



## Bedsite Habitat for Young Fawns

July 2013

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Some biologists recommend planting exotic grasses to improve hiding cover for young fawns in south Texas. We will not address herein the ecological problems caused by exotic grasses (see *Exotic Grasses: The Dawn of a Conservation Crisis in South Texas*) but what supports planting them for fawn cover? The rationale stems from the fact that the major fawn predator, coyotes, hunt primarily by sight. So, the more thick, tall grass there is to hide in, the better for fawn survival, right? Maybe, but what about the brutal heat of June, July, and August when most fawns in south Texas are born? Can a fawn survive while bedded in the open in thick, tall grass when the air temperature is 100 degrees F?

To gain insight into habitat selection by young fawns, we conducted a two-year study in 200-acre enclosures containing deer on two ranches in Dimmit County, western south Texas. First, we captured pregnant does in late spring and instrumented them with vaginal insert transmitters. When an instrumented doe gave birth, the transmitter was expelled and the radio signal became rapid. This allowed a research crew to locate the transmitter, the birth site, and the newborn fawn(s). An expandable radio transmitter collar was then fitted on the fawns to allow mortality monitoring and for future relocation. We relocated surviving fawns at seven and fourteen days after birth and took a variety of measurements at the bedsite. For each bedsite sampled, we also sampled a randomly located site for comparison. This allowed us to estimate the characteristics fawns were selecting in the habitat.

There was no difference between the bedsite characteristics selected by fawns at seven and fourteen days. In the first study year (2011), grass cover was lower for fawn sites versus random sites. The reverse was true in 2012, with fawn bedsites having greater grass cover. Fawns chose sites nearer to a shrub than random places, particularly in east and west directions. Since these directions were most likely to provide shade from the sun, this was a clue that fawns were trying to stay cool. Bedsites generally contained more concealing cover (viewed horizontally from coyote height) by all types of vegetation (grass, shrubs, forbs, cacti, etc.) than random sites. And, bedsites were cooler, 92 degrees F versus random sites at 96 degrees F.

So, what is the take-home message from these results? First, thick, tall grass can be important, but only when combined with other characteristics such as clumps of shrubs. Although we did not specifically measure proximity to openings, fawns appeared to select for concealment at the edge of small openings. Thus, managers should strive to provide a diverse habitat with small openings intermixed with cover that provides horizontal concealment along with shade. If a manager feels the need to plant grass for fawn cover, we recommend native grasses that are now commercially available from seed companies (For a list of seed companies partnering with our South Texas Natives and Texas Native Seeds Programs, visit [www.ckwr.tamuk.edu/research-programs/south-texas-natives/links/](http://www.ckwr.tamuk.edu/research-programs/south-texas-natives/links/)).

This study was part of the long-term Comanche-Faith project funded by T. Dan Friedkin and Comanche Ranch and the Stedman West Foundation and Faith Ranch.

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