



# SOUTHEAST GAP ANALYSIS PROJECT



## Species Modeling Report

### Song Sparrow

*Melospiza melodia*

Taxa: Avian

Order: Passeriformes

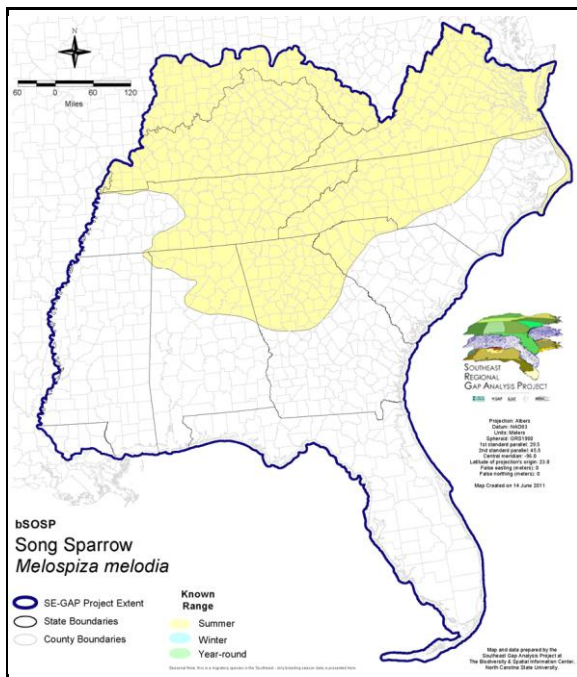
Family: Emberizidae

SE-GAP Spp Code: **bsOSP**

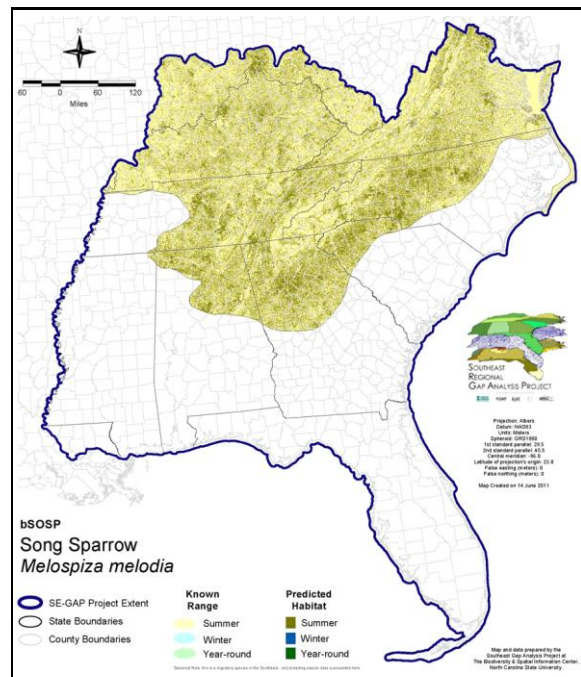
ITIS Species Code: 179492

NatureServe Element Code: ABPBXA3010

#### KNOWN RANGE:



#### PREDICTED HABITAT:



Range Map Link: [http://www.basic.ncsu.edu/segap/datazip/maps/SE\\_Range\\_bsOSP.pdf](http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_bsOSP.pdf)

Predicted Habitat Map Link: [http://www.basic.ncsu.edu/segap/datazip/maps/SE\\_Dist\\_bsOSP.pdf](http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_bsOSP.pdf)

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

Data Download: [http://www.basic.ncsu.edu/segap/datazip/region/vert/bsOSP\\_se00.zip](http://www.basic.ncsu.edu/segap/datazip/region/vert/bsOSP_se00.zip)

#### PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: CA (None), ID (P), KY (N), NJ (S/S), NV (YES), NY (PB), RI (Not Listed), UT (None), BC (4 (2005)), QC (Non suivie)

