



Species Modeling Report

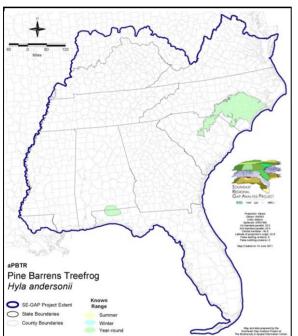
Pine Barrens Treefrog

Hyla andersonii

Taxa: Amphibian

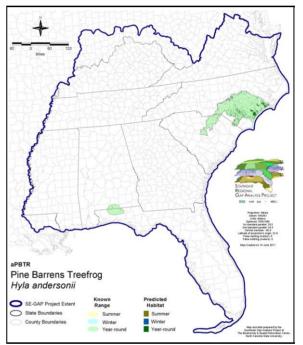
- Order: Anura
- Family: Hylidae

KNOWN RANGE:



SE-GAP Spp Code: **aPBTR** ITIS Species Code: 173509 NatureServe Element Code: AAABC02010

PREDICTED HABITAT:



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

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

 GAP Online Tool Link:
 http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=aPBTR

 Data Download:
 http://www.basic.ncsu.edu/segap/datazip/region/vert/aPBTR_se00.zip

PROTECTION STATUS:

Federal Status: ---State Status: AL (SP), FL (SSC), NC (SR), NJ (T), SC (ST-Threatened) NS Global Rank: G4 NS State Rank: AL (S2), FL (S3), GA (SNA), NC (S3), NJ (S2), SC (S2S3) Reported on March 14, 2011

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	0.0	0	0.0	0	0.0	0	0.0	0
Status 2	985.7	< 1	384.8	< 1	0.0	0	0.0	0
Status 3	0.0	0	38,841.6	9	0.0	0	16,592.6	4
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	985.7	< 1	39,226.4	9	0.0	0	16,592.6	4
	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	2.6	< 1	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	2.6	< 1	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	32,436.8	7	0.0	0
Status 3	0.0	0	1,148.8	< 1	2,022.9	< 1	8,186.6	2
Status 4	0.0	0	0.0	0	151.8	< 1	0.0	0
Total	0.0	0	1,148.8	< 1	34,611.6	8	8,186.6	2
	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	1,670.3	< 1	0.0	0	0.0	0
Status 3	0.0	0	0.0	0	62.1	< 1	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	1,670.3	< 1	62.1	< 1	0.0	0
	Private Land - I	No Res.		Water			Overa	all Total
	ha	%	ha	%			ha	%
Status 1	0.0	0	0.0	0			0.0	0
Status 2	0.0	0	0.0	0			35,477.6	8
Status 3	0.0	0	0.0	0			66,857.1	23
Status 4	311,639.0	69	5.4	< 1			311,948.0	69
Total	311,639.0	69	5.4	< 1			414,282.8	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: In the Southeast, typical habitat is characterized by the topography, soils, and vegetation of the Carolina Sandhills, with pocosin or evergreen shrub swamps established along seeps and small streams within the surrounding longleaf pine-oak forest (Noble and Noble 1923, Wright and Wright 1949, Gosner and Black 1957, Bullard 1965, Means and Moler 1978, Tardell et al. 1981). The pine barrens treefrog can be found in mesic seepage areas with open canopy and dense shrub thickets, poorly drained sandy soils, Uplands dominated by pine scrub oak forests. Shrub thickets are wet pocosins with herbaceous zones of sphagnum (Wilson 1995). HYLA ANDERSONII is often encountered in disturbed sites associated with utility rights-ofway and recent clearcuts (NatureServe 2004). AlS Jan 05

> Ecosystem Classifiers: Xeric Evergreen (Longleaf); Wetlands: Flatwoods (Mesic Longleaf); Peat Swamps; Depressional Seepage swamps, wetlands, and bogs; Floodplain (Acidic/blackwater bottomlands), Anthropogenic (utility swaths and clear-cuts). ALS Jan 05

Hydrography Mask:

Freshwater Only

Slow Current Only

Utilizes flowing water features with buffer of 60m from selected water features.

Utilizes open water features with buffer of 60m from selected water features.

