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Using Fences to Exclude Feral Hogs from Wildlife Feeding Stations

Jared Timmons¹, Justin Rattan², Tyler Campbell³, David Long⁴, Billy Higginbotham⁵, Duane Champion⁶, Mark McFarland⁷, Nikki Dictson⁸, and James C. Cathey⁹

Research conducted in the South Texas Brush country has found that enclosure fences are an effective way to keep feral hogs from eating corn and supplemental feeds that are intended for other animals. These fences protect corn and protein pellets from feral hogs and though labor intensive, they will pay for themselves in feed savings. (Fig. 1A)

Wildlife managers and hunters manage many properties for white-tailed deer. They use corn as feed and as bait to attract them into hunting areas. They also provide supplemental feed such as protein pellets in order to increase antler scores, body weights, survival and fawn production.

Hunters and land managers put out thousands of tons of corn each year and though most of this corn is intended for deer, feral hogs consume a substantial portion of it (Fig. 1B). Hogs also are detrimental to other game species such as ground-nesting birds like quail and wild turkey.



Figure 1A
An exclusion fence can be constructed around a broadcast corn feeder.



Figure 1B
When there are no fences, feral hogs routinely eat the corn that is meant to attract deer.

Keeping hogs out of the corn

To determine whether fencing could exclude feral hogs while still allowing deer to enter the feeding area, researchers with the U.S. Department of Agriculture and AgriLife Extension Service erected various heights of welded-panel fences and studied their effectiveness.

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Figure 2



Feral hogs were partially excluded from the bait station using 20-inch fences; 28-inch and 34-inch hog panels excluded them completely.

The fences tested were 20, 28, and 34 inches tall. The 20- and 28-inch fences used six 16-foot-long utility panels with 4-inch squares. The 34-inch fence was constructed using graduated hog panel, with the smaller openings closest to the ground. Where the panels overlapped, they were tied to steel T posts with bailing wire. T-posts were also placed halfway between each overlap. Each enclosure measured 28 feet in diameter and was placed around a broadcast corn feeder.

The study was conducted in two phases, one during the summer of 2010 and the other in the fall. Researchers used remote-sensing infrared cameras to monitor the feeders for 2 weeks before and 2 weeks after setting the fences. They found that the 20-inch fence reduced feral hog access while the 28- and 34-inch-tall fences kept them out completely (Fig. 2).

Adult deer visits to the feeders did not decline significantly after the fences were erected. The 2009 drought severely limited the fawn crop and may be the reason that no fawns visited the feeders before or after the fences were built. Also, fawns have a lower social status and may have been kept away by more dominant deer. As fawns grow larger, their access to feeding stations should increase.

Another study was conducted by the Caesar Kleberg Wildlife Research Institute and Texas A&M University-Kingsville. This study found that fences taller than 33 inches limited fawn access to feeding stations. This group also conducted a study on enclosures around protein feeders and suggested that fences be 80 by 80 feet or larger to prevent deer from crowding while feeding.

The materials for the 20-, 28-, and 34-inch fences cost \$170, \$187, and \$190 respectively. The 28-

Figure 3



White-tailed deer can access feed protected by 20- and 28-inch utility panels and 34-inch hog panels.

inch fence required more labor because 5-foot-tall utility panels were cut in half to create the six panels needed for the circular fence.

Choosing the right height

Remote-sensing infrared cameras can confirm if feral hogs are visiting your bait or feed stations. You can also inspect the area for hog tracks, rooting, rubs, and wallows. If hogs are a problem around your feeders, 28- or 34-inch-tall fences will keep them from reaching your corn. These two fence heights will keep out feral hogs but still allow adult deer to enter and feed (Fig. 3).

However, fencing that is 34 inches high may be too tall for fawns. When fawns are present, the 20- and 28-inch fences are a better choice. If you do build a fence that is 34 inches tall, you can improve accessibility for fawns by cutting at least two slots that are 6 inches deep by 3 feet wide into the top of the fence. Also, place the smaller openings of the graduated panel closest to the ground.

