



Feral Hogs in Georgia: Disease, Damage and Control



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FERAL HOG FACTS

- * It is illegal to stock, move or release any hogs that are not from disease-free herds or individually tested.
- * Feral hogs carry serious diseases that are transmissible to people and domestic animals.
- * Feral hogs are non-native invasive pests that compete directly for food and cover with many species of wildlife including deer, wild turkey and quail.
- * Hogs can damage habitats resulting in the elimination of rare or endangered plants and animals.
- * Hogs can destroy agricultural crops, including food plots for deer and turkey.
- * Hog damage can be controlled by shooting, trapping or through the use of exclusion fencing.
- * There is no closed season and no limit on hogs on private land. Hunting over bait, from a vehicle or at night with a light over 6 volts is prohibited. A hunting license is required for all resident hunters 16 years or older (except on land owned by them or their immediate family residing in the same household).
- * Commercial agriculture properties (three or more acres) experiencing hog damage may qualify for a special hog removal permit. This permit allows property owners (or those designated by property owners) to shoot from a vehicle, use a 12-volt light and/or shoot hogs in the vicinity of baited hog traps. Contact a WRD Regional Game Management Office for assistance.
- * Always wear protective gloves when handling feral hogs or meat.
- * Always cook hog meat to a minimum temperature of 170 degrees F and/or freeze at 0 degrees F for a minimum of 20 days.

INTRODUCTION

Feral hogs (*Sus scrofa*) in Georgia include some nearly pure Eurasian or Russian wild boar, free-ranging domestic hogs, and all manner of hybrids between the two extremes. Feral hogs (a term covering all free-ranging hog combinations) prefer the cover of dense brush for protection, but also may be found in mature woodlands and grassy areas. During hot weather they spend much of their time wallowing in swamps, wetlands, ponds, and streams close to protective cover.

Feral hogs are omnivorous and will eat anything from grain to carrion. Plant matter constitutes an important part of their diet. When available, acorns are preferred. They also consume roots and invertebrates such as centipedes, leeches, earthworms and crayfish. In certain areas, cultivated crops and row crops make up a significant portion of their diet. Wild hogs have been known to travel up to seven miles to feed on agricultural crops such as corn and soybeans. They also may prey on ground nests, young wildlife, livestock, and other small vertebrates.

IDENTIFICATION

Most feral hogs are domestic hogs which have escaped into the wild or have been released for hunting purposes and now are free-ranging (See Map-Page 4). Their size and color vary greatly and depend upon their domestic breed and their nutrition during development. The number of generations they have lived in the wild also seems to influence their appearance. Descendants from stock whose ancestry has been in the wild for generations or even centuries tend to have the classic long snouts and lean appearance of the legendary "razorback" of southern folk culture.

Eurasian or Russian Wild Hogs

Pure Eurasian wild hogs (often referred to as "Russian" boar) differ in appearance from the average feral hog in Georgia. This wild hog usually has longer legs, a larger head and a longer, flatter snout. Eurasian piglets are reddish brown with black longitudinal stripes. As the animals mature, the stripes disappear and their color changes to gray grizzled or black. Eurasian hogs generally have longer guard hair and a more distinct mane of guard hair running from the neck to the base of the tail than the domestic hog.



Eurasian Hog Sow and Young: Hogs can reproduce at six months of age and can have up to thirteen offspring in one litter.

Hybrids

Eurasian wild hogs and hybrids originating from escapees of a Hooper Bald, North Carolina enclosure in the 1920's subsequently spread into Tennessee and parts of the North Georgia Mountains. In recent years, the **illegal** transportation and stocking of wild hogs statewide has increased dramatically. As a result, more hybridization has occurred and few individuals of the pure Eurasian strain are found in Georgia. However, the hybrid offspring has retained many characteristics of the Eurasian wild hogs.

DISTRIBUTION

Christopher Columbus first introduced hogs into the Americas in 1498 during his exploration of the West Indies. Hernando DeSoto also brought a herd of hogs with him on his trip through the southeast in the 1540's. According to the following narrative from www.floridahistory.com, DeSoto essentially stocked hogs from southwest Georgia all the way to Augusta. We would speculate that this continued throughout his expedition in the southeast.

