

## D. State Goals and Objectives

Some states in SAMBI have attempted to step down continental and regional population or habitat objectives to state level BCR objectives. Generally, this is difficult to do, yet existing population and habitat objectives for some species allowed for such a step down, particularly where objectives of high priority species functioned to incorporate objectives of other species in similar habitats. Additionally, existing regional objectives for the various bird conservation plans are not entirely explicit about where to place quantifiable habitat conservation objectives, and therefore, State Working Groups were able to evaluate such objectives in their state relative to stated goals and identify where best to target such conservation. One of the best working examples of this step down process is in the [Setting Population and Habitat Objectives](#) section above regarding allocation of eight patches of forested wetland habitat for the conservation of Swallow-tailed Kite, Wayne's Black-throated Green Warbler, and Swainson's Warbler. The results of this process are outlined in the state sections for South Carolina, Georgia, and Florida below. Some states did not feel comfortable with stepping down objectives, and will therefore rely upon objectives outlined in the various national and regional bird conservation plans, from objectives defined in their State Comprehensive Wildlife Plans, and more general directional objectives. Finally, at least one bird conservation plan, The Northern Bobwhite Conservation Initiative (NBCI), has quantifiable objectives for the restoration of Northern Bobwhite habitat segregated by BCR, State, and habitat type ([Table 4](#)). Population and habitat objectives that have been developed by states are presented below.

### *State Focus Areas*

Each state has developed discreet focus areas for waterfowl, shorebirds, waterbirds, and landbirds. Three states, Georgia, South Carolina, and North Carolina, have developed focus areas for Northern Bobwhite, early successional species and/or other grassland species ([Figure 13](#)). Additionally, Florida has identified two pelagic focus areas ([Figure 10](#)). These focus areas are presented at the end of each of the state sections below. Additionally, states have completed State Wildlife Action Plans which identify specific objectives for high priority species and which have specifically targeted areas for conservation of these high priority species. Finally, some state population objectives have been presented for species in the previous section (Population Goals) for the entire SAMBI region but broken out by state for BCR 27 and will not be presented here again.

### **1. Virginia**

Virginia has not developed or stepped down any national or regional population or habitat objectives at this time specific to SAMBI planning area in Virginia at this time. However, Virginia will rely upon existing objectives outlined in existing bird conservation plans, and objectives defined in their State Wildlife Action Plan. Quantifiable objectives for the restoration of Northern Bobwhite habitat are outlined for Virginia in [Table 4](#). Click here for detailed information on: [Virginia's Comprehensive Wildlife Conservation Strategy](#). Additionally, information regarding avian resources in

the SAMBI portion of Virginia can be found in at: [Virginia's Mid-Atlantic Coastal Plain](#) in the “Conservation and Strategies” section for each species.

Some regional population and population habitat objectives for the SAMBI portion of Virginia are presented in the preceding sections for Regional population and habitat objectives.

## 2. North Carolina

### *Waterfowl*

- Support a population of 100,000 Tundra Swans
- Support a population of 60,000 Canada Geese (non-residents)
- Maintain current levels of Snow Geese (30,000)
- Breeding objective for American Black Duck is 500 pairs

### *Waterbirds*

The following table was developed for the Roanoke-Tar-Neuse-Cape Fear Ecosystem. The State Working Groups of North Carolina equates this ecosystem with the geographic SAMBI area for North Carolina, therefore, goals are identical.

### **Colonial Waterbird Goals for Roanoke-Tar-Neuse-Cape Fear Ecosystem**

Species	Statewide		SAMBI		State Status
	# Nests	# Sites	# Nests	# Sites	
White Ibis	8000	6	8000	6	W2
Glossy Ibis	500	7	500	7	SC
Brown Pelican	4000	5	4000	5	SC (PD)
Green Heron*					
Black-crowned Night-Heron	250	10	250	10**	
Yellow-crowned Night-Heron*					W2, W3
Great Egret	2500	30	2500	30	
Cattle Egret	No management need; No goal set; State will continue to monitor				
Snowy Egret	800	15	800	15	SC
Tricolored Heron	1500	15	1500	15	SC
Little Blue Heron	1200	15	1200	15	SC
Least Tern	2000	25	2000	25	SR (PSC)
Forster's Tern	1100	15	1100	15	W2
Sooty Tern	NA				
Royal Tern	15000	6	15000	6	
Sandwich Tern	2700	6	2700	6	W2, W5
Caspian Tern	25	1	25	1	SR
Common Tern	2500	20	2500	20	SR, (PSC)
Gull-billed Tern	300	6	300	6	T

