

Recreational Hunting  
Draft Decision Document  
Package  
For  
**Savannah NWR**

**Contents**

1. Hunt Plan

**Savannah National Wildlife Refuge  
Big Game, Small Game, Migratory Bird, Coyote, and Feral Hog  
Hunt Plan**

May 2016

**U.S. Fish and Wildlife Service**

**Savannah National Wildlife Refuge  
694 Beech Hill Lane  
Hardeeville, SC 29927**

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## Table of Contents

I. Introduction.....	1
II. Conformance with Statutory Authority.....	3
III. Statement of Objectives.....	4
IV. Assessment.....	5
A. Are wildlife populations present in numbers sufficient to sustain optimum population levels for priority Refuge objectives other than hunting?.....	5
B. Is there competition for habitat between target species and other wildlife?.....	9
C. Are there unacceptable levels of predation by target species on other wildlife forms?.....	9
V. Description of Hunting Program.....	9
A. Areas of Refuge that Support Targeted Species.....	10
B. Areas to be opened to hunting.....	10
C. Species to be taken, hunting periods, hunting access.....	10
D. Justification for the permit, if one is required.....	11
E. Consultation and Coordination with the State.....	11
F. Law Enforcement.....	11
G. Funding and staffing requirements .....	12
VI. Measures Taken to Avoid Conflicts with Other Management Objectives.....	12
A. Biological Conflicts.....	12
B. Public Use Conflicts.....	12
C. Administrative Use Conflicts.....	13
VII. Conduct of the Hunt.....	13

A. Refuge Specific Hunting Regulations.....	13
B. Anticipated Public Reaction to the Hunting Program.....	16
C. Hunter Application and Registration Procedures (if applicable).....	16
D. Description of Hunter Selection Process.....	17
E. Media Selection for Announcing and Publicizing the Hunt.....	17
F. General Requirements.....	17
G. Hunter Requirements.....	18
VIII. Compatibility Determination.....	18
References .....	18

#### List of Figures

Figure 1. Refuge Hunt Map.....	19
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# Savannah National Wildlife Refuge Hunt Plan

## **I. Introduction**

Savannah National Wildlife Refuge (NWR, Refuge), one of seven refuges comprising the Savannah Coastal Refuges Complex (Complex), was established by Executive Order 4626 on April 6, 1927, in Jasper County, South Carolina, on 2,352 acres of land owned by the United States near the Savannah River. Originally called the Savannah River Bird Refuge, these lands were reserved for use by the Department of Agriculture as a preserve and breeding ground for native birds.

On November 12, 1931, President Herbert Hoover signed Executive Order 5748, revoking Executive Order 4626, adding 207 acres to the present land base and renaming the unit the Savannah River Wildlife Refuge. Executive Order 7391, signed by Franklin D. Roosevelt on June 17, 1936, increased the acquisition boundary of the Refuge to include an additional 22,870 acres of land either acquired or to be acquired by the federal government. Between 1935 and 1938, a total of 9,980 acres of land were either transferred to or purchased by the U.S. Fish and Wildlife Service (Service, USFWS) to be added to the Refuge. A presidential proclamation on April 10, 1939 closed migratory bird hunting on channels of the Savannah River known as Steamboat River, Houstown Cut, Middle River (from the head of Argyle Island to its confluence with Front River), and Back River (from the mouth of Union Creek to the foot of Argyle Island). This closure set aside these waters as a permanent sanctuary for migratory birds on these otherwise open waters. On July 30, 1940, Presidential Proclamation 2416 renamed the Refuge the Savannah National Wildlife Refuge. In 1956, a 5-acre tract was purchased from an individual landowner, and in 1964, 459 acres were added when the fee title to Hog Marsh Island and adjacent lands to the north were acquired through an exchange of spoilage rights with Chatham County, Georgia. That same year, Savannah Electric and Power Company deeded 34 acres to the Refuge in exchange for a power line right-of-way under the Fish and Wildlife Act of 1956. South Carolina landowner Donald Livingston donated 37 acres to the Refuge in 1968, and in 1974, 24 acres were acquired from the Seaboard Coast Line Railroad Company. The 12,493-acre Argent Swamp tract was purchased from Union Camp Corporation in 1978 using Migratory Bird Conservation Act funds, and years later, 54 additional acres were added to the tract to straighten out the east boundary of the Refuge. In 1983, a land exchange with David C. Barrow III resulted in the acquisition of 18 acres. Mr. Barrow later sold a 432-acre tract to the Service in 1998. In Effingham County, Georgia, 712 acres known as Bear Island were purchased in 1993 from William Bradley, et. al. In 2000, 887 acres known as the Solomon Tract were purchased from Oak Grove Bluff, Inc., and in 2001, 401 acres were purchased from John C. Wylly Jr. (both tracts located in Chatham County, GA). In 2002, the Service entered into an agreement with the Georgia Department of Natural Resources, thus assuming management authority over an 840-acre tract located in Effingham County. Later that year, a 240-acre tract was purchased from Joseph H. Harrison. With these funds we acquired 276 acres along the eastern boundary of the Refuge from the owners of the Riverport Development. These 276 acres were purchased in two phases, one in 2013 and one in 2014, and helped secure one of the remaining inholdings within the Refuge acquisition boundary. It also provides approximately two miles of walk-in access for hunters and other Refuge users. The total current Refuge acreage is now 29,452.

It is anticipated that at least an additional 2,070 acres will be added to the Refuge during the next few years as part of a mitigation package related to the current Savannah Harbor Expansion Project. These future acquisitions will be included in the hunt program, where compatible with other Refuge uses.

