



# SOUTHEAST GAP ANALYSIS PROJECT



## Species Modeling Report

### Canada Goose

*Branta canadensis*

Taxa: Avian

Order: Anseriformes

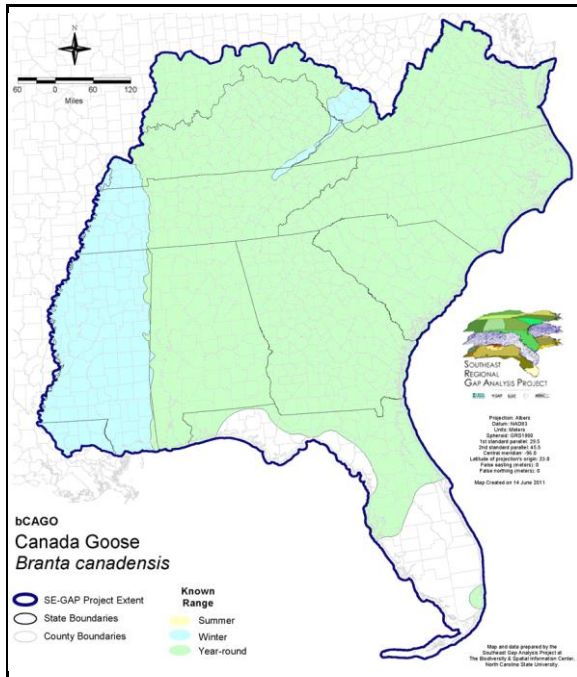
Family: Anatidae

SE-GAP Spp Code: **bCAGO**

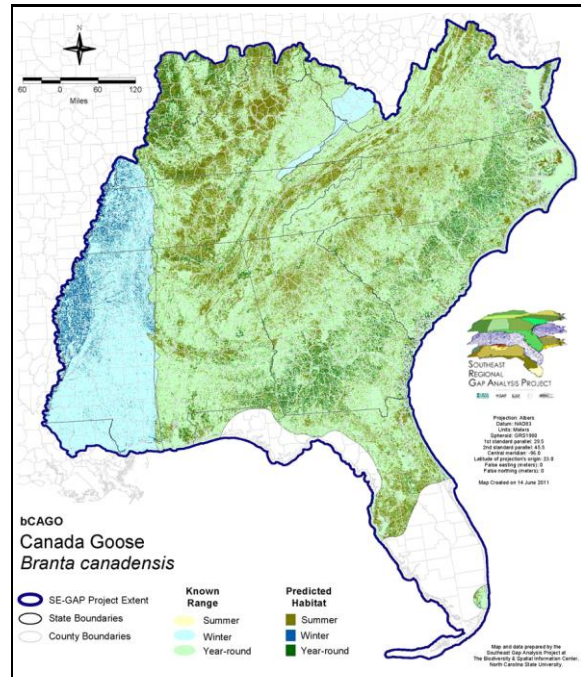
ITIS Species Code: 174999

NatureServe Element Code: ABNJB05030

#### KNOWN RANGE:



#### PREDICTED HABITAT:



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

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

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

Data Download: [http://www.basic.ncsu.edu/segap/datazip/region/vert/bCAGO\\_se00.zip](http://www.basic.ncsu.edu/segap/datazip/region/vert/bCAGO_se00.zip)

#### PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: AL (GB), ID (G), KY (N), NV (YES), NY (PB - GS), RI (Not Listed), UT (None), BC (4 (2005)), QC (Non suivie)

