



# SOUTHEAST GAP ANALYSIS PROJECT



## Species Modeling Report

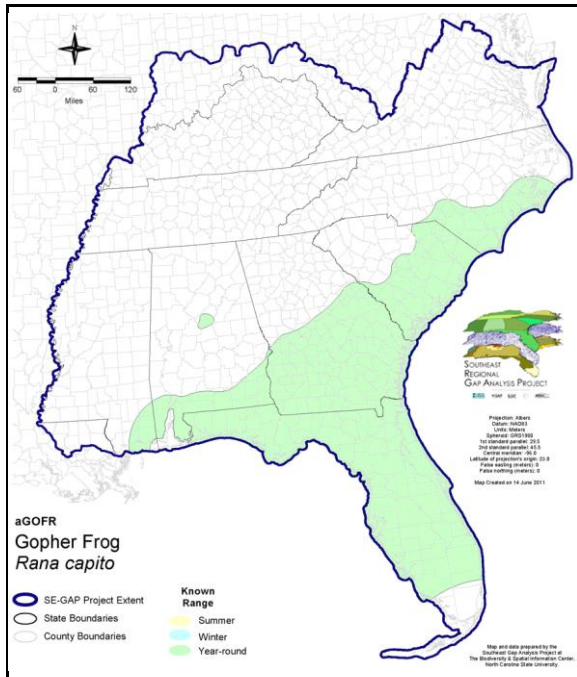
### Gopher Frog

*Rana capito*

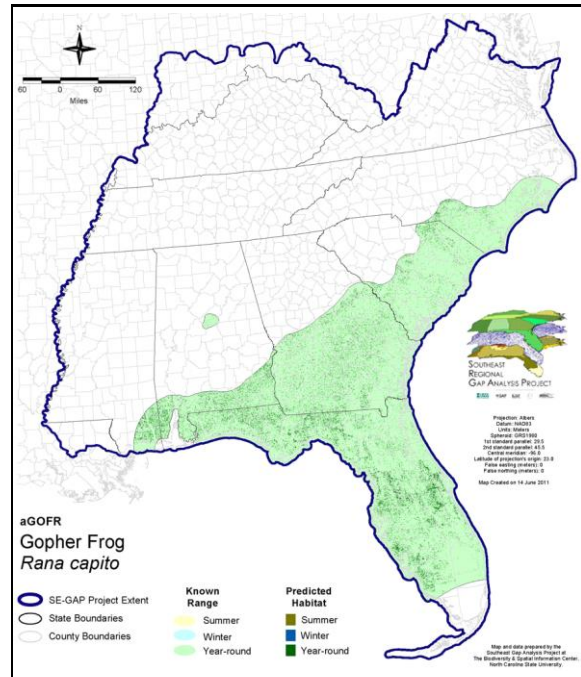
Taxa: Amphibian  
 Order: Anura  
 Family: Ranidae

SE-GAP Spp Code: **aGOFR**  
 ITIS Species Code: 207016  
 NatureServe Element Code: AAABH01270

#### KNOWN RANGE:



#### PREDICTED HABITAT:



Range Map Link: [http://www.basic.ncsu.edu/segap/datazip/maps/SE\\_Range\\_aGOFR.pdf](http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_aGOFR.pdf)

Predicted Habitat Map Link: [http://www.basic.ncsu.edu/segap/datazip/maps/SE\\_Dist\\_aGOFR.pdf](http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_aGOFR.pdf)

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

Data Download: [http://www.basic.ncsu.edu/segap/datazip/region/vert/aGOFR\\_se00.zip](http://www.basic.ncsu.edu/segap/datazip/region/vert/aGOFR_se00.zip)

#### PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: FL (SSC), GA (R), NC (T), SC (SE-Endangered)

NS Global Rank: G3

NS State Rank: AL (S2), FL (S3), GA (S3), NC (S2), SC (S1), TN (S1)