"Though hitherto we have not mentioned that we brought these animals with us, it is true that DeSoto brought more than three hundred head, male and female, which multiplied greatly and were exceedingly useful... If (by now) the Indians have not destroyed them, it is probable that... there are many of them there today (when this report was published in 1609), for besides those the governor gave to the friendly chiefs, many others were lost along the roads."

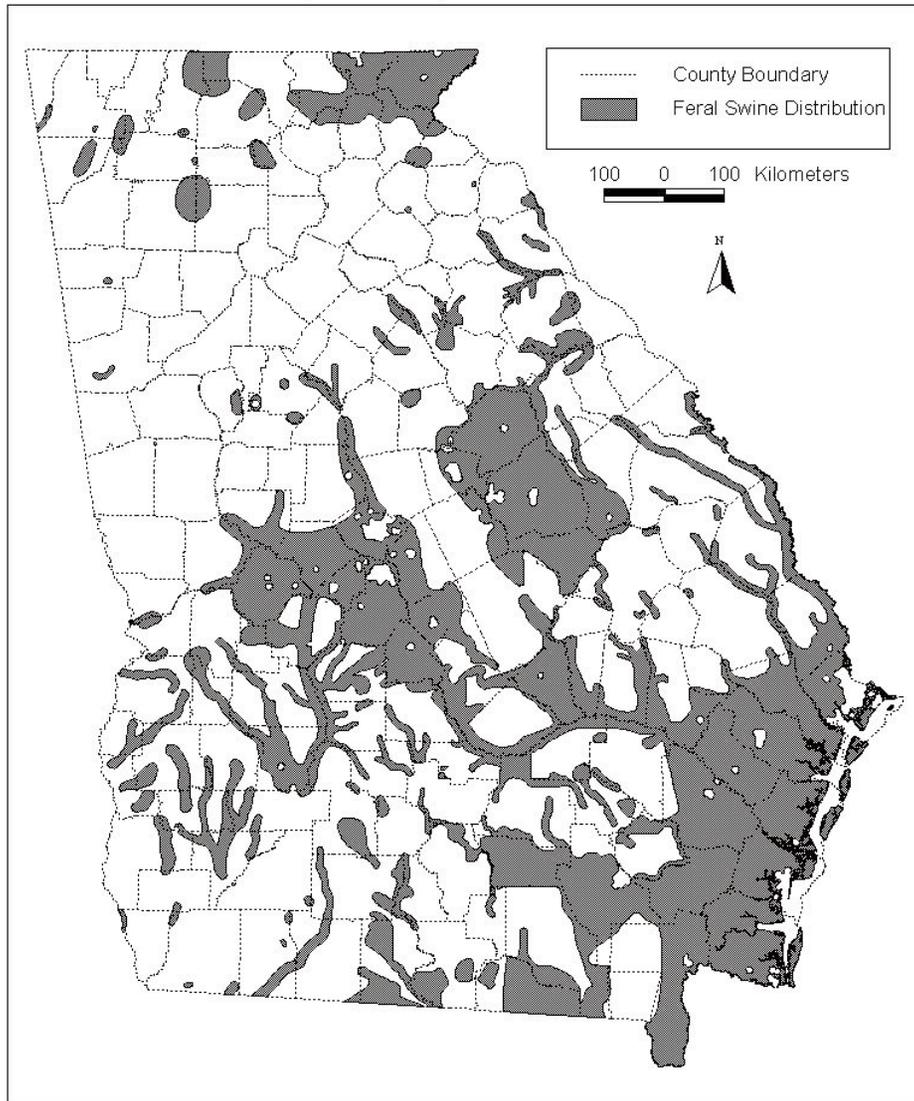
Hogs spread into interior Georgia and the Carolinas and eventually became sporadically established in all southeastern states. Today, feral hogs are reported in many counties of Georgia (See Map-Page 4).