Black Skimmer	1000	15	1000	15
Laughing Gull	No management need, but no < 10000			
Herring Gull	No management need, but no > 1000			
Great Black-backed Gull	No management need, but no > 200			

\* = No accurate data on which to base a state or ecosystem goal

\*\* = Coastal or estuarine area (not counting river swamps)

Great Blue Heron, Anhinga, and Double-crested Cormorants numbers and estimates remain unknown and nest primarily inland; goals not established, but need to be.

T = Threatened; SC = Special Concern; SR = Significantly Rare; PD = Proposed De-listed; PSC = Proposed Special Concern; W = Watch List (see NC Natural Heritage Program for numeric code)

Table 6. Colonial Waterbird Goals for Roanoke-Tar-Neuse-Cape Fear Ecosystem

### ***Shorebirds***

- Provide 1,539ha of managed wetlands for shorebirds during migration, particularly fall migration when many wetlands have been flooded up for waterfowl food production
- Population objective of 600 pairs of Wilson's Plovers in the next 50 years
- Population objective of 100 pairs of Piping Plovers in the next 50 years
- Population objective of 550 pairs of American Oystercatchers in the next 50 years

### ***Landbirds***

- Restore and maintain at least 2,835ha of pocosin/savannah for 5,000 pairs of Henslow's Sparrow
- Provide 127,575ha of warm season grasses for Northern Bobwhite
- Restore 42,930ha of longleaf pine community
- Support and maintain 103,478ha of Red-cockaded Woodpecker (RCW) habitat, while providing habitat for Southeastern American Kestrel, Brown-headed Nuthatch, and Bachman's Sparrow. Focus on Fort Bragg, Camp Lejeune, and the Suffolk Scarp.
- Restore 36,405ha of pond pine pocosin on public lands, to assist in supporting an RCW population of 500 groups
- Restore, enhance, and manage 17,010ha of Atlantic white cedar on National Wildlife Refuges in northeastern North Carolina, mixed with other non-alluvial forested wetlands for Wayne's Black-throated Green Warbler and Swainson's Warbler.
- From the Dismal Swamp to the South Carolina state line, provide seven patches of 40,470ha, four patches of 4,050-8,100ha, and one patch of 2,430-4,050ha of forested wetlands
- Determine importance of maritime forest to transient species and Painted Bunting
- Identify maritime pine savannah sites and restore through prescribed burning to support species associated with longleaf pine ecosystems
- Develop appropriate prescribed burning programs to minimize impacts to Black Rail and Seaside Sparrow

-Develop partnerships with the two Voice of America sites to conserve significant populations of Henslow's Sparrows.

### *Pelagic*

-Work with mineral industry to minimize impact to foraging seabird concentration areas off of Cape Hatteras. Significant numbers of Red-throated Loon, Black-capped Petrel, and Bermuda Petrel utilize these waters.

Additional detailed information on avian resources in the coastal plain of North Carolina can be found at: [North Carolina Wildlife Action Plan](#), and more specifically in Chapter 5, [Species and Habitat Assessments and Conservation Strategies](#).

Some state level population and habitat objectives can be found in the preceding Regional section on population and habitat objectives above.

## **3. South Carolina**

### *Waterfowl*

Dabbling Ducks- objectives were developed using the Noffsinger method – energetics based calculation, 1.9% wintered in SC in 70's, 324,598 to overwinter, divers-75,000.

-Provide 40,500ha of coastal impoundments or productive habitat, currently 28,350ha, need 12,150 additional ha.

-Provide habitat for 590,000 ducks in SC.

-Provide bottomland hardwood habitat for 240,000 Wood Ducks.

### *Waterbirds*

-Increase acreage of managed wetlands.

-Expand Wood Stork and White Ibis rookeries by protecting bottomland hardwoods and swamps.

-Reduce number of Double-crested Cormorants to 1000 pairs.

-Reduce disturbance to colonies and rookeries.