The majority of Refuge habitats are naturally occurring wetlands, including tidal and non-tidal bottomland hardwood, tidal estuarine and freshwater marsh, and scattered palustrine forested wetlands. Tidal areas within these wetlands are subject to daily water level ranging from 6 to 10 feet. Managed tidal freshwater impoundments (historic rice fields locally known as pools) provide 3,000 acres of wetlands where water levels are fully controlled. Additionally, hardwood hammocks and scattered upland parcels comprised of various hardwoods, pines, and grassland fields are present. About 87 acres are used for administrative areas and the Seaboard Coastline Railroad has a 24-acre right-of-way agreement with the Service. The Refuge provides Fife Plantation with vehicle access through an ingress/egress easement.

Management of the 16 pools enhances the importance of the Refuge as a haven for numerous wildlife species. This area is particularly valuable to migratory bird populations. Heavy emphasis is placed upon habitat management for wintering waterfowl, migratory shorebirds, and wading bird feeding habitat. In addition to these pools, the Refuge is required to supply freshwater, through the diversion canal, to neighboring Fife Plantation. Through use of the water provided by the Refuge, this adjacent private property also supports numerous species of wetland dependent wildlife. The Refuge provides quality habitat for resident game and non-game species as well. Several endangered and threatened species also inhabit Refuge lands including Atlantic sturgeon, shortnose sturgeon, West Indian manatee, and wood stork.

Savannah NWR offers an array of public use opportunities including wildlife observation, photography, interpretation, environmental education, fishing, and hunting. About 36 miles of dikes are open to authorized public use. The four mile long Laurel Hill Wildlife Drive is open to driving, cycling, running, and hiking throughout the year.

Public hunting on Savannah NWR is an appropriate form of wildlife-oriented public recreation and, based on the 2011 Comprehensive Conservation Plan (2011 CCP), is compatible with the purpose for which the Refuge was established. Hunting is often used to inhibit control the overpopulation of some species within a given natural community and can provide for greater wildlife diversity. Hunting also can also be utilized as a means to increase awareness of the Refuge, educate Refuge users about conservation issues, and ensure long-term public support for habitat management and future activities. The hunting program is designed to minimize potential conflicts with Refuge purposes and other priority public uses.

The Refuge's establishing authorities and related purposes include:

*"...as a refuge and breeding ground for birds and wild animals subject to future use in navigation if necessary and to valid existing rights if any" (Executive Order 5748, April 6, 1927)*

*"...for lands acquired under the Migratory Bird Conservation Act "for use as an inviolate sanctuary, or for any other management purpose, for migratory birds" (16 U.S.C. 715d)*

*“...for lands acquired under the Refuge Recreation Act for “(1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species” (16 U.S.C. 460k)*

*“...for “the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions” (16 U.S.C. 3901(b), 100 Stat. 3583, Emergency Wetlands Resources Act of 1968)*

*“...for the development, advancement, management, conservation, and protection of fish and wildlife resources” (16 U.S.C. 742f(a)(4))*

*“...for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude” (16 U.S.C. 742f(b1), Fish and Wildlife Act of 1956)*

To meet specific Refuge and Service directives, the primary management objectives for Savannah NWR include:

- To utilize Refuge property as "a refuge and breeding ground for native birds and wild animals".
- To provide habitat and protection for those species of plants and animals whose survival is threatened or endangered
- To provide habitat and sanctuary for migratory birds consistent with the objectives of the Atlantic Flyway.
- To maintain and enhance as needed the habitats of all other species of indigenous wildlife and fishery resources.
- To provide opportunities for environmental education, interpretation, and quality wildlife-dependent recreation for the visiting public.

Hunting of big game (deer, turkey), small game (squirrel, rabbit), migratory birds (waterfowl, dove, snipe), coyote, and feral hog is permitted within designated areas and limited seasons (see attached Refuge Hunt Map) to accomplish our mission and purpose. This 2016 Hunt Plan is a revision of the 2007 Hunt Plan and implementation ensures that we can satisfy these purposes. The plan is required to open recently acquired and future acquisitions to hunting, add species to the hunt program, and rectify past instances of administrative oversight.

## **II. Conformance with Statutory Authorities**

The Refuge Recreation Act of 1962 (16 U.S.C. 460K) authorizes the Secretary of the Interior to administer refuges, hatcheries, and other conservation areas for recreational use. The Refuge Recreation Act requires: 1) that any recreational use permitted will not interfere with the primary purpose for which the area was established and 2) that funds are available for the development, operation, and maintenance of the permitted forms of recreation.

Fundamental to the management of lands within the National Wildlife Refuge System (System) is the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57), an amendment to the National Wildlife Refuge System Administration Act of 1966. The National Wildlife Refuge System Improvement Act of 1997 provides a mission for the System and clear standards for its management, use, planning, and growth. The National Wildlife Refuge System Improvement Act of 1997 recognized that wildlife-dependent recreational uses, including hunting, fishing, wildlife observation and photography, and environmental education and interpretation, can be allowed when determined to be appropriate and compatible with the mission of the System and purposes of the Refuge. These top six compatible wildlife-dependent recreational uses (known as the “Big 6”) are the priority general public uses of the System and shall receive priority consideration in planning and management over other uses. Hunting, as specified in this plan, is a Big 6 wildlife-dependent recreational use and the law states that as such, it “shall receive priority consideration in National Wildlife Refuge planning and management.” The Secretary of Interior may then permit hunting on a refuge if it is determined that the use is compatible and does not materially interfere with the primary purpose for which Savannah NWR was established. This determination is based upon the updated Compatibility Determination (Section VIII).

