

## Catalogue of American Amphibians and Reptiles.

Grismer, L. Lee. 1990. *Coleonyx fasciatus*.

***Coleonyx fasciatus* (Boulenger)  
Black-banded Gecko**

*Eublepharis fasciatus* Boulenger, 1885:234. Type-locality, "Ventanas, México." [=Villa Corona, Durango, México (Kluge, 1975)]. Holotype British Museum (Natural History) 1946.8.30.19, adult female, collected by Alfonso Forrer, date unknown (examined by author).

*Coleonyx variegatus*: Stejneger, 1893:162 (part).

*Coleonyx fasciatus*: Taylor, 1935:203.

*Coleonyx variegatus fasciatus*: Conant, 1965:4.

- **Content.** This species is monotypic.
- **Diagnosis.** *C. fasciatus* differs from other *Coleonyx* in having thin, widely-flared basitrabecular processes, plate-like, imbricate dorsal scales on the proximal portions of the limbs, retention of the juvenile color pattern into adulthood, and a distinct separation of dorsal and ventral ground colors on the sides of the body.

• **Descriptions.** The original description (Boulenger, 1885) is brief and incomplete. Taylor (1935) compared *Coleonyx fasciatus* to *C. variegatus sonoriensis*. Klauber (1945) presented a good description of Taylor's (1935) specimen. Conant (1965) described a hybrid between *C. fasciatus* and *C. v. sonoriensis*. Grismer (1988) discussed various aspects of morphology and color pattern.

• **Illustrations.** Günther (1893) included a black and white illustration. Conant (1965) presented a black and white photograph of a hybrid *Coleonyx fasciatus* x *C. variegatus sonoriensis*.

• **Distribution.** Known only from five widely separated localities (Grismer, 1988) in thorn forests of the western foothills of the Sierra Madre Occidental from at least northern Sonora, México to southern Sinaloa and southwestern Durango, México. Probably ranges from near sea level to nearly 450 m. in elevation.

• **Fossil Record.** None.

• **Pertinent Literature.** General treatments of morphology and systematics are in Boulenger (1885), Stejneger (1893), Taylor (1935), Klauber (1945), Conant (1965), Dixon (1970), Kluge (1975) and Grismer (1988). Taylor (1935) and Hardy and McDiarmid (1969) presented ecological notes.

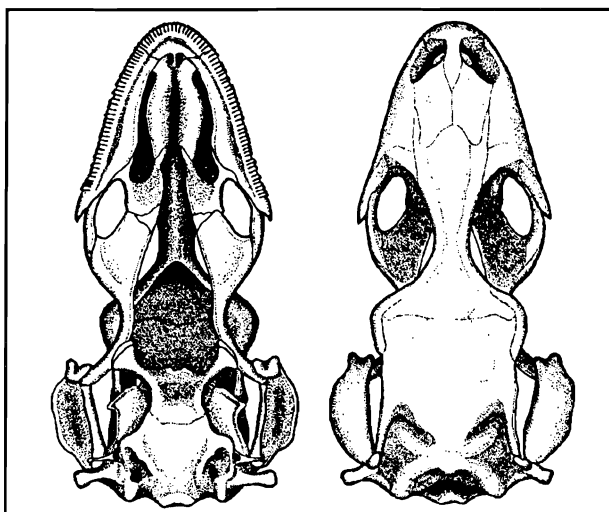
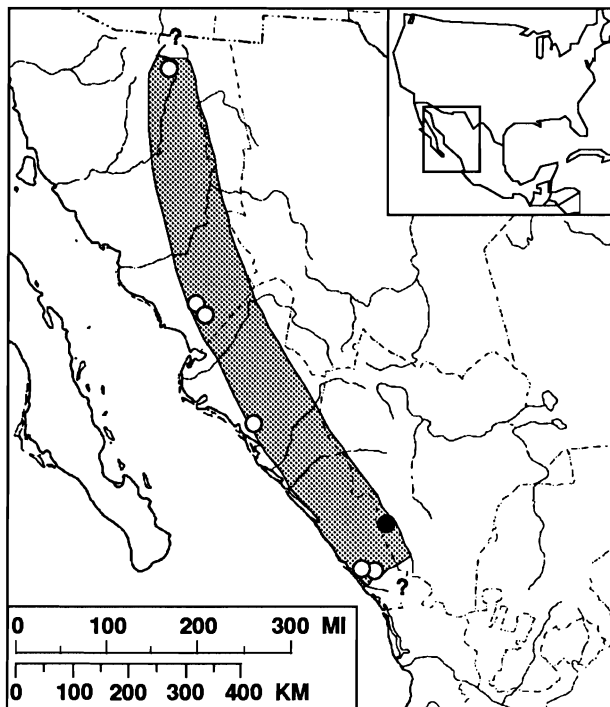


Figure 1. Ventral and dorsal view of the skull of *Coleonyx fasciatus*.



