

SOUTHEAST GAP ANALYSIS PROJECT

Species Modeling Report

Hooded Warbler

Wilsonia citrina

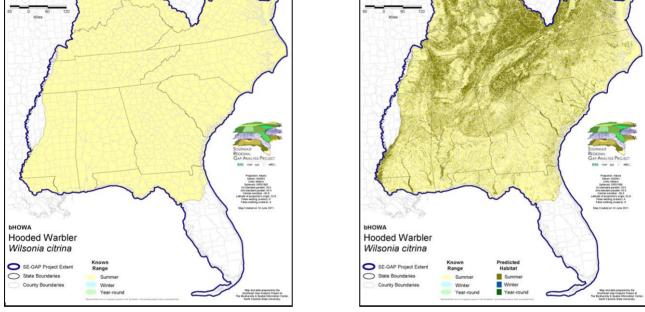
Taxa: Avian

Order: Passeriformes Family: Parulidae

SE-GAP Spp Code: **bHOWA** ITIS Species Code: 178972 NatureServe Element Code: ABPBX16010

KNOWN RANGE:





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

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

 GAP Online Tool Link:
 http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=bHOWA

 Data Download:
 http://www.basic.ncsu.edu/segap/datazip/region/vert/bHOWA_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: DE (E), IN (SSC), KY (N), MI (SC), MN (SPC), NJ (D/S), NV (YES), NY (PB), RI (Not Listed), UT (None), WI (THR), WI (THR), BC (8 (2005)), ON (SC), QC (Non suivie)

NS Global Rank: G5

NS State Rank: AL (S5B), AR (S4B), AZ (S2M), CA (SNA), CO (SNA), CT (S4B), CT (S4B), DC (S3S4N), DE (S1B), FL (SNRB), GA (S5), IA (S1B,S2N), IL (S3S4), IN (S3B), KS (S1B), KY (S5B), LA (S5B), MA (SXB,S2N), MA (SXB,S2N), MD (S4S5B), ME (SNA), MI (S3), MN (S3B), MO (S3), MS (S5B), MS (S5B), MT (SNA), NC (S5B), NC (S5B), NE (SNRN), NJ (S3B), NM (S4N), NM (S4N), NV (SNA), NY (S5), OH (S5), OK (S2B), OR (SNA), PA (S4B), RI (S3B), SC (S4?B), TN (S4), TX (S5B), UT (SNA), VA (S5), WA (SNA), WI (S2S3B), WI (S2S3B), WV (S5B), WY (SNA), AB (SNA), BC (SNA), MB (SNA), NB (SNA), NF (SNA), NS (SNA), ON (S3B), QC (SNA), 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	34,074.4	< 1	29,727.5	< 1	0.0	0	0.0	(
Status 2	76,510.9	< 1	326,179.7	1	0.0	0	4,071.2	< 1
Status 3	2,897.7	< 1	1,670,959.4	5	38,260.5	< 1	224,079.1	< 1
Status 4	56.6	< 1	0.0	0	0.0	0	0.0	C
Total	113,539.6	< 1	2,026,866.6	6	38,260.5	< 1	228,150.4	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	229,336.3	< 1	67.1	< 1	0.0	C
Status 2	0.0	0	14,522.9	< 1	4,447.6	< 1	0.0	C
Status 3	26,536.1	< 1	88,862.0	< 1	0.0	0	920.5	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	C
Total	26,536.1	< 1	332,721.2	1	4,514.7	< 1	920.5	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Fores	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1,205.2	< 1	72.0	< 1	0.0	(
Status 2	0.0	0	17,248.6	< 1	466,144.9	1	1,407.5	< 1
Status 3	16,674.8	< 1	201,696.3	< 1	141,411.2	< 1	65,968.9	< 1
Status 4	0.0	0	0.0	0	48,731.0	< 1	5.8	< 1
Total	16,674.8	< 1	220,150.1	< 1	656,359.1	2	67,382.2	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	13,137.0	< 1	0.0	0	0.0	(
Status 2	5,032.3	< 1	63,851.9	< 1	0.5	< 1	1,266.8	< 1
Status 3	0.0	0	2,914.7	< 1	5,383.4	< 1	16,885.3	< 1
Status 4	0.0	0	2.1	< 1	1,656.8	< 1	0.0	0
Total	5,032.3	< 1	79,905.7	< 1	7,040.8	< 1	18,152.0	< 1
	Private Land - I	No Res.		Water			Overa	all Tota
	ha	%	ha	%			ha	%
Status 1	0.0	0	0.0	0			307,619.5	< 1
Status 2	0.0	0	0.0	5			980,685.1	3
Status 3	398.6	< 1	0.0	0			2,503,848.6	13
Status 4	25,944,979.2	82	17,105.9	< 1			26,061,211.6	83
Total	25,945,377.8	82	17,106.0	<1			29,853,364.8	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.

