

UC SANTA CRUZ CAMPUS NATURAL RESERVE

SANTA CRUZ BLACK SALAMANDER



© Ken-ichi Ueda

Brandon Sanchez

Scientific Name: *Aneides niger*
Common Name: Santa Cruz Black Salamander
Global Rarity: Vulnerable
State Rarity: Species of Special Concern; Vulnerable
UCSC Rarity: Very Rare



Note that permits are required to handle this species

General Description

The Santa Cruz Black Salamander (*Aneides niger*) is a medium-sized salamander endemic to California's Santa Cruz Mountains. While adults are all black, juveniles have a solid black back with few white speckles, and often have small yellow marks at the base of their limbs. Habitats include damp environments with downed woody debris or rocks. These animals only move in times of high humidity at night when their camouflage is best for hunting. Diet usually include small invertebrates (e.g. insects). Surprisingly, these salamanders aggressively defend their territory and will release noxious sticky skin secretions if they feel threatened by a predator.



Identification

Adults: All black, occasionally with yellow, white or blue specks

Juveniles: Black with white spots, sometimes with yellow at the base of the limbs

Male vs. Female: Males have a larger and broader head

Geographic Range

The Santa Cruz Black Salamander can only be found in the Santa Cruz Mountains of California in portions of Santa Cruz and San Mateo Counties.





UCSC Distribution

At UCSC, the Santa Cruz Black Salamander can be found within one of the campus's north-south trending watersheds.

Life history

Habitat: Woodlands, coniferous forests, and coastal grasslands, near streams, under rocks and logs, or other safe places for them to hide.

Reproduction: Males maintain a territory and are aggressive towards other males who wander into their area. Females lay terrestrial eggs in underground chambers in moist, damp soil and guard eggs, which hang from the ceiling of the cavity by short stalks.

Behavior: Their toe pads and semi-prehensile tails are adaptations for climbing, though they are mostly terrestrial. Adults can flee, bite, secrete a toxic substance, or show defensive posturing.

Diet: Mainly invertebrates (insects)

Predators: Birds, raccoons, snakes

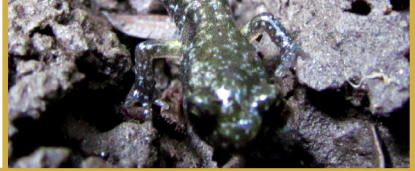
Research Highlights and Fun Facts

- In captivity the Santa Cruz Black Salamander has been known to have a maximum lifetime of 20 years.
- Researchers Sean Reilly (a UCSC Lecturer) and David Wake have presented molecular data justifying their split of *Aneides flavipunctatus* into four distinct species, including *A. niger*.
- They have been known to be so aggressive as to attack snakes in defense.



Conservation Status

CA Species of Special Concern;
Vulnerable



Threats

Santa Cruz

1. Habitat loss from development
2. High-intensity wildfire
3. Prolonged droughts affecting key breeding habitats

UCSC campus

1. Potential development, though the 2021 Long Range Development Plan doesn't include development in their currently occupied habitat.



Ways you can help

1. Support conservation efforts.
2. Document your findings on iNaturalist and the California Natural Diversity Database.
3. Do not disturb talus slopes or loose rock in old marble quarries in the Santa Cruz area.



References and Photo Credits

Nafis, G. N.d. Santa Cruz Black Salamander-*Aneides flavipunctatus niger* Myers and Maslin, 1948 (=Santa Cruz Black Salamander - *Aneides niger*). Retrieved from Californiaherps.com/salamanders/pages/a.f.niger.html on 23 April 2021.

Reilly, S.B. and D.B. Wake. 2019. Taxonomic revision of black salamanders of the *Aneides flavipunctatus* complex (Caudata: Plethodontidae). *PeerJ* 7:e7370.

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