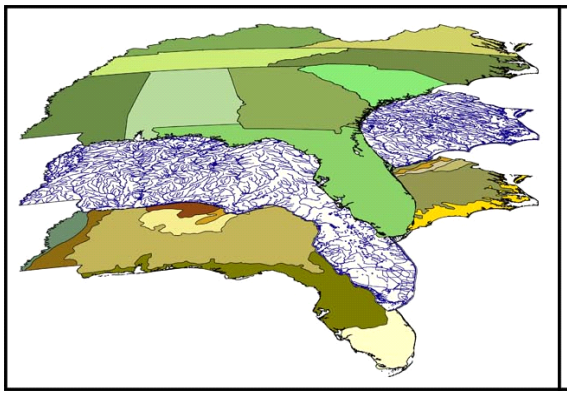


SOUTHEAST GAP ANALYSIS PROJECT

Species Modeling Report

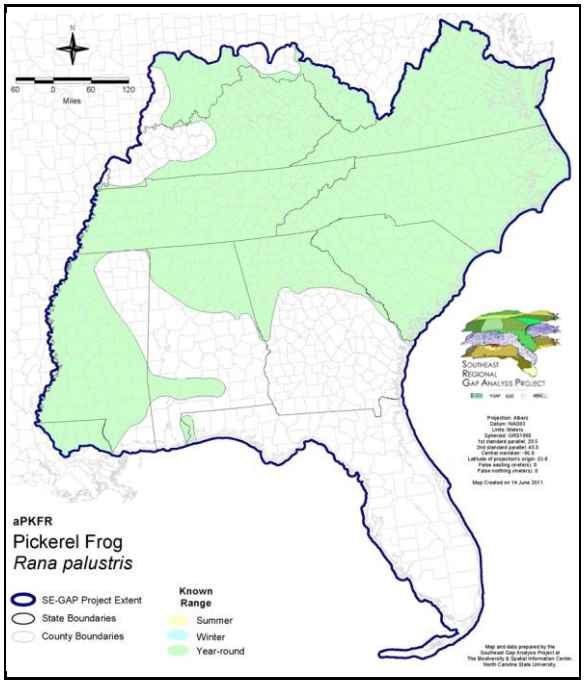
Pickerel Frog

Rana palustris

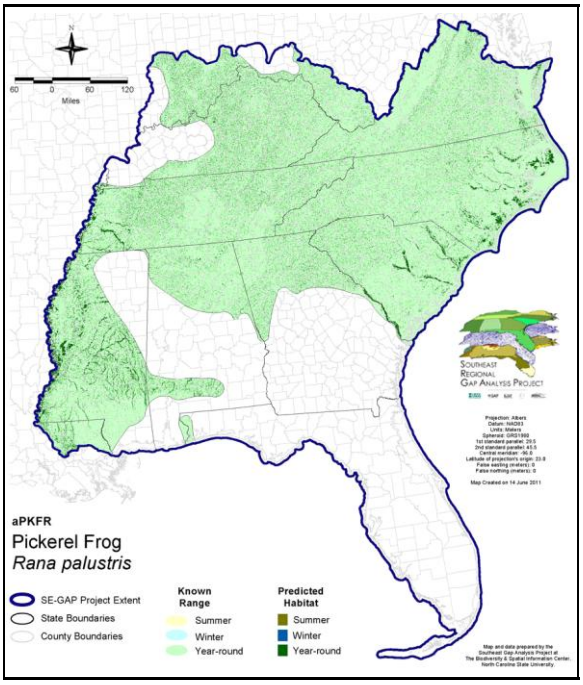
Taxa: Amphibian
Order: Anura
Family: Ranidae

SE-GAP Spp Code: **aPKFR**
ITIS Species Code: 173435
NatureServe Element Code: AAABH01160

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_aPKFR.pdf
Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_aPKFR.pdf
GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=aPKFR
Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/aPKFR_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: KY (N), MN (NON), MS (Non-game species in need of management), NJ (S), NY (GS), RI (Not Listed), WI (SC/H), ON (NAR), QC (Susceptible)

