



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

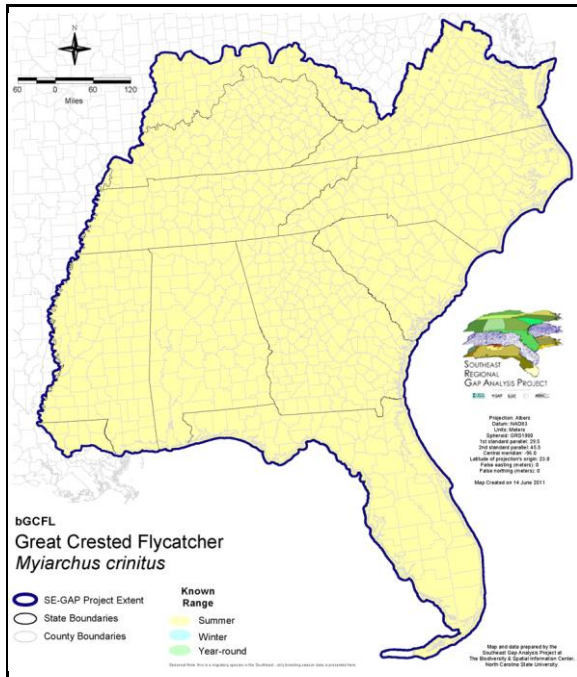
Great Crested Flycatcher

Myiarchus crinitus

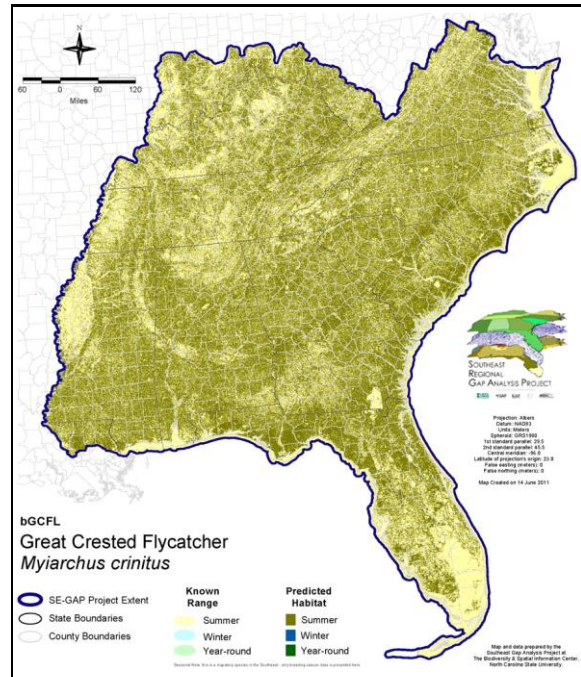
Taxa: Avian
 Order: Passeriformes
 Family: Tyrannidae

SE-GAP Spp Code: **bGCFL**
 ITIS Species Code: 178309
 NatureServe Element Code: ABPAE43070

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/bGCFL_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: KY (N), NJ (S/S), NY (PB), RI (Not Listed), UT (None), BC (8 (2005)), QC (Non suivie)

NS Global Rank: G5

NS State Rank: AK (SNA), AL (S5B), AR (S4B), AZ (SNA), CA (SNA), CO (S4B), CO (S4B), CT (S5B), CT (S5B), DC (S3B), DE (S5B), FL (SNRB), GA (S5), IA (S4B,S4N), IL (S5), IN (S4B), KS (S5B), KY (S5B), LA (S5B), MA (S5B), MD (S5B), ME (S5B), MI (S5), MN (SNRB), MO (SNRB), MS (S5B), MS (S5B), MT (SNA), NC (S5B), NC (S5B), ND (SNRB), NE (S4), NH (S5B), NJ (S4B), NM (SNA), NY (S5), OH (S5), OK (S5B), PA (S5B), RI (S5B), SC (S5), SD (S5B), SD (S5B), TN (S5), TX (S4B), UT (SNA), VA (S5), VT (S5B), VT (S5B), WI (S4B), WI (S4B), WV (S5B), WY (SNA), AB (S2), BC (SNA), MB (S4S5B), MB (S4S5B), NB (S4B), NF (SNA), NS (S2S3B), ON (S4B), PE (SNA), QC (S5B), SK (S5B,S5M)

