





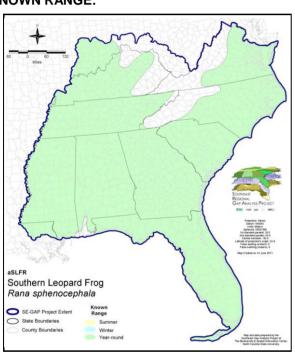
Southern Leopard Frog

Rana sphenocephala

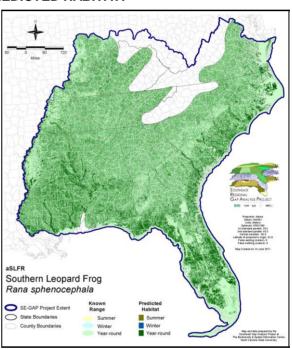
Taxa: Amphibian Order: Anura Family: Ranidae SE-GAP Spp Code: **aSLFR** ITIS Species Code: 173436

NatureServe Element Code: AAABH01220

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_aSLFR.pdf
Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_aSLFR.pdf
GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=aSLFR
Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/aSLFR se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: KY (N), MS (Non-game species in need of management), NJ (S), NY (SC), PA (PE)

NS Global Rank: G5

NS State Rank: AL (S5), AR (S5), DC (S2S3), DE (S5), FL (SNR), GA (S5), IA (S4), IL (S5), IN (S4), KS (S5), KY (S5), LA (S5),

MD (S4S5), MO (S5), MS (S5), NC (S5), NJ (S5), NY (S1S2), OK (S5), PA (S1), SC (SNR), TN (S5), TX (S5), VA (S4)

aSLFR Page 1 of 6

SUMMARY OF PREDICTED HABITAT BY MANAGMENT AND GAP PROTECTION STATUS:

		JS FWS	US Forest Service		Tenn. Valley Author.		US DOD/ACOE	
	ha	%	ha	%	ha	%	ha	%
Status 1	105,940.9	< 1	13,128.6	< 1	0.0	0	0.0	0
Status 2	213,757.6	< 1	96,318.5	< 1	0.0	0	3,928.2	< 1
Status 3	2,488.3	< 1	905,548.4	2	49,559.0	< 1	363,422.8	< 1
Status 4	53.6	< 1	< 0.1	< 1	0.0	0	125.8	< 1
Total	322,240.4	< 1	1,014,995.6	3	49,559.0	< 1	367,476.8	< 1
	US Dept. of	Energy	US Nat. Park	Service		NOAA	Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	65,848.1	< 1	46.1	< 1	8,592.4	< 1
Status 2	0.0	0	9,364.4	< 1	8,704.1	< 1	71.7	< 1
Status 3	27,909.9	< 1	195,771.5	< 1	0.0	0	4,024.1	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	27,909.9	< 1	270,984.1	< 1	8,750.2	< 1	12,688.2	< 1
	Native Am.	Reserv.	State Park/His	st. Park	State WMA/Ga	meland	State	Forest
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	619.6	< 1	34.3	< 1	0.0	0
Status 2	0.0	0	6,565.1	< 1	576,488.8	1	57.5	< 1
Status 3	4,857.7	< 1	565,533.2	1	144,604.8	< 1	257,000.0	< 1
Status 4	0.0	0	< 0.1	< 1	51,587.8	< 1	26.6	< 1
Total	4,857.7	< 1	572,717.9	1	772,715.7	2	257,084.2	< 1
	State Coastal F	Reserve	ST Nat.Area/Pr	eserve	Other State	e Lands	Private Cons. E	asemt.
	ha	%	ha	%	ha	%	ha	% %
Status 1	0.0	0	4,711.3	< 1	0.0	0	0.0	0
Status 2	14,226.6	< 1	64,777.4	< 1	6.5	< 1	3,259.1	< 1
Status 3	0.0	0	24,092.4	< 1	16,391.7	< 1	131,295.9	<1
Status 4	0.0	0	0.2	< 1	2,290.8	< 1	< 0.1	<1
Total	14,226.6	<1	93,581.3	<1	18,689.0	<1	134,555.0	<1
	Private Land - I	No Rec		Water			Overs	ıll Total
	ha	% No ites.	ha	water %			ha	iii Totai %
Status 1	0.0	0	0.0	0			198,921.2	< 1
Status 1	0.0	0	0.0	0			997,525.4	3
Status 2	709.0	< 1	1.1	< 1			2,693,209.8	9
Status 3	34,692,030.1	88	57,060.8	<1			34,854,710.2	88
Total	34,692,030.1	88	57,060.8	<1			34,854,710.2	100
i Utai	34,032,733.1	00	37,001.9	× 1			30,744,300.7	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.