**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	4,203.2	< 1	26.6	< 1	0.0	0	0.0	0
Status 2	7,034.4	< 1	5,783.1	< 1	0.0	0	0.0	0
Status 3	1.6	< 1	61,174.2	2	0.0	0	40,343.2	2
Status 4	1.0	< 1	0.0	0	0.0	0	0.0	0
Total	11,240.2	< 1	66,983.9	3	0.0	0	40,343.2	2
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	5.9	< 1	0.0	0	345.7	< 1
Status 2	0.0	0	595.6	< 1	123.6	< 1	0.0	0
Status 3	4,505.9	< 1	5,179.4	< 1	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	4,505.9	< 1	5,781.0	< 1	123.6	< 1	345.7	< 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	36.6	< 1	45,583.1	2	0.0	0
Status 3	5.8	< 1	84,552.7	3	4,897.3	< 1	48,218.0	2
Status 4	0.0	0	< 0.1	< 1	1,695.9	< 1	6.2	< 1
Total	5.8	< 1	84,589.4	3	52,176.2	2	48,224.3	2
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	181.8	< 1	0.0	0	0.0	0
Status 2	35.6	< 1	1,672.7	< 1	0.0	0	455.5	< 1
Status 3	0.0	0	4,454.4	< 1	2,098.2	< 1	19,043.6	< 1
Status 4	0.0	0	0.0	0	139.6	< 1	0.0	0
Total	35.6	< 1	6,308.9	< 1	2,237.8	< 1	19,499.0	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	4,763.2 < 1			
Status 2	0.0	0	0.0	0	61,320.3 2			
Status 3	52.7	< 1	0.9	< 1	274,527.7 13			
Status 4	2,239,619.9	85	2,019.1	< 1	2,245,176.6 85			
Total	2,239,672.6	85	2,020.0	< 1	2,585,787.8 100			

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: *Rana capito* inhabits xeric upland pine communities of the southeastern coastal plain (Palis & Fisher 1997). This frog is highly terrestrial and commonly associated with sandy pine flatwoods and turkey oak-pine (longleaf) sandhills, usually in the vicinity of gum or cypress ponds (Wilson 1995). This species is also known to occur in mesic longleaf pine flatwoods, sand pine scrub, xeric oak hammocks, and rudereal successional stages of these habitats (NatureServe2005). In general gopher frogs are very secretive in nature, taking cover by day in the burrows of gopher tortoises, crayfish, or small mammals, under logs, and in other hidden places that provide shelter (GA-GAP 2003). Breeding occurs in ephemeral to semi-permanent graminoid-dominated wetlands that lack large predatory fish (Palis & Fisher 1997). Egg masses are laid in water, typically attached to vertical stems of emergent herbaceous, reedy or woody vegetation and can contain up to 6000 eggs but on average masses probably contain approximately 1200-2500 eggs (NatureServe 2005). Amy Silvano 12apr05

Ecosystem Classifiers: Evergreen & Mixed Forests, Flatwoods, Domes/Hammock, Lakes/River/Pondshore.  
Amy Silvano 21apr05

### Hydrography Mask:

Freshwater Only

Utilizes open water features with buffer of 500m from selected water features.

### Selected Map Units:

Functional Group	Map Unit Name
Forest/Woodland	Atlantic Coastal Plain Fall-Line Sandhills Longleaf Pine Woodland - Loblolly Modifier
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Open Understory Modifier
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Scrub/Shrub Understory Modifier
Forest/Woodland	Atlantic Coastal Plain Upland Longleaf Pine Woodland
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 - Open Understory Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Scrub/Shrub Modifier
Forest/Woodland	Florida Longleaf Pine Sandhill - Open Understory Modifier
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Pine Modifier
Wetlands	Atlantic Coastal Plain Depression Pondshore
Wetlands	Atlantic Coastal Plain Large Natural Lakeshore
Wetlands	Atlantic Coastal Plain Northern Pondshore
Wetlands	Atlantic Coastal Plain Northern Wet Longleaf Pine Savanna and Flatwoods
Wetlands	Atlantic Coastal Plain Southern Wet Pine Savanna and Flatwoods
Wetlands	Atlantic Coastal Plain Xeric River Dune
Wetlands	Central Florida Herbaceous Pondshore
Wetlands	Central Florida Pine Flatwoods
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 Southern Depression Pondshore
Wetlands	East Gulf Coastal Plain Southern Loblolly-Hardwood Flatwoods
Wetlands	East Gulf Coastal Plain Treeless Savanna and Wet Prairie
Wetlands	South Florida Cypress Dome
Wetlands	South Florida Pine Flatwoods
Wetlands	South Florida Pond-Apple/Popash Slough
Wetlands	Southern Coastal Plain Hydric Hammock
Wetlands	Southern Coastal Plain Nonriverine Cypress Dome

