





# Species Modeling Report

# Carolina Chickadee

Poecile carolinensis

Taxa: Avian

Order: Passeriformes

Family: Paridae

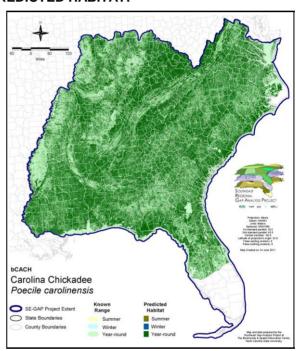
SE-GAP Spp Code: **bCACH** ITIS Species Code: 178709

NatureServe Element Code: ABPAW01020

# **KNOWN RANGE:**

# Carolina Chickadee Poecile carolinensis

# PREDICTED HABITAT:



Range Map Link: <a href="http://www.basic.ncsu.edu/segap/datazip/maps/SE\_Range\_bCACH.pdf">http://www.basic.ncsu.edu/segap/datazip/maps/SE\_Range\_bCACH.pdf</a> Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE\_Dist\_bCACH.pdf

GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=bCACH Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/bCACH\_se00.zip

#### **PROTECTION STATUS:**

Reported on March 14, 2011

Federal Status: ---

State Status: KY (N), NJ (S/S)

NS Global Rank: G5

NS State Rank: AL (S5), AR (S5), DC (S5), DE (S5), FL (SNR), GA (S5), IL (S5), IN (S4), KS (S4), KY (S5), LA (S5), MD (S5), MI (SNA), MO (SNR), MS (S5), NC (S5), NE (SNA), NJ (S4B,S4N), OH (S5), OK (S5), PA (S5), SC (SNR), TN (S5), TX (S5B), VA

(S5), WV (S5B,S5N), ON (SNA)

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# SUMMARY OF PREDICTED HABITAT BY MANAGMENT AND GAP PROTECTION STATUS:

	l	US FWS		US Forest Service		Tenn. Valley Author.		US DOD/ACOE	
	ha	%	ha	%	ha	%	ha	%	
Status 1	108,294.5	< 1	35,735.9	< 1	0.0	0	0.0	0	
Status 2	232,008.3	< 1	412,972.8	< 1	0.0	0	5,403.2	< 1	
Status 3	3,890.0	< 1	2,904,917.9	4	61,933.1	< 1	747,819.5	1	
Status 4	105.5	< 1	< 0.1	< 1	0.0	0	206.5	< 1	
Total	344,298.2	< 1	3,353,626.7	5	61,933.1	< 1	753,429.2	1	
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands		
	ha	%	ha	%	ha	%	ha	%	
Status 1	0.0	0	273,755.1	< 1	152.1	< 1	10,167.3	< 1	
Status 2	0.0	0	20,793.2	< 1	8,948.8	< 1	58.1	< 1	
Status 3	88,216.9	< 1	124,785.1	< 1	0.0	0	5,569.9	< 1	
Status 4	0.0	0	1.0	0	0.0	0	0.0	0	
Total	88,216.9	< 1	419,334.9	< 1	9,100.9	< 1	15,795.4	< 1	
ĺ	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest		
	ha	%	ha	%	ha	%	ha	%	
Status 1	0.0	0	1,632.0	< 1	72.0	< 1	0.0	0	
Status 2	0.0	0	20,262.7	< 1	762,889.9	1	1,446.1	< 1	
Status 3	24,329.6	< 1	495,714.2	< 1	254,078.1	< 1	366,946.9	< 1	
Status 4	0.0	0	< 0.1	< 1	134,538.8	< 1	45.5	< 1	
Total	24,329.6	< 1	517,608.9	< 1	1,151,578.8	2	368,438.6	< 1	
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.		
	ha	%	ha	%	ha	%	ha	%	
Status 1	0.0	0	15,538.4	< 1	0.0	0	0.0	0	
Status 2	14,764.3	< 1	105,197.9	< 1	5.0	< 1	2,476.4	< 1	
Status 3	0.0	0	19,505.9	< 1	26,935.5	< 1	90,210.2	< 1	
Status 4	0.0	0	2.1	< 1	3,513.2	< 1	0.0	0	
Total	14,764.3	< 1	140,244.2	< 1	30,453.7	< 1	92,686.7	< 1	
	Private Land - I	No Res.		Water			Overa	ıll Total	
	ha	%	ha	%			ha	%	
Status 1	0.0	0	0.0	0			445,347.2	< 1	
Status 2	0.2	< 1	0.0	2			1,587,227.2	2	
Status 3	1,076.3	< 1	1.0	< 1			5,215,930.2	12	
Status 4	58,145,548.5	85	43,827.1	< 1			58,462,222.2	85	
Total	58,146,625.0	85	43,828.3	< 1			65,710,726.8	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.