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	101,258.4	< 1	15,683.4	< 1	0.0	0	0.0	0
Status 2	181,417.5	< 1	177,437.8	< 1	0.0	0	4,636.5	< 1
Status 3	2,527.7	< 1	1,614,056.4	3	61,859.8	< 1	702,309.0	1
Status 4	161.2	< 1	< 0.1	< 1	0.0	0	94.1	< 1
Total	285,364.8	< 1	1,807,177.7	3	61,859.8	< 1	707,039.6	1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	86,102.3	< 1	15.6	< 1	11,385.0	< 1
Status 2	0.0	0	9,602.6	< 1	4,793.9	< 1	67.6	< 1
Status 3	76,062.1	< 1	238,333.1	< 1	0.0	0	5,519.2	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	76,062.1	< 1	334,038.0	< 1	4,809.5	< 1	16,971.8	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1,158.8	< 1	55.9	< 1	0.0	0
Status 2	0.0	0	6,882.7	< 1	591,539.3	< 1	571.8	< 1
Status 3	15,733.1	< 1	534,356.9	< 1	195,181.1	< 1	403,177.8	< 1
Status 4	0.0	0	< 0.1	< 1	100,169.2	< 1	47.0	< 1
Total	15,733.1	< 1	542,398.4	< 1	886,945.5	1	403,796.5	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	8,601.6	< 1	0.0	0	0.0	0
Status 2	11,184.6	< 1	59,937.9	< 1	5.5	< 1	3,233.7	< 1
Status 3	0.0	0	22,330.3	< 1	31,378.6	< 1	124,160.5	< 1
Status 4	0.0	0	0.3	< 1	3,523.1	< 1	0.0	0
Total	11,184.6	< 1	90,870.0	< 1	34,907.2	< 1	127,394.2	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	224,260.8	< 1		
Status 2	0.4	< 1	0.0	0	1,051,311.8	2		
Status 3	1,322.6	< 1	< 0.1	< 1	4,028,308.0	9		
Status 4	55,503,597.9	89	46,530.7	< 1	55,754,131.7	89		
Total	55,504,920.8	89	46,530.8	< 1	61,058,012.3	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: In all seasons they can be found in: medium-growth to somewhat open woods and forests, hardwoods, mixed woods, or pines, wooded residential areas, but generally scarce in dense forests (Hamel 1992). Research on canopy selection and flight length indicates a preference for open canopies where unhampered foraging flights can occur (Via 1979). Preferred perches are tall trees, but may also be found on utility lines and short shrub-like growth in recent clearcuts (Via 1979). Reported to use: FORESTED WETLANDS (including southern riverine forests, southern mixed hardwood swamp forests, bald cypress, pocosin, Carolina bays, and Appalachian riverine forests); UPLAND BROADLEAF WOODLANDS (oak-hickory, southern hardwoods at low elevations, and Appalachian cove forests at mid elevations); and MIXED BROADLEAF-NEEDLELEAF WOODLANDS (pine-oak and pine-white cedar at low elevations, red cedar-hemlock-eastern white pine-mixed deciduous at mid elevation and red spruce-beech-maple at high elevations). All above woodlands at low and mid elevation (AL). Also inhabits Pine woodlands (Coastal Plain and Piedmont: longleaf-slash, loblolly-shortleaf. Piedmont, Ridge and Valley, Highland Rim and Cumberland Plateau: virginia pine, shortleaf pine). Subtropical woodlands including mangroves (Hunter-AL). Prefers open woodlands, cypress swamps, farmyards, shade trees of city streets (AL). Generally in open deciduous or mixed woodlands and edges of clearings, seldom in coniferous woods. Occupies old orchards, wooded pastures and riparian corridors, wooded swamps, parks, cemeteries, golf courses and other urban areas with large trees. Favors isolated woodlots, second-growth woodlands, wooded hedgerows, and selectively cut woodlands over continuous and closed-canopy forest and generally favors mesic to wet forests over dry forests, and avoids boreal forests (AL). Prefers medium to mature forests in moderately open woodlands (Potter et al 1980, Simpson 1992). They breed in deciduous (mainly), mixed, or pine woodland or somewhat open forest (Hamel et al. 1982, Hamel 1992), parks, orchards, wooded residential areas, areas of scattered trees in cultivated regions, clearings and edges of wooded areas, and swamps. Frequents upper levels of trees. Also inhabits edges of clearings, wooded pastures, old orchards, riparian corridors, parks, cemeteries, and other urban areas with numerous shade trees (Lanyon 1997). Often favors drier habitats as well (Potter et al 1980). Found in all parts of North Carolina except in the higher mountains (Hamel 1992, Potter et al 1980).

Great-crested Flycatchers forages from the crevices of tree bark, fence posts, and haystacks before trees are in full foliage (Layton 1997) and selects high perches (Anderson-AL). During the breeding season, they mainly forage on insects, either hawking them from a branch in the canopy, gleaning from the foliage while hovering, or drops from a perch to the ground on prey (Hamel 1992, Kaufman 1996, Lanyon 1997). Hamel (1992) states they 'do not hunt from exposed perches.'