NS Global Rank: G5

NS State Rank: AL (S5), AR (S4), CT (S5), DC (S5), DE (S5), GA (S4), IA (S4), IL (S3S4), IN (S4), KS (SH), KY (S5), LA (S4), MA (S5), MD (S5), ME (S5), MI (S5), MN (S4), MO (S5), MS (S4S5), NC (S5), NH (S5), NJ (S5), NY (S5), OH (SNR), OK (S2S3), PA (S5), RI (S5), SC (SNR), TN (S5), TX (S5), VA (S5), VT (S5), WI (S3S4), WV (S5), NB (S5), NS (S5), ON (S4), PE (S1), QC (S3S4)

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	27,691.2	< 1	3,202.9	< 1	0.0	0	0.0	0
Status 2	105,618.2	2	25,841.2	< 1	0.0	0	527.6	< 1
Status 3	742.7	< 1	245,938.3	4	13,857.9	< 1	43,715.2	< 1
Status 4	4.7	< 1	0.0	0	0.0	0	5.1	< 1
Total	134,056.7	2	274,982.4	4	13,857.9	< 1	44,247.9	< 1

	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	37,829.2	< 1	0.0	0	0.0	0
Status 2	0.0	0	1,172.4	< 1	9.0	< 1	0.0	0
Status 3	11,277.0	< 1	15,673.7	< 1	0.0	0	116.7	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	11,277.0	< 1	54,675.3	< 1	9.0	< 1	116.7	< 1

	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	97.9	< 1	11.9	< 1	0.0	0
Status 2	0.0	0	1,580.3	< 1	98,962.4	1	104.9	< 1
Status 3	3,440.8	< 1	15,383.3	< 1	62,144.3	< 1	11,302.7	< 1
Status 4	0.0	0	0.0	0	5,610.2	< 1	0.0	0
Total	3,440.8	< 1	17,061.6	< 1	166,728.7	2	11,407.7	< 1

	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1,123.7	< 1	0.0	0	0.0	0
Status 2	4,510.6	< 1	25,538.2	< 1	4.6	< 1	179.4	< 1
Status 3	0.0	0	196.0	< 1	990.8	< 1	13,690.1	< 1
Status 4	0.0	0	0.0	0	604.4	< 1	0.0	0
Total	4,510.6	< 1	26,858.0	< 1	1,599.8	< 1	13,869.5	< 1

	Private Land - No Res.		Water		Overall Total	
	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	69,956.8	1
Status 2	0.0	0	0.0	0	264,048.8	4
Status 3	0.0	0	0.0	0	438,469.6	10
Status 4	5,915,559.8	85	17,455.4	< 1	5,944,845.0	85
Total	5,915,559.8	85	17,455.4	< 1	6,717,320.1	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: Pickerel frogs tend to be associated with cool, clear water in or near upland forests where they inhabit springs, creeks, ponds, reservoirs, floodplain swamps and the twilight zones of caves (Mount 1975, Martof et al. 1980, Wilson 1995, Conant and Collins 1998). They occur in a variety of habitats including sphagnum bogs, meadows, and grassy fields near shaded streams (Mount 1975, Wilson 1995) and are usually associated with hardwood environments of yellow poplar, beech-maple, and white oak-red oak (Wilson 1995). This species has segregated habitat use within its range. In the coastal plain, it is most commonly found in bottomland swamps and forest edged marshes, whereas in the piedmont and mountains they typical inhabitat cool densely forested riparian ravines as well as wet meadows near hardwood forest (Mount 1975, Conant & Collins 1998). Breeding sites of pickerel frogs primarily consist of creeks and slow flowing water, but will also breed in ponds and streams of old field & shrub habitat (NC-GAP 2004). In the south breeding occurs in winter but in the north breeding in spring (NatureServe 2005). Amy Silvano 12apr05