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# PREDICTED HABITAT MODEL(S):

# **Year-round Model:**

Habitat Description:

Carolina chickadees are present throughout the southeast (excluding southern Flroida) except on some of the barrier islands (Fussell 1994) and in high elevation mountains where Carolina chickadees are found (Potter et al 1980, Simpson 1992). They breed in medium to mature woods, where dead trees or stubs are present for nesting. Hamel (1992) asserts they are most common in mixed pine-hardwoods and pinewoods, and less common in pure hardwood forests, while Kaufman (1996) states they are 'mostly in deciduous forests.' Also occur in woodland edges, suburban areas, and wooded parks (Hamel 1992, Simpson 1992).

Nest in cavities, either excavated by the breeding pair or existing cavity such old woodpecker hole (Hamel 1992, Kaufman 1996, Potter et al 1980). Cavities usually dug out in 'softwood of fence post, decaying stump, or dead stub on a living tree,' according to Potter et al (1980).

Quoted form State habitat notes - K. Cook - 4-9-05

Elevation Mask: < 1524m

Functional Group	Map Unit Name Deciduous Plantations				
Anthropogenic					
Anthropogenic	Developed Open Space				
Anthropogenic	Evergreen Plantations				
Anthropogenic	Low Intensity Developed				
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Tidal Wooded Swamp				
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Southern Tidal Wooded Swamp				
Brackish Tidal Marsh & Wetland	East Gulf Coastal Plain Tidal Wooded Swamp				
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 Central Maritime Forest				
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 Maritime Forest				
Forest/Woodland	Atlantic Coastal Plain Northern Mixed Oak-Heath Forest				
Forest/Woodland	Atlantic Coastal Plain Southern Maritime Forest				
Forest/Woodland	Atlantic Coastal Plain Upland Longleaf Pine Woodland				
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	Voodland 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	d East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Loblolly Modifier				

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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 Maritime 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 Mississippi Delta Maritime Forest
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-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 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

Wetlands Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Forest 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 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 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 Riparian - Forest Modifier Wetlands Central Florida Pine Flatwoods Central Interior Highlands and Appalachian Sinkhole and Depression Pond Wetlands Wetlands Cumberland Riverscour East Gulf Coastal Plain Interior Shrub Bog Wetlands 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 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 East Gulf Coastal Plain Treeless Savanna and Wet Prairie Wetlands Wetlands Lower Mississippi River Bottomland and Floodplain Forest Wetlands Lower Mississippi River Bottomland Depressions - Forest 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-Central Interior Large Floodplain - Forest 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 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 Southern Piedmont/Ridge and Valley Upland Depression Swamp Wetlands 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.

Bent, A.C. 1946. Life histories of North American jays, crows, and titmice. U.S. Natl. Mus. Bull. 191. Washington, D.C.

Fussell, J.O. III. 1994. A birder's guide to coastal North Carolina. Chapel Hill and London: The University of North Carolina Press.

Gill, F. B., A. M. Mostrom, and A. L. Mack. 1993. Speciation in North American chickadees: I. Patterns of mtDNA genetic divergence. Evolution 47:195-212.

Hamel, P. B. 1992. The land manager's guide to the birds of the south. The Nature Conservancy, Chapel Hill, North Carolina. 367 pp + several appendices.

Harrison, C. 1978. A field guide to the nests, eggs and nestlings of North American birds. Collins, Cleveland, Ohio.

Harrison, H.H. 1975. A field guide to bird's nests in the U.S. east of the Mississippi River. Houghton Mifflin Company, Boston, Massachusetts. 257 p.

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Harrison, H.H. 1979. A field guide to western birds' nests. Houghton Mifflin Company, Boston. 279 pp.

Kaufman K. 1996. Lives of North American Birds. Boston, New York: Houghton Mifflin Company.

Mitchell, W.A. 1988. Songbird nest boxes. Section 5.1.8, U.S. Army Corps of Engineers, Wildlife Resources Management Manual. Tech. Rep. EL-88-19. Waterways Experiment Station, Vicksburg, Mississippi. 48 pp.

Potter, E. F., J. F. Parnell, and R. P. Teulings. 1980. Birds of the Carolinas. Univ. North Carolina Press, Chapel Hill. 408 pp.

Robbins, M. 1989. What's your name, my little chickadee? Birding 21:205-207.

Sheldon, F. H., et al. 1992. DNA-DNA hybridization evidence of phylogenetic relationships among major lineages of PARUS. Auk 109:173-185

Simpson MB Jr. 1992. Birds of the Blue Ridge Mountains. Chapel Hill and London: University of North Carolina Press

Terres, J.K. 1980. The Audubon Society encyclopedia of North American birds. Alfred A. Knopf, New York.

For more information:: SE-GAP Analysis Project / BaSIC

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