Common Name: GREEN SALAMANDER

Scientific Name: *Aneides aeneus* Cope and Packard

Other Commonly Used Names: none

Previously Used Scientific Names: none

Family: Plethodontidae

Rarity Ranks: G3G4/S2

State Legal Status: Rare

Federal Legal Status: none

Description: A medium-sized salamander averaging 10.2 cm (4 inches) in total length, the green salamander has a dark brown or black dorsal background and numerous irregularly-shaped, light-green or yellowish-green blotches, similar in coloration to rock-encrusting lichens. Its head, legs, and tail are colored and patterned similarly; the belly is light and unmarked or lightly flecked with yellow. Both its body and head are relatively flat, its webbed toes expanded and square-tipped, and its round tail as long or longer than the body. Males have a broader head than females. Hatchlings typically have distinctly yellow limbs, especially the upper parts, and the pattern on the head and back is usually duller and less extensive than that of adults.

Similar Species: Green salamanders are the only member of their genus in Georgia and no other species should be confused with them.

Habitat: This is a species adapted to living in and around sandstone cliffs and outcroppings, especially those with abundant cracks and crevices. Green salamanders prefer permanently moist but seldom wet outcrops. They are occasionally found on live trees and behind the bark of rotting trees in the moist forests surrounding these rocky sites.

Diet: Green salamanders feed opportunistically on small insects, spiders, snails, and slugs.

Life History: The fissures within rocky cliffs and outcroppings serve as shelters, foraging areas, and brooding sites. During the spring and summer, green salamanders can often be viewed at night by peering into these horizontal cracks with aid of a flashlight. Eggs, which average 17 per clutch, are laid primarily during the summer and are deposited on the upper surfaces of rock fissures, where they are guarded by the female until hatching occurs. The larval stage is omitted and eggs hatch directly into terrestrial forms. During winter, green salamanders may aggregate in deep retreats within the rocks to escape freezing temperatures. Their arboreal habits have only recently begun to be studied.

Survey Recommendations: Although green salamanders can be found with some regularity from spring through fall, they are generally most visible in fall when previously dispersed individuals return to and concentrate on rock outcroppings. Searching crevices with the aid of a flashlight is the best method for finding them.

Range: This species occurs in hilly and mountainous areas from northeastern Mississippi to southern Pennsylvania. In Georgia, the species occurs in two disjunct physiographic regions, the Cumberland Plateau in the northwest corner of the state and the eastern Blue Ridge in the extreme northeast corner.

Threats: Several researchers have noted declines in green salamander populations in the Blue Ridge since the 1970s. Reasons for the decline are unknown, but suggested reasons include climatic factors, habitat loss, disease, and over-collecting. Populations of the green salamander on the Cumberland Plateau have been considered stable. Animals from both regions are vulnerable to habitat modifications that alter outcrops or remove shading through the loss of the forest canopy.

Georgia Conservation Status: Conservation lands harboring populations of green salamanders include Cloudland Canyon and Tallulah Gorge State Parks, Zahnd Natural Area, Crockford-Pigeon Mountain Wildlife Management Area, and the Chattahoochee National Forest, especially the Ellicott Rock Wilderness Area.

Conservation and Management Recommendations: Timber harvest and other activities that may alter the moist forest canopy should be avoided in the vicinity of rock outcrops known to harbor green salamanders. In addition, this species may be vulnerable to over-collecting, and the specific locations of populations should be guarded.

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J. Jensen, Dec. 2007: original account
K. Owers, Sept. 2009: updated status and ranks, added pictures