According to Savannah NWR’s 2015 Refuge Annual Performance Plan (RAPP), we estimate the number of hunting visits to be as follows: deer, turkey, feral hog = 2,875 visits; squirrel = 240 visits; duck and coot = 539 visits. The Refuge requires hunters to purchase an annual hunt permit, which is valid for all refuge hunts on all refuges contained within the Complex. The processing of this permit is administered through Accela/Kinsail, a contractor that manages permits for various federal and state agencies. In fiscal year 2015, permits sold for Complex hunts generated approximately \$9,500 in revenue through the Service’s Recreational Fee Program. These funds are deposited into a designated account to be used solely for the administration and enhancement of the Refuge hunt program. Annual costs associated with the Refuge hunt program are minimal (printing hunt regulation brochures, staff time, equipment purchases and/or repairs for youth and mobility-impaired hunts).

### **III. Statement of Objectives**

The objectives of a hunting program on Savannah NWR are to:

1. Provide the public with a high-quality recreational experience and increase opportunities for hunters, particularly youth and those who are mobility-impaired, on current and future Refuge lands, consistent with federal and state laws and regulations and that do not adversely affect local or regional wildlife populations.
2. Maintain game animal populations at levels compatible with other uses and habitat quality on current and future Refuge lands.
3. Control non-native and/or invasive species populations.
4. Allow compatible public use of a valuable, renewable resource on current and future Refuge lands.
5. Meet Refuge provisions for recreational hunting listed in the 2011 CCP.
6. Support the Conserving the Future vision document by implementing Recommendation 17 to increase quality hunting and fishing opportunities on National Wildlife Refuges and to increase public awareness and support for the Refuge and Refuge System.

## IV. Assessment

### A. Are wildlife populations present in numbers sufficient to sustain optimum population levels for priority refuge objectives other than hunting?

#### **Big Game**

##### *White-tailed Deer*

Deer hunting is an allowed and compatible use on most of the Refuge (see Refuge Hunt Map). The Refuge is open for deer hunting during the October archery season and November general season, with the Solomon Tract in Georgia being reserved as youth only. The tidal freshwater impoundment system lying east of the Back River in South Carolina is open to deer hunting only during the mobility-impaired quota hunt. Due to concern for administrative sites and other uses, several small, scattered areas are closed to all hunting.

Deer density on any given area of Savannah NWR varies with season, river height, impoundment management, outside hunting pressure, and other factors. Overpopulation of deer can be devastating to the understory component of forested habitat. Excessive browsing has the potential to impact understory-dependent species, specifically breeding, migrant, and resident songbirds. Species that could experience negative impacts from deer overpopulation and associated habitat degradation include breeding birds, such as painted bunting, common yellowthroat, and wood thrush, and migrant birds, including black-throated blue warblers, yellow warbler, worm-eating warbler, hooded warbler, ovenbird, gray-cheeked thrush, Swainson's thrush, and hermit thrush. Habitat quality for resident species, such as gray catbird, brown thrasher, and white-eyed vireo, can also decline in the presence of too many deer.

An active deer hunting program is necessary at Savannah NWR. Control of deer through hunting helps maintain quality habitat for breeding, migrant, and resident birds. The overall health and welfare of the Refuge deer herd is also maintained or improved through an active hunting program. The current deer herd status appears to be at a suitable level for providing quality hunting, maintaining herd health, and ensuring minimal negative impacts by deer on wildlife habitat quality. Several small wildlife food plots are managed on the Solomon Tract to provide increased deer harvest opportunities for youth hunters. The average estimated annual harvest is 30-40 deer.

##### *Wild Turkey*

Limited turkey hunting is allowed in many areas of the Refuge (see Refuge Hunt Map). The wild turkey is a non-migratory gamebird that maintains a relatively small home range, generally no more than 1,500 acres in this region. Spring hunting, for gobblers only, ensures the survival of hens, allows those hens to be bred, and perpetuates this renewable resource. Harvest during limited turkey hunting at Savannah NWR is expected to be no more than 25-30 turkeys. The limited public hunting of turkeys on the Refuge should have no noticeable impacts on sustaining this renewable resource.

## **Small Game**

### ***Squirrel, rabbit***

Small game that can be hunted on the Refuge include gray squirrel, fox squirrel, and rabbit. Both squirrels and rabbits are abundant statewide in Georgia and South Carolina. Rabbits and squirrels are greatly affected by limited food and cover resources with disease influences common with dense populations. Due to limited access and minimal numbers of small game hunters on the Refuge, squirrels and rabbits thrive where adequate food and cover are available to sustain their populations. The bottomland forested habitat of the Refuge can be expected to support huntable populations of squirrels into perpetuity. Rabbits can be found in a variety of habitats, but are primarily associated with the edges of upland openings and dense regeneration areas in woodlands. Annual harvest of squirrels is estimated at 200 while fewer than 25 rabbits are expected to be taken. Road kills likely provide a much greater annual impact on squirrel and rabbit populations on the Refuge than do hunting.

## **Migratory Birds**

Migratory game birds are those bird species so designated in conventions between the United States and several foreign nations for the protection and management of these birds. Under the Migratory Bird Treaty Act (16 U.S.C. 703-712), the Secretary of the Interior is authorized to determine when "hunting, taking, capture, killing, possession, sale, purchase, shipment, transportation, carriage, or export of any ... bird, or any part, nest, or egg" of migratory game birds can take place, and to adopt regulations for this purpose. These regulations are written after giving due regard to the zones of temperature and to the distribution, abundance, economic value, breeding habits, and times and lines of migratory flight of such birds, and are updated annually (16 U.S.C. 704(a)). This responsibility has been delegated to the USFWS as the lead federal agency for managing and conserving migratory birds in the United States. Acknowledging regional differences in hunting conditions, the USFWS has administratively divided the nation into four Flyways for the primary purpose of managing migratory game birds. Each Flyway (Atlantic, Mississippi, Central, and Pacific) has a Flyway Council, a formal organization generally composed of one member from each state and Province in that Flyway. Savannah NWR is within the Atlantic Flyway.

