



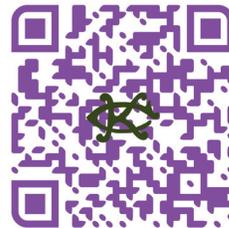
When Invasive Guineagrass Takes Over: The Effects on Northern Bobwhite

Jennifer Smith, Aaron Foley, and Benjamin Oswald

For those working on the South Texas rangelands, it is becoming increasingly common to be faced with a sea of thick, fast-growing grass. The likely culprit, guineagrass, a non-native and invasive species, was imported from areas of tropical Africa as a forage grass for cattle. Originally introduced in the Rio Grande Valley in the 1950s, it started spreading in earnest in the 1970s and can now be found as far north as San Antonio and east to Houston. Where it occurs, it appears to swallow everything around it, especially brushy mottes, which it seems to devour.

Often towering at head height at the peak of the growing season, guineagrass forms dense stands, impenetrable for anyone trying to walk through them. This is certainly the case for northern bobwhites who typically weave between clumps of grass as they forage on the ground for seeds and insects. Guineagrass may create a barrier for bobwhites as they traverse the landscape, disrupting their movements and potentially leading to a reduction in their local abundance.

Our research team at CKWRI is currently testing these ideas to assess the effects of guineagrass on bobwhites in South Texas. Over the last year, we have trapped and banded bobwhites in areas of varying guineagrass amounts with the aim of recapturing them. This process will allow us to determine local



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bobwhite abundance. A subset of birds has also been fitted with small tracking devices that allow us to trace their movements and estimate their home ranges, in other words, the areas they use during their normal daily activities.

A northern bobwhite wearing a device used to track its movements.



Jennifer Smith

Dr. Jennifer Smith is an Assistant Professor of Quail Ecology and Management, Dr. Aaron Foley is a Research Scientist and Research Assistant Professor, and Benjamin Oswald is a Graduate Research Assistant at CKWRI.

Kudos for Dr. Fidel Hernandez

CKWRI's Fidel Hernandez has recently accepted the Sue and Radcliffe Killam Chair for Wildlife, Livestock, and Habitat Interactions. Fidel's background growing up on a ranch, his deep knowledge of South Texas vegetation and habitat, and his understanding of interactions among wildlife, livestock, and habitat created the perfect fit for this prestigious chair.

By assessing abundance and movement of bobwhites across areas of varying amounts of guineagrass, our goal is to identify a critical threshold where guineagrass affects their movement. In so doing, we will be able to identify when pastures with guineagrass need to be managed for bobwhites and when they do not based on guineagrass amounts.

In phase two of our project, we will explore the effects of different management types (e.g., disking or burning) used to control guineagrass by land managers in South Texas for bobwhites. We will also monitor bobwhites year-round to help identify the time of year that they are most affected by guineagrass. Our goal is to identify management activities that are both effective at controlling guineagrass and, at the same time, promoting bobwhite populations, and to determine when to apply them.

During hunting seasons, our thoughts turn to explosive covey rises and the magic of watching a bird dog weaving back and forth across the terrain in search of a covey until it freezes, pointed on a bird. Not only is it likely that guineagrass affects the movements and abundance of bobwhite, it also likely impacts hunter experiences, making it harder for hunters and dogs to move quickly and harder for dogs to locate bobwhites. Thus, as guineagrass increases in South Texas, hunter enjoyment may be reduced in some areas. Our objective is that our research will reduce these impacts and ensure there are unforgettable bobwhite hunts for years to come. ~



Fidel was also elected to the role of President of The Wildlife Society last year and will serve in that capacity for the current year. Congratulations, Fidel! We're proud of you!

CKWRI News is continued on page 4.

A stand of thick guineagrass in a South Texas pasture.



Jennifer Smith

Did You Know?

Harris's Hawks (*Parabuteo unicinctus*) nest in social groups of up to seven individuals. They also hunt cooperatively, allowing them to be more successful capturing prey. (https://www.allaboutbirds.org/guide/Harris_Hawk/overview)



Another Great Year for CKWRI

David G. Hewitt

*Leroy G. Denman, Jr. Endowed Director
of Wildlife Research*

I arrived at the Caesar Kleberg Wildlife Research Institute in 1996. I was proud to be part of a research institute that had a national reputation and that was approaching its 20th anniversary. I remember a lot of angst about Y2K as the new century approached. Now we are a quarter of the way through that century, and this year CKWRI will be 45 years old. While remaining true to its goal of conducting applied research to support wildlife conservation, the Institute has grown and changed over the past 25 years. Much of this growth and change are exemplified by milestones and advances that occurred during 2025.

First, CKWRI's North Texas Program took a big step this year in opening an office in Lubbock where the program director, Dr. Levi Heffelfinger, and his team run projects on mule deer, white-tailed deer, pronghorn, and elk. They are working across much of the Texas Panhandle and in the Trans-Pecos and Rolling Plains. Levi and his students are also doing research in adjoining states, and he has strong partnerships with other universities in Texas and Oklahoma.

