



ONA REPORT

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The emerging threat to our native rangeland wildlife, the Argentine Black and White Tegu

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Florida’s rangelands provide habitat for some of our most beloved native wildlife, including the eastern meadowlark, northern bobwhite, sandhill crane, and gopher tortoise. The same features that make Florida’s rangelands so important for our native wildlife, however, can also support invasive wildlife species. And indeed, there is a new invader wreaking havoc on our rangelands - the Argentine black and white tegu (*Salvator merianae*).



Figure 1. Alex Furst (a) and Zach Holmes (b), both University of Florida graduate students in the Rangeland Wildlife Ecology Lab, with Argentine black and white tegu captured in live traps in Charlotte County in 2023. (c) an adult tegu

Argentine black and white tegus, often shortened to “tegu”, are large-bodied lizards originally from South America. Some can be more than 4.5 ft long. Tegus were introduced to the state of Florida mainly through the pet trade via intentional and unintentional release into the wild. Tegus have now become established in multiple counties, including parts of Charlotte, Miami-Dade, Hillsborough, and St. Lucie Counties, and are considered an invasive species in Florida. Tegus are mostly ground-dwelling and specialize in raiding the eggs and nests of ground-nesting birds and reptiles. Tegus locate nests using their long, forked tongue to collect scent particles given off by the eggs. With their specialized foraging techniques, tegus threaten the nest survival of some of Florida’s most iconic wildlife, such as northern bobwhite, wild turkey, and gopher tortoise.

Tegus also pose a threat to many other native animals in Florida because they are omnivores. Not only will tegus search for easy food items like fruit, but they also have no problem expending more effort to chase after more challenging prey, such as native rodents, snakes, and fish.

Unlike other infamous invasive reptiles in Florida (Burmese python and iguana), tegus have behavioral adaptations that help them survive during the cooler months. During the winter (October to February), tegus go underground into burrows and enter a period of brumation, which is like hibernation. This period of brumation allows them to survive even when temperatures drop below freezing. Previous studies have shown that tegus can survive further north than Burmese pythons or iguanas and are an invasive threat to much of the Southeastern United States.

Florida provides a perfect subtropical climate for tegus to thrive in, which has made the control of this invader extraordinarily difficult. Moreover, tegus can rapidly increase in population size, with female tegus laying an average of 30 eggs per year. Florida's rangelands appear to be excellent habitat for tegus, especially when there are vegetation corridors for tegus to move through and stay protected from avian predators. For example, the Brazilian pepper tree is an invasive, scrub-like tree in Florida that provides the perfect vegetation corridor for tegus.

Management efforts focused on lethal removal of tegus are underway for the four established tegu populations in Florida. For example, the Rangeland Wildlife Ecology Lab and our partners at the Florida Fish and Wildlife Conservation Commission (FWC) have trapped and removed over 400 tegus from Charlotte County since 2018. Our partnership with FWC began last year, with the goal of implementing a trapping protocol that expands previous efforts and is designed such that tegu population size can be estimated for Charlotte County. The Rangeland Wildlife Ecology Lab and FWC team is entering its second trapping season after a previously successful season of 90 tegus removed (Figure 1).

In addition to our trap and removal efforts, we have also deployed a network of baited trail cameras in the Fred C. Babcock/Cecil M. Webb Wildlife Management Area (Babcock Webb WMA), an area adjacent to the known tegu population in Charlotte County, to monitor tegu population expansion. The baited trail cameras are gathering observations of tegu presence inside Babcock Webb and will give further insight into tegu activity range and habitat selection (Figure 1c).

The data we are collecting through our trap and removal efforts and our remote camera network will help us to understand the population dynamics of tegus in Charlotte County and improve tegu management actions across Florida.

There is still time to control and eliminate invasive tegu populations in Florida. One barrier to effective control is a lack of good data on tegu habitat preferences and population trends in Florida's rangelands. Our research is focused on addressing this barrier. But effective tegu control efforts also require collaboration and cooperation from private landowners in Florida's rangelands. Tegus have a high reproductive rate and can rapidly repopulate an area if they are allowed to persist in any untrapped areas. So, for tegu control efforts to be effective,

managers must have trapping access to as much land as possible, both public and private, to ensure that all invasive tegus on the landscape are trapped and removed.

There is still time to make a difference if we can work together to achieve tegu management goals that protect agriculture (e.g., poultry and some fruit crops) and the environment (e.g., nests of bobwhite, turkey, and gopher tortoise).

Upcoming Events

April 9, 11:00 – 11:45 a.m. Join us for the Ona Highlight ‘Update on Biosolids Research’ with Dr. Maria Silveira. See our website calendar (link below) to register for the Zoom broadcast or register to attend in person by calling 863-735-1001.

June 27, 8:00 a.m. – 2:00 p.m. 15th Annual Youth Field Day. Save the date! Watch for the flier in May!

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