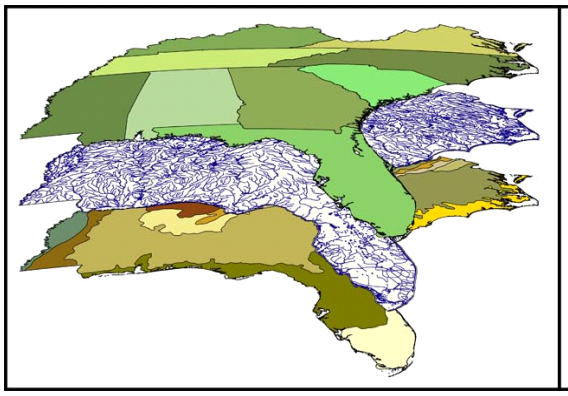


SOUTHEAST GAP ANALYSIS PROJECT

Species Modeling Report

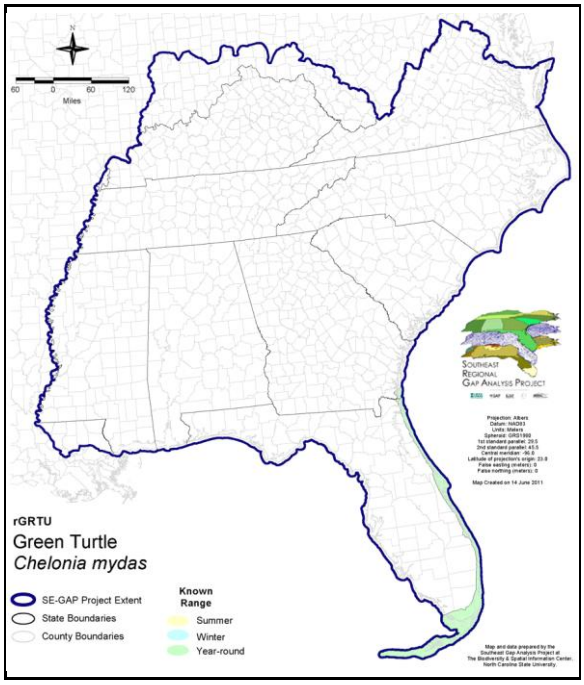
Green Turtle

Chelonia mydas

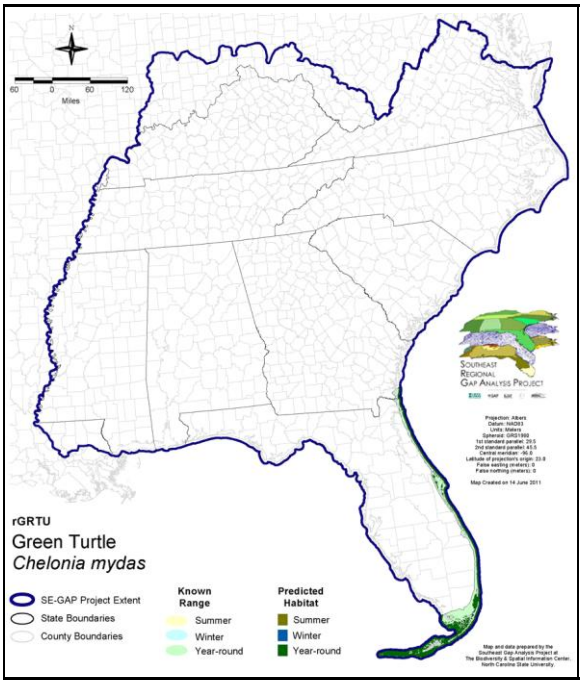
Taxa: Reptilian
Order: Cryptodeira
Family: Cheloniidae

SE-GAP Spp Code: **rGRTU**
ITIS Species Code: 173833
NatureServe Element Code: ARAAA02010

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_rGRTU.pdf
Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_rGRTU.pdf
GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=rGRTU
Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/rGRTU_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: LE, LT

State Status: AL (SP), CA (None), CT (T), DE (E), FL (FE), GA (T), LA (Threatened), MA (T), MD (T), MS (LE), NC (T), NC (T), NJ (T), NY (T), RI (Not Listed), SC (ST-Threatened), TX (T), VA (LT), WA (T)