Summer Model:

Habitat Description: Hooded Warbler inhabit mixed (Fussell 1994) or deciduous, usually mature, (Simpson 1992) shaded forests with a dense shrubby understory (Dunn and Garrett 1997), especially in ravines or near water (Alsop 1991, Ehrlich et al. 1988). Also in cypress lagoons and swamps (Dunn and Garrett 1997, Griscom and Sprunt 1957), and sometimes pine plantations with dense undergrowth (Dunn and Garrett 1997). In general, this species breeds in mixed hardwood forests in it's northernly range and cypress-gum swamps in the southernly range (Ogden & Stutchbury 1994). Sometimes they are also found in mature pine forests but preferred tree species include beech, maple, hickory, oak, and cypress-gum (GA-GAP 2003). Nests in understory of mature deciduous forest, especially along streams and ravine edges, and thickets in riverine forest (AOU 1983). Inhabits both young and mature forests but is most abundant in the latter. Rarely occurs at elevations above 1200 m (Hamel 1992). NatureServe (2005) identified that in "North Carolina. common in mountain ravines with dense growth of mountain laurel (KALMIA LATIFOLIA) and rhododendron (RHODODENDRON spp.) and in bottomland swamps with dense pepperbush (CLETHRA ALNIFOLIA) and giant cane (ARUNDINARIA GIGANTEA) (LeGrand, pers. comm.)." Amy Silvano 9jun05

****Portions guoted directly from state hab notes. Amy Silvano 9jun05

Ecosystem Classifiers: Mixed, Hardwood, Mesic, Cove, Montane & Maritime Forests, Shrub/scrub, Swamps (exluding peat), Depressional (treed/srub only but excluded Pocosins & peatlands), Floodplain/Riparian (excluding herbaceous modifiers). Amy Silvano 9jun05

Elevation Mask: < 1200m

Contiguous Patch Minimum Size (hectares): 15

Functional Group	Map Unit Name
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Hardwood Modifier
Forest/Woodland	Appalachian Hemlock-Hardwood Forest
Forest/Woodland	Atlantic Coastal Plain Central Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Dry and Dry-Mesic Oak Forest
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 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 Interior Shortleaf Pine-Oak Forest - Hardwood 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 Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland - Hardwood 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	Mississippi Delta Maritime Forest
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	South-Central Interior Mesophytic Forest
Forest/Woodland	Southern and Central Appalachian Cove Forest
Forest/Woodland	Southern and Central Appalachian Oak Forest
Forest/Woodland	Southern and Central Appalachian Oak Forest - Xeric
Forest/Woodland	Southern Appalachian Montane Pine Forest and Woodland

Forest/Woodland	Southern Coastal Plain Dry Upland Hardwood 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	Southern Piedmont Dry Oak-(Pine) Forest - Hardwood 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 Mesic Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Hardwood Modifier
Forest/Woodland	Southwest Florida Coastal Strand and Maritime Hammock
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 Nonriverine Swamp and Wet Hardwood Forest - Oak Dominated Modifier
Wetlands	Atlantic Coastal Plain Small Blackwater River Floodplain Forest
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 Riparian - Forest Modifier
Wetlands	Central Interior Highlands and Appalachian Sinkhole and Depression Pond
Wetlands	East Gulf Coastal Plain Interior Shrub Bog
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Forest Modifier
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	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	Southern and Central Appalachian Bog and Fen
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Southern Coastal Plain Nonriverine Basin Swamp
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

CITATIONS: Alsop FJ III. 1991. Birds of the Smokies. Gatlinburg: Great Smoky Mountains Natural History

Association.

