

Wild Hogs in Florida: An Overview



Division of Hunting and Game
Management
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This presentation is a staff report on wild hog ecology and management in Florida. The purpose of this presentation is to provide the Commission with background on the history, biology, values, problems, and issues associated with wild hog management in Florida. This information can provide context and perspective for future management decisions the Commission may consider, such as managing hunting opportunities on FWC-managed lands.

Wild Hogs: Opportunities and Problems

- Introduced species
- Important hunting opportunity
- Destructive
- Disease
- Management philosophies vary



The wild hog is often considered one of the more problematic wild animals in Florida, and there are different viewpoints. Some people like and value them...many do not.

Wild hogs were introduced to Florida by Europeans and are considered an exotic species. They have been here a long time.

Many Floridians value wild hogs for the hunting opportunity they provide.

Wild hogs can be destructive to native habitats, wildlife and agriculture.

Like many wild animals, wild hogs can carry diseases that may be spread to humans, domestic animals and wildlife.

The Commission generally seeks to manage the species through public hunting, while many of its land management partners seek to control, reduce, or even eliminate it from the lands under their management, using a variety of methods. Although the goals of controlling hog numbers are similar, management philosophies and approaches vary among agencies.

What they are

- Domestic hogs
- Eurasian wild boar
- Domestic hog x Eurasian wild boar



Domestic



Eurasian



Hybrid



Wild hogs are often referred to as feral hogs or swine and are of three general types. These include free-ranging swine that come from domesticated stock, Eurasian wild boar, and hybrids of the two.

There are no free-ranging, pure Eurasian wild boar in Florida, only feral domestic hogs and hybrids (domestic hog x Eurasian boar). Wild hogs are in the family Suidae (true pigs), none of which are native to the Americas.

Although feral refers to free-ranging animals from domesticated stock, all wild hogs are typically referred to as feral in Florida and all are considered the same species: *Sus scrofa*.

History of Establishment

- Explorers

- Columbus (1493)
- Hernando de Soto (1539)



Illustrations by FloridaHistory.com



Charlotte Harbor



When Christopher Columbus made his second voyage across the Atlantic in 1493, his cargo included 8 hogs to be released on islands in the West Indies as a food source for future voyagers. In May 1539, when Hernando De Soto (middle portrait) landed at the mouth of Charlotte Harbor in Lee County, he had with him 13 sow hogs that he obtained from Cuba (probably descendants of those introduced by Columbus). By April of the following year, De Soto's 13 hogs reportedly had increased to approximately 300.

Hogs spread throughout Florida

- European explorers & settlers
- Native Americans
- Intentional releases



During the next four centuries, explorers and settlers took hogs with them as they traveled throughout Florida. Many of these animals were acquired by Native Americans who helped expand hog populations and distribution in the state.

Europeans and Native Americans alike often raised their swine in semi-wild conditions, where hogs were allowed to roam freely and only rounded up when needed. These open range provisions ended in Florida in the mid-1900s.

Wild populations continue to be supplemented by escaped domestic hogs and intentional releases.

How many hogs are there?

- 500,000+ in Florida (in every county)
- 1-2,000,000 in the Southeast
- Several million in 39 states and provinces



Wild hogs are now found in every county in Florida and in at least 39 states and Canadian provinces, including most of the Southeast.

Florida, second only to Texas, is estimated to have 500,000+ wild hogs in a relatively stable population, with 1 to 2 million in the southeastern U.S.

Some of the highest densities are found north and west of Lake Okeechobee, with many on private ranches.

Ecology: Breeding

- Start breeding at 1 yr of age
- Breeding peaks in spring & fall
 - Produce 2 litters of 1-13 piglets each



In Florida, wild hogs breed year-round with peak births during fall and spring. While hogs may be sexually mature at 6 months of age, they typically do not breed until about one year of age, provided there is good nutrition.

With pregnancy lasting about 115 days, hogs can produce 2 litters of 1-13 (usually 5-7) piglets per year, with the young usually born in a 1:1 male :female ratio.

Piglets remain in the nest for 3 weeks.

Typically, boars are solitary animals except when breeding. However, sows (1-3) and their offspring often travel in groups called sounders.

Ecology: Survival

- Full grown in 3-5 years
- Average life span: 4-5 years



- Hunting
- Predators
- Accidents
- Disease
- Starvation



It may take 3-5 years until hogs are fully grown. Under good conditions, wild hogs usually live 4-5 years, with some living 8+ years.

Hog mortality is greatest during the first 6 months of life, with predation, accidents, disease and starvation as leading causes of death during this time. As adults, hogs typically have higher survival rates, with hunting, a wide variety of diseases and parasites, and starvation as leading causes of mortality. Humans are the main predators of wild hogs, but large carnivores such as alligators, black bears, and Florida panthers may be capable of preying on adult animals. Piglets are also preyed upon by smaller predators including foxes, coyotes, panthers and bobcats.

When conditions are favorable, hog reproduction exceeds mortality leading to growing and overabundant populations.