Great crested flycatchers are cavity nesters (Lanyon 1997). Nest in natural or old woodpecker hole, 20 to 50 feet above the ground (Kaufman 1996). Lanyon (1997) states that they 'usually prefer dead over live trees, and natural cavities over abandoned woodpecker holes.' Morrison (1988) suggested a preference for nestboxes that are hung from trees as opposed to stationary boxes; the former may be less likely to be used by starlings.

Regarding spatial habitat characteristics, occurrence increases with tracts above 180 acres (AL).

Quoted directly from existing state habitat notes - K. Cook, 17Feb05

Additional information:

McIntyre (1995) found that great crested flycatchers in the north Georgia Piedmont did not occur in forest patches less than 13.25 ha.

Lohr et al. (2002) conducted a study of experimental removal of snags from loblolly pine forests at the Savannah River site. Enough great-crested flycatchers were detected in this habitat type to show a negative effect on abundance of great-crested flycatchers from snag removal from loblolly pine forests. Great-crested flycatchers were common in clearcuts of all sizes within the Savannah River site loblolly plantations (Krementz and Christie 2000). K. Cook, 17Feb05

Elevation Mask: < 1371m

Mask of Forest/Open Ecotone: Include within 250m of ecotone edge.

Mask of Woodlands and Shrublands: Include all woodland and shrubland interiors and 250m buffer from them.