BIOLOGY, REPRODUCTION AND BEHAVIOR

Adult weight:	100 to 500+ pounds. Very large hogs (500+ pounds) are generally from domestic stock.
Adult height:	3 feet (males are generally larger than females).
Color:	Varies from solid black, gray grizzled black, brown, blond, white or red to spotted or belted.
Feet/Track:	Similar to deer tracks, except toes have more round or blunt tips and often show widely splayed dewclaws.
Gestation period:	115 days.
Litter size:	Four to eight, but may be as large as thirteen.
Age at first breeding:	Six to 10 months.
Number of litters:	One or two litters per year. Young may be born at any time of the year.
Social structure:	Generally travel in family groups normally comprised of two or more sows and their young. Adult boars are generally solitary, only joining a herd to breed.

Feral Swine Distribution in Georgia, 2003

Produced by the Southeastern Cooperative Wildlife Disease Study in cooperation with the Georgia Department of Natural Resources, Wildlife Resources Division, and Animal and Plant Health Inspection Service, USDA.



Wild hogs are susceptible to a variety of important diseases/parasites in Georgia. Hogs can carry the nematode, *Trichinella spiralis*, which causes trichinosis in people. Although rare in Georgia, people can get trichinosis by consuming undercooked pork containing the parasite. Always cook pork at a minimum of 170 degrees F. Freezing meat at 0 degrees F for a minimum of 20 days also destroys this pathogen.

As for diseases, two of the most serious diseases found in Georgia include swine brucellosis and pseudorabies. Hunters and farmers need to be aware that wild hogs can transmit these diseases to domestic hogs. Although these diseases may occur in all parts of Georgia, one or both has been confirmed in over 25 counties to date. Testing of over 1,800 feral swine in Georgia from 1991 through January 1999 revealed 507 (28 percent) positive for pseudorabies and 73 (4 percent) positive for swine brucellosis. Swine brucellosis and pseudorabies both are transmissible to domestic pigs and swine brucellosis can be transmitted to people. Further screening by the Southeastern Cooperative Wildlife Disease Study was ongoing as this publication went to press.

SWINE BRUCELLOSIS

Swine brucellosis is caused by a bacterium similar to the brucellosis organism in cattle. It causes abortions in sows and infertility in boars. Wild hogs in 10 southeastern states, including some areas of Georgia are infected with swine brucellosis. It can be spread to domestic swine if infected wild hogs are introduced into or near local herds.

Other farm animals are rarely threatened by swine brucellosis, although cattle can become infected if they are exposed to the afterbirth of infected wild pigs. Humans can get swine brucellosis through handling infected tissues of wild pigs. Hunters are at risk when they clean or process wild hogs and should take the following precautions:

1. Always wear disposable plastic or rubber gloves when dressing and cleaning wild hogs. Avoid direct skin contact with blood and reproductive organs.
2. As soon as possible, wash hands with soap and hot water after dressing wild hogs.
3. Burn or bury gloves and carcass remains from dressed wild hogs.
4. Cook meat from wild hogs thoroughly (minimum temperature of 170 degrees F).

The symptoms of swine brucellosis in humans are not distinctive enough for a clearcut diagnosis. Most people report recurring fevers, chills, sweating, weakness, headaches, debilitating pain in muscles or joints, loss of appetite, and weight loss. Some of these symptoms can persist for months. People with these symptoms, who have been exposed to wild hogs, should consult their doctor about swine brucellosis.

PSEUDORABIES

Another important disease harbored by wild hogs is pseudorabies. Despite its name this disease is not related to rabies and does not infect people. It is caused by a herpes virus. Pseudorabies causes production and economic losses in domestic operations.

Adult feral swine can be silent carriers of pseudorabies and periodically will shed the virus that causes the disease through the reproductive tract. Once infected, the hog is a lifetime carrier, and there is no effective treatment. Pseudorabies can be detected by blood testing and has been found in 11 states including parts of Georgia.