**CITATIONS:** Altig, R. and R. Lohofener. 1983. RANA AREOLATA. Cat. Am. Amph. Rep. 324.1-324.4.

- Bailey, M. A. 1991. The dusky gopher frog in Alabama. *J. Alabama Acad. Sci.* 62(1):28-34.
- 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.
- Conant, R. and J. T. Collins. 1991. *A field guide to reptiles and amphibians: eastern and central North America*. Third edition. Houghton Mifflin Co., Boston, Massachusetts. 450 pp.
- Dundee, H. A., and D. A. Rossman. 1989. *The amphibians and reptiles of Louisiana*. Louisiana State Univ. Press, Baton Rouge.
- Franz, R. 1991. Remember the drought? *Florida Wildl.* 45:10-2.
- Franz, R., C. K. Dodd, Jr., and C. Jones. 1988. Life history notes: *RANA AREOLATA AESOPUS* (Florida gopher frog). *SSAR Herpetol. Rev.* 19:33.
- Gentry, J. B. and M. H. Smith. 1968. Food habits and burrow associates of *PEROMYSCUS POLIONOTUS*. *J. Mammalogy.* 49:562-5.
- Godley, J. S. 1992. Gopher frog *RANA CAPITO* Le Conte. Pages 15-19 in P. E. Moler, editor. *Rare and endangered biota of Florida*. Vol. III. *Amphibians and reptiles*. Univ. Press of Florida.
- Lee, D. S. 1968. Herpetofauna associated with central Florida mammals. *Herpetologica.* 24:83-4.
- Means, D. B. 1986. Threatened: dusky gopher frog. Pp. 30-1 in R. H. Mount (ed.). *Vertebrate Animals of Alabama in Need of Special Attention*. Alabama Agricul. Exp. Sta. Auburn University, Auburn, AL.
- Moler, P. E. and R. Franz. 1987. Wildlife Values of Small, Isolated Wetlands in the Southeastern Coastal Plain. Pp. 234-41 in R. R. Odum, K. A. Riddleberger, and J. C. Ozier (eds.). *Proceedings of the Third Annual Nongame and Endangered Wildlife Symposium*
- Mount, R. H. 1975. *The Reptiles and Amphibians of Alabama*. Auburn University Agricultural Experiment Station, Auburn, Alabama. vii + 347 pp.
- Palis, J. G., and J. B. Jensen. 1995. Distribution and breeding biology of the flatwoods salamander (*Ambystoma cingulatum*) and gopher frog (*Rana capito*) on Eglin Air Force Base, Florida. Final Report. Florida Natural Areas Inventory, Tallahassee, Florida.
- Palis, J.G. and R.A. Fischer. 1997. Species profile: gopher frog (*Rana capito* spp.) on military installations in the southeastern United States. Technical Report SERDP-97-5, U.S. Army Corps of Engineers, Vicksburg, MS.
- Reay, K. K., and J.C. Mitchell. 1999. *Atlas of amphibians and reptiles in Virginia (1)*. Richmond, VA: Virginia Dept. Game and Inl. Fisheries.
- Semlitsch, R. D., J. W. Gibbons, and T. D. Tuberville. 1995. Timing of reproduction and metamorphosis in the Carolina gopher frog (*RANA CAPITO CAPITO*) in South Carolina. *Journal of Herpetology* 29:612-614.
- Wilson, L. A. 1995. *The Land Manager's Guide to the amphibians and reptiles of the South*. Chapel Hill, NC: The Nature Conservancy.
- Wright, A. H. and A. A. Wright. 1949. *Handbook of frogs and toads of the United States and Canada*. Comstock Publishing Company, Ithica, NY. 640 pp.

---

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](http://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.