NS Global Rank: G5

NS State Rank: AK (S5B), AL (S3B,S5N), AR (S5), AZ (S1B,S4N), CA (SNRB,SNRN), CO (S5), CT (S5), DE (S4B,S5N), FL (SNA), GA (S4), HI (SNA), IA (S5B,S5N), ID (S5B,S5N), IL (S5), IN (S5), KS (S3B,S4N), KY (S3S4B,S4N), LA (S3), MA (S5), MD (S4B,S5N), ME (S4N,S5B), MI (S5), MN (SNRB,SNRN,SNRM), MO (S5), MS (S4N), MS (S4N), MT (S5B), MT (S5B), NC (S4B,S4N), ND (SNRB), NE (SNRN), NH (S5), NJ (S5), NM (S5B,S5N), NV (S5), NY (S5), OH (S5), OK (SU), OR (S5), PA (S5B,S5N), RI (S4B), SC (SNR), SD (S5B,S5N), TN (S5B), TX (S5), UT (S4), VA (S3S4), VT (S5N), VT (S5N), WA (S5B,S5N), WI (S5B), WI (S5B), WV (S5N,S5B), WY (S4N,S5B), AB (S5), BC (S5), LB (S5B), MB (S5B), MB (S5B), NB (S4B,S4M), NB (S4B,S4M), NF (S5B), NS (S4B), NT (SNRB), NU (SNRB), ON (S5), PE (S5M), PE (S5M), QC (S5B), SK (S5B,S5M,S2N), YT (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	64,497.2	< 1	873.5	< 1	0.0	0	0.0	0
Status 2	98,380.9	< 1	7,633.6	< 1	0.0	0	369.1	< 1
Status 3	1,370.3	< 1	128,734.7	< 1	21,364.7	< 1	160,172.4	< 1
Status 4	22.3	< 1	0.0	0	0.0	0	317.2	< 1
Total	164,270.7	< 1	137,241.8	< 1	21,364.7	< 1	160,858.6	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	5,458.6	< 1	1,068.4	< 1	2,364.7	< 1
Status 2	0.0	0	31,169.2	< 1	28,781.0	< 1	0.0	0
Status 3	6,578.5	< 1	23,367.9	< 1	0.0	0	1,031.1	< 1
Status 4	0.0	0	3.0	0	0.0	0	0.0	0
Total	6,578.5	< 1	59,998.7	< 1	29,849.4	< 1	3,395.8	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	79.0	< 1	6.2	< 1	0.0	0
Status 2	0.0	0	834.7	< 1	129,053.8	< 1	21.5	< 1
Status 3	2,021.1	< 1	94,948.4	< 1	52,894.3	< 1	38,835.7	< 1
Status 4	0.0	0	0.0	0	6,616.2	< 1	0.9	< 1
Total	2,021.1	< 1	95,862.1	< 1	188,570.4	< 1	38,858.1	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	882.9	< 1	0.0	0	0.0	0
Status 2	29,430.8	< 1	33,168.3	< 1	1.6	< 1	554.4	< 1
Status 3	0.0	0	3,190.8	< 1	8,196.8	< 1	25,208.6	< 1
Status 4	0.0	0	0.0	0	1,850.2	< 1	< 0.1	< 1
Total	29,430.8	< 1	37,242.0	< 1	10,048.6	< 1	25,763.1	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	6	0.0	0	75,230.6	< 1		
Status 2	0.8	< 1	0.0	6	359,399.9	1		
Status 3	236.5	< 1	0.0	0	568,151.6	2		
Status 4	27,417,739.5	96	36,953.5	< 1	27,470,096.7	96		
Total	27,417,977.0	96	36,953.6	< 1	28,472,878.9	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: Generally considered feral or introduced throughout much of the southeast, Canada geese utilize a variety of habitats near water for breeding (Nicholson 1997). They typically inhabit open or forested areas near lakes, ponds, larger streams, marshes, and rivers in either fresh or brackish situations (Mowbray et al. 2002, Ehrlich et al. 1988). In the south, Canada geese typically prefer marshes, especially those with bulrush or cattails, and will also utilize agricultural and urban areas such as irrigation ditches, city lakes, parks, and golf courses for breeding (Mowbray et al. 2002). 'Nests sites are generally on the ground near water, either on the mainland (Nicholson 1997) or often on a small island (Belrose 1976). Also on cliffs, in trees, on man-made structures such as wooden platforms (Belrose 1976), or in abandoned osprey or heron nests (Geis 1956), especially if the ground is covered in snow (Ehrlich et al. 1988).' Amy Silvano 01Sept05

\*\*\*Nest information quoted directly from NC habitat notes

Ecosystem Classifiers: Urban, Disturbed, Open water, Shrub/scrub, Depressional, Lakes/Ponds/River, Unconsolidated shore, Floodplain/Riparian (Herb mods only). Amy Silvano 01Sept05

### Hydrography Mask:

Utilizes flowing water features with buffers of 500m from and 500m into selected water features.

Utilizes open water features with buffers of 500m from and 500m into selected water features.

Utilizes wet vegetation features with buffers of 250m from and unlimited into selected vegetation features.

### Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Bare Sand
Anthropogenic	Developed Open Space
Anthropogenic	Low Intensity Developed
Anthropogenic	Medium Intensity Developed
Anthropogenic	Pasture/Hay
Anthropogenic	Row Crop
Beach	Atlantic Coastal Plain Sea Island Beach
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 Indian River Lagoon Tidal Marsh
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Sea-Level Fen
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Tidal Wooded Swamp
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Southern Tidal Wooded Swamp
Brackish Tidal Marsh & Wetland	East Gulf Coastal Plain Tidal Wooded Swamp
Coastal Dune & Freshwater Wetland	Atlantic and Gulf Coastal Plain Interdunal Wetland
Freshwater Tidal Marsh & Wetland	Atlantic Coastal Plain Central Fresh-Oligohaline Tidal Marsh
Freshwater Tidal Marsh & Wetland	Atlantic Coastal Plain Embayed Region Tidal Freshwater Marsh
Freshwater Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Fresh and Oligohaline Tidal Marsh
Freshwater Tidal Marsh & Wetland	Florida Big Bend Fresh-Oligohaline Tidal Marsh
Water	Open Water (Brackish/Salt)
Water	Open Water (Fresh)
Wetlands	Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Herbaceous Modifier
Wetlands	Atlantic Coastal Plain Clay-Based Carolina Bay Forested Wetland
Wetlands	Atlantic Coastal Plain Clay-Based Carolina Bay Herbaceous Wetland
Wetlands	Atlantic Coastal Plain Depression Pondshore
Wetlands	Atlantic Coastal Plain Large Natural Lakeshore
Wetlands	Atlantic Coastal Plain Northern Basin Swamp and Wet Hardwood Forest
Wetlands	Atlantic Coastal Plain Northern Pondshore
Wetlands	Atlantic Coastal Plain Peatland Pocosin
Wetlands	Atlantic Coastal Plain Sandhill Seep
Wetlands	Atlantic Coastal Plain Streamhead Seepage Swamp, Pocosin, and Baygall
Wetlands	Atlantic Coastal Plain Xeric River Dune