NS Global Rank: G5

NS State Rank: AK (S5), AL (S3B,S5N), AR (S4N), AZ (S5), CA (SNR), CO (S5), CT (S5B), DC (S5B,S5N), DE (S5), FL (SNRN), GA (S5), IA (S5B,S5N), ID (S5B,S5N), IL (S5), IN (S4S5), KS (S3B,S4N), KY (S4S5B,S5N), LA (S5N), MA (S5), MD (S5), ME (S4N,S4S5B), MI (S5), MN (SNRB,SNRN), MO (SNR), MS (SNA), MT (S5B), NC (S5B,S5N), ND (SNRB), NE (S4), NH (S5), NJ (S5B,S5N), NM (S4B,S5N), NV (S5), NY (S5), OH (S5), OK (S5N), OR (S5), PA (S5), RI (S5B), SC (SNRB,SNRN), SD (S5B), TN (S4), TX (S5), UT (S4S5), VA (S5), VT (S5B), WA (S5), WI (S5B), WV (S5N,S5B), WY (S5B,S5N), AB (S5), BC (S5B), LB (S2B), MB (S5B), NB (S5B), NF (S3B), NS (S5B), NT (SNRB), NU (SNR), ON (S5B), PE (S5B), QC (S5B), SK (S5B), YT (S4B)

**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	9,224.7	< 1	713.8	< 1	0.0	0	0.0	0
Status 2	11,594.4	< 1	9,438.4	< 1	0.0	0	803.8	< 1
Status 3	175.8	< 1	106,590.7	< 1	28,569.7	< 1	73,308.7	< 1
Status 4	12.2	< 1	0.0	0	0.0	0	216.0	< 1
Total	21,007.1	< 1	116,742.9	< 1	28,569.7	< 1	74,328.5	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	10,568.2	< 1	47.3	< 1	0.0	0
Status 2	0.0	0	13,321.3	< 1	622.1	< 1	0.0	0
Status 3	3,414.9	< 1	27,652.3	< 1	0.0	0	554.9	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	3,414.9	< 1	51,541.7	< 1	669.4	< 1	554.9	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	93.8	< 1	11.5	< 1	0.0	0
Status 2	0.0	0	1,275.3	< 1	60,084.0	< 1	119.8	< 1
Status 3	3,007.4	< 1	17,797.0	< 1	21,023.6	< 1	3,635.6	< 1
Status 4	0.0	0	0.0	0	7,900.7	< 1	0.0	0
Total	3,007.4	< 1	19,166.0	< 1	89,019.8	< 1	3,755.3	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1,085.7	< 1	0.0	0	0.0	0
Status 2	10,046.9	< 1	7,886.1	< 1	1.8	< 1	270.5	< 1
Status 3	0.0	0	700.4	< 1	1,964.3	< 1	1,212.6	< 1
Status 4	0.0	0	0.0	0	1,141.6	< 1	0.0	0
Total	10,046.9	< 1	9,672.1	< 1	3,107.6	< 1	1,483.0	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	21,745.0		< 1	
Status 2	0.0	0	0.0	0	115,464.2		< 1	
Status 3	0.0	0	0.0	0	289,607.5		3	
Status 4	14,007,535.1	96	10,987.0	< 1	14,035,681.2		96	
Total	14,007,535.1	96	10,987.0	< 1	14,462,497.9		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:** Habitat in the breeding range includes a wide range of forest, shrub, and riparian habitats, but limited to those adjacent to fresh water more often in arid environments. Occupy shrubs on moist ground along streams, slough, marsh, or coastline from fresh to saltwater. Favors shrubby areas in open country; residential shrubbery, farmyards, streamside thickets, hedgerows, and pond edges (Arcese et al 2002). M. Rubino, 13Jan05.

**Customized Model:** Instead of checking all forested habitat types and noting that this species uses edges and openings within forest, I chose to leave those map units unchecked and mention here that a grid of all forest edge (i.e. those areas other than forest interior) could be used. I also checked map units that may not necessarily be included in a grid of forest edge, namely emergent wetlands, balds, marsh, grassland/herbaceous, and anthropogenic units. Include contiguous patches of all these checked map units.

