

FIVE YEAR STATUS REPORT

I. COMMON NAME: Barefoot Banded Gecko
(formerly Switak's Barefoot Gecko)
SCIENTIFIC NAME: Coleonyx switaki
CURRENT CLASSIFICATION: Threatened

II. RECOMMENDED ACTION:

Retain Threatened classification; change common name.

III. SUMMARY OF REASONS FOR RECOMMENDED ACTION:

The Barefoot Banded Gecko (BBG) remains rare, with very few individuals collected, although intensive searches have been made. This rarity threatens the BBG by making it of great interest to collectors. Threatened designation is recommended to protect the BBG from collection, and to protect its fragile desert habitat from impacts caused by collectors.

A change is recommended in the common name of this species, from Switak's Barefoot Gecko to Barefoot Banded Gecko. This new name more accurately describes the species and is now recognized in the scientific community because it is in accord with those common names of other species of Coleonyx (Grismer and Ottley 1987).

SUPPORTING INFORMATION

IV. NATURE AND DEGREE OF THREAT:

The BBG is threatened due to intense interest in collecting this rare species for captive maintenance and sale. The common collection technique, which consists of prying rock flakes and cap rocks and moving boulders with iron bars and other tools can cause a great deal of damage to the species' rock habitat and associated biota. In addition, this technique results in the destruction of desert varnish on granite exposures, increases erosion, and exposes microhabitats critical to insects and small vertebrates which are essential to the species existence.

V. HISTORIC AND CURRENT DISTRIBUTION:

Historic

Historic information is not available.

Current

The genus Coleonyx, which is distributed from the southwestern United States to Central America, includes seven species (Grismer 1986). One of the species of this genus, Coleonyx switaki, appears to have originated on the Baja California peninsula as it separated from mainland Mexico. The

distribution of the BBG may extend from the type locality near San Ignacio, Baja California Sur to southwestern Imperial and eastern San Diego counties in California. The existence of intrusive rock formations along the Peninsular Ranges suggests the possibility that the BBG extends into Riverside County as far north as the Morongo Pass. In California, the BBG appears to be restricted to specific rock habitats in a narrow zone of the Peninsular Range desert foothills (Figure 1) (Fritts et al. 1982).

VI. HISTORIC AND CURRENT ABUNDANCE:

Historic abundance information is not available. Current population estimates are not possible because of the extreme rarity of the BBG.

VII. SPECIES DESCRIPTION AND BIOLOGY:

The BBG is a moderately large species (maximum known snout vent length of 2.9 in). The head is moderately broad and distinctly wider than the neck in adults. The head and snout are uniformly covered with granular scales, those of the snout and canthal region slightly larger than other head scales. The rostral is large, wider than high, with a convex but not sharply pointed posterior margin bordered dorsolaterally by a pair of large prenasals. The eyes are large and the eyelids are fringed. The auricular opening is elliptical, and higher than wide, with a fold of skin on the dorsal and anterodorsal borders (Fritts et al. 1982, Grismer and Ottley 1987).

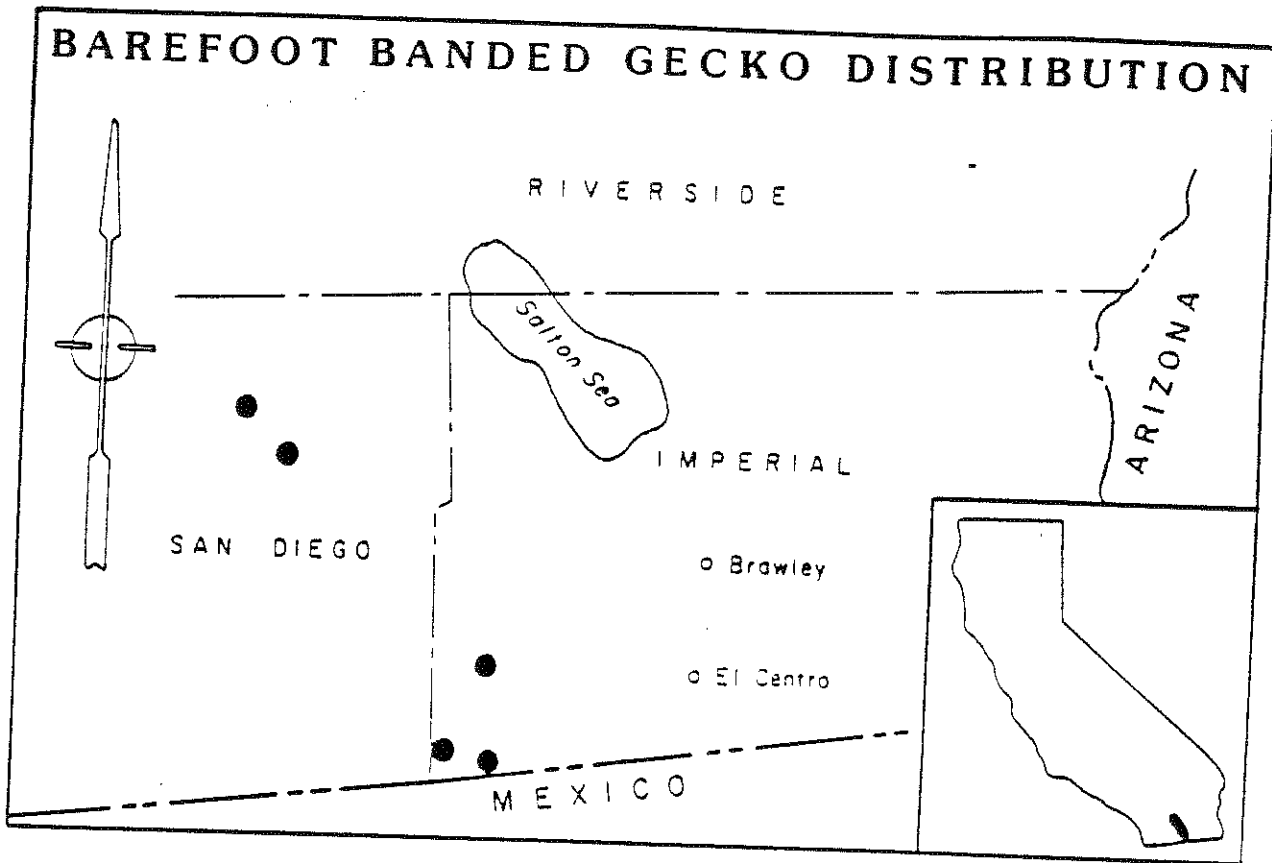
The neck is covered by uniform granular scales with small, flattened tubercles sparsely distributed on the nape. The tubercles on the body are relatively few and conical. The tubercles increase in size posteriorly from nape to caudal constriction where they terminate (Grismer and Ottley 1987).