aSLFR Page 2 of 6

PREDICTED HABITAT MODEL(S):

Year-round Model:

Habitat Description:

Southern leopard frog are a ubiquitous species found throughout the southeast. They occupy all types of freshwater habitats and may also occupy some slightly brackish marshes. In general, they are more frequently associated with grassy or marshy areas at ponds, ditches, swamps, and lake and stream margins but will occupy a diverse array of habitats. Breeding habitat is varied and ranges from permanent and semi-permanent woodland ponds to potholes where it lays clutch of up to several thousand eggs, in any month in south. Aquatic larvae metamorphose in summer or fall, or may overwinter and metamorphose the following year. Amy Silvano 12apr05

Ecosystem Classifiers: Evergreen (Except Xeric Pine), hardwoods, Mixed, Mesic, Cove, Anthropogenic, Freshwater, All wetlands(excluded from wet Marl Praire as per Bartlett & Bartlett 1999). Also Excluded all Central Appalachians Ecosystems. Amy Silvano 12apr05

Hydrography Mask:

Utilizes flowing water features with buffers of 120m from and 30m into selected water features.

Utilizes open water features with buffers of 120m from and 30m into selected water features.

Utilizes wet vegetation features with buffers of 120m from and unlimited into selected vegetation features.

Functional Group	Map Unit Name					
Anthropogenic	Developed Open Space					
Anthropogenic	Low Intensity Developed					
Anthropogenic	Pasture/Hay					
Anthropogenic	Successional Grassland/Herbaceous					
Anthropogenic	Successional Grassland/Herbaceous (Other)					
Anthropogenic	Successional Grassland/Herbaceous (Utility Swath)					
Anthropogenic	Successional Shrub/Scrub (Clear Cut)					
Anthropogenic	Successional Shrub/Scrub (Other)					
Anthropogenic	Successional Shrub/Scrub (Utility Swath)					
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland					
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Hardwood Modifier					
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Pine Modifier					
Forest/Woodland	Appalachian Hemlock-Hardwood Forest					
Forest/Woodland	Atlantic Coastal Plain Dry and Dry-Mesic Oak Forest					
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Offsite Hardwood Modifier					
Forest/Woodland	Atlantic Coastal Plain Mesic Hardwood and Mixed Forest					
Forest/Woodland	Atlantic Coastal Plain Northern Mixed Oak-Heath Forest					
Forest/Woodland	Atlantic Coastal Plain Upland Longleaf Pine Woodland					
Forest/Woodland	Central Appalachian Oak and Pine Forest					
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Hardwood Modifier					
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Mixed Modifier					
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Pine Modifier					
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Loblolly Modifier					
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Offsite Hardwood Modifier					
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Open Understory Modifier					
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Scrub/Shrub Modifier					
Forest/Woodland	East Gulf Coastal Plain Limestone Forest					
Forest/Woodland	East Gulf Coastal Plain Northern Dry Upland Hardwood Forest					
Forest/Woodland	East Gulf Coastal Plain Northern Loess Bluff Forest					
Forest/Woodland	East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland - Hardwood Modifier					
Forest/Woodland	East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland - Juniper Modifier					
Forest/Woodland	East Gulf Coastal Plain Northern Mesic Hardwood Forest					
Forest/Woodland	East Gulf Coastal Plain Southern Loess Bluff Forest					
Forest/Woodland	East Gulf Coastal Plain Southern Mesic Slope Forest					

aSLFR Page 3 of 6

Forest/Woodland Florida Longleaf Pine Sandhill - Scrub/Shrub Understory Modifier

Forest/Woodland Northeastern Interior Dry Oak Forest - Mixed Modifier

Forest/Woodland Northeastern Interior Dry Oak Forest - Virginia/Pitch Pine Modifier

