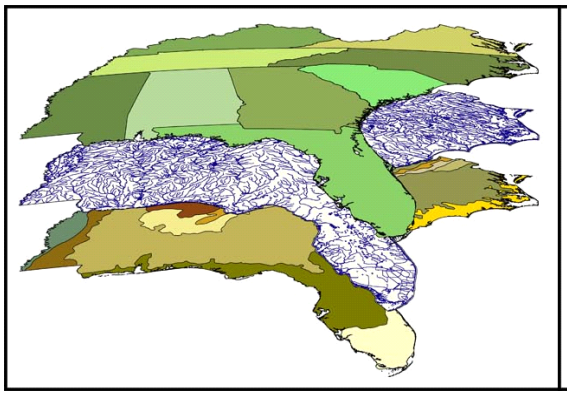


SOUTHEAST GAP ANALYSIS PROJECT

USGS gap BaSIC NARSAL

Species Modeling Report

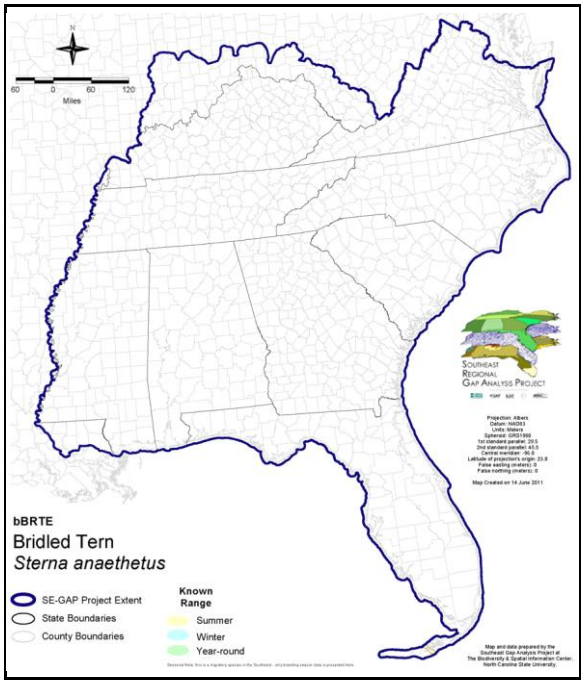
Bridled Tern

Sterna anaethetus

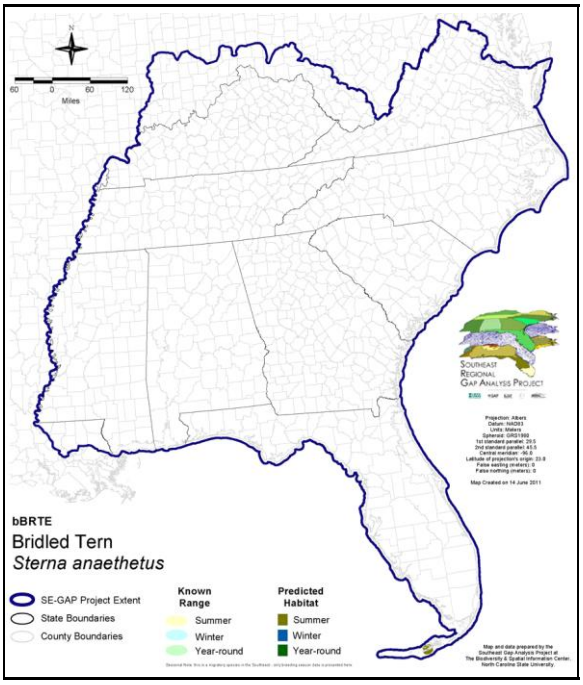
Taxa: Avian
Order: Charadriiformes
Family: Laridae

SE-GAP Spp Code: **bBRTE**
ITIS Species Code: 176897
NatureServe Element Code: ABNNM08140

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_bBRTE.pdf
Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_bBRTE.pdf
GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=bBRTE
Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/bBRTE_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: NY (PB)

NS Global Rank: G5

NS State Rank: AL (SNR), AR (SNA), DE (SNA), FL (SNRN), GA (SNRN), LA (SNA), MD (SNA), MS (SNA), NC (S3N), NY (SNA), TX (SNA), VA (SNA), NF (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	84.5	4	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	898.2	46
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	84.5	4	0.0	0	0.0	0	898.2	46

	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	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

	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	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

	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		84.5	4
Status 2	0.0	0	0.0	0		0.0	0
Status 3	0.0	0	0.0	0		898.2	46
Status 4	815.2	42	158.3	8		973.5	50
Total	815.2	42	158.3	8		1,956.2	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):

Summer Model:

Habitat Description: Single breeding location in U.S. is Pelican Shoals off Boca Chica Key FL. Nests on vegetated coral cays and exposed reefs, islands plateaus of limestone, rocky granitic islands, and volcanic stacks (Haney et al. 1999). Highly pelagic species, feeds offshore among Sargassum "grass". Forages 8-10 km offshore but sometime 2-3 km from nesting areas (Kishimoto and Kohno 1989, Hulsman and Langham 1985) M. Rubino, 31dec04.