Ecology: Food



- Hard & soft mast
- Other plants
- Agriculture crops
- Animals



Food habit studies of wild hogs have shown them to be highly seasonal in their forage selection, which is determined largely by food availability.

Wild hogs are omnivorous (eat anything), opportunistic feeders. However, they consume far more plant than animal material, and may occasionally consume carrion (dead animals). The list of foods eaten by hogs is diverse and includes grass, forbs, woody plant stems, roots, tubers, leaves, seeds, fruits, fungi, and a variety of animals including worms, insects, crustaceans, mollusks, fish, small birds, mammals, reptiles, and amphibians. Predation on rare or endangered animals can be a problem.

The opportunistic tendencies of wild hogs often lead them to forage in agricultural lands and forest plantations where they can cause significant losses of crops, including corn, rice, sorghum, melons, peanuts, forage grasses, grains, various vegetables and tree seedlings. Wild hogs will also readily exploit game feeders and may destroy wildlife food plots by rooting (digging for foods below the surface of the ground).

Seasonal changes in habitat use are typically related to food availability, with hogs preferring areas containing abundant hard mast (such as acorns and hickory nuts) and if unavailable, soft mast such as plums and other fruits.

Soft mast - fruits (wild plum, top left photo), baby turtles (lower left), and hard mast (acorns, lower right)

Ecology: Range and Density

- ~1 mile² (450-740 acres)
 - Depends on food
- 1 hog / 32 acres



Wild hogs typically range over approximately a square mile (450-750 acres), but may wander farther in search of food.

In good habitat, hog densities are about 1 per 32 acres.

Impacts

- Competition with native wildlife



- Predation



The opportunistic and omnivorous tendencies of wild hogs sometimes lead to conflicts with people and wildlife. With hard mast, including acorns, as their preferred food, hogs directly compete with many popular game animals, including deer, turkeys, and squirrels. The impacts of this competition are uncertain, but it may be a limiting factor for populations of native species in some areas.

In addition, hogs may consume the nests and young of reptiles (including turtles), ground-nesting birds and mammals (including deer fawns). Wild hogs have also been known to prey on young domestic livestock including poultry, lambs and goats.

Impacts

- Feeding on crops, seeds & seedlings



- Rubbing & tusking



When natural foods are scarce or inaccessible, hogs will readily consume almost any agricultural crop and feed set out for livestock and wildlife, leading to significant losses. Wild hogs will also feed on tree seeds and seedlings, causing damage to forests, orchards, and plantations. In Florida and the Southeast, this can be a serious problem in the regeneration of long-leaf pine forests (top left photo).

Hogs rub trees to scratch themselves. In addition, males will often "tusk" small trees, scraping off the bark with their tusks, in what is thought to be a dominance display. Such actions can seriously damage the trees.

Impacts

- Rooting



- Wallowing



In addition to the impacts of consuming, trampling, and rubbing large amounts of native vegetation and crops, the rooting behavior of hogs also causes damage. Rooting (digging for foods below the surface of the ground) destabilizes the soil surface, which can lead to erosion and exotic plant establishment; uprooting or weakening of native vegetation; and damage to lawns, dikes, roads, trails, recreation areas, and other structures.

Wallowing behavior can impact small ponds and stream banks, and lead to declines in water quality.

Impacts

- Disease



Another area of concern is the potential for wild hogs to serve as reservoirs for diseases and parasites that may affect native wildlife, livestock, and people. Hogs have been known to carry pathogens, including cholera, pseudorabies, brucellosis, tuberculosis, salmonellosis, anthrax, ticks, fleas, lice, and various flukes and worms. You may remember that several dogs used for hunting at the Corbett Wildlife Management Area were recently infected with pseudorabies and had to be destroyed. Wild hogs were implicated in this incident.

Millions of dollars are spent each year in the U.S. to keep livestock safe from the diseases carried by wild hogs.

Brucellosis can be a serious threat to hunters if they do not take precautions when cleaning infected animals.

Values

- Hunting Opportunity



- Panther Food



Hunting for wild hogs is immensely popular among Florida's hunters. The number of days spent hunting hogs is exceeded only by days spent hunting deer in Florida. Economic value is derived by landowners from fee and sport hunting. Landowners trap wild hogs for sale to hunting preserves, for fee-hunting operations and slaughter for their meat.

Wild hogs provide a major food source for the endangered Florida panther. This value weighs significantly when FWC considers hog management on public lands within the panther's range.

Can Wild Hogs be Managed?

- Control: YES
- Eradication: NO
- Management agency positions:
 - FWC
 - Water Mgmt. Districts
 - Florida Forest Service
 - Federal Agencies



In good habitat, it is unlikely that any amount of hunting or other population control could eradicate wild hogs, but it may be possible to reduce numbers and limit further population expansion. Different agencies use different methods to control hogs for the purpose of reducing negative impacts as described in previous slides. Control methods include hunting, trapping, shooting and exclusion. Toxicants and repellents have been suggested as means of controlling or deterring hog populations. However, none is registered for use in the United States.