-Provide usable nesting island every 30 miles, hurricanes can have significant impacts.

-Reduce disturbance by boaters and beach users to nesting areas and islands.

-Royal terns are currently declining, current goal is 18,000 pairs, currently have 3,000 pairs.

-Goal for Sandwich Terns is 5000 pairs.

-Goal for Gull-billed Tern is 500 pairs.

### *Shorebirds*

- High priority species are American Oystercatcher and Wilson's Plover.
- Goal is 500 nesting pairs of American Oystercatcher, at 400 now.
- Reduce disturbance from boat wakes and beach development.
- Objective of 500 pairs of Wilson's Plover.
- Objective of 800 pairs of Black-necked Stilt, up to 500 pairs now.
- Work to encourage Least Terns to nest in natural areas.
- Increase acreage of managed wetlands, and work with landowners to provide suitable habitat during fall migration through the South Carolina Shorebird Habitat Management Group.

### ***Landbirds***

- Goal is 300 pairs of Swallow-tailed Kites in the Waccamaw-Pee Dee region, Francis Marion National Forest, and Savannah River corridor, 120-150 pairs currently.
- Protect remaining maritime forest communities for Painted Bunting.
- Follow NBCI objectives to assist in providing habitat for Loggerhead Shrike, Barn Owl, and Painted Bunting, as well as Northern Bobwhite.
- Inventory habitat for Wayne's Black-throated Green Warbler, and protect remaining habitat.

Specifically, for Northern Bobwhite:

- Increase the amount and enhance the quality of the agricultural lands for nesting, brood rearing and roosting by bobwhites and other grassland species by adding native warm season grasses and other conservation plantings such as shrubs and forbs.
- Enhance the management practices on pinelands and mixed pine-hardwoods by thinning, controlled burning and site preparation in a fashion that benefits bobwhites and other wildlife.
- Preserve and enhance the quality of rangelands by utilizing vegetation management practices and grazing regimes that favor the retention and improvement of native plant communities beneficial to bobwhites and other wildlife.

Specifically:

- 1) Convert 911,615 acres (**SC 8,315 acres or 3,365ha**) of cool season grasses currently in the CRP to native warm season grasses/forbs to produce an estimated 227,925 coveys (**SC 2,079**).
- 2) Apply appropriate site preparation techniques, burning and/or thinning to the 1,534,300 acres (**SC 152,000 or 61,514ha**) of pines in CRP trees. This would add about 4,602 coveys (**SC 456**).
- 3) Apply appropriate site preparation techniques, burning and thinning to the 29,613,000 acres (**SC 2,445,700 acres or 989,775ha**) of pinelands. This should add 88,839 coveys (**SC 7,338**).

4) Add to the improvable acres of the agricultural land base 2,122,736 acres (**SC 213,000 or 86,201ha**) of native warm season grasses. This can be achieved through replacement of row crop acreage and by conversion of cool season hay and/or pasture. This addition of 18.5ha of native warm season grasses per square mile will change the habitat on 6.5% of the improvable agricultural land base and should add 530,684 coveys (**SC 53,250**).

Some state level population and habitat objectives can be found in the preceding Regional section on population and habitat objectives above.

Additional detailed information on avian resources in the coastal plain of South Carolina can be found at: [South Carolina's Comprehensive Wildlife Conservation Strategy](#), and more specifically in Chapters 2 and 4. Conservation actions for avian species and guilds can be found at: [Species](#).

#### 4. Georgia

##### *Waterfowl*

See Regional Habitat Objectives above ([Table 5](#)).

Additionally, Georgia has identified the following short-term (5-10 yrs.) for waterfowl focus areas:

Focus Area	Short-Term ACJV Goals (5-10 year period)			
	Forested Wetland	Shrub/Scrub Emergent	Moist Soil Impound	Flooded Crops
Coastal	4,567	913	183	18
Savannah River	5,729	1,146	229	23
Oconee/Ocmulgee/ Altamaha	6,074	1,215	243	24
Chattahoochee/Flint Rivers	5,500	1,100	220	22
Dougherty Plains	531	106	21	2
Carolina Bays	1,796	359	72	7
Ogeechee River	377	75	15	2
Okefenokee Basin	427	85	17	2
Total Habitat Goal in Acres	25000	5000	1000	100