Customized Model: There are no map units that represent exposed reef, so South Florida Shell Hash Beach is the only appropriate map unit for this species. In order to include the other keys that may be suitable, essentially, this species can be modeled by selecting all the islands off Boca Chica Key. Since it is pelagic, it could be viewed as a non-terrestrial species.

Since this species is known to nest only on Boca Chica but forages pelagically up to 10 km from breeding islands, I decided to model the predicted distribution as only Boca Chica Key and 10 km of open ocean (excluding land) from that island. MJR 11 March 2008.

Selected Map Units:

Functional Group	Map Unit Name
Beach	South Florida Shell Hash Beach

CITATIONS:

American Ornithologists' Union (AOU), Committee on Classification and Nomenclature. 1983. Check-list of North American Birds. Sixth Edition. American Ornithologists' Union, Allen Press, Inc., Lawrence, Kansas.

de Korte, J. 1984. Status and conservation of seabird colonies in Indonesia. Pages 527-545 in Croxall et al., eds. Status and conservation of the world's seabirds. ICBP Tech. Pub. No. 2.

Feare, C. J. 1984. Seabird status and conservation in the tropical Indian Ocean. Pages 457-471 in Croxall et al., eds. Status and conservation of the world's seabirds. ICBP Tech. Pub. No. 2.

Garnett, M. C. 1984. Conservation of seabirds in the South Pacific region:a review. Pages 547-558 in Croxall et al., eds. Status and conservation of the world's seabirds. ICBP Tech. Pub. No. 2.

Haney, J. C., D. S. Lee, and R. D. Morris. 1999. Bridled Tern (Sterna anaethetus). In The Birds of North America, No. 468 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.

Hasegawa, H. 1984. Status and conservation of seabirds in Japan, with special attention to the short-tailed albatross. Pages 487-500 in Croxall et al., eds. Status and conservation of the world's seabirds. ICBP Tech. Pub. No. 2.

Hilty, S.L., and W.L. Brown. 1986. A guide to the birds of Colombia. Princeton University Press, Princeton, New Jersey. 836 pp.

Hulsman, K. and N. P. E. Langham. 1985. Breeding biology of the Bridled Tern Sterna anaethetus . Emu 85: 240–249.

Kepler, C. B. 1978. The breeding ecology of sea birds on Monito Island, Puerto Rico. Condor 80:72-87.

Kishimoto, H. and H. Kohno. 1989. The prey of seabirds breeding on Nakanokami-Shimi, South Ryukyu, Japan. Bull. Inst. Oceanic Res. Develop. Tokai Univ. 10: 43–64.

Melville, D. S. 1984. Seabirds of China and the surrounding seas. Pages 501-511 in Croxall et al., eds. Status and conservation of the world's seabirds. ICBP Tech. Pub. No. 2.

Raffaele, H.A. 1983. A guide to the birds of Puerto Rico and the Virgin Islands. Fondo Educativo Interamericano, San Juan, Puerto Rico. 255 pp.

Sprunt, A., IV. 1984. The status and conservation of seabirds of the Bahama Islands. Pages 157-168 in Croxall et al., eds. Status and conservation of the world's seabirds. ICBP Tech. Pub. No. 2.

Stiles, F.G., and A.F. Skutch. 1989. A guide to the birds of Costa Rica. Comstock Publ. Associates, Cornell University Press, Ithaca, New York. 511 pp.

Terres, J.K. 1980. The Audubon Society encyclopedia of North American birds. Alfred A. Knopf, New York.

van Halewyn, R., and R. L. Norton. 1984. The status and conservation of seabirds in the Caribbean. Pages 169-222 in Croxall et al., eds. Status and conservation of the world's seabirds. ICBP Tech. Pub. No. 2.

van Tets, G. F., and P. J. Fullagar. 1984. Status of seabirds breeding in Australia. Pages 559-571 in Croxall et al., eds. Status and conservation of the world's seabirds. ICBP Tech. Pub. No. 2.

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.