FWC: The Commission generally seeks to manage the species through public hunting. On rare occasions, other methods may need to be used.

Water Management Districts: Management philosophies vary, but most WMDs view the wild hog as an undesirable exotic species that requires control. Control methods include public hunting in cooperation with FWC, contract trapping and shooting outside of periods open to hunting.

Florida Forest Service: Most hog control is accomplished through public hunting, although other control measures have been used when problems arise.

National Park Service: The National Park Service (NPS) generally views wild hogs as an exotic species that warrants control on Big Cypress National Preserve. NPS recognized that wild hogs require special management consideration, because of their importance to the Florida panther and recreational hunters. The primary technique for hog control on Big Cypress National Preserve is recreational hunting.

U.S. Forest Service: The U.S. Forest Service view wild hogs as trespass livestock and their presence on national forests as undesirable. The primary management approach has been through liberal hunting pressure in cooperation with the FWC.

Department of Defense: Individual military installations in Florida have varying views and policies relating to management of wild hogs. At Eglin Air Force Base, hogs are viewed as an undesirable resource that provides recreational benefits ancillary to control efforts. Eglin's management objective is to control hog populations to the point where they cause minimum damage to environmentally sensitive areas. Eglin uses and supports public hunting as one of the many tools to control hog numbers. Tyndall Air Force Base views hogs as a pest species but tolerates low population densities provided there is minimal damage to natural resources. Avon Park Air Force Range recognizes that wild hogs are an important recreational resource for hunters, but they are viewed as a potential threat to ecological resources and various methods, including trapping, and direct reduction programs have been implemented.

Management: Hunting



Hunting is an important control method for wild hogs because it provides recreational opportunities, is inexpensive and can be useful at reducing the number of adult animals.

FWC has liberalized the take of hogs on WMAs, whenever possible. Hogs are now legal to take during the small game season, as well as during archery, muzzleloading gun and general gun seasons on many areas. In addition, public hog management hunts can be conducted quickly, when problems arise.

Wild hogs are a major prey item of the Florida panther. In south Florida, within the range of the Florida panther, some restrictions on bag limits and size remain in place on WMAs.

Management: Other Methods

- Removal
- Exclusion



Hog management on private lands may also include shooting, trapping or catching with dogs and removal from the area. Releasing hogs on public land is prohibited.

Excluding hogs using fencing can also be an effective but expensive control option for relatively small areas.

The Law and Wild Hogs

- Not considered a game animal
- Managed as wildlife
- Movement regulated by DOACS



Wild hogs are not considered “game” animals anywhere in Florida.

It should be noted that the Commission asserts constitutional authority over wild hogs owing to the existence of case law which describes hogs as “wildlife.” On FWC managed lands, wild hogs may be taken in accordance with seasons, bag limits and methods of take approved by the Commission.

Landowners enjoy broad authority to manage wild hogs on their own property. On private lands and lands not managed by FWC, the landowner may take hogs year-round, with no size or bag limit and no hunting license required. Hogs can be taken by any method except poison, or steel trap, provided it is “humane” as pursuant to Section 828.12, F.S. Because of the domestic origin, hogs become the property of the landowner when captured and placed under proper control. If hogs are live captured, the trapper must follow Florida Department of Agriculture and Consumer Service rules on transportation and quarantine:

5C-21.015 Swine Movement Requirements.

(3) Feral Swine. Feral swine may be moved directly to a recognized slaughtering establishment, an Approved Game Reserve (Initial Approval and Inspection of an Approved Game Reserve for the Acceptance of Feral Swine, DACS-09197 11/04), or to an Approved Feral Swine Holding Facility (Application/Inspection for Approved Feral Swine Holding Facility and/or Registration as a Feral Swine Dealer, DACS-09188 11/04) without testing. Feral swine moved to other locations must be segregated from all other swine and be tested negative for pseudorabies on two consecutive tests conducted at least 60 days apart.

Conclusions

- Wild hogs are an introduced species that has economic costs and benefits
- Biological impacts are mostly negative
- Hogs can be controlled but not eliminated
- Management and control efforts provide hunting opportunity
- FWC prefers to manage through public hunting, when possible



Wild hogs are non-native wildlife that have negative impacts on agriculture, timber and livestock operations. They are popular with hunters and provide an economic incentive for some landowners to allow hunting on their land.

Although hogs are considered an important prey item for the panther in south Florida, most of the biological impacts to native systems are negative.

Because of their high reproductive rate and ability to adapt and survive, hog numbers can be controlled, but not eliminated.

Land management agencies share a common interest in controlling hog populations and hunting is an important tool. FWC works with our partners to provide public hunting opportunities, while helping to achieve management goals on public lands.

We would like to thank William M. Giuliano, Department of Wildlife Ecology & Conservation, IFAS, University of Florida who helped prepare this presentation and supplied several of the pictures.

Questions?



This presentation is a staff report. No Commission action is necessary.