



# SOUTHEAST GAP ANALYSIS PROJECT



## Species Modeling Report

### Red-breasted Nuthatch

*Sitta canadensis*

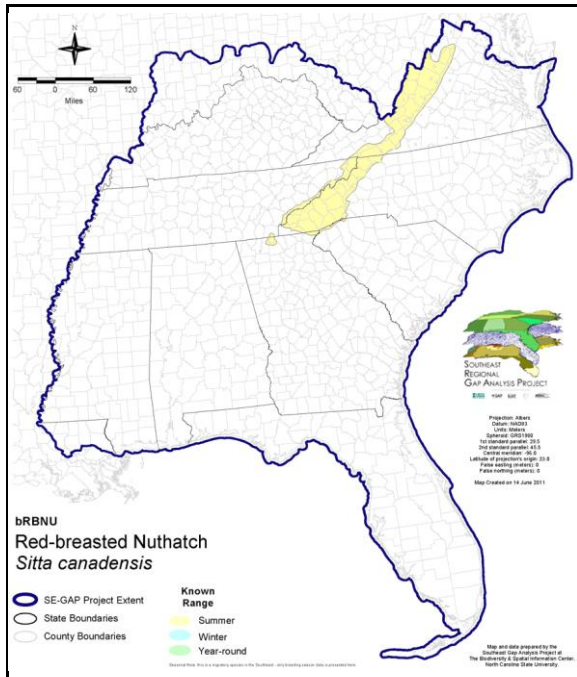
Taxa: Avian  
 Order: Passeriformes  
 Family: Sittidae

SE-GAP Spp Code: **brBNU**

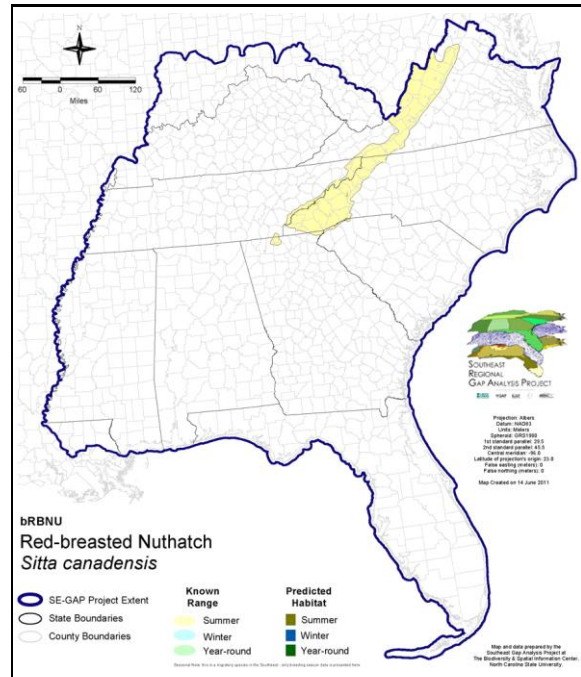
ITIS Species Code: 178784

NatureServe Element Code: ABPAZ01010

#### KNOWN RANGE:



#### PREDICTED HABITAT:



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

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

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

Data Download: [http://www.basic.ncsu.edu/segap/datazip/region/vert/brBNU\\_se00.zip](http://www.basic.ncsu.edu/segap/datazip/region/vert/brBNU_se00.zip)

#### PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: ID (P), KY (E), KY (E), NC (W2,W5), NJ (S/S), NV (YES), NY (PB), OH (SI), RI (Not Listed), UT (None), VA (SC), BC (4 (2005)), QC (Non suivie)

