native reptiles and amphibians in the U.S. Virgin Islands. Pages 168-174 *in* G. W. Witmer, W. C. Pitt, K. A. Fagerstone (eds.). *Managing Vertebrate Invasive Species: Proc. International Symposium*; Aug. 7-9, 2007; USDA/APHIS Wildlife Services, National Wildlife Research Center, Fort Collins, CO. Published by Univ. Nebraska. Lincoln, NE.

Platenberg, R. J. and R. H. Boulon. 2006. Conservation status of reptiles and amphibians in the U.S. Virgin Islands. *Applied Herpetology* 3: 215-235.

Thomas, R. 1966. A new species of Antillean *Eleutherodactylus*. *Quarterly Journal Florida Academy of Science* 28: 375-391.