



# SOUTHEAST GAP ANALYSIS PROJECT



## Species Modeling Report

### Chestnut-sided Warbler

*Dendroica pensylvanica*

Taxa: Avian

Order: Passeriformes

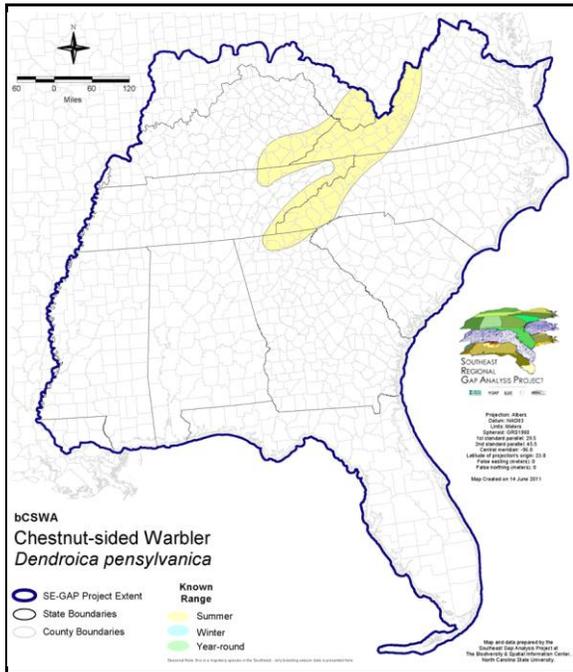
Family: Parulidae

SE-GAP Spp Code: **bCSWA**

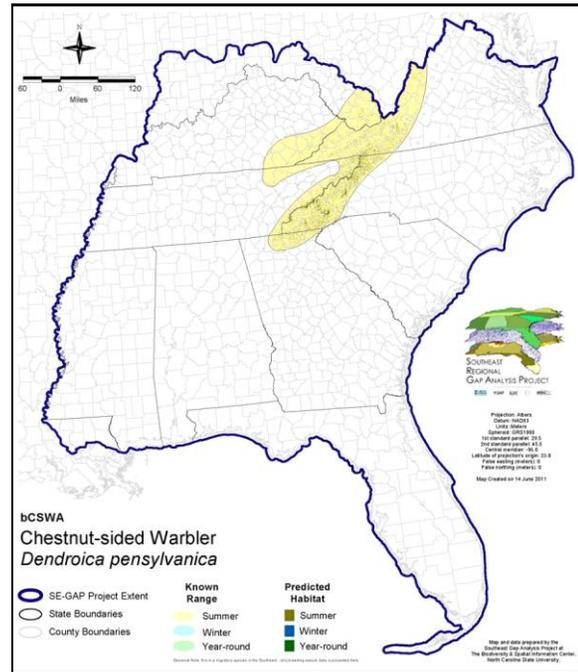
ITIS Species Code: 178911

NatureServe Element Code: ABPBX03020

#### KNOWN RANGE:



#### PREDICTED HABITAT:



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

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

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

Data Download: [http://www.basic.ncsu.edu/segap/datazip/region/vert/bCSWA\\_se00.zip](http://www.basic.ncsu.edu/segap/datazip/region/vert/bCSWA_se00.zip)

#### PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

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

NS Global Rank: G5

NS State Rank: AK (SNA), AL (SNA), AR (S1B,S5N), AZ (S1N), CA (SNA), CO (S2B), CO (S2B), CT (S5B), CT (S5B), DC (S4N), DE (S1B), FL (SNA), GA (S5), IA (S3B,S4N), ID (SNA), IL (S2S3), IN (S3B), KS (SNA), KY (S3S4B), LA (SNA), MA (S5B), MD (S4B), ME (S5B), MI (S5), MN (SNRB), MO (S3), MS (SNA), MT (SNA), NC (S5B), NC (S5B), ND (S3), NE (SNRN), NH (S5B), NJ (S4B), NM (S4N), NV (SNA), NY (S5), OH (S3), OK (S2N), OR (SNA), PA (S5B), RI (S5B), SC (SNR), SD (S1B), SD (S1B), TN (S4), TX (S4N), UT (SNA), VA (S4), VT (S5B), VT (S5B), WA (SNA), WI (S4B), WI (S4B), WV (S5B), WY (SNA), AB (S2), BC (SNA), LB (SNA), MB (S5B), MB (S5B), NB (S5B), NF (SNA), NS (S5B), ON (S5B), PE (S5B), QC (S5B), SK (S5B), SK (S5B)