Map. Solid circle marks type-locality, open circles represent other localities. Question marks indicate uncertain range boundaries.

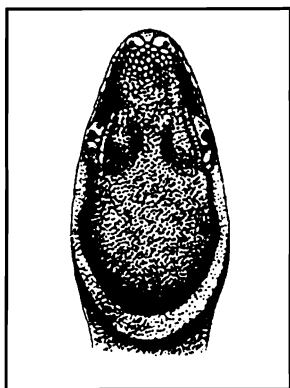
• **Remarks.** Conant (1965), Hardy and McDiarmid (1969), and Kluge (1975) considered *Coleonyx fasciatus* a subspecies of *C. variegatus* based on presumed interfertility. Grismer (1988) demonstrated that *C. fasciatus* shares many derived character states with *C. brevis* and concluded that these two are sister species. *Coleonyx fasciatus* was reelected to full species status to avoid making *C. variegatus* paraphyletic (Grismer, 1988).

• **Etymology.** The specific epithet *fasciatus* comes from the Latin root *fascia* which means "band" or "a bandage" and presumably refers to this species' distinct dorsal color pattern.

• **Comment.** A diagnostic character of *Coleonyx fasciatus* is its retention of primitive hatchling-juvenile color patterns (Grismer, 1988). This pattern also occurs in young *C. mitratus* and *C. elegans*, but changes ontogenetically to become clouded and less distinct (Klauber, 1945). This change is generally complete at snout-vent lengths of 60 to 70 mm, the adult size range of *C. fasciatus* (Grismer, 1988). Since these are the only *Coleonyx* occurring exclusively in subtropical to tropical forests, it is likely this color pattern is adaptive within this size range (<70 mm). *Coleonyx variegatus* supports this hypothesis. In various Sonoran Desert environments its banding is generally drab and does not show the vivid contrasts seen in *C. fasciatus* and young *C. mitratus* and *C. elegans*. However, where one of its subspecies, *C. v. peninsularis* (Klauber, 1945) which attains snout-vent lengths no larger than 54 mm, ranges into tropical deciduous forests in the Cape Region of Baja California Sur, México, its pattern approaches that observed in *C. fasciatus* (Grismer, 1988).

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**Figure 2.** Head of *Coleonyx fasciatus* (from Günther, 1893).

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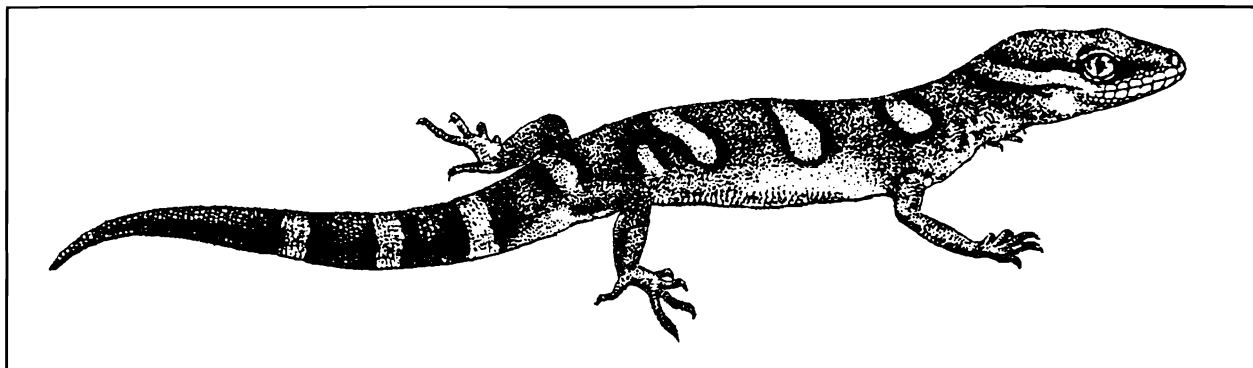
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**Figure 3.** *Coleonyx fasciatus* (from Günther, 1893).