



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

Barking Treefrog

Hyla gratiosa

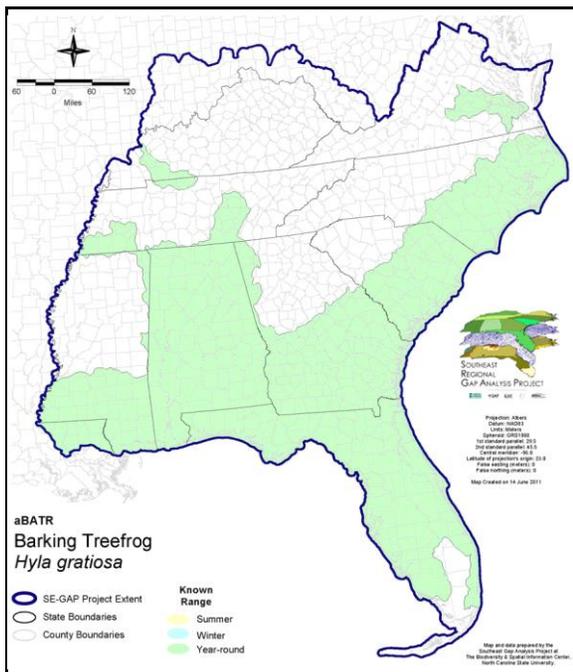
Taxa: Amphibian
 Order: Anura
 Family: Hylidae

SE-GAP Spp Code: **aBATR**

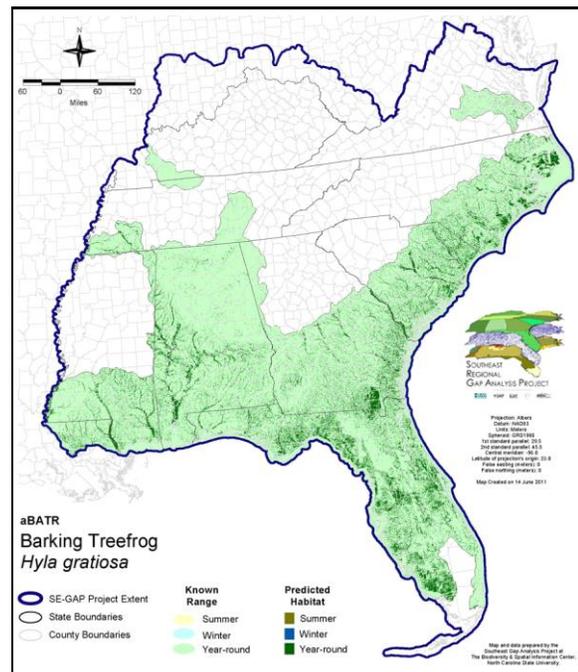
ITIS Species Code: 173508

NatureServe Element Code: AAABC02100

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/aBATR_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: DE (E), KY (S), MD (E), MS (Non-game species in need of management), NJ (U), TN (D), VA (LT)

NS Global Rank: G5

NS State Rank: AL (S5), DE (S1), FL (SNR), GA (S5), KY (S3), LA (S3S4), MD (S1), MS (S4S5), NC (S3S4), NJ (SNA), SC (SNR), TN (S3), VA (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	163,402.7	2	5,377.0	< 1	0.0	0	0.0	0
Status 2	119,225.2	1	35,918.7	< 1	0.0	0	0.0	0
Status 3	681.8	< 1	241,606.6	3	3,048.6	< 1	102,064.3	1
Status 4	1,284.3	< 1	0.0	0	0.0	0	0.0	0
Total	284,594.0	3	282,902.3	3	3,048.6	< 1	102,064.3	1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	9,045.6	< 1	10.4	< 1	5,517.5	< 1
Status 2	0.0	0	2,321.6	< 1	1,859.9	< 1	4.1	< 1
Status 3	14,319.9	< 1	136,969.9	2	0.0	0	1,144.9	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	14,319.9	< 1	148,337.1	2	1,870.4	< 1	6,666.5	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	121.2	< 1	0.3	< 1	0.0	0
Status 2	0.0	0	626.0	< 1	266,710.9	3	10.9	< 1
Status 3	33.8	< 1	324,608.7	4	62,942.9	< 1	142,334.1	2
Status 4	0.0	0	< 0.1	< 1	5,165.7	< 1	4.3	< 1
Total	33.8	< 1	325,356.0	4	334,819.7	4	142,349.3	2
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1,708.1	< 1	0.0	0	0.0	0
Status 2	10,792.9	< 1	23,309.1	< 1	0.0	0	1,373.2	< 1
Status 3	0.0	0	14,562.9	< 1	5,594.4	< 1	61,246.8	< 1
Status 4	0.0	0	0.0	0	695.4	< 1	0.0	0
Total	10,792.9	< 1	39,580.1	< 1	6,289.8	< 1	62,620.0	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	185,182.8 2			
Status 2	376.5	< 1	0.0	0	462,528.9 5			
Status 3	1,386.3	< 1	0.0	0	1,112,545.9 15			
Status 4	6,750,390.8	77	9,194.2	< 1	6,770,616.3 77			
Total	6,752,153.5	77	9,194.2	< 1	8,530,873.9 100			

