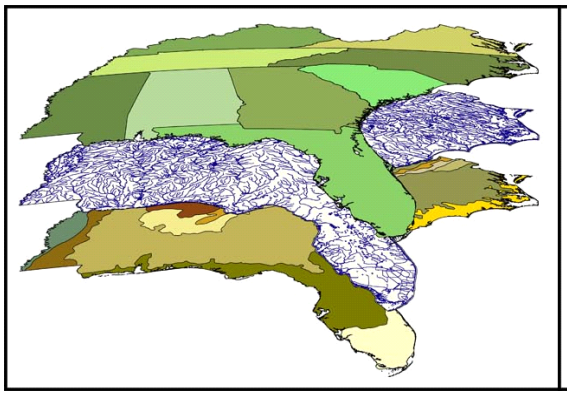


SOUTHEAST GAP ANALYSIS PROJECT

USGS gap BaSIC NARSAL

Species Modeling Report

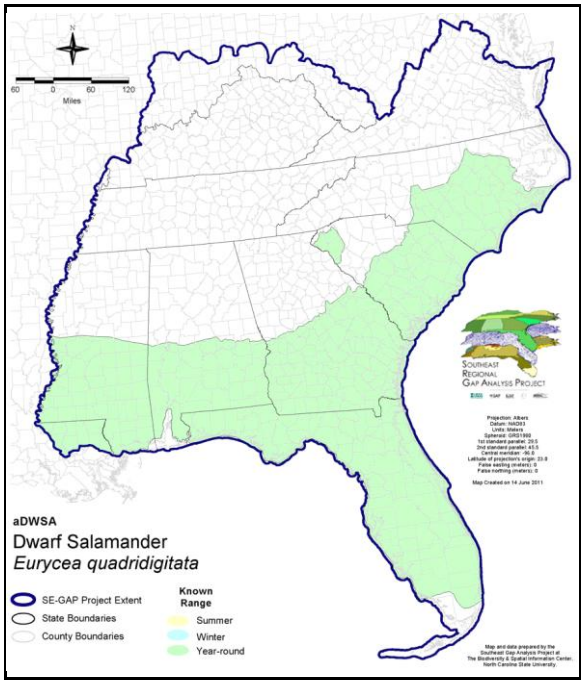
Dwarf Salamander

Eurycea quadridigitata

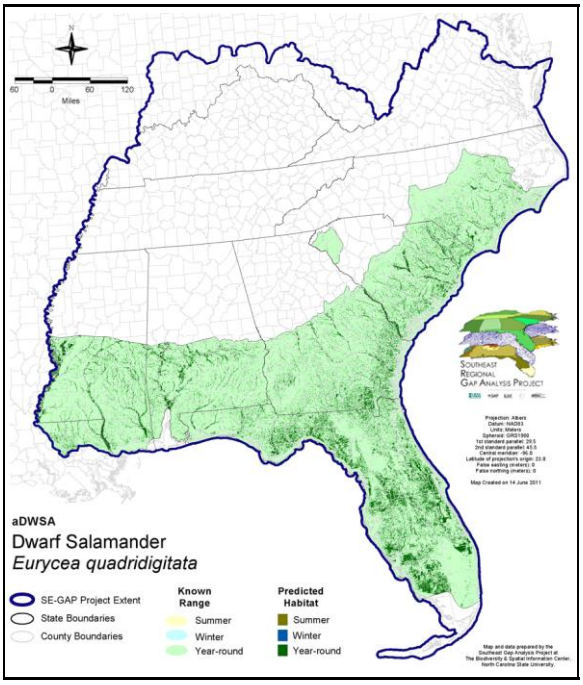
Taxa: Amphibian
Order: Caudata
Family: Plethodontidae

SE-GAP Spp Code: **aDWSA**
ITIS Species Code: 173695
NatureServe Element Code: AAAAD05090

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_aDWSA.pdf
Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_aDWSA.pdf
GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=aDWSA
Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/aDWSA_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: MS (Non-game species in need of management), NC (SC)