Contiguous Patch Minimum Size (hectares): 12

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Deciduous Plantations
Anthropogenic	Developed Open Space
Anthropogenic	Evergreen Plantations
Anthropogenic	Low Intensity Developed
Anthropogenic	Successional Grassland/Herbaceous
Anthropogenic	Successional Grassland/Herbaceous (Other)
Anthropogenic	Successional Grassland/Herbaceous (Utility Swath)
Anthropogenic	Successional Shrub/Scrub (Clear Cut)
Anthropogenic	Successional Shrub/Scrub (Other)
Anthropogenic	Successional Shrub/Scrub (Utility Swath)
Bald	Central Appalachian Montane Rocky Bald - Herbaceous Modifier
Bald	Central Appalachian Montane Rocky Bald - Shrub Modifier
Bald	Southern Appalachian Grass and Shrub Bald - Herbaceous Modifier
Bald	Southern Appalachian Grass and Shrub Bald - Shrub Modifier
Forest/Woodland	Alabama Ketona Glade and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Hardwood Modifier
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Pine Modifier
Forest/Woodland	Appalachian Hemlock-Hardwood Forest
Forest/Woodland	Appalachian Serpentine Woodland
Forest/Woodland	Appalachian Shale Barrens
Forest/Woodland	Atlantic Coastal Plain Dry and Dry-Mesic Oak 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 - Offsite Hardwood 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 Mesic Hardwood and Mixed Forest
Forest/Woodland	Atlantic Coastal Plain Northern Mixed Oak-Heath Forest
Forest/Woodland	Atlantic Coastal Plain Upland Longleaf Pine Woodland
Forest/Woodland	Central and Southern Appalachian Montane Oak Forest
Forest/Woodland	Central and Southern Appalachian Northern Hardwood Forest
Forest/Woodland	Central and Southern Appalachian Spruce-Fir Forest
Forest/Woodland	Central Appalachian Alkaline Glade and Woodland
Forest/Woodland	Central Appalachian Oak and Pine Forest
Forest/Woodland	Central Appalachian Pine-Oak Rocky Woodland
Forest/Woodland	Central Interior Highlands Calcareous Glade and Barrens
Forest/Woodland	Central Interior Highlands Dry Acidic Glade and Barrens
Forest/Woodland	Cumberland Sandstone Glade and Barrens
Forest/Woodland	East Gulf Coastal Plain Black Belt Calcareous Prairie and Woodland - Woodland Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Mixed Modifier
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 - Offsite Hardwood 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 Limestone Forest
Forest/Woodland	East Gulf Coastal Plain Northern Dry Upland Hardwood Forest
Forest/Woodland	East Gulf Coastal Plain Northern Dry Upland Hardwood Forest - Offsite Pine Modifier
Forest/Woodland	East Gulf Coastal Plain Northern Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland - Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland - Juniper Modifier
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	Florida Longleaf Pine Sandhill - Open Understory Modifier
Forest/Woodland	Florida Longleaf Pine Sandhill - Scrub/Shrub Understory Modifier
Forest/Woodland	Florida Peninsula Inland Scrub
Forest/Woodland	Nashville Basin Limestone Glade
Forest/Woodland	Northeastern Interior Dry Oak Forest - Mixed Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest-Hardwood Modifier
Forest/Woodland	Northern Atlantic Coastal Plain Dry Hardwood Forest
Forest/Woodland	Ridge and Valley Calcareous Valley Bottom Glade and Woodland
Forest/Woodland	South Florida Pine Rockland
Forest/Woodland	South-Central Interior Mesophytic Forest
Forest/Woodland	Southeastern Interior Longleaf Pine Woodland
Forest/Woodland	Southern and Central Appalachian Cove Forest
Forest/Woodland	Southern and Central Appalachian Mafic Glade and Barrens
Forest/Woodland	Southern and Central Appalachian Oak Forest
Forest/Woodland	Southern and Central Appalachian Oak Forest - Xeric
Forest/Woodland	Southern Appalachian Low Mountain Pine Forest
Forest/Woodland	Southern Appalachian Montane Pine Forest and Woodland
Forest/Woodland	Southern Coastal Plain Dry Upland Hardwood Forest
Forest/Woodland	Southern Coastal Plain Oak Dome and Hammock
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest - Evergreen Modifier
Forest/Woodland	Southern Piedmont Dry Oak-(Pine) Forest - Hardwood Modifier
Forest/Woodland	Southern Piedmont Dry Oak-(Pine) Forest - Loblolly Pine Modifier
Forest/Woodland	Southern Piedmont Dry Oak-(Pine) Forest - Mixed Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Hardwood 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 Glade and Barrens
Forest/Woodland	Southern Piedmont Mafic Hardpan Woodland
Forest/Woodland	Southern Piedmont Mesic Forest
Forest/Woodland	Southern Piedmont Northern Triassic Basin Dry Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Hardwood Modifier
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Pine Modifier
Prairie	Bluegrass Basin Savanna and Woodland
Prairie	East Gulf Coastal Plain Black Belt Calcareous Prairie and Woodland
Prairie	East Gulf Coastal Plain Black Belt Calcareous Prairie and Woodland - Herbaceous Modifier
Prairie	East Gulf Coastal Plain Jackson Plain Prairie and Barrens
Prairie	East Gulf Coastal Plain Jackson Prairie and Woodland
Prairie	Eastern Highland Rim Prairie and Barrens
Prairie	Eastern Highland Rim Prairie and Barrens - Dry Modifier
Prairie	Florida Dry Prairie
Prairie	Panhandle Florida Limestone Glade
Prairie	Pennyroyal Karst Plain Prairie and Barrens
Prairie	Southern Ridge and Valley Patch Prairie
Prairie	Western Highland Rim Prairie and Barrens
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 Clay-Based Carolina Bay Herbaceous Wetland
Wetlands	Atlantic Coastal Plain Depression Pondshore
Wetlands	Atlantic Coastal Plain Large Natural Lakeshore
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 Pondshore
Wetlands	Atlantic Coastal Plain Northern Wet Longleaf Pine Savanna and Flatwoods
Wetlands	Atlantic Coastal Plain Peatland Pocosin
Wetlands	Atlantic Coastal Plain Sandhill Seep
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	Atlantic Coastal Plain Xeric River Dune
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 Florida Herbaceous Pondshore
Wetlands	Central Florida Herbaceous Seep
Wetlands	Central Florida Pine Flatwoods
Wetlands	Central Interior Highlands and Appalachian Sinkhole and Depression Pond
Wetlands	East Gulf Coastal Plain Interior Shrub Bog
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 Depression Pondshore
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 Depression Pondshore
Wetlands	East Gulf Coastal Plain Southern Loblolly-Hardwood Flatwoods
Wetlands	East Gulf Coastal Plain Treeless Savanna and Wet Prairie
Wetlands	Floridian Highlands Freshwater Marsh
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 Acidic Swamp
Wetlands	North-Central Appalachian Seepage Fen
Wetlands	North-Central Interior and Appalachian Rich Swamp
Wetlands	South Florida Bayhead Swamp
Wetlands	South Florida Cypress Dome
Wetlands	South Florida Dwarf Cypress Savanna
Wetlands	South Florida Freshwater Slough and Gator Hole
Wetlands	South Florida Hardwood Hammock
Wetlands	South Florida Pine Flatwoods
Wetlands	South Florida Pond-Apple/Popash Slough
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 and Central Appalachian Bog and Fen
Wetlands	Southern Appalachian Seepage Wetland
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Southern Coastal Plain Herbaceous Seepage Bog
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 Coastal Plain Spring-run Stream Aquatic Vegetation
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
Wetlands	Western Highland Rim Seepage Fen

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.

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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.