The limbs lack tubercles and are covered with uniform granular scales. The forelimbs are relatively slender, the hind limbs roughly twice as large as the forelimbs. The digits are conical, increasing in length from first to fourth and decreasing from fourth to fifth (Grismer and Ottley 1987).

The body is of moderate thickness and covered with granular scales. The tail is conical and variable in thickness, being constricted at the base, widest at the center, and tapering to a point (Grismer and Ottley 1987).

The ground color of the dorsum (including limbs and excluding tail) is grey-brown with indistinct brownish spots which produce a mottled appearance. The tubercles are variously colored, appearing as dark spots on the dorsum, completely white to yellowish, or mottled with brown. The rostrum shows tendencies of dark striping, the top of the head has scattered white spots with poorly defined edges. The interorbital region is tinted a

FIGURE 1



t The Crossroads, 1980. Calif. Dep. of Fish and Game.

drab blue-green; the iris is gold, the inner surface of the eye fringe is solid white and the adjacent proximal scales solid black. The labia are immaculate to solid brown, the rostral mottled, mental light colored with a small squarish median brown marking, the gular region and ventral surface of the neck immaculate with slight brown mottling restricted to various scales immediately ventral to the mandibles. In the San Diego County specimens, the body has seven indistinct bands resulting from the fusion or near fusion of white to yellowish spots between limb insertions, plus two bands between insertions of hind limbs and the first black caudal ring. The pattern from Imperial County BBG is much different (Grimer and Ottley 1987). The anterior spots and bands are white, becoming yellowish posteriorly. A light vertebral stripe extends from a point even with the anterior margin of the forelimb insertion to the anterior margin of the hindlimb insertion. The tail has eight black and seven white caudal rings and a small white tip (Grismer and Ottley 1987).

Adult males exhibit a striking ephemeral color change consisting of a bright yellow suffusion of the dorsum which is most pronounced in the spots and bands. This change begins in early June and lasts until early August. Males with full tails exhibit yellow only on the anterior portion of the tail near the caudal constriction. Regenerated tails are suffused throughout (Grismer 1986).

VIII. HABITAT REQUIREMENTS:

In southern California, localities in which the BBG is found are within the desert foothills. The area is predominately covered with intrusive rock formations which make up the eastern escarpment and slopes of the northernmost extension of the Peninsular Ranges in the United States. These granitic formations have been exposed by erosion and uplifting accompanying faulting (Fritts et al. 1982). The BBG is also known from metavolcanic outcrops in southern California.

The BBG is found at elevations ranging from 900 to 1900 ft. The vegetation is predominately of desert species; Agave, Yucca, Opuntia bigelovii, Encelia, and Fouquieria which form stands between rock piles and on steep rock slopes. The BBG seems to depend more on the presence of rock formations and rock rubble than on other ecological factors (Fritts et al. 1982).

IX. CURRENT AND RECOMMENDED MANAGEMENT:

Management for this species is limited to the restriction placed on its collection provided by Threatened designation. Additional studies could provide abundance data and should be undertaken. Additional distribution information would make it possible to provide specific management direction, and possibly delineate a refuge or reserve for the BBG.

X. INFORMATION SOURCES:

Fritts, T. H., H.L. Snell, and R.L. Martin. 1982. Anarbylus switaki Murphy: an addition to the herpetofauna of the United States with comments on its relationships with Coleonyx. J. Herpetol. 16:39-52.

Grismer, L.L. 1986. The phylogeny, taxonomy, classification and biogeography of eublepharid geckos (Squamata: Eublepharidae). Masters Thesis, San Diego State University ix + 264 pp.

Grismer, L. L. and J. R. Ottley. 1987. Geographic variation in Coleonyx swritaki (Squamata: Euklepharidae) with a description of an insular subspecies. 30 pp. Unpubl. report.

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July 1, 1987

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