Second, the Henry Hamman Program for Hill Country Conservation and Management is finishing its first full year. The program Director is Dr. Mike Cherry, who is based in Austin. There are 2 graduate students working in the Hill Country on juniper management and on interactions between white-tailed deer, exotics, and habitat. The program is centered in Leakey, but we have study sites from Brackettville to Austin and as far north as Llano and Mason. If you are interested in learning more about these programs or supporting them, please contact Levi, Mike, or me.

The Institute had a couple of important personnel changes in 2025. First, Fidel Hernandez started a new position as the Sue and Radcliffe Killam Chair in Wildlife, Livestock, and Habitat Interactions. Fidel brings a strong background in ranching and an inti-

mate understanding of South Texas rangelands. We are thrilled to have Fidel filling this research chair and focusing his talents on such important management issues.

The other big change for CKWRI is that David Killam, Chair of our Advisory Board since 2017, decided to step out of that position this fall. He will continue to provide insight and guidance to CKWRI as a member of the Advisory Board. The Advisory Board's new chair is Tim Leach. Tim has served on the Institute's board since 2017 and understands the value and mission of the Institute. We are excited to have Tim's passion and background guiding the Institute and its Advisory Board.

Another significant advancement that was initiated this spring is the CKWRI Ocelot Conservation Facility. This state-of-the-art facility, scheduled to open during fall of 2026, will focus on producing ocelots for release to establish a new population. Ocelots will be bred using natural breeding and cutting-edge techniques in assisted reproduction. The kittens and their mothers will be moved to special "wilding" pens that contain native habitat. They will be held in these pens with minimal human interaction and will learn hunting skills and how to be a wild ocelot. When they have all the necessary skills, the ocelots will be moved to an even bigger pen at the release site and, once adjusted to that location, they will be released into their new home. The Institute is proud to be working with a large team of partners on this ground-breaking project to secure the ocelot's future in Texas.

Another milestone is right around the corner. South Texas Natives was founded in 2001 and rapidly established itself as the go-to entity for restoration of native grasslands in South Texas. The program was so successful that it was expanded to West Texas and Central Texas. Over the last 8 years, the program expanded further, encompassing the rest of the state and becoming Texas Native Seeds. Plans are underway for a celebration of the 25th Anniversary of Texas Native Seeds in San Antonio next spring. Big kudos to Paula Maywald Strumberg, Forrest Smith, Keith Pawelek, and Tony Falk who each directed the program, enabling it to grow into the conservation powerhouse it is today.

So, 2025 represented a continuation of all the great research, education, and conservation work that CKWRI has invested in since its inception. I trust you are as excited as I am about what 2026 and the next 45 years have in store.

By The Numbers

8-12

The number of heartbeats per minute of a hibernating grizzly bear. (Yellowstone Forever. Naturalist Notes: Hibernation. Yellowstone.org).



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Editing and Layout: Sandra Rideout-Hanzak, Ph.D.

Wildlife Research is printed on recycled paper.

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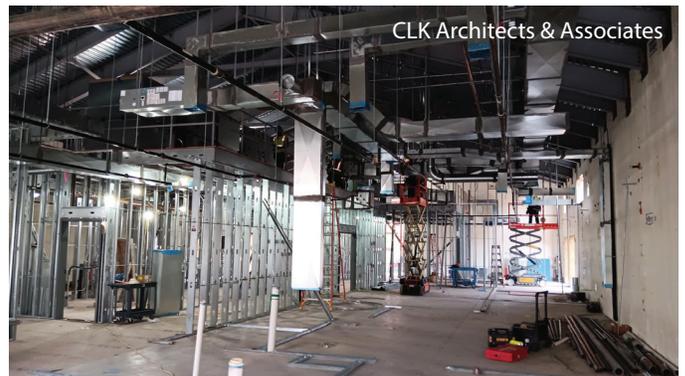
TWS Annual Meeting

At last fall's meeting of the Wildlife Society in Alberta, Canada, CKWRI faculty and students gave 30 oral presentations and 8 poster presentations. The Institute also sponsored Luis Tarango, a colleague from Mexico, to give a plenary presentation about wildlife conservation in Mexico and the efforts to establish a Mexico Chapter of TWS.

The CKWRI Ocelot Conservation Facility, which will open later this year, is pictured on the right. This facility represents a major milestone in saving one of the rarest cats in the United States.

What Do They Eat?

Unlike most butterflies, which only consume nectar as adults, the Zebra Longwing (*Heliconius charithonia*) also eats pollen. Protein-rich pollen allows it to live more than a month, which is much longer than the typical 1- to 2-week lifespan of most adult butterflies. (Zebra Longwing: Florida Museum of Natural History, 17 Aug. 2017, www.floridamuseum.ufl.edu/100years/zebra-longwing/).



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The Advisory Board of the Caesar Kleberg Wildlife Research Institute provides leadership in all aspects of our work. We are indebted to them for their commitment to the Institute and its mission.

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