Ecosystem Classifiers: Mixed, Hardwood, Mesic & Montane Forests (excluding systems in CP, except included Loess Bluff b/c of MS), Shrub/Shrub, Depressional, Floodplain/Riparian (included Brownwater only within CP). Amy Silvano 12apr05

AUXILIARY UNITS: Open disturbed, Flatwoods, and Prairie. Amy Silvano 12apr05

*****Lack of information for this species distribution in MS, generally kept in EGCP bottomlands and only in hardwoods of Loess Bluff region (Due to Ravine nature) Amy Silvano 12apr05

Hydrography Mask:

Freshwater Only

Utilizes flowing water features with buffers of 60m from and 60m into selected water features.

Utilizes open water features with buffers of 60m from and 60m into 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
Forest/Woodland	Appalachian Hemlock-Hardwood Forest
Forest/Woodland	Atlantic Coastal Plain Mesic Hardwood and Mixed Forest
Forest/Woodland	Central and Southern Appalachian Montane Oak Forest
Forest/Woodland	Central and Southern Appalachian Northern Hardwood Forest
Forest/Woodland	Central Appalachian Oak and Pine Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Northern Mesic Hardwood Forest
Forest/Woodland	East Gulf Coastal Plain Southern Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Southern Mesic Slope Forest
Forest/Woodland	Northeastern Interior Dry Oak Forest - Mixed Modifier
Forest/Woodland	South-Central Interior Mesophytic Forest
Forest/Woodland	Southern and Central Appalachian Cove Forest
Forest/Woodland	Southern Piedmont Dry Oak-(Pine) Forest - Mixed Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Mixed Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Southern Piedmont Mesic Forest
Water	Open Water (Fresh)
Wetlands	Atlantic Coastal Plain Brownwater Stream Floodplain Forest
Wetlands	Atlantic Coastal Plain Clay-Based Carolina Bay Forested Wetland
Wetlands	Atlantic Coastal Plain Clay-Based Carolina Bay Herbaceous Wetland
Wetlands	Atlantic Coastal Plain Northern Basin Swamp and Wet Hardwood Forest
Wetlands	Atlantic Coastal Plain Peatland Pocosin
Wetlands	Atlantic Coastal Plain Small Brownwater River Floodplain Forest

Wetlands	Atlantic Coastal Plain Streamhead Seepage Swamp, Pocosin, and Baygall
Wetlands	Central Appalachian Floodplain - Forest Modifier
Wetlands	Central Appalachian Floodplain - Herbaceous Modifier
Wetlands	Central Appalachian Riparian - Forest Modifier
Wetlands	Central Appalachian Riparian - Herbaceous Modifier
Wetlands	Central Interior Highlands and Appalachian Sinkhole and Depression Pond
Wetlands	East Gulf Coastal Plain Interior Shrub Bog
Wetlands	East Gulf Coastal Plain Northern Seepage Swamp
Wetlands	East Gulf Coastal Plain Small Stream and River Floodplain Forest
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	North-Central Appalachian Seepage Fen
Wetlands	South-Central Interior Small Stream and Riparian
Wetlands	Southern and Central Appalachian Bog and Fen
Wetlands	Southern Appalachian Seepage Wetland
Wetlands	Southern Coastal Plain Seepage Swamp and Baygall
Wetlands	Southern Piedmont Seepage Wetland
Wetlands	Southern Piedmont Small Floodplain and Riparian Forest
Wetlands	Southern Piedmont/Ridge and Valley Upland Depression Swamp
Wetlands	Western Highland Rim Seepage Fen

Selected Secondary Map Units within 60m of Primary Map Units:

Functional Group	Map Unit Name
Anthropogenic	Developed Open Space
Anthropogenic	Successional Grassland/Herbaceous
Anthropogenic	Successional Grassland/Herbaceous (Other)
Anthropogenic	Successional Grassland/Herbaceous (Utility Swath)
Anthropogenic	Pasture/Hay

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