See notes in Model Review.

Model had 0m FROM and unlimited buffers INTO wet veg selected. Limiting this species to wet veg buffers eliminates too much potential habitat. I removed wet veg hydro buffers. I chose to hand model this species instead and limit pasture/hay to only moist flats, wet flats, and slope bottom landforms (see Palmer-Ball 1996, Arcese et al 2002); all other habitats are not limited by landforms. MJR 26 March 2008.

**Mask of Forest Interior Avoidance:** Exclude forest interiors with 60m buffer into them.

### Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Developed Open Space
Anthropogenic	Low Intensity Developed
Anthropogenic	Pasture/Hay
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
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Central Salt and Brackish Tidal Marsh
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Embayed Region Tidal Salt and Brackish Marsh
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Sea-Level Fen
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Tidal Salt Marsh
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Tidal Wooded Swamp
Coastal Dune & Freshwater Wetland	Atlantic and Gulf Coastal Plain Interdunal Wetland
Coastal Dune & Freshwater Wetland	Atlantic Coastal Plain Northern Dune and Maritime Grassland
Coastal Dune & Freshwater Wetland	Atlantic Coastal Plain Southern Dune and Maritime Grassland
Forest/Woodland	Alabama Ketona Glade and Woodland
Forest/Woodland	Central Appalachian Alkaline Glade and Woodland
Forest/Woodland	East Gulf Coastal Plain Black Belt Calcareous Prairie and Woodland - Woodland Modifier
Forest/Woodland	Ridge and Valley Calcareous Valley Bottom Glade and Woodland
Freshwater Tidal Marsh & Wetland	Atlantic Coastal Plain Central Fresh-Oligohaline Tidal Marsh
Freshwater Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Fresh and Oligohaline Tidal Marsh
Prairie	Bluegrass Basin Savanna and Woodland
Prairie	East Gulf Coastal Plain Black Belt Calcareous Prairie and Woodland
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 - Herbaceous Modifier
Wetlands	Atlantic Coastal Plain Depression Pondshore
Wetlands	Atlantic Coastal Plain Large Natural Lakeshore
Wetlands	Atlantic Coastal Plain Northern Pondshore
Wetlands	Atlantic Coastal Plain Sandhill Seep
Wetlands	Central Appalachian Floodplain - Herbaceous 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 Depression Pondshore
Wetlands	North-Central Appalachian Seepage Fen
Wetlands	South-Central Interior Large Floodplain - Herbaceous Modifier
Wetlands	Southern and Central Appalachian Bog and Fen
Wetlands	Southern Appalachian Seepage Wetland
Wetlands	Southern Piedmont Large Floodplain Forest - Herbaceous Modifier
Wetlands	Western Highland Rim Seepage Fen

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

<b>Functional Group</b>	<b>Map Unit Name</b>
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Hardwood Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Southern Appalachian Low Mountain Pine Forest
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 Mesic Forest
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Pine Modifier
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Hardwood Modifier
Forest/Woodland	Southern and Central Appalachian Cove Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Pine Modifier
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Hardwood Modifier
Forest/Woodland	Central Appalachian Oak and Pine Forest
Forest/Woodland	Northeastern Interior Dry Oak Forest-Hardwood Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Southern and Central Appalachian Oak Forest
Forest/Woodland	Southern and Central Appalachian Oak Forest - Xeric
Forest/Woodland	South-Central Interior Mesophytic Forest
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest - Evergreen Modifier
Forest/Woodland	Northern Atlantic Coastal Plain Dry Hardwood Forest
Forest/Woodland	East Gulf Coastal Plain Northern Mesic Hardwood Forest
Prairie	East Gulf Coastal Plain Black Belt Calcareous Prairie and Woodland - Herbaceous Modifier
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 Interior Shortleaf Pine-Oak Forest - Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Pine Modifier
Forest/Woodland	Southern Coastal Plain Dry Upland Hardwood Forest

Association.

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