##### *Waterbirds*

The following are goals (pairs) for waterbirds in Georgia:

- 2,780 White Ibis
- 2,490 Great Egrets
- 1,793 Tricolored Heron
- 1500 Snowy Egret

- 180 Black-crowned Night-Heron
- 1000 Little Blue Heron
- 160 Great Blue Heron
- 8 Glossy Ibis
- 10,000 Royal Terns
- 500 Black Skimmers
- 300 Gull-billed Terns
- 600 Sandwich Terns
- 800 Least Terns in natural habitats
- 2000 Brown Pelicans
- 1500 Wood Storks

### ***Shorebirds***

The following are goals (pairs) for shorebirds in Georgia:

- 150 pairs of American Oystercatchers
- 200 pairs of Wilson's Plovers
- 300 pairs of Black-necked Stilts
  
- Increase acreage of managed impoundments.
- Maintain sandbar islands.
- Reestablish historical seabird nesting sites.
- Protect tips of barrier islands.
- Restore freshwater wetlands on barrier islands.

### ***Landbirds***

The following are goals (pairs) for high priority landbirds in Georgia:

- 300 Swallow-tailed Kites
- 25,000 Swainson's Warblers
- 35,000 Prothonotary Warblers
- 25,000 Bachman's Sparrows
  
- Protect 121,500ha in three patches of 40,500ha each, primarily for Swallow-tailed Kite in the Savannah River corridor and Altamaha River watershed.
- Protect another 202,500ha in 20 patches for Swainson's and Prothonotary Warbler.

### ***Other***

- Acquire lands along the Altamaha River watershed.
- Renovate impoundments in the Altamaha River area.
- Renovate impoundments on Sapelo Island.
- Hydrology restoration on Ossabaw Island.
- See NBCI for Northern Bobwhite objectives.

-Georgia has delineated focus areas for the conservation of Northern Bobwhite and other early successional/grassland bird species

Some state level population and habitat objectives can be found in the preceding Regional section on population and habitat objectives above. Additional detailed information on avian resources in the coastal plain of Georgia can be found at: [Georgia's Comprehensive Wildlife Conservation Strategy](#), and [The Southern Coastal Plain of Georgia](#).

## **5. Florida**

Florida has not developed nor stepped down any national or regional population or habitat objectives for SAMBI at this time. However, Florida will utilize existing objectives outlined in existing bird conservation plans, and objectives defined in their State Wildlife Action Plan. Additionally, quantifiable objectives for the restoration of Northern Bobwhite habitat are outlined for Virginia in [Table 4](#). Florida has provided the following information relative to the following bird groups.

### ***Waterbirds***

- Protect existing colonies and rookeries
- Protect nesting sites for Black Skimmer, Gull-billed Tern, Royal Tern, and Least Tern.

### ***Shorebirds***

- Protect American Oystercatcher breeding areas and staging areas in northeast Florida and along the barrier islands, and in the central panhandle of the state.
- Protect Snowy Plover areas in the central panhandle.
- Reduce disturbance of wintering shorebirds in all coastal areas.

### ***Landbirds***

- Tier to Regional goals.
- Utilize landbird goals developed in the Comprehensive Wildlife Plan.

### ***Pelagic***

Florida has identified two pelagic focus areas ([Figure 10](#)). These regions are important to pelagic species in both summer and winter, including Common Loon (*Gavia immer*), Brown Pelican, Double-crested Cormorant, Magnificent Frigatebird (*Fregata magnificens*), Northern Gannet (*Morus bassanus*), Brown Booby (*Sula leucogaster*), Forster's Tern (*Sterna fosteri*), Caspian Tern (*Sterna caspia*), Royal Tern, Sandwich Tern, and Least Tern.

Figure 10. Focus Areas in Florida. a) waterbird; b) waterfowl; c) landbird; d) shorebird, e) pelagic (shaded areas outside of SAMBI boundary are now in EGCP).

Some state level population and habitat objectives can be found in the preceding Regional section on population and habitat objectives above.

Additional detailed information on avian resources in the coastal plain of Florida can be found at: [Florida's Comprehensive Wildlife Conservation Strategy](#). Here, avian habitat resources are addressed by habitat types and in the conservation action section.