



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

Blue-gray Gnatcatcher

Polioptila caerulea

Taxa: Avian

Order: Passeriformes

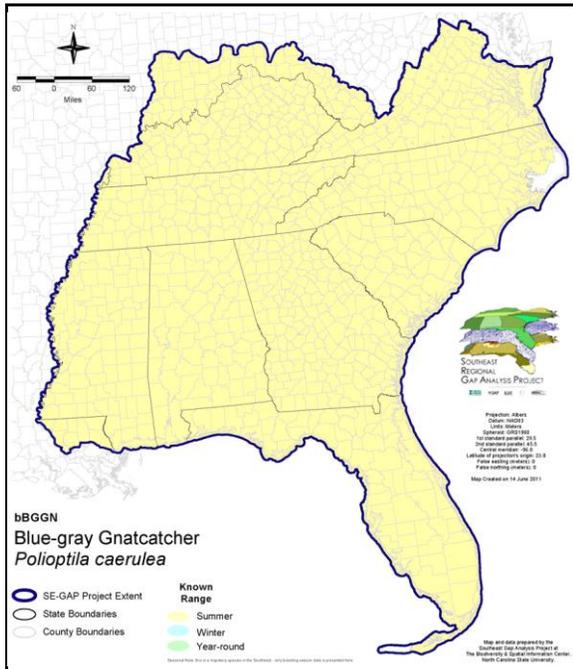
Family: Sylviidae

SE-GAP Spp Code: **bBGGN**

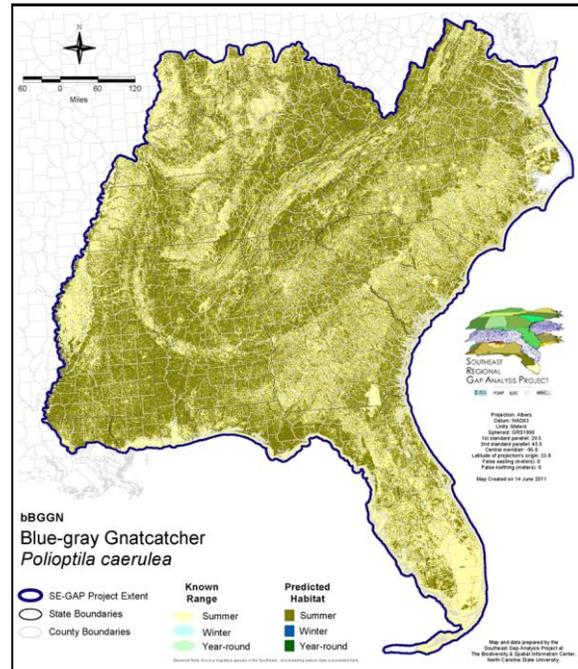
ITIS Species Code: 179853

NatureServe Element Code: ABPBJ08010

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/bBGGN_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

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

NS Global Rank: G5

NS State Rank: AL (S5B,S3N), AR (S5B), AZ (S5), CA (S4), CO (S5B), CO (S5B), CT (S5B), CT (S5B), DC (S3B,S3N), DE (S5B), FL (SNRB,SNRN), GA (S5), IA (S4B,S4N), ID (S3?), IL (S5), IN (S4B), KS (S4B), KY (S5B), LA (S3N,S4B), MA (S4B), MD (S5B), ME (S2S3), MI (S5), MN (SNRB), MO (SNRB), MS (S5B), MS (S5B), MT (S1B), NC (S5B,S2N), NE (S4), NH (S4B), NJ (S4B), NM (S4B,S4N), NV (S4B), NY (S5), OH (S5), OK (S5B), OR (S3B), PA (S5B), RI (S4B), SC (SNRB,SNRN), SD (S1B), SD (S1B), TN (S5), TX (S3B), UT (S5B), UT (S5B), VA (S5), VT (S3B), VT (S3B), WA (SNA), WI (S4B), WI (S4B), WV (S5B), WY (S3?B), WY (S3?B), AB (SNA), BC (SNA), LB (SNA), MB (SNA), NB (SNA), NF (SNA), NS (SNA), ON (S4B), PE (SNA), QC (S4B), SK (SNA)