NS Global Rank: G3

NS State Rank: AK (SNA), AL (S1), CA (S1), CT (SNA), DE (SNA), FL (S2), GA (S1), HI (S3), LA (SNA), MA (S1N), MD (S1N), ME (SNR), MS (SNA), NC (S1B,SUN), NC (S1B,SUN), NH (SNA), NJ (S1), NY (S1N), OR (SNA), RI (SNR), SC (SNR), TX (S1), VA (SNA), WA (SNA), BC (SNA)

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	15.3	< 1	0.0	0	0.0	0	0.0	0
Status 2	0.0	0	0.0	0	0.0	0	0.0	0
Status 3	0.0	0	0.0	0	0.0	0	73.8	1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	15.3	< 1	0.0	0	0.0	0	73.8	1

	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	144.3	2	0.0	0	17.5	< 1
Status 2	0.0	0	1,426.6	23	192.8	3	0.0	0
Status 3	0.0	0	0.0	0	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	1,570.9	25	192.8	3	17.5	< 1

	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	0.0	0	0.0	0
Status 2	0.0	0	0.0	0	40.7	< 1	0.0	0
Status 3	0.0	0	508.0	8	0.0	0	3.7	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	508.0	8	40.7	< 1	3.7	< 1

	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	0.0	0	0.0	0
Status 2	0.0	0	0.0	0	0.0	0	0.0	0
Status 3	0.0	0	0.0	0	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	0.0	0	0.0	0	0.0	0

	Private Land - No Res.		Water			Overall Total	
	ha	%	ha	%		ha	%
Status 1	0.0	0	0.0	0		177.0	3
Status 2	0.0	0	0.0	0		1,660.1	27
Status 3	0.0	0	0.0	0		585.5	9
Status 4	3,739.1	60	81.3	1		3,820.4	61
Total	3,739.1	60	81.3	1		6,242.9	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 green sea turtle ranges south from the coast of New England. They migrate in the open ocean, often near the shore in water less than 50 m deep. The turtles rest in deep water when not feeding. At night they sleep on the bottom or on a ledge above the water level. They forage on submerged vegetation in quiet, shallow water, usually in well-lighted areas that favor the growth of algae and other aquatic plant and animal life. Juveniles also frequent these areas during their development. Coral reefs and rocky outcrops near feeding pastures often are used as resting areas. They are inactive on the bottom in winter in the northern Gulf of California. The green sea turtle nests on beaches, usually on islands, but also nests on mainland. On islands, nests may be placed more frequently on the sound side (Ernst et al. 1994). Sand may be coarse to fine with little organic content. They prefer high energy beaches with deep sand. In some regions, they generally nest at their natal beach (Meylan et al. 1990, Allard et al. 1994). Although individuals sometimes change to different nesting beach within a single nesting season and may switch to a beach up to several hundred kilometers away (see Eckert et al. 1989). Beach development and illumination often makes beaches unsuitable for successful nesting. Mating occurs in shallow water near the nesting beach. Beaches chosen for nesting are generally flat with low wave energy. Nesting for the species is seen only occasionally in North Carolina (Martof et al. 1980). They nest above high water mark, but below vegetation (Ernst & Barbour 1972). They prefer beaches without submerged rocks and artificial lights with an open offshore approach (Mortimer 1981). They lay 1-8 clutches, averaging about 90-140 eggs, at about two-week intervals usually every 2-4 years. They nest in Florida from May to September (Ehrhart and Witherington 1992). Eggs usually hatch in 1.5-3 months. Hatchlings often spend the first year or so of their lives floating with mats of sargassum (Ernst et al. 1994). Stacy Smith, 7June05

Hydrography Mask:

Brackish/Saltwater Only

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

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

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Bare Sand
Beach	Atlantic Coastal Plain Northern Sandy Beach
Beach	Atlantic Coastal Plain Sea Island Beach
Beach	Atlantic Coastal Plain Southern Beach
Beach	South Florida Shell Hash Beach
Beach	Southeast Florida Beach
Beach	Southwest Florida Beach
Beach	Unconsolidated Shore (Beach/Dune)
Water	Open Water (Brackish/Salt)

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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.