



Managing an Invasion

EFFECTIVE MEASURES TO CONTROL WILD PIGS

By Bill Hamrick, Tyler Campbell, Ph.D., Billy Higginbotham, Ph.D., and Steven Lapidge, Ph.D.

A few years back, wild pigs ran mostly unchecked on Ossabaw Island, a 25,000-acre barrier island of maritime forests and marshlands just off the coast of Savannah, Georgia. Pigs wreaked havoc on island wildlife, feasting on the eggs of snowy plovers and eating turtle hatchlings as they made their way from the beaches to the water. Managers estimated that hogs were depredated over 30 percent of Ossabaw Island's sea turtle nests each year ([Mississippi State University 2011](#)). Something had to be done.

In 2001, the Georgia Department of Natural Resources launched the Wild Pig Removal Program on Ossabaw Island, an intensive, ongoing effort to hunt and trap wild pigs. The Department conducts seven hunts each year, including five deer-and-hog hunts and two hog-only hunts. "We remove between 2,500 and 3,000 hogs annually," says David Mixon, game management regional supervisor with the Department. "Removing wild pigs and constantly keeping pressure on them, we've seen vegetation rebound, increases in deer body weights, and very few sea turtle nests depredated by wild hogs." In fact, sea turtle nest depredateion on Ossabaw Island is now less than 5 percent per year.

The Case for Control

Wildlife damage management experts throughout the United States are exploring the use of various lethal and nonlethal methods for managing the nation's growing populations of wild hogs. Most nonlethal methods—such as habitat manipulation and the use of frightening devices and guard animals—fail to provide a permanent solution to the problem, and are therefore largely ineffective. As a result, most effective management approaches for wild pigs are lethal.

Wildlife professionals typically use hunting and trapping to curb wild hog populations, but "to remove populations as a whole is very expensive and a very large-scale effort," Michael Bodenchuk, director of Wildlife Services in Texas, said in a Mississippi State University video on feral pigs. For

lethal removal to be effective on a population scale, it must take into account wild pig reproductive biology and ensure that removal tactics are accompanied by continual population surveys. In areas with limited food resources and no supplemental feeding, for example, wildlife damage managers will generally remove only adult hogs because their mortality has a greater impact on the overall population than does the mortality of non-breeding juvenile sows ([West et al. 2009](#)). Under more favorable habitat conditions where high-quality foods are readily available, removal of both juvenile and adult pigs is necessary.

Shooting can be an effective method for controlling individual or small groups of nuisance wild pigs. Hunting methods include still hunting, shooting at night, or hunting with dogs, but these methods are rarely effective at substantially reducing wild pig numbers because they do not remove large enough numbers of animals ([Hamrick et al. 2011](#)).



Courtesy of Bill Hamrick

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Credit: Texas Parks and Wildlife Department

Landowners prepare a sizeable trap for feral hogs. Rounded cages without corners reduce potential footholds, making escape more difficult. Most traps have natural flooring because hogs—which are highly intelligent—are quick to recognize and avoid an artificial floor. One of the most critical steps: Prebait traps with a trail of corn or other grains to lure in foraging pigs.



This captured hog has little chance of escape from its sturdy trap. To be effective, traps must be made of solid materials such as steel livestock panels and fence posts. Traps must also be heavy enough that even the largest, most-aggressive hogs can't root under the sides or use their heads to tip over the traps.



Credit: Texas Parks and Wildlife Department

In addition, hunting at night is illegal in many states, and most night-shooting is done by professional sharpshooters.

Some of the most efficient methods of lethal control include aerial control and live trapping followed by euthanasia. The best traps are constructed from sturdy materials such as steel livestock panels and pressure treated lumber. Landowners have multiple options to choose from, such as the most commonly used cage trap, which comes with a drop door that makes the trap inescapable, or the box trap, a rectangular or square structure made of wood-fence panels. Another favorite is the corral trap, generally most effective for trapping large groups of pigs.

To bait traps and enclosures, managers typically use shelled corn—the “gold standard” for baiting pig traps. Other baits commonly used in some areas are sweet potatoes, rotten or over-ripened fruit, dry dog food, wheat, and other grains.

Before building or placing a pig trap, a little research is necessary. Wild pigs usually travel in family groups called sounders—a social unit of nine to 12 pigs. As a result, managers often use remote-sensing game cameras to determine how many pigs are causing damage and what size trap will be necessary to capture all the pigs. Once the trap is in place, they wire the door open and begin baiting, all the while monitoring the trap with a game camera. When all of the pigs have entered the trap and are feeding, the trap is ready to trigger.

Wildlife professionals in the U.S. are not yet permitted to use toxicants to manage pigs, in part because of the risk of accidental poisonings of non-target species. Yet these chemicals have been shown to be cost effective (Coblentz and Baber 1987, Choquenot *et al.* 1996), and many have been investigated for wild pig control, including warfarin in Australia (Cowled *et al.* 2008), cyanide and cholecalciferol in New Zealand (Cowled *et al.* 2004), and zinc phosphide in Pakistan (Brooks 1985, Khokhar and Rizvi 1998). More recently, researchers have been looking into using sodium nitrite (a food preservative) as a wild pig toxicant (Cowled *et al.* 2008, Lapidge *et al.* 2008).

The Politics of Pigs

In recent years, the subject of wild pig damage has come before many state and federal lawmakers. Agricultural producers who have felt the harsh impacts of wild pigs, and wildlife experts who understand the ecological ramifications of the species, have testified at many House and Senate Agriculture Committee hearings, asking for increased management measures to control wild pigs. In hard-hit areas such as Texas—with over two million wild pigs—legislators have allocated special funding for pig control. Some states, including Michigan, have passed legislation encouraging the eradication of wild pig populations while they are still relatively small.

The Wildlife Society (TWS) has also weighed in on the issue of wild pigs. In April of this year TWS released a [draft position statement](#) encouraging state, federal, and provincial agencies to share information and technical data—such as maps of local wild pig populations—for management purposes. TWS also encourages collaboration between agencies and private landowners to develop and support educational programs and materials that highlight the issue.

Wildlife damage managers everywhere are working tirelessly to expand efforts to every state affected by wild pigs through public education, communication with stakeholders, and support from political entities. They know that bringing people on board to discuss the situation is critical in curbing the spread of this hoofed biological threat. ■

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For additional information on the impact of feral pigs as well as resources on feral pig management, go to www.wildlife.org.