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	119,453.4	< 1	33,893.6	< 1	0.0	0	0.0	0
Status 2	217,852.4	< 1	393,068.9	< 1	0.0	0	5,422.9	< 1
Status 3	3,734.0	< 1	2,723,487.5	4	57,247.9	< 1	537,738.8	< 1
Status 4	97.7	< 1	< 0.1	< 1	0.0	0	27.2	< 1
Total	341,137.4	< 1	3,150,450.1	5	57,247.9	< 1	543,188.9	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	272,284.4	< 1	89.3	< 1	16,241.8	< 1
Status 2	0.0	0	21,323.3	< 1	8,457.4	< 1	58.1	< 1
Status 3	54,293.0	< 1	272,208.2	< 1	0.0	0	4,324.1	< 1
Status 4	0.0	0	1.0	2	0.0	0	0.0	0
Total	54,293.0	< 1	565,817.3	< 1	8,546.7	< 1	20,623.9	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1,657.6	< 1	72.9	< 1	0.0	0
Status 2	0.0	0	19,911.8	< 1	788,473.1	1	1,415.5	< 1
Status 3	22,045.6	< 1	603,561.6	< 1	232,233.8	< 1	346,412.9	< 1
Status 4	0.0	0	< 0.1	< 1	138,111.4	< 1	35.8	< 1
Total	22,045.6	< 1	625,131.1	< 1	1,158,891.2	2	347,864.2	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	15,110.7	< 1	0.0	0	0.0	0
Status 2	13,925.9	< 1	100,564.7	< 1	5.0	< 1	3,168.0	< 1
Status 3	0.0	0	22,468.3	< 1	24,332.4	< 1	108,085.2	< 1
Status 4	0.0	0	2.1	< 1	3,261.2	< 1	0.0	0
Total	13,925.9	< 1	138,145.8	< 1	27,598.6	< 1	111,253.2	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	458,803.7	< 1		
Status 2	0.2	< 1	0.0	2	1,573,647.0	2		
Status 3	976.1	< 1	1.1	< 1	5,013,150.6	12		
Status 4	53,123,766.6	84	47,155.7	< 1	53,450,473.1	85		
Total	53,124,742.9	84	47,156.9	< 1	60,496,074.4	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: Blue-gray gnatcatchers prefers loblolly short-leaf, Scrub and second-growth hardwoods and subtropical woodlands in Florida (Hunter). They prefer open woodlands and brushy growth interspersed with trees and isolated streamside groves. They have an affinity for parklike stands of mature oaks and pines and appear to adapt to a wide variety of habitats, from hedgroves and wood margins to forest interior. Breeding densities are positively correlated with annual precipitation, % oaks, and canopy height and are negatively correlated with % of conifers, ground cover and number of small trees (Anderson). Probability of occurrence is maximum with tracts over 3000 Ha (Robbins). They breed primarily in moist deciduous forests, such as bottomland forests and swamps; seldom far from water and avoids coniferous woods (Hamel et al) (Alabama citations). Cypress forest is considered breeding habitat (Robertson and Kushlan 1984). Breeding habitat is reported as occurring generally in broad leaved trees and shrubs, and riparian forests and swamps, while not in conifer dominated forests, but in pine flatwoods with hardwood understory. In south Florida, winters in cypress swamps with broadleaf understory, sub-tropical hammocks, pine flatwoods, citrus orchards, and ornamental plantings are considered breeding habitat (Ellison 1992 NAB). They nest in swamps and woodlands (except mangrove), including heavily wooded residential areas throughout most of the peninsula.

Quoted from habitat notes - K. Cook - 4-17-08

Additional information:

There appears to be conflicting findings on the suitability of pine as breeding habitat.

From a study in Ouachita, Barber et al. (2001) report higher breeding success of gnatcatchers in regenerating (3-6 yr.) pine and thinned pine (17-23 yr.) than in other studies (Approx. 34.8 % success compared to 24 % success in other studies. Therefore I would suggest that pine is a breeding habitat. Also Turner et al (2002) show that gnatcatchers are common in mesic rotation age pine of ~20 yrs. And uncommon in the pine matrix of pines <20 yrs. However Ellison (1992) Report that gnatcatchers are rare to absent in needle leaved habitats. Ellison (1992) does report that gnatcatchers use pine flatwoods with a hardwood understory in the Southeastern US. It appears that the use of pine habitats may depend on aridity of the environment and proximity to water.

Robinson and Robinson (1999) report that blue-gray gnatcatchers were equally abundant in early successional habitats on ridges and in ravines. Therefore distance to stream may not be a predictor.

Elevation Mask: < 1219m

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Deciduous Plantations
Anthropogenic	Evergreen Plantations
Anthropogenic	Successional Shrub/Scrub (Clear Cut)
Anthropogenic	Successional Shrub/Scrub (Other)
Anthropogenic	Successional Shrub/Scrub (Utility Swath)
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 - Offsite Hardwood 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	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 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 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 - 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 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-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	Southeast Florida Coastal Strand and Maritime Hammock
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
Forest/Woodland	Southwest Florida Coastal Strand and Maritime Hammock
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 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	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
Wetlands	Central Interior Highlands and Appalachian Sinkhole and Depression Pond
Wetlands	Cumberland Riverscour
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 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	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 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 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 Piedmont Large Floodplain Forest - Forest 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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