NS Global Rank: G5

NS State Rank: AL (S5), AR (S3), FL (SNR), GA (S5), LA (S5), MS (S5), NC (S2), SC (SNR), TX (S5)

SUMMARY OF PREDICTED HABITAT BY MANAGMENT AND GAP PROTECTION STATUS:

	US FWS		US Forest Service		Tenn. Valley Author.		US DOD/ACOE	
	ha	%	ha	%	ha	%	ha	%
Status 1	111,780.8	1	4,675.1	< 1	0.0	0	0.0	0
Status 2	46,916.2	< 1	30,892.8	< 1	0.0	0	0.0	0
Status 3	25.5	< 1	206,253.3	3	0.0	0	89,576.2	1
Status 4	577.1	< 1	0.0	0	0.0	0	0.0	0
Total	159,299.6	2	241,821.2	3	0.0	0	89,576.2	1

	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	10,847.1	< 1	10.3	< 1	6,253.1	< 1
Status 2	0.0	0	2,495.7	< 1	1,767.5	< 1	7.1	< 1
Status 3	13,013.8	< 1	101,818.8	1	0.0	0	960.6	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	13,013.8	< 1	115,161.6	2	1,777.8	< 1	7,220.8	< 1

	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	43.7	< 1	0.0	0	0.0	0
Status 2	0.0	0	581.5	< 1	251,518.7	3	0.0	0
Status 3	1,244.3	< 1	397,494.4	5	22,595.4	< 1	138,505.2	2
Status 4	0.0	0	< 0.1	< 1	4,361.0	< 1	2.8	< 1
Total	1,244.3	< 1	398,119.6	5	278,475.1	4	138,508.0	2

	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	91.4	< 1	0.0	0	0.0	0
Status 2	529.5	< 1	14,980.3	< 1	0.0	0	1,569.8	< 1
Status 3	0.0	0	17,778.4	< 1	5,474.9	< 1	74,159.8	< 1
Status 4	0.0	0	0.0	0	619.0	< 1	0.0	0
Total	529.5	< 1	32,850.1	< 1	6,093.9	< 1	75,729.6	1

	Private Land - No Res.		Water		Overall Total	
	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	133,701.4	2
Status 2	169.5	< 1	0.0	0	351,428.5	5
Status 3	1,029.2	< 1	0.0	0	1,069,929.8	17
Status 4	5,763,450.3	76	19,411.2	< 1	5,792,205.5	77
Total	5,764,649.0	76	19,411.2	< 1	7,347,265.2	100

GAP Status 1: An area having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a natural state within which disturbance events (of natural type, frequency, and intensity) are allowed to proceed without interference or are mimicked through management.

GAP Status 2: An area having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a primarily natural state, but which may receive use or management practices that degrade the quality of existing natural communities.

GAP Status 3: An area having permanent protection from conversion of natural land cover for the majority of the area, but subject to extractive uses of either a broad, low-intensity type or localized intense type. It also confers protection to federally listed endangered and threatened species throughout the area.

GAP Status 4: Lack of irrevocable easement or mandate to prevent conversion of natural habitat types to anthropogenic habitat types. Allows for intensive use throughout the tract. Also includes those tracts for which the existence of such restrictions or sufficient information to establish a higher status is unknown.

PREDICTED HABITAT MODEL(S):

Year-round Model:

Habitat Description: Dwarf salamanders occur in a variety of low, swampy habitats. Typical habitat includes swamps, spring seeps, and bottomland hardwood forest and they also may be abundant at the edges of ponds or bays. This salamander occurs in wet sites in pine savanna (Martof et al. 1980). Logs and other heavy objects near the edge of surface water are ideal sites for shelter, but minimal cover such as pine-needle litter or moss in or adjacent to water is usable as well (Petranka 1998). They rarely wander overland (Bancroft et al 1983). In xeric hammocks they must burrow or utilize others' burrows to survive dry periods (Ashton 1988). They lay eggs in seepage areas or near the edges of shallow ponds on the undersides of logs or leaves, under or on sphagnum or pine needles, or on rootlets beneath logs. They lay up to about 60 eggs singly or in small clusters, late fall to early winter. The female attends eggs. Larvae hatch in 30-40 days and metamorphose in spring or early summer. They reach sexual maturity in the first year. Stacy Smith, 15April05

Hydrography Mask:

Freshwater Only

Slow Current Only

Utilizes open water features with buffers of 30m from and 30m into selected water features.