NS Global Rank: G5

NS State Rank: AK (S4), AL (S4N), AR (S4N), AZ (S4), CA (S5), CO (S5), CT (S5), DC (S1S2N), DE (SNA), FL (SNRN), GA (S4), IA (S3N), IA (S3N), ID (S5), IL (S1), IN (S1B), IN (S1B), KS (SNA), KY (S1B), KY (S1B), LA (SNA), MA (S5), MD (S1B), ME (S5), MI (S5), MN (SNR), MO (SNRN), MO (SNRN), MS (SNA), MT (S5), NC (S3B,S4N), ND (S4), NE (S4), NH (S5), NJ (S4B,S4N), NM (S4B,S4N), NV (S5), NY (S5), OH (SNA), OK (S2N), OR (S5), PA (S3S4B,S5N), RI (S3B), SC (S4), SD (S5B,S4N), TN (S2B,S4N), TX (S2B,S4N), UT (S4), VA (S2B,S4N), VT (S5B,S5N), WA (S5), WI (S4B), WI (S4B), WV (S4B,S4N), WY (S5B,S5N), AB (S5), BC (S5B), LB (S3), MB (S5), NB (S5), NF (S5), NS (S5), NT (SNR), ON (S5), PE (S5), QC (S5B), SK (S5B,S5N), YT (S4)

**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	399.4	1	0.0	0	0.0	0
Status 2	0.0	0	3,243.2	12	0.0	0	0.0	0
Status 3	0.0	0	3,966.6	14	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	7,609.1	28	0.0	0	0.0	0
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	10,873.6	40	0.0	0	0.0	0
Status 2	0.0	0	0.0	0	0.0	0	0.0	0
Status 3	0.0	0	669.4	2	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	11,543.0	42	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	70.7	< 1	0.0	0
Status 3	32.9	< 1	363.3	1	12.2	< 1	3.4	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	32.9	< 1	363.3	1	83.0	< 1	3.4	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	0.0	0	0.0	0
Status 2	0.0	0	1.2	< 1	0.0	0	0.0	0
Status 3	0.0	0	0.0	0	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	1.2	< 1	0.0	0	0.0	0
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	11,273.0 41			
Status 2	0.0	0	0.0	0	3,315.1 12			
Status 3	0.0	0	0.0	0	5,047.8 33			
Status 4	3,789.5	14	0.0	0	3,789.5 14			
Total	3,789.5	14	0.0	0	23,425.5 100			

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: Red breasted nuthatches are permanent resident of the spruce-fir and hemlock forests of the mountains (Potter et al 1980). They prefer coniferous forest, although Kaufman (1996) lists mixed forests will also be used. Mature forests are selected for (Potter et al 1980, Simpson 1992) probably because old decaying wood present in these forests provides good nesting sites (Kaufman 1996). Limited to habitat above 3500ft.

Nest is usually excavated by the breeding pair (Hamel 1992, Kaufman 1996, Potter et al 1980), but will also use natural cavities or old woodpecker holes (Pravosudov and Grubb 1993). Ordinarily the cavity is hollowed out in rotten snag or stub of a living or dead tree generally 5 to 40 above the ground (Kaufman 1996). Pitch is plastered around the opening of the cavity as long as the nest is active, and is thought to be a deterrent to insects and predators entering the nest (Kaufman 1996, Potter et al 1980).

In central Ohio, using minimum convex polygons, males had an average home range of 2.7 ha (n=7), and females had an average home range of 3.37 ha (n=3). There was substantial home range overlap between individuals (Matthysen et. Al. 1992).

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

Elevation Mask: > 1066m and < 2500m

### Selected Map Units:

Functional Group	Map Unit Name
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Pine Modifier
Forest/Woodland	Appalachian Serpentine Woodland
Forest/Woodland	Central and Southern Appalachian Spruce-Fir Forest
Forest/Woodland	Central Appalachian Oak and Pine Forest
Forest/Woodland	Central Appalachian Pine-Oak Rocky Woodland
Forest/Woodland	Northeastern Interior Dry Oak Forest - Mixed Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Southern Appalachian Low Mountain Pine Forest
Forest/Woodland	Southern Appalachian Montane Pine Forest and Woodland
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Pine Modifier
Wetlands	North-Central Interior and Appalachian Rich Swamp

**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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This data was compiled and/or developed  
by the Southeast GAP Analysis Project at  
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Center, North Carolina State University.