Building the fence

A 28-inch-tall fence requires the following:

- Three 60-inch by 16-foot utility panels
- Twelve 5-foot T-posts
- Wire clips
- T-post driver
- Fencing pliers
- Bolt cutters

1. Use the bolt cutters to cut each panel length-wise exactly in half.
2. Place the utility panels end to end to form an approximately 28-foot-diameter circle

- around the feeder. Overlap the ends by one 4-inch square and push the cut end into the ground.
3. Fasten the ends together with wire clips.
 4. Position the fence so the feeder is in the middle of the circle.
 5. Drive steel T-posts on the outside of the circle in the middle of each panel and where they overlap.
 6. Fasten the T-posts to the panels with wire clips. Make sure the panels are flush to the ground and leave no gaps that hogs might dig under.

Deterring feral hogs has many benefits

In many parts of Texas, feral hogs damage landscapes, pollute the water, and hinder farming, ranching and wildlife management. They cause an estimated \$52 million in damage to the state's agriculture industry each year.

Because feral hogs are non-native and damage water quality and wildlife management, fencing them from supplemental feed should be part of every ranch management plan.

See other feral hog resources at <http://agriflifebookstore.org>.

- L-5523 Recognizing Feral Hog Sign
- L-5524 Corral Traps for Capturing Feral Hogs
- L-5525 Box Traps for Capturing Feral Hogs
- L-5526 Placing and Baiting Feral Hog Traps
- L-5527 Door Modifications for Feral Hog Traps
- L-5528 Snaring Feral Hog
- L-5529 Making a Feral Hog Snare
- SP-419 Feral Hogs Impact Ground-nesting Birds
- SP-420 Feral Hog Laws and Regulations
- SP-421 Feral Hogs and Disease Concerns
- SP-422 Feral Hogs and Water Quality in Plum Creek
- SP-423 Feral Hog Transportation Regulations

Suggested readings

1. Higginbotham, B., G. Clary, L. Hysmith, and M. Bodenchuck. 2008. *Statewide Feral Hog Abatement Pilot Project*. Texas AgriLife Extension Service.
2. Kozicky, E. L. 1997. "A protein pellet feed-delivery system for white-tailed deer." *Management Bulletin 1*, Caesar Kleberg Wildlife Research Institute, Texas A&M University-Kingsville.
3. Lambert, B. C. and S. Demarais. 2001. "Use of supplemental feed for ungulates by non-target species." *Southwestern Naturalist* 46:118–121.
4. Rattan, J. M., B. J. Higginbotham, D. B. Long, and T. A. Campbell. 2010. "Exclusion fencing for feral hogs at white-tailed deer feeders." *The Texas Journal of Agriculture and Natural Resources* 23:83–89.
5. Petty, B. D., S. L. Locke, R. R. Lopez, M. J. Peterson, J. C. Cathey, and N. J. Silvy. 2005. "Effects of feral hog control on nest fate of eastern wild turkey in the Post Oak Savannah of Texas." *Proceedings of the National Wild Turkey Symposium* 9:169–172.
6. Seward, N. W., K. C. VerCauteren, G. W. Witmer, and R. M. Engeman. 2004. "Feral swine impacts on agriculture and the environment." *Sheep & Goat Research Journal* 19:34-40.
7. Tolleson, D. R., W. E. Pinchak, D. Rollins, and L. J. Hunt. 1995. "Feral hogs in the Rolling Plains of Texas: perspectives, problems, and potential." *Wildlife Damage Management, Internet Center for Great Plains Wildlife Damage Control Workshop Proceedings*. University Nebraska-Lincoln.
8. Van Bogelen, K. A., D. G. Hewitt, C. A. DeYoung, and M. W. Hellickson. 2010. "Fawn Use of Supplemental Feed in South Texas." Poster presentation at southeast deer study group meeting, 28 Feb-2 Mar 2010, San Antonio, TX.

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