The USFWS, working with partners, annually prescribes a framework, or outer limits, for dates and times when hunting may occur and the number of birds that may be taken and possessed. These frameworks are necessary to allow State selections of season and limits for recreation and sustenance, aid federal, state, and tribal governments in the management of migratory game birds, and permit harvests at levels compatible with population status and habitat conditions. Because the Migratory Bird Treaty Act stipulates that all hunting seasons for migratory game birds are closed unless specifically opened by the Secretary of the Interior, the USFWS annually promulgates regulations (50 CFR Part 20) establishing the frameworks from which States may select season dates, bag limits, shooting hours, and other options for each of the migratory bird hunting seasons. The frameworks are essentially permissive in that hunting of migratory birds

would not be permitted without them.

States may always be more conservative in their selections than the federal frameworks but never more liberal. Furthermore, season dates and bag limits for NWR's open to hunting can never be any longer than the state regulations. Each new Refuge hunt must include the development of an Environmental Assessment (EA) when the NWR opens a new hunting activity, to evaluate changes in huntable areas and species. In the EA, season dates and bag limits (when Specific to the Refuge and different that State regulation) are then set.

Service policy 605 FW2 states, "If a refuge, or portion thereof, has been designated, acquired, reserved, or set apart as an inviolate sanctuary, we may only allow hunting of migratory game birds on no more than 40% of that refuge, or portion, at any one time unless we find that taking of any such species in more than 40% of such area would be beneficial to the species." This plan ensures that the management of hunts at Savannah NWR adheres to this policy (see Refuge Hunt Map) and that migratory bird hunting is restricted to the season, bag limits, and other regulations based on the state in which the hunting occurs and on any Refuge specific regulations.

### ***Waterfowl***

Waterfowl hunting is allowed in many areas of Savannah NWR and regulated by the respective state seasons. Selected areas are open only to limited waterfowl hunting or are closed to all waterfowl hunting (see Refuge Hunt Map). Waterfowl hunting within the impoundments that lie east of the Back River and north of SC170 in South Carolina is restricted to a total of three, half-day youth hunts with a quota of no more than 12 youth selected per hunt. Harvest numbers from each of these three youth waterfowl hunts is expected to be about 24 ducks of mixed species, primarily the most common species (green-winged teal, blue-winged teal, northern shoveler), for a total of 72 ducks. Based on the USFWS Harvest Report (Raftovich et al., 2015), this estimated harvest represents less than 0.036% of the total annual South Carolina waterfowl harvest for 2014 (200,600) and less than 0.36% of the average annual overwintering duck population (20,000) on Savannah NWR.

### ***Mourning Dove***

Limited mourning dove hunting is allowed in the managed impoundments that lie east of the Back River and north of SC170 in South Carolina. This is limited to no more than two days per week during the established South Carolina season and only in the months of September and October. Only areas that are not currently flooded for waterfowl habitat are open. Based on Breeding Bird Surveys over the past 49 years, mourning dove numbers continue to increase within the Eastern Management Unit (EMU), which includes South Carolina (Seamans 2015). Based on the USFWS Harvest Report (Raftovich et al. 2015), mourning dove harvest estimates for South Carolina for 2013 and 2014 were 372,200 and 681,500, respectively. Refuge staff and Youth Conservation Corps (YCC) crews annually band 400 mourning doves in support of population and harvest research projects. Annual harvest variations for South Carolina demonstrate how weather may be a determining factor in hunter success throughout the state when hunting

mourning dove. With the limited number of hunting days and area, hunter harvest is expected to be no more than 200 dove per season or less than 0.03% of the total South Carolina harvest for 2014.

### ***Wilson's Snipe***

Limited snipe hunting is allowed in the managed impoundments north of SC170 and east of the Back River in South Carolina. This is limited to no more than two days per week during the established South Carolina season and only in the month of February. Based on the USFWS Harvest Report (Raftovich et al., 2015), snipe harvest estimates for South Carolina for 2013 and 2014 were 3,500 and 2,000 respectively. Total harvest of snipe for the Atlantic Flyway was 33,000 in 2013 and 55,200 in 2014. Annual harvest variations for South Carolina demonstrate how weather may be a determining factor in hunter success throughout the state. With the limited number of hunting days and area, hunter harvest is expected to be no more than 200 snipe per season or less than 0.37% of the total South Carolina harvest for 2014.

### **Other Species**

#### ***Coyote***

There are no specified seasons for hunting coyotes on the Refuge. However, coyotes can be taken during all Refuge hunts while using any designated legal firearm or bow for that particular hunt. Although no research projects have been conducted concerning coyote densities and impacts on wildlife populations at Savannah NWR, anecdotal evidence suggests they first appeared on the Refuge in 1999. The number of coyotes observed by field staff while conducting management activities continues to increase each year. The coyote is considered a non-native, nuisance species by both Georgia Department of Natural Resources (GA DNR) and South Carolina Department of Natural Resources (SC DNR). Hunter harvest is expected to be no more than 25 coyotes.

#### ***Feral Hog***

Feral hogs can be harvested during all Refuge hunts while using any designated legal firearm or bow for that particular hunt. A special feral hog-only hunt is also managed each year in March.

Feral hogs are an extremely invasive, non-native species and are not considered a game animal by either Georgia or South Carolina DNR. They also harbor several infectious diseases, some of which can be fatal to native wildlife and humans. By rooting and wallowing, feral hogs destroy wildlife habitat. Impacts include severe damage to impoundment dikes, increased erosion along waterways and wetlands, loss of native plants, and soil disturbance that favors the introduction of invasive plants, such as Chinese tallow and Japanese climbing fern. Additionally, feral hogs compete directly for food with native species such as deer, turkeys, squirrels, raccoons, and many other birds and mammals. They are predators of reptiles, small mammals, and ground nesting birds.

