



# SOUTHEAST GAP ANALYSIS PROJECT



## Species Modeling Report

### Hooded Merganser

*Lophodytes cucullatus*

Taxa: Avian

Order: Anseriformes

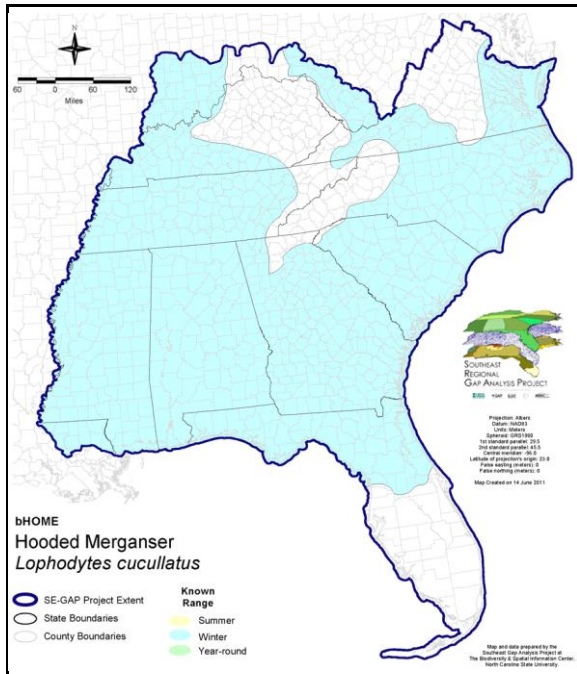
Family: Anatidae

SE-GAP Spp Code: **bHOME**

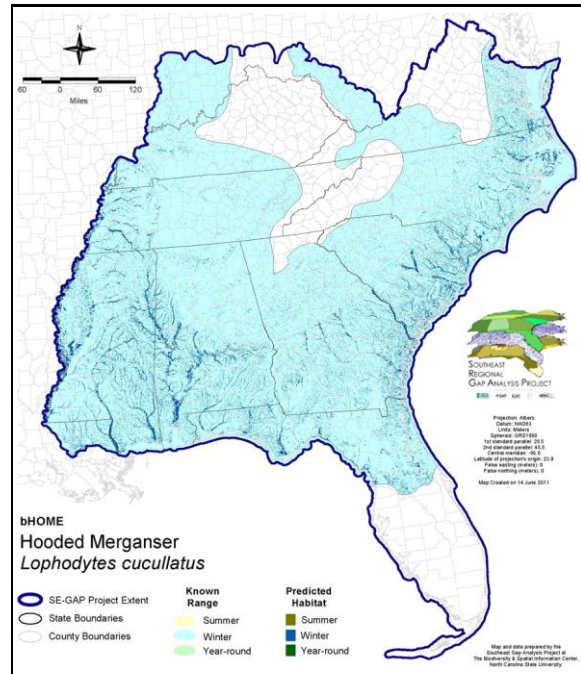
ITIS Species Code: 175183

NatureServe Element Code: ABNJB20010

#### KNOWN RANGE:



#### PREDICTED HABITAT:



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

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

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

Data Download: [http://www.basic.ncsu.edu/segap/datazip/region/vert/bHOME\\_se00.zip](http://www.basic.ncsu.edu/segap/datazip/region/vert/bHOME_se00.zip)

#### PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: AL (GB), ID (G), KY (T), NC (W3), NJ (SC/S), NV (YES), NY (PB - GS), RI (Concern), UT (None), BC (4 (2005)), QC (Non suivie)

NS Global Rank: G5

NS State Rank: AK (S3B), AL (S3B,S5N), AR (S2B,S5N), AZ (S2N), CA (SNRB,SNRN), CO (SNA), CT (S3B), DC (S3N), DE (S1B,S4N), FL (SNRN), GA (S5), IA (S2B,S3N), ID (S2B,S3N), IL (S2S3), IN (S2S3B), IN (S2S3B), KS (S1B,S2N), KY (S1S2B,S3S4N), LA (S2S3B,S4N), MA (S4B,S5N), MD (S1B), ME (S5), MI (S3), MN (SNRB,SNRN), MO (SNRB,SNRN), MS (S2?B,S5N), MT (S4B), MT (S4B), NC (S1B,S4N), ND (S3), NE (SNRN), NH (S5), NJ (S3B), NJ (S3B), NM (S4N), NV (S3N), NY (S4), OH (S2), OK (S3N), OR (S4), PA (S3B,S3N), RI (S1B), SC (SNRB,SNRN), SD (S2B), SD (S2B), TN (S4N), TX (S4N,S3B), UT (S3N), VA (S4N), VA (S4N), VT (S4B,S4N), WA (S3N,S4B), WI (S4B), WI (S4B), WV (S1B,S4N), WY (SHB), WY (SHB), AB (S2), BC (S5B), LB (S2B), MB (S5B), MB (S5B), NB (S4B), NF (S1B), NS (S4B), NT (SNRN), ON (S5B,S5N), ON (S5B,S5N), PE (SNR), QC (S5B), SK (S4B,S3M), YT (S3B)