Forest/Woodland Northeastern Interior Dry Oak Forest-Hardwood Modifier
Forest/Woodland Northern Atlantic Coastal Plain Dry Hardwood Forest

Forest/Woodland
South-Central Interior Mesophytic Forest
Forest/Woodland
Southeastern Interior Longleaf Pine Woodland
Forest/Woodland
Southern and Central Appalachian Cove Forest
Forest/Woodland
Southern and Central Appalachian Oak Forest
Forest/Woodland
Southern and Central Appalachian Oak Forest - Xeric
Forest/Woodland
Southern Appalachian Low Mountain Pine Forest

Forest/Woodland Southern Appalachian Montane Pine Forest and Woodland
Forest/Woodland Southern Coastal Plain Dry Upland Hardwood Forest
Forest/Woodland Southern Interior Low Plateau Dry-Mesic Oak Forest

Forest/Woodland Southern Interior Low Plateau Dry-Mesic Oak Forest - Evergreen Modifier

Forest/Woodland
Southern Piedmont Dry Oak-(Pine) Forest - Hardwood Modifier
Forest/Woodland
Southern Piedmont Dry Oak-(Pine) Forest - Loblolly Pine Modifier
Forest/Woodland
Southern Piedmont Dry Oak-(Pine) Forest - Mixed Modifier
Forest/Woodland
Southern Piedmont Dry Oak-Heath Forest - Hardwood Modifier
Forest/Woodland
Southern Piedmont Dry Oak-Heath Forest - Mixed Modifier

Forest/Woodland Southern Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier

Forest/Woodland Southern Piedmont Mesic Forest

Forest/Woodland Southern Ridge and Valley Dry Calcareous Forest

Forest/Woodland
Southern Ridge and Valley Dry Calcareous Forest - Hardwood Modifier
Forest/Woodland
Southern Ridge and Valley Dry Calcareous Forest - Pine Modifier
Freshwater Tidal Marsh & Wetland
Atlantic Coastal Plain Central Fresh-Oligohaline Tidal Marsh
Freshwater Tidal Marsh & Wetland
Atlantic Coastal Plain Embayed Region Tidal Freshwater Marsh
Freshwater Tidal Marsh & Wetland
Atlantic Coastal Plain Northern Fresh and Oligohaline Tidal Marsh

Freshwater Tidal Marsh & Wetland Florida Big Bend Fresh-Oligohaline Tidal Marsh

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 Basin Swamp and Wet Hardwood Forest

Wetlands Atlantic Coastal Plain Northern Pondshore

Wetlands Atlantic Coastal Plain Northern Wet Longleaf Pine Savanna and Flatwoods

Wetlands Atlantic Coastal Plain Peatland Pocosin
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 Central Interior Highlands and Appalachian Sinkhole and Depression Pond

Wetlands East Gulf Coastal Plain Interior Shrub Bog

Wetlands East Gulf Coastal Plain Large River Floodplain Forest - Forest Modifier

Wetlands East Gulf Coastal Plain Large River Floodplain Forest - Herbaceous Modifier