Feral hogs are an increasing problem both on Refuge lands and adjoining privately-owned lands. They occur throughout the Savannah NWR and their numbers appear to be

stable but fluctuate greatly depending on the condition of the Savannah River. During prolonged events of flooding in the wetlands along the river, feral hog numbers generally decline but soon recover as flood waters recede and rapid reproduction is achieved. Hunting of feral hogs provides the Refuge with a proven management tool in reducing this detrimental species, and at the same time, is widely enjoyed by local hunters. The average estimated feral hog harvest is around 200 per season.

**B. Is there competition for habitat between target species and other wildlife?**

The Refuge has not directly studied habitat competition between the target species and other wildlife. However, population management of deer, feral hog, and coyote is anticipated to maintain and/or increase available habitat for numerous trust species. High deer numbers can have devastating impacts on migratory bird and small mammal habitat. Feral hogs compete with many species of native wildlife for food, cover, water, and space. They are highly adaptable, have high reproductive capabilities, and can be found in a wide range of habitat types. Rooting and feeding activities negatively impact vegetative communities, soil properties and plant successional patterns, including predation on ground nesting birds, reptiles, and amphibians (Stevens 2010). Soil disturbance from feral hogs results in ideal growing conditions for Chinese tallow, an extremely invasive, exotic tree that is continually being controlled on the Refuge. The coyote is a relative newcomer to the Refuge with little being known about their impacts on other species. Their opportunistic nature surely leads to competition with native predators such as bobcats, raccoon, and the numerous raptor species.

**C. Are there unacceptable levels of predation by target species on other wildlife?**

Predation levels by feral hog and coyote on other wildlife on the Refuge have not been measured. Due to their reputation as opportunistic omnivores, it can be assumed that all levels of predation by feral hogs have negative impacts on native wildlife, particularly reptiles, amphibians, and ground nesting birds, such as wild turkey and common nighthawk. Although coyote predation has not been studied on the Refuge, like feral hogs, they may often take ground nesting birds and other trust species that may be available as prey.

**V. Description of Hunting Program**

A total of 23,387 acres of Savannah NWR are currently open to hunting of white-tailed deer, turkey, feral hog, squirrel, and/or waterfowl. This plan includes the expansion of the hunt area to include selected formerly closed areas and new acquisitions, as well as the introduction of three new species (mourning dove, Wilson's snipe, coyote) to the hunt program. Implementation of this plan will increase hunting areas to a total of 27,210 acres. It also provides underserved Refuge user groups (mobility-impaired hunters, youth hunters) with opportunities to hunt lands not open to the general public for the purpose of improving outdoor recreation skills and increased quality of the hunting experience. The hunt program generally follows Georgia and South Carolina state regulations with respect to seasons, limits, and methods of take. In certain instances, Refuge regulations deviate from those state

regulations to meet Refuge wildlife population, public use, and public safety goals.

**A. Areas of the Refuge that support populations of the target species**

The Refuge is a diverse mix of bottomland hardwood forest, tidal hardwood forest, tidal freshwater marsh, tidal brackish marsh, managed tidal wetlands, with scattered hardwood hammocks and younger pine dominated areas. Depending on location, the Refuge supports sustainable populations of deer, turkey, rabbit, squirrel, waterfowl, dove, and snipe. Ideally, coyote and feral hog populations will be greatly reduced by continued hunting of these species during all open hunting seasons. Some areas of the Refuge are closed to all hunting to minimize conflict with other priorities, such as habitat management, administrative uses, and other recreational activities.

**B. Areas to be opened to hunting**

Most of Savannah NWR is open to some form of hunting each year. All Refuge lands are designated as one of six types for hunting purposes: 1) Closed to all hunting, 2) Open to youth hunting only, 3) Open to deer/turkey/small game/coyote/feral hog hunting, 4) Open to deer/turkey/small game/coyote/feral hog/waterfowl hunting, 5) Open to mobility impaired hunting, and 6) Open to quota youth waterfowl/dove/snipe hunting (see Refuge Hunt Map).

**C. Species to be taken, hunting periods, hunting access**

The Refuge is open to hunting for deer, turkey, rabbit, squirrel, waterfowl, dove, snipe, coyote, and feral hog. The Refuge is closed to all hunting for species not listed as open.

Generally, Refuge hunts are held for a limited period within the more broad State seasons. Waterfowl hunting, excluding youth hunts, is open for the duration of the Georgia and South Carolina State seasons, respective to location on the Refuge.

<b>Species</b>	<b>Refuge Season</b>
White-tailed deer	Limited, within state seasons
Wild turkey	Limited, within state seasons
Rabbit	Limited, within state seasons
Squirrel	Limited, within state seasons
Waterfowl	State seasons
Mourning dove	Limited, within SC season and only in September and October
Wilson’s snipe	Limited, within SC season and only in February
Coyote	During all Refuge hunts
Feral hog	During all Refuge hunts

There are no special entry or access procedures for hunters during open hunts on the

Refuge. The general hunting public can enter Refuge hunt areas by boat from the Savannah River and its tributaries, adjacent private lands, and Refuge access points along public roads. Limited hunts, such as mobility impaired deer, quota youth waterfowl, youth turkey, youth deer, mourning dove, and snipe, have designated access points that can be found in the Refuge hunt brochure. Hunters cannot access areas open to hunting by traversing through administrative areas which are closed to hunting or the Laurel Hill Wildlife Drive.