Utilizes wet vegetation features with buffer of unlimited into selected vegetation features.

Selected Map Units:

Functional Group	Map Unit Name
Water	Open Water (Fresh)
Wetlands	Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Forest Modifier
Wetlands	Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Herbaceous Modifier
Wetlands	Atlantic Coastal Plain Brownwater Stream Floodplain Forest
Wetlands	Atlantic Coastal Plain Clay-Based Carolina Bay Forested Wetland
Wetlands	Atlantic Coastal Plain Clay-Based Carolina Bay Herbaceous Wetland
Wetlands	Atlantic Coastal Plain Depression Pondshore
Wetlands	Atlantic Coastal Plain Large Natural Lakeshore
Wetlands	Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Taxodium/Nyssa Modifier
Wetlands	Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Oak Dominated Modifier
Wetlands	Atlantic Coastal Plain Northern Basin Peat Swamp
Wetlands	Atlantic Coastal Plain Northern Wet Longleaf Pine Savanna and Flatwoods
Wetlands	Atlantic Coastal Plain Sandhill Seep
Wetlands	Atlantic Coastal Plain Small Blackwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Small Brownwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Southern Wet Pine Savanna and Flatwoods
Wetlands	Atlantic Coastal Plain Streamhead Seepage Swamp, Pocosin, and Baygall
Wetlands	Central Florida Herbaceous Pondshore
Wetlands	Central Florida Herbaceous Seep
Wetlands	Central Florida Pine Flatwoods
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Forest Modifier
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Herbaceous Modifier
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Offsite Hardwood Modifier
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Open Understory Modifier
Wetlands	East Gulf Coastal Plain Small Stream and River Floodplain Forest
Wetlands	East Gulf Coastal Plain Southern Depression Pondshore
Wetlands	East Gulf Coastal Plain Southern Loblolly-Hardwood Flatwoods
Wetlands	Floridian Highlands Freshwater Marsh
Wetlands	Lower Mississippi River Bottomland and Floodplain Forest
Wetlands	Lower Mississippi River Bottomland Depressions - Forest Modifier
Wetlands	Lower Mississippi River Bottomland Depressions - Herbaceous Modifier
Wetlands	Mississippi River Low Floodplain (Bottomland) Forest
Wetlands	Mississippi River Riparian Forest
Wetlands	South Florida Bayhead Swamp

Wetlands	South Florida Cypress Dome
Wetlands	South Florida Dwarf Cypress Savanna
Wetlands	South Florida Hardwood Hammock
Wetlands	South Florida Pine Flatwoods
Wetlands	South Florida Wet Marl Prairie
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Southern Coastal Plain Herbaceous Seepage Bog
Wetlands	Southern Coastal Plain Hydric Hammock
Wetlands	Southern Coastal Plain Nonriverine Basin Swamp
Wetlands	Southern Coastal Plain Nonriverine Cypress Dome
Wetlands	Southern Coastal Plain Seepage Swamp and Baygall
Wetlands	Southern Coastal Plain Spring-run Stream Aquatic Vegetation
Wetlands	Southern Piedmont Large Floodplain Forest - Forest Modifier
Wetlands	Southern Piedmont Large Floodplain Forest - Herbaceous Modifier
Wetlands	Southern Piedmont Seepage Wetland

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Trauth, S. E. 1983. Reproductive biology and spermathecal anatomy of the dwarf salamander (EURYCEA QUADRIDIGITATA) in Alabama. Herpetologica 39:9-15.

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Compiled: 15 September 2011

This data was compiled and/or developed by the Southeast GAP Analysis Project at The Biodiversity and Spatial Information Center, North Carolina State University.