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: *Hyla gratiosa* are chiefly associated with pine savannahs, high pines, flatwoods, swamps, and other low wet forested environments such as willow oak - blackgum, live oak, and cypress forests. They typically require sandy soils for burrowing, and are often found at the base of wire grass clusters in dwarf cypress or turkey oak woods (Neill 1952). Barking treefrogs require breeding sites of semi-permanent ponds or others sources of open water, but may also breed in lakes, Carolina bays, and permanent ponds that are free of fish. ALS Jan 05.

Ecosystem Classifiers: Evergreen (Longleaf Woodlands and scrub/shrub modifiers), Maritime Forest, Feshwater wetland, Wetlands (Flatwoods, Swamps, Somes/Hammocks, forested depressional, floodplain/riparian). Included systems in all ecoregions (except Central Appalachians) since species range was independent of ecosystems. AIS Jan 04.

Hydrography Mask:

Freshwater Only

Utilizes open water features with buffers of 120m from and 60m 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
Forest/Woodland	Atlantic Coastal Plain Central Maritime Forest
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 Northern Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Southern Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Upland Longleaf Pine Woodland
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	East Gulf Coastal Plain Maritime Forest
Forest/Woodland	Florida Longleaf Pine Sandhill - Open Understory Modifier
Forest/Woodland	Florida Longleaf Pine Sandhill - Scrub/Shrub Understory Modifier
Forest/Woodland	Southeast Florida Coastal Strand and Maritime Hammock
Forest/Woodland	Southeastern Interior Longleaf Pine Woodland
Forest/Woodland	Southwest Florida Coastal Strand and Maritime Hammock
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 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 Wet Longleaf Pine Savanna and Flatwoods
Wetlands	Atlantic Coastal Plain Peatland Pocosin
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 Pine Flatwoods
Wetlands	Central Interior Highlands and Appalachian Sinkhole and Depression Pond
Wetlands	East Gulf Coastal Plain Jackson Plain Dry Flatwoods - Open Understory Modifier

Wetlands	East Gulf Coastal Plain Jackson Plain Dry Flatwoods - Scrub/Shrub Understory Modifier
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 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 Seepage Swamp
Wetlands	East Gulf Coastal Plain Small Stream and River Floodplain Forest
Wetlands	East Gulf Coastal Plain Southern Loblolly-Hardwood Flatwoods
Wetlands	East Gulf Coastal Plain Treeless Savanna and Wet Prairie
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 Hardwood Hammock
Wetlands	South Florida Pine Flatwoods
Wetlands	South Florida Wet Marl Prairie
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 Coastal Plain Blackwater River Floodplain Forest
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 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: 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.

Caldwell, J. P. 1982. *Hyla gratiosa*. Cat. Am. Amph. Rep. 298.1-298.2.

Conant, R. 1975. A Field Guide to Reptiles and Amphibians of Eastern and Central North America. Second Edition. Houghton Mifflin Company, Boston, Massachusetts. xvii + 429 pp.

Jarrett R. Johnson, Raymond D. Semlitsch . Defining core habitat of local populations of the gray treefrog (*Hyla versicolor*) based on choice of oviposition site. *Oecologia*, Volume 137, Number 2 (October 2003), pp. 205-210, <<http://ejournals.ebsco.com/dir>

Johnson, J. R., and R. D. Semlitsch. 2003. Defining core habitat of local populations of the gray treefrog (*Hyla versicolor*) based on choice of oviposition site. *Oecologia* 137:205-210.

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.

Mitchell, J. C. 1991. Amphibians and reptiles. Pages 411-76 in K. Terwilliger (coordinator). Virginia's Endangered Species: Proceedings of a Symposium. McDonald and Woodward Publishing Company, Blacksburg, Virginia.

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

Neill, W.T., 1952. Burrowing Habits of *Hyla-Gratiosa*. *Copeia* (3) 1952

Perrill, S. A., and R. E. Daniel. 1983. Multiple egg clutches in *HYLA REGILLA*, *H. CINEREA*, and *H. GRATIOSA*. *Copeia* 1983:513-516.

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.