#### **D. Justification for the permit, if one is required**

Savannah NWR requires all hunters, 16 years of age or older, to purchase, and carry while hunting, a Savannah Coastal Refuges Complex Annual Hunt Permit, which certifies they understand and will comply with all Refuge hunting regulations and provides information related to hunter participation. Hunters under the age of 16 are required to obtain a free hunt specific permit. This permit allows hunters access to all non-quota hunts for the annual hunting season. For all other hunts, fees collected (80%) through the purchase of the Annual Hunt Permit are deposited into a Recreational Fee Program account, which is specifically marked to be used on Refuge hunt program administration and improvements. For limited Refuge hunts, such as quota youth waterfowl, quota youth hunt and learn turkey, and mobility impaired, a lottery drawing will be used to select hunters for participation. In these instances, an application fee will be charged but the Annual Hunt Permit is not required.

#### **E. Consultation and Coordination with the State**

Savannah NWR staff work cooperatively and regularly on various projects with staff from both GA DNR and SC DNR. Hunting opportunities on the Refuge are generally designed to comply with seasons, limits, and legal firearms and bows in both states. Refuge management and biological staff meet periodically with DNR representatives from both states to discuss current issues, status of hunts, and any proposed changes to regulations.

#### **F. Law Enforcement**

Enforcement of Refuge violations normally associated with management of the Refuge is the responsibility of commissioned USFWS Federal Wildlife Officers (FWO). Three FWO's are currently assigned to the Complex. Other FWO's, USFWS Special Agents, state game wardens, and the local sheriff departments often assist the Complex FWO's.

The following are some of the methods used to control and enforce hunting regulations:

- Refuge and hunt area boundaries will be clearly posted.
- The Refuge will provide a map that shows hunt areas.
- Complex FWO's will randomly check hunters for compliance with federal and state laws, as well as Refuge-specific regulations pertaining to hunting, including stipulations outlined in the Compatibility Determination.
- Complex FWO's will coordinate with state game wardens and other law enforcement

- agencies.
- Information will be made available at the Savannah NWR Visitor Center and website.

Detailed information about the Complex Law Enforcement program can be found in the Complex Law Enforcement Plan (Draft) 2016.

## **G. Funding and Staffing Requirements**

Many of the annual hunt administration costs including salary, equipment, boundary signs, and maintenance are associated with general management of the Refuge and are required whether hunting is permitted or not. Printing hunt brochures, purchasing replacement boundary signs, and providing law enforcement are the primary costs directly associated with hunting. Immediately prior to and during the active hunting season, one full-time employee is fully devoted to conducting hunt-related administrative activities.

## **VI. Measures Taken to Avoid Conflicts with Other Management Objectives**

### **A. Biological Conflicts**

At the present time, no biological conflicts are anticipated with any of the types or methods of hunting described in this plan. However, special restrictions, such as duration of a hunt or specific area limitations, may be used at the discretion of the Refuge Manager to reduce or prohibit hunting within certain areas that are normally open to hunting, if a biological conflict is identified.

Selected areas of the Refuge are either closed to hunting or open to limited hunting and are primarily managed to provide sanctuary. In these areas, hunts are specifically designed to minimize disturbance and other negative impacts on trust species while being compatible with other Refuge purposes. For example, the 3,000 acres of managed freshwater impoundments are managed primarily for waterfowl, wading birds, and shorebirds. The limited mourning dove and two-day mobility-impaired deer hunts within these impoundments are generally administered prior to fall flooding, thus ensuring minimal disturbance to waterfowl and wading birds. The quota youth waterfowl hunt within this same system is confined to the areas north of SC170, drawing no more than six blinds, and only during three Saturday morning hunts, one each in November, December, and January. This quota youth access will result in a hunt of the highest quality while exhibiting negligible amounts of disturbance and mortality on wintering waterfowl. Limited snipe hunting also is confined to areas north of SC170. This hunt is administered only during two days per week in February and on impoundments that are not flooded.

### **B. Public Use Conflicts**

The potential for conflicts between hunters and other visitors is minimal due to the short duration of Refuge hunts and the availability of separate and highly desirable non-hunting

public use areas. Refuge hunts occur during a total of about eight months of the year, leaving four months free from all hunting activities. The areas of the Refuge closed to general public hunting also are the areas that provide the best opportunities for non-hunting uses such as wildlife observation, photography, outreach, environmental education, and hiking. The four-mile, self-interpreted Laurel Hill Wildlife Drive, which provides excellent opportunities for wildlife viewing, is open to the public year round during daylight hours, except during the two-day mobility-impaired deer hunt. It is the most heavily visited area on the Refuge. All impoundments and associated trails and dikes north of SC170 in South Carolina are closed to all other public uses during the mobility-impaired deer hunt, quota youth waterfowl hunt, limited mourning dove hunt, and limited Wilson's snipe hunt. Most other areas open to hunting are generally more remote, much less accessible, and have no amenities, such as shelters and restrooms. These areas are not places that the average, non-hunting visitor tends to go. On all Refuge hunting areas, hunting is not allowed on, across, or within 100 yards of any service road, parking lot, or marked hiking trail, except during the mobility-impaired deer hunt, quota youth waterfowl hunt, limited mourning dove hunt, and limited Wilson's snipe hunt. Areas where these hunts occur are temporarily closed to other public uses. If conflicts arise, management strategies will be implemented by the Refuge Manager to minimize or resolve the conflict.

### **C. Administrative Conflicts**

No administrative conflicts are known to occur due to hunting activities covered within this plan. Only three Refuge hunts (mobility-impaired deer hunt, quota youth waterfowl hunt, youth turkey "Hunt & Learn" weekend) require additional work hours for Refuge staff. For these quota hunts, the Refuge Ranger contributes time processing hunt applications and permits, and one or two other Refuge staff provides on-the-ground assistance the days of the hunts. Volunteers also are recruited to assist with these special hunts. All other hunts are non-quota, require no check in, and no data are collected, except for big game harvests that are self-reported to the respective states.