Pseudorabies can result in a fatal infection for other domestic animals including cattle, sheep, goats, dogs and cats. Wild mammals such as raccoons, skunks, foxes, opossums and small rodents also can be fatally infected. Although people are not at risk themselves, hunters need to know that their dogs could become infected by exposure to infected wild hogs or their carcass remains.

Laws govern the control of swine brucellosis and pseudorabies. **Relocating wild pigs that have not been tested for these diseases is in violation of both state and federal law.** It is important to follow the outlined sanitary handling procedures (page 5) in this booklet to prevent humans from becoming infected with swine brucellosis and to make sure that this disease and pseudorabies do not infect domestic farm animals and native wildlife.



Hunters and farmers need to be aware that wild hogs can transmit diseases to domestic hogs and humans.

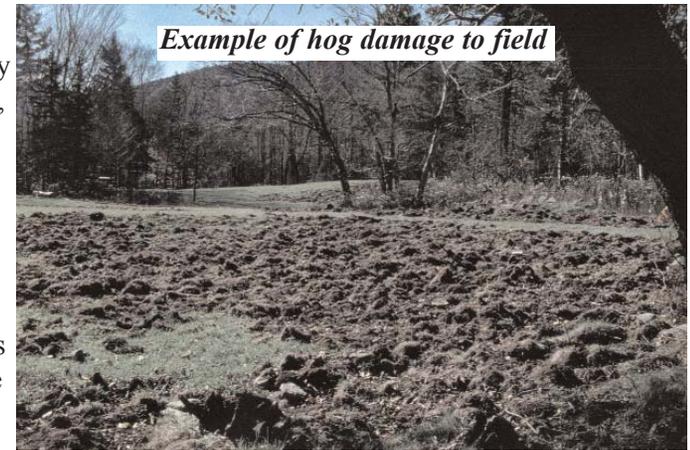
DAMAGE

Damage caused by feral hogs has been reported in many Georgia counties. Hogs compete with over 100 species of native wildlife for important and limited natural food supplies, including hard and soft mast (especially acorns). The native competitors at risk include high profile, high demand animals such as deer, wild turkey, quail, black bear and ruffed grouse.

Since they compete heavily with deer, hogs can be extremely detrimental to deer management programs. They will destroy quail and turkey nests and consume their eggs. In addition to consuming supplemental feed on some private intensively managed areas, wildlife feeders often are damaged or destroyed by feral hogs. Feeding also can contribute to the spread of diseases among hogs and between hogs and native wildlife. Hogs also destroy, eliminate and prevent the re-establishment of valuable native plants and animals including threatened and endangered species. All of the above reasons are why hogs are not desired on public lands in Georgia.

On Wildlife Management Areas (WMAs), National Forest lands, Army Corps of Engineers lands, National Wildlife Refuges and other state and federal properties, hogs are considered an invasive exotic nuisance animal and their population must be limited and controlled by hunting and in some cases, trapping and sharpshooting. The goal for most public lands is either elimination or significant population reduction to the point that there is no measurable impact on the habitat.

Agricultural crops commonly damaged by feral hogs include rice, sorghum, wheat, corn, soybeans, peanuts, potatoes, watermelon and cantaloupe. Two of the most common types of damage to crops occur when hogs root in the fields while consuming and trampling crops.



Hog predation on livestock also can be a problem in some localized areas. Feral hogs can kill and consume lambs and kid goats. Physical evidence of hog predation is hard to detect because the entire animal may be consumed. If hog predation occurs when kids and lambs are larger, the entire carcass may be turned inside out, leaving the hide with little or no flesh except on the head, neck and hooves.

CONTROL METHODS

The most effective method for controlling feral hogs is a combination of shooting, live trapping and hunting with dogs. All are legal methods of take in Georgia. There currently are no toxicants or repellents registered for the control of feral hogs. Electric fencing or hog wire fencing may have limited application to protect valuable crops or plants from wild hog damage. The best success comes from a multi-faceted approach. The USDA Wildlife Services located in Athens (706-546-2020) is a federal program experienced in the efficient management of hog problems. They have successfully reduced or eliminated localized hog populations using the three-pronged approach of shooting first, then trapping and finishing with dog hunting. As one technique becomes less effective, they move to the next technique. USDA biologists are available for technical or operational assistance.