**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	0.0	0	4,472.6	< 1	0.0	0	0.0	0
Status 2	0.0	0	18,306.5	3	0.0	0	0.0	0
Status 3	0.0	0	113,104.4	16	161.2	< 1	707.3	< 1
Status 4	4.0	< 1	0.0	0	0.0	0	0.0	0
Total	4.0	< 1	135,883.5	19	161.2	< 1	707.3	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	44,001.5	6	0.0	0	0.0	0
Status 2	0.0	0	324.9	< 1	0.0	0	0.0	0
Status 3	0.0	0	6,614.6	< 1	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	50,941.0	7	0.0	0	0.0	0
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	0.0	0	0.0	0
Status 2	0.0	0	0.0	0	5,123.4	< 1	0.2	< 1
Status 3	3,013.3	< 1	2,297.7	< 1	1,260.0	< 1	864.3	< 1
Status 4	0.0	0	0.0	0	215.9	< 1	0.0	0
Total	3,013.3	< 1	2,297.7	< 1	6,599.3	< 1	864.5	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	257.0	< 1	0.0	0	0.0	0
Status 2	0.0	0	754.1	< 1	0.0	0	0.0	0
Status 3	0.0	0	0.0	0	9.1	< 1	0.0	0
Status 4	0.0	0	0.0	0	21.6	< 1	0.0	0
Total	0.0	0	1,011.2	< 1	30.7	< 1	0.0	0
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	48,731.2	7		
Status 2	0.0	0	0.0	0	24,509.1	3		
Status 3	0.0	0	0.0	0	128,031.8	33		
Status 4	411,471.4	57	99.3	< 1	412,024.1	57		
Total	411,471.4	57	99.3	< 1	613,296.2	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: Chestnut-sided warbler inhabits early successional habitats such as abandoned farmlands, margins of roadways, utility corridors, and regenerating clearcuts (Palmer-Ball 1996), as well as natural environments such as scrubby second-growth habitats and forest edges (Richardson & Brauning 1995). In the mountain regions, this species inhabits brushy areas in over-grown fields (Pearson 1959), heath balds (Kendeigh and Fawver 1981), mountain laurel thickets, thickets of young chestnuts (Dunn and Garrett 1997), and sapling-sized clear-cut areas (Mitchell and Stedman 1993); can also be found within mature deciduous or coniferous forests wherever there exists a brushy place with a gap in the canopy due to fire, windfallen trees, blight, logging, etc. (Stupka 1963, Alsop 1991). In the spruce-fir zone, birds breed in mountain ash saplings, which often sprout in these gaps, and also where the spruce and fir are in early successional stages (Kendeigh and Fawver 1981). Amy Silvano 6jun05

\*\*\*Portions quoted directly from compiled habitat.

Customized Model: Generally distributed between 610-1220m in TN, but have recorded singing males as low as 550m on Cumberland Plateau (Nicholson 1997). Richardson & Brauning (1995) restricts species to elevations >450m in Appalachian mountains. \*\*\*\*Do not restrict Montane Forest, Disturbed successional shrub/scrub, natural scrub/shrub, or Bald-shrub ecosystems to Edge Buffer. So only apply edge buffer to Mixed, & Hardwood Forests, Developed open space, pasture or succ grassland (identified as AMU's). Ecotone width derived from territorial spacing, larger male territory size 1.10 ha (Richardson & Brauning 1995)... $1.10\text{ha}=11000\text{m}^2=104\text{m}$  so 60m buffer from & into forest gives 120m edge. Amy Silvano 6jun05

Elevation Mask: > 450m and < 2500m

Mask of Forest/Open Ecotone: Include within 30m of ecotone edge.

Mask of Woodlands and Shrublands: Include all woodland and shrubland interiors and 30m buffer from them.

**Selected Map Units:**

Functional Group	Map Unit Name
Anthropogenic	Successional Shrub/Scrub (Clear Cut)
Anthropogenic	Successional Shrub/Scrub (Other)
Anthropogenic	Successional Shrub/Scrub (Utility Swath)
Bald	Central Appalachian Montane Rocky Bald - Shrub Modifier
Bald	Southern Appalachian Grass and Shrub Bald - Shrub Modifier
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	Southern Appalachian Montane Pine Forest and Woodland
Wetlands	Central Interior Highlands and Appalachian Sinkhole and Depression Pond
Wetlands	North-Central Appalachian Seepage Fen
Wetlands	Southern and Central Appalachian Bog and Fen

**Selected Secondary Map Units within 120m of Primary Map Units:**

Functional Group	Map Unit Name
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Southern Appalachian Low Mountain Pine 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 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 - Mixed Modifier
Forest/Woodland	Southern and Central Appalachian Oak Forest

Forest/Woodland	Southern and Central Appalachian Oak Forest - Xeric
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest - Evergreen Modifier
Anthropogenic	Deciduous Plantations
Anthropogenic	Successional Grassland/Herbaceous
Anthropogenic	Successional Grassland/Herbaceous (Other)
Anthropogenic	Successional Grassland/Herbaceous (Utility Swath)
Anthropogenic	Pasture/Hay

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