Utilizes wet vegetation features with buffers of 60m from and unlimited into selected vegetation features.

Selected Map Units:

Functional Group	Map Unit Name				
Anthropogenic	Successional Shrub/Scrub (Clear Cut)				
Anthropogenic	Successional Shrub/Scrub (Other)				
Anthropogenic	Successional Shrub/Scrub (Utility Swath)				
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 Upland Longleaf Pine Woodland - Open Understory Modifier				
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Scrub/Shrub 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 Sandhill Seep				
Wetlands	nds Atlantic Coastal Plain Streamhead Seepage Swamp, Pocosin, and Baygall				
Wetlands	East Gulf Coastal Plain Interior Shrub Bog				
Wetlands	East Gulf Coastal Plain Northern Seepage Swamp				
Wetlands	Southern Coastal Plain Nonriverine Basin Swamp				
Wetlands	Southern Coastal Plain Seepage Swamp and Baygall				
Wetlands	Southern Piedmont Seepage Wetland				

CITATIONS:

Bullard, A. J. 1965. Additional records of the treefrog HYLA ANDERSONII from the Coastal Plain of North Carolina. Herpetologica. 21:154-5.

Cely, J. E., and J. A. Sorrow, Jr. 1986. Distribution and habitat of HYLA ANDERSONII in South Carolina. J. Herpetol. 20:102-104

Freda J., and P. J. Morin. 1984. Adult home range of the pine barrens treefrog (HYLA ANDERSONII) and the physical, chemical, and ecological characteristics of its preferred breeding ponds. Final Report to New Jersey Department of Environmental Protection.

Freda, J., and R. J. Gonzalez. 1986. Daily movements of the treefrog, HYLA ANDERSONI. J. Herpetol. 20:469-471

Garton, J. S. and B. L. Sill. 1979. The status of the pine barrens treefrog, HYLA ANDERSONII Baird, in South Carolina. Pp. 131-2 in D. M. Forsythe and W. B. Ezell Jr. (eds.). Proceedings of the First South Carolina Endangered Species Symposium, South Caro

Gerhardt, H. C. 1974. Behavioral isolation of the treefrogs HYLA CINEREA and HYLA ANDERSONII. Amer. Midl. Nat. 91:424-33

Gosner, K. L. and I. H. Black. 1957. Larval development in New Jersey Hylidae. Copeia. 1:31-6.

Gosner, K. L., and I. H. Black. 1967. Hyla andersonii. Cat. Am. Amph. Rep. 54.1-54.2.

Hulmes, D., P. Hulmes, and R. Zappalorti. 1981. Notes on the ecology and distribution of the pine barrens treefrog, Hyla andersonii, in New Jersey. Bull. New York Herpetol. Soc. 17(1):2-19.

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.

Means, D. B. 1983. The enigmatic pine barrens treefrog. Florida Wildlife 37:16-19.

Means, D. B. and C. J. Longden. 1976. Aspects of the biology and zoogeography of the pine barrens treefrog (HYLA ANDERSONII) in northern Florida. Herpetologica. 32:117-30.

Means, D. B., and P. E. Moler. 1979. The pine barrens treefrog:fire, seepage bogs, and management implications. Pages 77-83 in R. R. Odum and L. Landers, eds. Proceedings.. Georgia Game & Fish Div. Tech. Bull. WL4, Atlanta.

Morin, P. J., et al. 1990. Ecology and breeding phenology of larval HYLA ANDERSONII: the disadvantages of breeding late. Ecology 71:1590-1598.

Noble, G. K. and R. C. Noble. 1923. The Anderson treefrog (HYLA ANDERSONII Baird): observations on its habits and life history. Zoologica 11:416-55.

Tardell, J. H., R. C. Yates and D. H. Schiller. 1981. New records and habitat observations of HYLA ANDERSONII Baird (Anura:Hylidae) in Chesterfield and Marlboro Counties, South Carolina. Brimleyana 6:153-8.

U.S. Fish & Wildlife Service. 1980. Selected vertebrate endangered species of the seacoast of the United States--the pine barrens treefrog. FWS/OBS-80/01.6.

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 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.