RESTRICTIONS

Feral hogs are free-ranging, exotic animals and may be taken on private lands at any time of the year, by any legal means with no bag limits. **Hunting over bait and hunting from a vehicle are not legal except by special permit.** Commercial agriculture properties (three or more acres) experiencing hog damage may qualify for a special hog removal permit.

This permit allows property owners (or those designated by property owners) to shoot from a vehicle, use a 12-volt light and/or shoot hogs in the vicinity of baited hog traps. Permits will be issued on a case-by-case basis by the WRD Regional Game Management Office. Permit windows for use of vehicles and 12-volt lights extends from January 15 to March 15 and May 15 to September 1. Permits for shooting hogs near baited traps are limited to June 1 to September 1.

To hunt hogs, any person 16 years of age or older must have a current hunting license - except for Georgia residents hunting on land owned by them or their immediate family residing in the same household. See current hunting regulations guide (available online at www.gohuntgeorgia.com or through hunting and fishing license agents) for WMA and public lands restrictions. Consult with any WRD Game Management Office (numbers listed at the front of this booklet) regarding any question about the legal status of feral hogs.

The most effective method for controlling feral hogs is a combination of shooting, live trapping and hunting with dogs.

SHOOTING

Shooting during daylight hours or at night is an effective control method, especially if the areas of greatest hog activity are known. Recent data from hog removal efforts on Ossabaw Island WMA indicate that hunting/shooting can be more effective than trapping when both were conducted concurrently. However this may vary on hunting clubs where it is difficult to exert constant intense hunting pressure. Efficiency of both trapping and hunting on Ossabaw was nearly equal in all seasons of the year except fall when both techniques were less effective due to high mast availability. The feral hogs quickly became aware of hunting pressure when they were consistently hunted or shot from the same stands or locations. They often changed behavior or left the area and became less susceptible to hunting. A variety of techniques including stand hunting, stalk hunting, changing hours and locations became necessary for effective control. When shooting became ineffective, other techniques such as trapping or dog hunting were used.

In Georgia, it is not legal to shoot hogs, deer or wild turkeys within 200 yards of bait or within sight of bait regardless of distance. At night a 6-volt, hand held light is legal for hunting hogs. *Note: Hog removal permits allow a 12-volt light and shooting near baited traps (See page 8).*

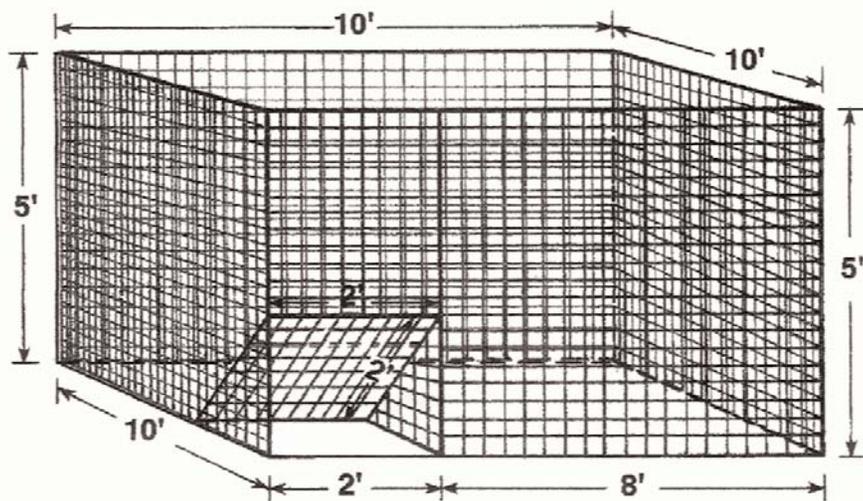
Landowners may seek hog control assistance from interested hunters or trappers. Many hunters perceive hogs as desirable game. In fact, hog hunting opportunity is the impetus for the illegal moving and stocking of hogs.