## **VII. Conduct of the Hunting Program**

Listed below are Refuge specific regulations that pertain to Savannah NWR as of the date of this plan, as listed in Title 50 of the Code of Federal Regulations (50 CFR). These regulations may be modified as conditions change or if Refuge expansion continues/occurs.

### **A. Refuge-Specific Hunting Regulations**

**Migratory Game Bird Hunting:** We allow hunting of waterfowl, dove, and snipe on designated areas of the Refuge in accordance with State regulations and subject to the following conditions:

1. For all hunters age 16 and older, in addition to a state license, we require a Refuge hunt permit, which must be signed and carried at all times when hunting. We charge a

- fee for all hunt permits. For hunters age 15 and under we require a free hunt specific permit.
2. To participate in the quota youth waterfowl hunt, youth hunters must submit the waterfowl lottery application (FWS Form 3-2355). We require an application fee to enter the hunt drawing.
  3. We only allow shotguns with #2 or smaller, non-toxic shot for all migratory bird hunting, including dove and snipe.
  4. We only allow temporary blinds. You must remove decoys and other personal property from the Refuge daily (see § 27.93 of this chapter).
  5. We allow the use of retrieving dogs for migratory bird hunting. Dogs must remain under direct and constant control of the hunter.
  6. We prohibit hunting within 100 yards (91.4 meters) of Georgia Highway 25/South Carolina Highway 170.
  7. Youth hunters age 15 and under must remain within sight and normal voice contact of an adult age 21 or older, who possesses a valid hunting license for the State in which they are hunting. One adult may supervise no more than two youth hunters.
  8. Persons possessing, transporting, or carrying firearms on National Wildlife Refuges must comply with all provisions of state and local law. Persons may only use (discharge) firearms in accordance with Refuge regulations (§ 27.42 of this chapter and specific refuge regulations in part 32.)

**Upland Game Hunting (Referred to as Small Game elsewhere within this Hunt Plan):** We allow hunting of gray squirrel and rabbit in designated areas of the Refuge in accordance with State regulations and subject to the following conditions:

1. For all hunters age 16 and older, in addition to a state license, we require a Refuge hunt permit, which must be signed and carried at all times when hunting. We charge a fee for all hunt permits. For hunters age 15 and under we require a free hunt specific permit.
2. We only allow rimfire rifles, rimfire pistols, or shotguns with #2 or smaller, non-toxic shot for squirrel hunting. We only allow shotguns with #2 or smaller, non-toxic shot for rabbit hunting.
3. We prohibit hunting on or within 100 yards (90 m) of US Highway 17, GA Highway 25/SC Highway 170, Refuge facilities, road and trails, railroad rights of way, and within areas marked as closed.
4. We prohibit the use of dogs for upland game hunting.
5. During the period when upland game hunting coincides with the Refuge gun hunt for deer and hogs, we require hunters to wear an outer garment containing a minimum of 500 square inches (3,250 cm<sup>2</sup>) of hunter-orange material above the waistline.

6. Youth hunters age 15 and younger must remain within sight and normal voice contact of an adult age 21 or older, who possesses a valid hunting license for the State in which they are hunting. One adult may supervise no more than one youth hunter.
7. Persons possessing, transporting, or carrying firearms on National Wildlife Refuges must comply with all provisions of state and local law. Persons may only use (discharge) firearms in accordance with Refuge regulations (§ 27.42 of this chapter and specific refuge regulations in part 32.)

**Big Game Hunting (Although not considered game animals by the states, the Service includes feral hog and coyote as Big Game when referenced within 50 CFR):** We allow hunting of white-tailed deer, turkey, feral hog, and coyote in designated areas of the Refuge in accordance with State regulations and subject to the following conditions:

1. For all hunters age 16 and older, in addition to a state license, we require a Refuge hunt permit, which must be signed and carried at all times when hunting. We charge a fee for all hunt permits. For hunters age 15 and under we require a free hunt specific permit.
2. To participate in the gun hunt for wheelchair-dependent hunters, hunters must submit the quota deer hunt application (FWS Form 3-2354). To participate in the Youth Turkey Hunt & Learn Weekend, youth hunters must submit the big/upland game hunt application (FWS Form 3-2356). We require an application fee to enter these hunt drawings.
3. We allow only bows, in accordance with state regulations, for deer, hog, and coyote hunting during the archery-only deer hunt.
4. We allow only shotguns (20 gauge or larger; slugs only), center-fire rifles (.22 caliber or larger), center-fire pistols (.22 caliber or larger), muzzleloaders, and bows, in accordance with state regulations, for deer, hog, and coyote hunting during the firearm deer hunt and March firearm hog hunt. Solid copper or other non-toxic shotgun slugs and rifle bullets are recommended but not required.
5. You must remove hunt stands daily (see § 27.93 of this chapter).
6. Hunters may take five deer (no more than two antlered). There is no bag limit on feral hog or coyote.
7. You may take feral hog and coyote during all Refuge hunts (migratory bird, upland, and big game) with weapons authorized and legal for those hunts. You must possess a big game license if taking coyote and feral hog during the established deer season.
8. Turkey hunters may harvest only three gobblers (male turkey).
9. We allow only shotguns with #2 or smaller, non-toxic shot and bows, in accordance with state regulations, for turkey hunting. We prohibit the use of slugs or buckshot for turkey hunting.
10. We prohibit the use of trail or game cameras.
11. We prohibit the use of dogs for big game hunting.

