

MISSISSIPPI GREEN WATERSNAKE

Nerodia cyclopion



Order: Squamata
Family: Colubridae
FNAI Ranks: G5/S1
U.S. Status: none
FL Status: none

Description: All watersnakes of the genus *Nerodia* (*Natrix* in older literature) have keeled dorsal scales, a divided cloacal (anal) scale, a double row of scales under the tail, and round pupils. *N. cyclopion* is a medium-sized snake typically reaching 75–115 cm (30–45 inches) in total length. Dorsal coloration is olive to brownish, usually with some dark pattern (but not bold), and the belly is gray to brown with light, usually semicircular spots. There is a row of scales (suboculars) between the eye and upper labial scales. Young are relatively large at birth, 23–28 cm in total length (Powell et al. 2016).

Similar Species: The closest relative of *N. cyclopion* is the Florida green watersnake, *N. floridana*; the two were formerly considered to be one species (Crother 2017). *N. floridana* rarely has distinctive dorsal patterning, has a mostly whitish to yellowish belly, and may be absent from the westernmost Panhandle counties (Krysko et al. 2019). Other potentially co-occurring species of watersnakes (*N. erythrogaster*, *N. fasciata*, *N. rhombifer*, *N. sipedon*, *N. taxispilota*) lack the extra row of scales between the eye and upper labials and may have a distinct dorsal pattern of bands or blotches. The related Gulf salt marsh snake (*N. c. clarkii*) has stripes running the length of its body. Although the tendency of both of the moderately heavy-bodied green watersnake species to flatten their bodies and heads and strike if molested cause some to confuse it with the venomous cottonmouth (*Agkistrodon piscivorus*) (Tennant 1997), the latter is distinguished by its heavy body and large, triangular head, white-bordered dark stripe through the eye, vertical pupils, facial pit between each eye and nostril (absent from *Nerodia*), and single row of scales beneath the tail.

Habitat: *N. cyclopion* chiefly inhabits sluggish to still wetlands. It especially frequents margins of lakes, ponds, swamps (especially cypress), marshes, bayous,

and rice fields (Dundee and Rossman 1989). Reports exist for occasional use of brackish waters (Powell et al. 2016).

Seasonal Occurrence: The species occurs year-round in appropriate habitats, although it may be observed rarely because of nocturnal habits in warm weather (Tennant 1997). Activity is reduced in colder months, although diurnal basking may occur (Dundee and Rossman 1989). Live young are presumably born in mid- to late summer.

Florida Distribution: The Mississippi green watersnake reaches Florida only in southern Escambia County, closely approaching and possibly entering adjacent Santa Rosa County. Most of the remainder of the state is within the range of its sister species, the Florida green watersnake (Krysko et al. 2019).

Range-wide Distribution: This is principally a species of wetlands along the lower Mississippi River (from southernmost Illinois to the Gulf), much of Louisiana, eastern Texas, and southern Mississippi and Alabama (lower Mobile Bay drainage). It barely enters Florida from the west.

Conservation Status: Outside of Florida, this species is likely secure (Dundee and Rossman 1989). With so few Florida records, and none being recent, its in-state status is unknown and in dire need of study. Conservation of this snake here and elsewhere depends almost entirely on the existence of abundant freshwater wetlands free of disturbances such as environmental contamination, drainage, and roads.

Protection and Management: Maintain water quality, natural hydroperiod, and native groundcover. Maintain fish populations, and perhaps amphibians, for food. Prevent all sources of pollution. Do everything possible to limit global warming and consequent sea level rise.

References: Crother (ed.) 2017, Dundee and Rossman 1989, Krysko et al. 2019, Powell et al. 2016, Tennant 1997.



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