aSLFR

Page 4 of 6

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 Near-Coast Pine Flatwoods - Scrub/Shrub Understory Modifier Wetlands East Gulf Coastal Plain Northern Depression Pondshore Wetlands East Gulf Coastal Plain Northern Seepage Swamp Wetlands East Gulf Coastal Plain Small Stream and River Floodplain Forest Wetlands East Gulf Coastal Plain Southern Depression Pondshore East Gulf Coastal Plain Southern Loblolly-Hardwood Flatwoods Wetlands Wetlands East Gulf Coastal Plain Treeless Savanna and Wet Prairie 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 Freshwater Slough and Gator Hole South Florida Pine Flatwoods Wetlands Wetlands South Florida Pond-Apple/Popash Slough Wetlands South Florida Willow Head Wetlands South-Central Interior Large Floodplain - Forest Modifier Wetlands South-Central Interior Large Floodplain - Herbaceous Modifier Wetlands South-Central Interior Small Stream and Riparian Wetlands South-Central Interior/Upper Coastal Plain Wet Flatwoods Wetlands Southern and Central Appalachian Bog and Fen Wetlands Southern Appalachian Seepage Wetland 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 Wetlands Southern Piedmont Small Floodplain and Riparian Forest Wetlands Southern Piedmont/Ridge and Valley Upland Depression Swamp

CITATIONS:

Wetlands

Bartlett, R.D. and P.P. Bartlett. 1999. Field guide to Florida reptiles and amphibians. Gulf Publishing Co, Houston, TX. 280 p.

Western Highland Rim Seepage Fen

Behler, J. L., and F. W. King. 1979. The Audubon Society field guide to North American reptiles and amphibians. Alfred A. Knopf, New York. 719 pp.

Brown, L. E., H. M. Smith, and R. S. Funk. 1990. RANA SPHENOCEPHALA Cope, 1886 (Amphibia, Anura):proposed precedence over RANA UTRICULARIUS Harlan, 1826). Bull. Zool. Nomen. 47:283-285.

Case, S. M. 1978. Biochemical systematics of members of the genus RANA native to western North America. Syst. Zool. 27:299-311

Collins, J. T. 1990. Standard common and current scientific names for North American amphibians and reptiles. SSAR Herpetol. Circular No. 19. 41 pp.

Frost, D. R. 1985. Amphibian species of the world. A taxonomic and geographical reference. Allen Press, Inc., and Assoc. Systematics Collections, Lawrence, Kansas. v + 732 pp.

Hillis, D. M., and S. K. Davis. 1986. Evolution of ribosomal DNA: fifty million years of recorded history in the frog genus RANA. Evolution 40:1275-1288.

Johnson, T. R. 1977. The amphibians of Missouri. Univ. Kansas Mus. Nat. Hist., Pub. Ed. Ser. 6. ix + 134 pp.

aSLFR Page 5 of 6

Martof, B. S., W. M. Palmer, J. R. Bailey, and J. R. Harrison, III. 1980. Amphibians and reptiles of the Carolinas and Virginia. University of North Carolina Press, Chapel Hill, North Carolina. 264 pp.

Minton, S. A., Jr. 1972. Amphibians and reptiles of Indiana. Indiana Academy Science Monographs 3. v + 346 pp.

Mount, R. H. 1975. The Reptiles and Amphibians of Alabama. Auburn University Agricultural Experiment Station, Auburn, Alabama. vii + 347 pp.

Pace, A. E. 1974. Systematic and biological studies of the leopard frogs (RANA PIPIENS complex) of the United States. Univ. Michigan Mus. Zool. Misc. Publ. (148):1-140.

Reay, K. K., and J.C. Mitchell. 1999. Atlas of amphibians and reptiles in Virginia (1). Richmond, VA: Virginia Dept. Game and Inl. Fisheries.

Schwartz, A., and R. W. Henderson. 1991. Amphibians and Reptiles of the West Indies:Descriptions, Distributions, and Natural History. University of Florida Press, Gainesville, Florida. xvi + 720 pp.

Wilson, L. A. 1995. The Land Manager's Guide to the amphibians and reptiles of the South. Chapel Hill, NC: The Nature Conservancy.

For more information:: SE-GAP Analysis Project / BaSIC

127 David Clark Labs Dept. of Biology, NCSU Raleigh, NC 27695-7617 (919) 513-2853 www.basic.ncsu.edu/segap 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.

aSLFR Page 6 of 6