12. We prohibit hunting on or within 100 yards (90 m) of US Highway 17, GA Highway 25/SC Highway 170, Refuge facilities, road and trails, railroad rights of way, and within areas marked as closed.
13. Youth hunters age 15 and younger must remain within sight and normal voice contact of an adult age 21 or older, who possesses a valid hunting license for the State in which they are hunting. One adult may supervise no more than one youth hunter.
14. Persons possessing, transporting, or carrying firearms on National Wildlife Refuges must comply with all provisions of state and local law. Persons may only use (discharge) firearms in accordance with Refuge regulations (§ 27.42 of this chapter and specific refuge regulations in part 32.)

## **B. Anticipated Public Reaction to the Hunting Program**

The public has generally supported the Refuge hunting program with exceptions usually being a request for more hunting, more access, and longer seasons. Occasionally, concerns are raised by non-hunting users of the Refuge regarding a potential conflict with hunters. Such concerns are rare and usually easy to resolve. Generally, the local public desires more hunting than less on the Refuge. Public reaction from surrounding communities to all Refuge hunts has been very favorable. However, some anti-hunting organizations have expressed opposition to hunting on National Wildlife Refuges. It is possible that some objections may be voiced to some or all of the hunts within this plan.

## **C. Hunter Application and Registration Procedures (if applicable)**

**General Public Hunts:** These hunts are open to all eligible hunters, with proper state licenses, who have purchased the Complex Annual Hunt Permit. There is no check-in/check-out required.

**Youth Deer and Turkey Hunts:** These hunts are open to all eligible youth hunters 15 years of age and under with a supervising adult. No application is required. Youth hunters are required to obtain a free permit which may be requested by emailing, calling, or visiting the Savannah NWR Visitor Center.

**Quota Youth Turkey Hunt & Learn Weekend:** This is a quota hunt that requires the youth hunter to submit a Big/Upland Game Hunt Application (FWS Form 3-2356) to the Savannah NWR Visitor Center by January 31 each year. An application fee is required.

**Quota Youth Waterfowl Hunt:** This is a quota hunt that requires the youth hunter to submit a Waterfowl Lottery Application (FWS Form 3-2355) to the Savannah NWR Visitor Center by October 1 each year. An application fee is required.

**Mobility Impaired Hunt:** This is a quota hunt that requires mobility-impaired hunters to submit a Quota Deer Hunt Application (FWS Form 3-2354) to the Savannah NWR Visitor Center by August 31 each year. First-time hunters are also required to submit a physician's statement certifying that the applicant meets the requirement of being permanently confined to a wheelchair for mobility. An application fee is required.

#### **D. Description of Hunter Selection Process**

**General Public Hunts:** Any eligible hunter with proper state licenses, who has purchased the Complex Annual Hunt Permit, may hunt during general Refuge hunting seasons.

**Youth Deer and Turkey Hunts:** Eligible youth hunters may hunt after requesting and obtaining a free youth hunt permit. If a supervising adult is not available for a selected youth participant, one can be assigned.

**Youth Turkey Hunt & Learn Weekend:** Applications for this hunt must be postmarked by January 31 each year. A random drawing is conducted to select 10 applicants. Any remaining applications are also drawn for an alternate list. Both successfully drawn hunters and alternates are notified via email and/or U.S. mail. If any cancellations are received from the original list, alternates are notified in the order they were drawn.

**Quota Youth Waterfowl Hunt:** Applications for this hunt must be postmarked by October 1 each year. A random drawing is conducted during which six parties are selected. Parties consist of either one or two youth hunters. Any remaining applications are also drawn for an alternate list. Both successfully drawn hunters and alternates are notified via email and/or U.S. mail. If any cancellations are received from the original list, alternates are notified in the order they were drawn.

**Mobility Impaired Hunt:** Applications for this hunt must be postmarked by August 31 each year. After applications are received and physician's statements checked for eligibility, a random drawing is conducted during which fifteen applications are drawn. Any remaining applications are also drawn for an alternate list. Both successfully drawn hunters and alternates are notified via email and/or U.S. mail. If any cancellations are received from the original list, alternates are notified in the order they were drawn.

#### **E. Media Selection for Announcing and Publicizing the Hunting Program**

The Refuge maintains a contact list of local media outlets including newspapers, radio stations, and television stations. News releases will be developed announcing the hunting season dates, where hunt permits can be obtained, and other pertinent information. Information will also be posted on the Refuge website and through social media.

#### **F. General Requirements**

General information regarding hunting and other wildlife-dependent public uses can be obtained at the Savannah NWR Visitor Center at 694 Beech Hill Lane, Hardeeville, SC 29927 or by calling (843) 784-2468. Hunting regulations, dates, maps, and permit and application requirements for all hunts will be available on the Refuge website at: [www.fws.gov/refuge/savannah](http://www.fws.gov/refuge/savannah) and at the Refuge Visitor Center.

### **G. Hunter Requirements**

All hunter requirements, such as equipment, licenses and permits, check-in, transportation and hunter training and safety are specified in the Refuge-specific hunt regulations (see section VII.A).

### **VIII. Compatibility Determination**

Hunting and all associated program activities contained in this plan are likely to be found compatible with the purposes of the Refuge on the in process Compatibility Determination.

### **REFERENCES**

- Raftovich, R.V., S. C. Chandler, and K.A. Wilkins. 2015. Migratory bird hunting activity and harvest during the 2013-14 and 2014-15 hunting seasons. U.S. Fish and Wildlife Service, Laurel, Maryland.
- Seamans, M. E. 2015. Mourning dove population status, 2015. U.S. Department of the Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Washington, D.C.
- U.S. Fish and Wildlife Service. 2011. Savannah Coastal Refuges Complex Comprehensive Conservation Plan. Department of the Interior, Fish and Wildlife Service, Southeast Regional Office, Atlanta, Georgia.

Figure 1. Refuge Hunt Map

