



The Impacts of Wild Pigs on Cattle, Pasture, and the Environment

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Rangelands are economically vital, culturally important, and ecologically essential to the people of Florida. At the Range Cattle REC, our mission is to provide science-based information to address the challenges affecting owners and managers of Florida’s rangelands. One of the threats facing Florida’s rangelands is the invasive wild pig. “Wild pig” is a broad term describing any pig outside of a fence, including feral pigs descended from domesticated stock, introduced Eurasian wild boar, and hybrids between these two groups. Wild pigs have also been referred to as feral swine, feral hogs, and razorbacks, but regardless of the nomenclature, these animals are considered an invasive species that is not native to Florida. Wild pigs can be extremely destructive to the environment and to agriculture, and they can pose a risk to livestock production.

Wild pigs occur in every county in Florida with an estimated population greater than 500,000. They breed year-round, and sows can produce two litters per year. With an average litter size of 6 piglets and as many as 12, the wild pig population in Florida continues to increase (Figure 1a). Wild pigs commonly reach 8 years of age, and as adults they face few natural threats. Although in south Florida adults can be preyed upon by Florida panther and pythons. Piglets have a variety of predators, including coyote (Figure 1b).

As a diet generalist, wild pigs consume a variety of food resources, but one of their favorite foods include acorns and hickory nuts. Wild pigs also consume a large amount of fleshy roots and tubers; nutsedge species are often a favorite target. Pigs will root up to 16 inches deep causing substantial damage to soil and surface vegetation in the process. Wild pig sounders (a group of related wild pigs) can also cause extensive damage to agricultural crops. In fact, the USDA estimates that wild pigs cause environmental and agricultural damage in excess of \$1.5 billion a year in the United States. You can learn more about wild pigs in Florida from the “Wildlife of Florida Factsheet: Feral Swine” (<https://edis.ifas.ufl.edu/pdf/UW/UW442/UW442-Dnuqzat9bz.pdf>).

In this article we will explore the impacts that wild pigs can have on Florida’s cattle industry and the environment.

Damage to pastures and sod production

Wild pigs can also extensively damage pastures as they root for food resources in the soil. Dr. Anderson found that bahiagrass was the fifth most frequently occurring diet item in wild pigs on a ranch in south Florida, although it was unclear whether wild pigs were actively foraging on bahiagrass or it was simply collateral damage. Rooting damage to Florida's pastures was highest from December to February. This damage can have economic impacts for both cattle and sod production. In fact, Brittany Bankovich and colleagues estimated that rooting damage from an unmanaged wild pig population in native grasslands of central Florida would cause a loss of 78 ha per 1000ha and in sown pasture would cause a loss of 8ha per 1000ha.

Disease risk to livestock

Another area of concern is the potential for wild pigs to serve as reservoirs for disease and parasites that may affect wildlife, livestock, and people. For example, wild pigs can pass tuberculosis and pseudorabies to cattle. Dr. Anni Yang and colleagues found that the most likely way for wild pigs to transmit disease to livestock was by sharing the same supplemental feed. On a ranch in south Florida, they found that molasses supplements for cattle attracted wild pigs, and by sharing the same feed, disease transmission from wild pigs to cattle could occur. Interestingly, Dr. Yang and colleagues found that a low-intensity population reduction of wild pigs, like that achieved by hunting, did not result in any reduced risk of disease transmission from wild pigs to livestock in Florida. This points to the need for more effective wild pig management and control efforts.

Competition with native wildlife

Connor Crank, a University of Florida graduate student, studied how wild pigs in Florida interact with deer at oak trees and at supplement feeders. Connor found that deer avoided areas when wild pigs were present – deer avoided both oak trees and supplement feeders when wild pigs were more likely to be present and spent more time away from these resources as wild pig use increased. Overall, wild pigs dominated the most productive oak trees and supplement feeders while deer were relegated to using the oak trees that were less productive and typically had less access to supplement feeders. It is likely that wild pigs also outcompete wild turkey and squirrels for access to acorns and other food resources.

Damage to sensitive species and ecosystems

When wild pigs root under the soil with their tusks to access roots and tubers, not only do they change the vegetation and soil communities, but they also alter water chemistry, hydrology, and impact other species that most of us do not regularly think about. Dr. Wes Anderson's research at the RCREC concluded that wild pig rooting alters the structural diversity of wetlands, which can lead to a reduction in tadpole abundance. During the process of rooting in wetlands, the opportunistic wild pig can also directly consume several amphibian species, especially when these animals are in a period of dormancy. Wes's research also found that rooting damage to Florida's wetlands is most likely to occur from January to April.

How can you effectively manage wild pigs on your property?

Currently, the most effective management actions are whole sounder removals by using large corral-style traps that capture the entire social group of pigs at once. Factors that contribute to successful trapping include setting traps in areas of frequent wild pig activity, pre-baiting traps to accustom pigs to the trap, monitoring traps and adjusting technique as needed, and monitoring post-removal to determine when pigs return to the area. We outline this strategy and other trapping strategies in our extension document, “Trapping wild pigs: techniques and designs” (<https://edis.ifas.ufl.edu/pdf/UW/UW440/UW440-D2erjb1m7o.pdf>). It is important to emphasize that hunting alone is not an effective management strategy and might even reduce the effectiveness of other management strategies. There are currently no toxicants registered for use on wild pigs in Florida, but trials are occurring in other states.

The Rangeland Wildlife Ecology Lab is continuing research on wild pig interactions with native wildlife using trail cameras at the Range Cattle Research and Education Center. We also recently began a project to study the barriers that livestock producers and rural landowners might face in implementing effective wild pig management, which we hope we will allow us to develop more impactful extension programming in the future.

Upcoming Events

Ona Highlight featuring the South Florida Beef Forage Program – April 12, 11: 00 - 11:45 a.m. Allie Williams and Sheri Trent will present, “Collaboration, Communication, and Education: Enhancing Florida's Livestock Industry Through the SFBFP.” Allie is a small farms and alternative enterprises extension agent with Hillsborough County and Sheri is a agriculture/4-H Youth Development extension agent with the Seminole Tribe of Florida.

13th Annual Youth Field Day – June 30, 9:00 a.m. – 2:30 p.m., Ona – SAVE THE DATE – Registration opens May 1!

UF/IFAS Range Cattle REC - 3401 Experiment Station Rd., Ona - <http://rcrec-ona.ifas.ufl.edu/>

