



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

Greater Siren

Siren lacertina

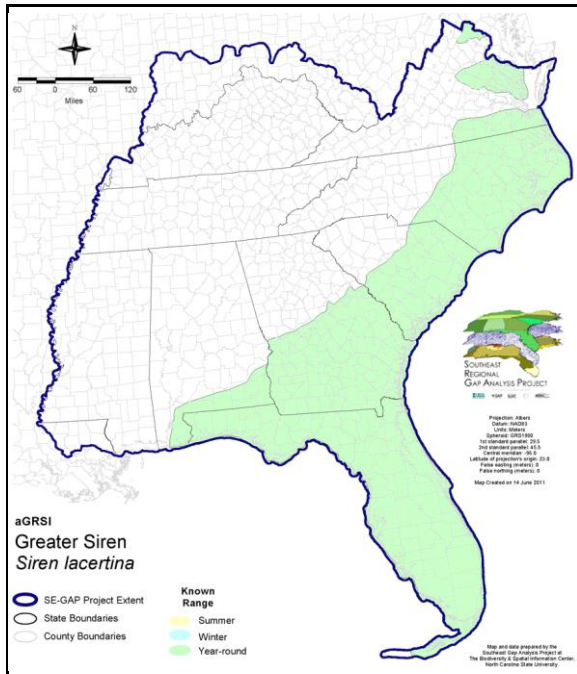
Taxa: Amphibian
 Order: Caudata
 Family: Sirenidae

SE-GAP Spp Code: **aGRSI**

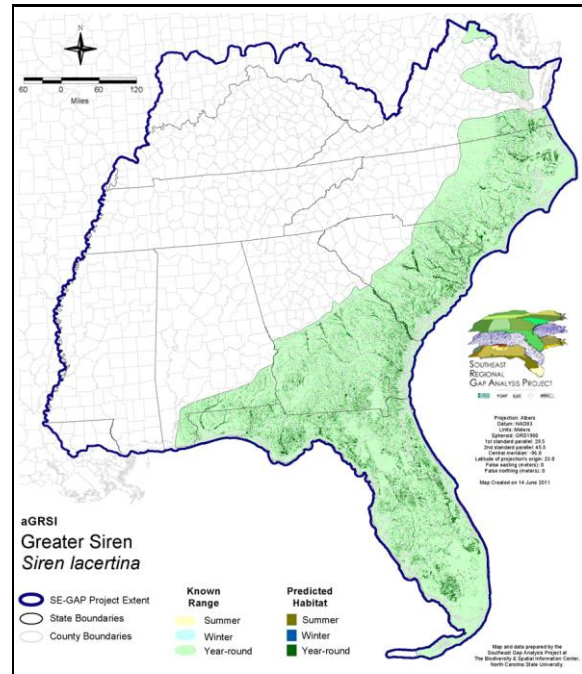
ITIS Species Code: 173735

NatureServe Element Code: AAAAG02020

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_aGRSI.pdf

Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_aGRSI.pdf

GAP Online Tool Link: <http://www.gapservice.ncsu.edu/segap/segap/index2.php?species=aGRSI>

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/aGRSI_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: MS (Non-game species in need of management), NC (W3)

NS Global Rank: G5

NS State Rank: AL (S3), DC (SH), FL (S5), GA (S5), MS (SNA), NC (S3?), SC (SNR), TX (S2?), VA (S3)

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	48,397.0	< 1	4,573.4	< 1	0.0	0	0.0	0
Status 2	57,028.0	< 1	21,429.7	< 1	0.0	0	51.3	< 1
Status 3	304.3	< 1	126,669.6	2	0.0	0	78,290.2	1
Status 4	17.6	< 1	0.0	0	0.0	0	0.9	< 1
Total	105,746.9	2	152,672.8	3	0.0	0	78,342.4	1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	13,240.2	< 1	8.7	< 1	2,855.3	< 1
Status 2	0.0	0	1,671.6	< 1	2,845.9	< 1	4.1	< 1
Status 3	13,765.8	< 1	112,768.8	2	0.0	0	0.4	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	13,765.8	< 1	127,680.6	2	2,854.6	< 1	2,859.8	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	36.5	< 1	0.0	0	0.0	0
Status 2	0.0	0	556.2	< 1	196,079.6	3	0.0	0
Status 3	0.0	0	277,366.7	5	18,137.3	< 1	87,436.4	2
Status 4	0.0	0	< 0.1	< 1	4,072.6	< 1	5.2	< 1
Total	0.0	0	277,959.4	5	218,289.5	4	87,441.6	2
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	285.3	< 1	0.0	0	0.0	0
Status 2	5,572.4	< 1	21,553.2	< 1	0.0	0	858.1	< 1
Status 3	0.0	0	11,110.8	< 1	5,361.8	< 1	44,411.8	< 1
Status 4	0.0	0	0.0	0	729.9	< 1	0.0	0
Total	5,572.4	< 1	32,949.3	< 1	6,091.7	< 1	45,269.8	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	69,396.3 1			
Status 2	0.0	0	0.0	0	307,650.1 5			
Status 3	439.8	< 1	0.0	0	776,063.6 16			
Status 4	4,413,052.0	77	19,971.4	< 1	4,441,904.6 78			
Total	4,413,491.8	77	19,971.4	< 1	5,595,014.6 100			

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: The greater siren is an eel-like salamander that may be found on the coastal plain in a wide variety of aquatic habitats, such as rivers or streams, ponds, lakes, sloughs, borrow pits, cypress swamps, oxbows, ditches, swamps, marshes, rice fields, and other similar sites (Holbrook 1976; Martof 1973; Leviton 1970; Cochran and Goin 1970; Bishop 1947 and 1943; Carr 1940). They are always aquatic although they can withstand temporary drying of their habitat by burrowing and are capable of moving overland to other nearby aquatic sites. They are most frequently encountered in muddy, weed-choked water and require a location with a soft substrate for burrowing. They are partial to water hyacinth (Carr and Goin 1955). The adults are generally found in 2-3 feet of water and the juveniles in 6-12 inches (Duellman and Schwartz 1958). Their habitat is similar to that of the lesser siren, however they may utilize river margins in larger, more open water bodies to a greater extent. They lay a clutch of about 500 eggs in water in small clusters on bottom in February-March. Hatching occurs in April-May. They are paedomorphic. Stacy Smith, 3May05

Hydrography Mask:

Freshwater Only

Slow Current Only

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

Utilizes open water features with buffer of 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
Coastal Dune & Freshwater Wetland	Atlantic and Gulf Coastal Plain Interdunal Wetland
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 Small Blackwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Small Brownwater River Floodplain Forest
Wetlands	Central Florida Herbaceous Pondshore
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 Northern Depression Pondshore
Wetlands	East Gulf Coastal Plain Small Stream and River Floodplain Forest
Wetlands	East Gulf Coastal Plain Southern Depression Pondshore
Wetlands	Floridian Highlands Freshwater Marsh
Wetlands	South Florida Bayhead Swamp
Wetlands	South Florida Cypress Dome
Wetlands	South Florida Freshwater Slough and Gator Hole
Wetlands	South Florida Pond-Apple/Popash Slough
Wetlands	South Florida Willow Head
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Southern Coastal Plain Nonriverine Basin Swamp

Wetlands	Southern Coastal Plain Nonriverine Cypress Dome
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	Unconsolidated Shore (Lake/River/Pond)

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