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.

Bushman, E.S., and G.D. Therres. 1988. Habitat management guidelines for forest interior breeding birds of coastal Maryland. Maryland Department of Natural Resources, Wildlife Tech. Publ. 88-1. 50 pp.

Dunn, J.L., and K.L. Garrett. 1997. A field guide to warblers of North America. Houghton Mifflin Company, Boston.

Ehrlich, P.R., D.S. Dobkin, and D. Wheye. 1988. The birder's handbook: a field guide to the natural history of North American birds. Simon and Shuster, Inc., New York. xxx + 785 pp.

Fussell, J. III and M. Lyons. 1990. Birds of the Outer Banks [pamphlet]. Eastern National Parks and Monument Association Coastal Wildlife Refuge Society.

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

Griscom, L., and A. Sprunt, Jr. 1979. The warblers of America. Doubleday and Co., Garden City, New York. 302 pp.

Hagan, J.M., III, and D.W. Johnston, editors. 1992. Ecology and conservation of neotropical migrant landbirds. Smithsonian Institution Press, Washington, D.C. xiii + 609 pp.

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

Harrison, H.H. 1984. Wood warblers' world. Simon and Schuster, New York. 335 pp.

Keast, A., and E. S. Morton. 1980. Migrant birds in the Neotropics; ecology, distribution, and conservation. Smithsonian Inst. Press, Washington, D.C.

Lynch, J. F., E. S. Morton, and M. E. Van der Voort. 1985. Habitat segregation between the sexes of wintering hooded warblers (WILSONIA CITRINA). Auk 102:714-721.

Morton, E. S. 1990. Habitat segregation by sex in the hooded warbler:experiments on proximate causation and discussion of its evolution. Am. Nat. 135:319-333.

Morton, E.S., J.F. Lynch, K. Young, and P. Mehlhop. 1987. Do male Hooded Warblers exclude females from nonbreeding territories in tropical forest? Auk 104:133-135.

Nicholson CP. 1997. Atlas of the breeding birds of Tennessee. Knoxville: University of Tennessee Press.

Ogden, L.J.E. and B.J. Stutchbury. 1994. Hooded Warbler (Wilsonia citrina). In The Birds of North America, No. 110 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.

Peterjohn, B.G., and D.L. Rice. 1991. Ohio breeding bird atlas. Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Columbus, Ohio. 416 pp.

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

Powell, G. V. N., and J. H. Rappole. 1986. The hooded warbler. Pages 827-853 in Di Silvestro, R. L., editor. Audubon Wildlife Report 1986. National Audubon Soc., N.Y.

Raffaele, H.A. 1983. A guide to the birds of Puerto Rico and the Virgin Islands. Fondo Educativo Interamericano, San Juan, Puerto Rico. 255 pp.

Rappole, J.H., and D.W. Warner. 1980. Ecological aspects of migrant bird behavior in Veracruz, Mexico. Pages 353-393 in A. Keast and E.S. Morton, editors. Migrant birds in the neotropics:ecology, behavior, distribution, and conservation. Smithsonian Insti

Ridgely, R.S., and G. Tudor. 1989. The birds of South America. Vol. 1. The Oscine passerines. Univ. Texas Press, Austin. 516 pp.

Sauer, J.R., and S. Droege. 1992. Geographical patterns in population trends of neotropical migrants in North America. Pages 26-42 in J.M. Hagan III and D.W. Johnston, editors. Ecology and conservation of neotropical migrant landbirds. Smithsonian Institu

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

Stiles, F.G., and A.F. Skutch. 1989. A guide to the birds of Costa Rica. Comstock Publ. Associates, Cornell University Press, Ithaca, New York. 511 pp.

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

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