Wetlands	Central Appalachian Floodplain - Herbaceous Modifier
Wetlands	Central Appalachian Riparian - Herbaceous Modifier
Wetlands	Central Florida Herbaceous Pondshore
Wetlands	Central Florida Herbaceous Seep
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 Large River Floodplain Forest - Herbaceous Modifier
Wetlands	East Gulf Coastal Plain Northern Depression Pondshore
Wetlands	East Gulf Coastal Plain Northern Seepage Swamp
Wetlands	East Gulf Coastal Plain Southern Depression Pondshore
Wetlands	Floridian Highlands Freshwater Marsh
Wetlands	North-Central Appalachian Seepage Fen
Wetlands	South Florida Freshwater Slough and Gator Hole
Wetlands	South Florida Willow Head
Wetlands	South-Central Interior Large Floodplain - Herbaceous Modifier
Wetlands	Southern and Central Appalachian Bog and Fen
Wetlands	Southern Appalachian Seepage Wetland
Wetlands	Southern Coastal Plain Herbaceous Seepage Bog
Wetlands	Southern Coastal Plain Nonriverine Basin Swamp
Wetlands	Southern Coastal Plain Seepage Swamp and Baygall
Wetlands	Southern Coastal Plain Spring-run Stream Aquatic Vegetation
Wetlands	Southern Piedmont Large Floodplain Forest - Herbaceous Modifier
Wetlands	Southern Piedmont Seepage Wetland
Wetlands	Southern Piedmont/Ridge and Valley Upland Depression Swamp
Wetlands	Unconsolidated Shore (Lake/River/Pond)
Wetlands	Western Highland Rim Seepage Fen

**Winter Model:**

**Habitat Description:** During the winter months Canada Geese can be found in coastal areas, mudflats, shallow tidal waters, salt- and freshwater marshes, lakes, and rivers near or adjacent to agricultural fields (Mowbray et al. 2002). Amy Silvano 01sept05

**Ecosystem Classifiers:** Open Water, Coastal, Brackish and Freshwater Marshes, and Unconsolidated Shores as PMU's. Ag as AMU. 01Sept05

**Hydrography Mask:**

- Utilizes flowing water features with buffers of 1000m from and 500m into selected water features.
- Utilizes open water features with buffers of 1000m from and 500m into selected water features.
- Utilizes wet vegetation features with buffer of unlimited into selected vegetation features.

**Selected Map Units:**

Functional Group	Map Unit Name
Beach	Unconsolidated Shore (Beach/Dune)
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 Indian River Lagoon Tidal 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 Southern Tidal Wooded Swamp
Brackish Tidal Marsh & Wetland	Florida Big Bend Salt-Brackish Tidal Marsh
Brackish Tidal Marsh & Wetland	Mississippi Sound Salt and Brackish Tidal Marsh
Brackish Tidal Marsh & Wetland	South Florida Everglades Sawgrass Marsh
Brackish Tidal Marsh & Wetland	Southwest Florida Perched Barriers Salt Swamp and Lagoon - Marsh Modifier
Coastal Dune & Freshwater Wetland	Atlantic and Gulf Coastal Plain Interdunal Wetland
Freshwater Tidal Marsh & Wetland	Atlantic Coastal Plain Central Fresh-Oligohaline Tidal Marsh
Freshwater Tidal Marsh & Wetland	Atlantic Coastal Plain Embayed Region Tidal Freshwater Marsh

Freshwater Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Fresh and Oligohaline Tidal Marsh
Freshwater Tidal Marsh & Wetland	Florida Big Bend Fresh-Oligohaline Tidal Marsh
Water	Open Water (Brackish/Salt)
Water	Open Water (Fresh)
Wetlands	Unconsolidated Shore (Lake/River/Pond)

**Selected Secondary Map Units within 1000m of Primary Map Units:**

Functional Group	Map Unit Name
Anthropogenic	Row Crop

- CITATIONS:** Aguilera, E., R. L. Knight, and J. L. Cummings. 1991. An evaluation of two hazing methods for urban Canada geese. *Wildl. Soc. Bull.* 19:32-35.
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This data was compiled and/or developed by the Southeast GAP Analysis Project at The Biodiversity and Spatial Information Center, North Carolina State University.