LIVE TRAPPING

Live traps are very effective for capturing feral hogs. Pre-baiting is essential. Pre-baiting is best accomplished using timed spin feeders or other semi-permanent long-term feeders. There are many trap designs, ranging from single-catch traps with a drop gate or one-way swing gate to multi-catch traps with root up doors.

An example of a multi-catch trap is shown on page 10. This trap is constructed from 2 inch x 2 inch angle iron and stock paneling. The trap door measures 2 feet x 2 feet and when closed should lie at an angle of approximately 30 degrees. The assembled trap measures 10 feet x 10 feet x 5 feet. It may be necessary to enclose the top of the trap to prevent hogs from escaping. All sides of the trap, except the gate, may be camouflaged with brush. If the trap is not secured to trees, it should be secured to the ground with 24-inch stakes so that the hogs do not escape by rooting under the sides.

Hog traps are available for sale at www.allseasonsfeeders.com. They operate through a local distributor - Triple B Farms in Lyons, GA (912- 578-4101). In addition, White Fencing Co. in Thomasville, GA (850-668-3242) custom builds hog traps. Other traps may be commercially available.



When pre-baiting, the trap door is wired open to allow free access to the trap and bait. Once the hogs become accustomed to entering the trap the door should be propped open with a stick that is attached to a screen door spring. The door is opened 18 to 20 inches, and the spring attached with sufficient tension to pull the stick away from the door when a hog enters the trap.

Once an animal has been caught in this trap, other hogs can enter by pushing open the door. As with other multi-catch traps, a decoy animal in the trap will aid in attracting other hogs to enter. The trap should be checked daily for animals. Decoy animals should be fed and watered as often as necessary.

Plain corn, fermented corn (see recipe page 11), or peanut butter are the preferred baits. Because hogs have a keen sense of smell, the trap should be placed upwind of known hog activity areas. Pre-baiting is extremely important for any long-term successful trapping operation.



Hog traps come in all shapes and sizes. This photo depicts a flap door portable trap that has proven successful in South Georgia.

HUNTING WITH DOGS

In certain situations, trained dogs may be used to locate hogs. Dogs should be properly trained for hog control to lessen the possibility of injury. Hogs will become particularly wary of dogs after they have been continuously harassed and other control methods may become necessary.

FENCING

Fencing is the only guaranteed control measure available to hog producers. Check with the USDA Veterinary Services (770-922-7860) for information on proper double fencing around hog operations to prevent contact between feral and domestic swine. Excluding feral hogs from valuable crops can be accomplished using several types of fencing, including hog wire and electric fence. To be hog proof, non-electric fences must be made of a net wire or diamond mesh construction with the spacing of vertical wires of 6 inches or less. Fences should be at least 36 inches tall and tightly stretched and, if necessary, buried beneath the ground. Hog proof fencing is difficult to achieve across terrain with dips and gullies and these features increase trapping costs substantially.

The "Peanut butter fence" that works for deer exclusion also will work for hogs. This is a one or two strand electric fence with multicolored high visibility (1-1½ inch wide) polytape installed at 10 to 20 inches above the ground. Before initial use, dab a slurry mix of peanut butter and cooking oil on the tape at frequent intervals (3-6 feet apart) so that any initial contact by hogs will result in a memorable shock to the nose or tongue.

For more information and assistance, contact the local WRD Game Management office (see front of this booklet for phone numbers).

FERMENTED CORN RECIPE:

1. Use large metal trash cans with re-sealable lid, 40-50 gallon size.
2. Per 150 pounds of corn: Add 8 pounds of sugar.
3. Add 1 to 1 ½ packets of yeast.
4. Optional: Add 5 packets of grape, strawberry, or raspberry Jell-O[®] or Kool Aid[®] for a sweet smell.
5. Add water 3-4" above corn. Note: Check daily to keep water level to top of corn.
6. Place trash cans in direct sunlight. During warm weather corn should properly ferment in 5 to 7 days.
7. Stir daily with shovel to properly mix contents.