**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 | 95,772.2               | 1   | 4,745.6               | < 1 | 0.0                  | 0   | 0.0                   | 0   |
| Status 2 | 134,660.1              | 2   | 14,248.2              | < 1 | 0.0                  | 0   | 1,661.1               | < 1 |
| Status 3 | 1,659.9                | < 1 | 147,521.3             | 2   | 6,155.8              | < 1 | 87,200.9              | 1   |
| Status 4 | 21.0                   | < 1 | 0.0                   | 0   | 0.0                  | 0   | 12.6                  | < 1 |
| Total    | 232,113.1              | 3   | 166,515.1             | 2   | 6,155.8              | < 1 | 88,874.6              | 1   |
|          | US Dept. of Energy     |     | US Nat. Park Service  |     | NOAA                 |     | Other Federal Lands   |     |
|          | ha                     | %   | ha                    | %   | ha                   | %   | ha                    | %   |
| Status 1 | 0.0                    | 0   | 8,832.2               | < 1 | 1,078.3              | < 1 | 0.0                   | 0   |
| Status 2 | 0.0                    | 0   | 26,006.9              | < 1 | 29,803.2             | < 1 | 24.6                  | < 1 |
| Status 3 | 14,479.0               | < 1 | 5,821.7               | < 1 | 0.0                  | 0   | 1,107.5               | < 1 |
| Status 4 | 0.0                    | 0   | 2.0                   | 3   | 0.0                  | 0   | 0.0                   | 0   |
| Total    | 14,479.0               | < 1 | 40,663.8              | < 1 | 30,881.5             | < 1 | 1,132.1               | < 1 |
|          | Native Am. Reserv.     |     | State Park/Hist. Park |     | State WMA/Gameland   |     | State Forest          |     |
|          | ha                     | %   | ha                    | %   | ha                   | %   | ha                    | %   |
| Status 1 | 0.0                    | 0   | 163.1                 | < 1 | 1.4                  | < 1 | 0.0                   | 0   |
| Status 2 | 0.0                    | 0   | 770.7                 | < 1 | 234,579.4            | 3   | 0.0                   | 0   |
| Status 3 | 1,747.0                | < 1 | 142,888.1             | 2   | 78,945.3             | < 1 | 35,034.6              | < 1 |
| Status 4 | 0.0                    | 0   | 0.0                   | 0   | 9,452.4              | < 1 | 5.4                   | < 1 |
| Total    | 1,747.0                | < 1 | 143,821.8             | 2   | 322,978.6            | 4   | 35,040.0              | < 1 |
|          | State Coastal Reserve  |     | ST Nat.Area/Preserve  |     | Other State Lands    |     | Private Cons. Easemt. |     |
|          | ha                     | %   | ha                    | %   | ha                   | %   | ha                    | %   |
| Status 1 | 0.0                    | 0   | 2,259.0               | < 1 | 0.0                  | 0   | 0.0                   | 0   |
| Status 2 | 31,913.1               | < 1 | 50,390.5              | < 1 | 2.1                  | < 1 | 460.0                 | < 1 |
| Status 3 | 0.0                    | 0   | 3,171.8               | < 1 | 3,467.6              | < 1 | 24,986.0              | < 1 |
| Status 4 | 0.0                    | 0   | 0.0                   | 0   | 795.9                | < 1 | 0.0                   | 0   |
| Total    | 31,913.1               | < 1 | 55,821.2              | < 1 | 4,265.6              | < 1 | 25,446.0              | < 1 |
|          | Private Land - No Res. |     | Water                 |     | Overall Total        |     |                       |     |
|          | ha                     | %   | ha                    | %   | ha                   | %   |                       |     |
| Status 1 | 0.0                    | 2   | 0.0                   | 0   | 112,851.9            |     |                       |     |
| Status 2 | 0.8                    | < 1 | 0.0                   | 2   | 524,520.8            |     |                       |     |
| Status 3 | 496.2                  | < 1 | < 0.1                 | < 1 | 554,682.8            |     |                       |     |
| Status 4 | 6,995,431.3            | 83  | 33,880.7              | < 1 | 7,049,033.6          |     |                       |     |
| Total    | 6,995,928.4            | 83  | 33,881.0              | < 1 | 8,241,089.1          |     |                       |     |

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):**

**Winter Model:**

Habitat Description: As described by the AL Heritage hooded merganser's favorite winter habitats include forested freshwater wetlands, brackish estuaries, and tidal creeks. Occupy shallow, freshwater and brackish bays, estuaries, and tidal creeks and ponds, where they often concentrate along the edge of ice. In MS Alluvial Delta, they prefer deeper, more permanently flooded sloughs, backwaters, scrub/shrub, and overcup (Quercus spp) habitats.'

Quoted from state compiled notes AL-heritage/NatureServe presumed to be Dugger et al. 1994, BNA #98. Amy Silvano 08sept05

Ecosystem Classifiers: Open water, Coastal, Brackish & freshwater wetlands, Scrub/shrub, lakes/Ponds/Rivers (no depressionnal), Floodplain/Riparian. Amy silvano 08sept05

**Hydrography Mask:**

- Utilizes flowing water features with buffers of 60m from and 60m into selected water features.
- Utilizes open water features with buffers of 60m from and 60m into selected water features.
- Utilizes wet vegetation features with buffers of 60m from and unlimited into selected vegetation features.

**Selected Map Units:**

| Functional Group                  | Map Unit Name  |
|-----------------------------------|--|
| 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 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   |
| 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    | Southwest Florida Perched Barriers Salt Swamp and Lagoon - Mangrove Modifier               |
| 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   |
| Coastal Dune & Freshwater Wetland | Atlantic Coastal Plain Northern Dune and Maritime Grassland                                |
| Coastal Dune & Freshwater Wetland | Atlantic Coastal Plain Southern Dune and Maritime Grassland                                |
| Coastal Dune & Freshwater Wetland | East Gulf Coastal Plain Dune and Coastal Grassland   |
| Coastal Dune & Freshwater Wetland | Southwest Florida Dune and Coastal Grassland   |
| 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 - Forest Modifier               |
| Wetlands                          | Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Herbaceous Modifier           |
| Wetlands                          | Atlantic Coastal Plain Brownwater Stream Floodplain Forest                                 |
| Wetlands                          | Atlantic Coastal Plain Clay-Based Carolina Bay Forested Wetland                            |
| Wetlands                          | Atlantic Coastal Plain Clay-Based Carolina Bay Herbaceous Wetland                          |
| Wetlands                          | Atlantic Coastal Plain Large Natural Lakeshore   |
| Wetlands                          | Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Taxodium/Nyssa Modifier |
| Wetlands                          | Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Oak Dominated Modifier  |
| Wetlands                          | Atlantic Coastal Plain Northern Basin Peat Swamp   |
| Wetlands                          | Atlantic Coastal Plain Northern Pondshore  |
| Wetlands                          | Atlantic Coastal Plain Small Blackwater River Floodplain Forest                            |
| Wetlands                          | Atlantic Coastal Plain Small Brownwater River Floodplain Forest                            |

|          |   |
|----------|---|
| Wetlands | Atlantic Coastal Plain Xeric River Dune                                     |
| Wetlands | Central Appalachian Floodplain - Forest Modifier                            |
| Wetlands | Central Appalachian Floodplain - Herbaceous Modifier                        |
| Wetlands | Central Appalachian Riparian - Forest Modifier                              |
| Wetlands | Central Appalachian Riparian - Herbaceous Modifier                          |
| Wetlands | Central Florida Herbaceous Pondshore  |
| 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 - Forest Modifier     |
| Wetlands | East Gulf Coastal Plain Large River Floodplain Forest - Herbaceous Modifier |
| Wetlands | East Gulf Coastal Plain Small Stream and River Floodplain Forest            |
| Wetlands | Floridian Highlands Freshwater Marsh  |
| Wetlands | Lower Mississippi River Bottomland and Floodplain Forest                    |
| Wetlands | Lower Mississippi River Bottomland Depressions - Forest Modifier            |
| Wetlands | Lower Mississippi River Bottomland Depressions - Herbaceous 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 Florida Bayhead Swamp   |
| Wetlands | South Florida Pond-Apple/Popash Slough                                      |
| Wetlands | South-Central Interior Large Floodplain - Forest Modifier                   |
| Wetlands | South-Central Interior Large Floodplain - Herbaceous 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 Spring-run Stream Aquatic Vegetation                 |
| Wetlands | Southern Piedmont Large Floodplain Forest - Forest Modifier                 |
| Wetlands | Southern Piedmont Large Floodplain Forest - Herbaceous Modifier             |
| Wetlands | Southern Piedmont Small Floodplain and Riparian Forest                      |
| Wetlands | Unconsolidated Shore (Lake/River/Pond)                                      |

**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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