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BoarBuster™ thinks outside the box trap

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Encounters of widespread damage associated with feral hogs are becoming increasingly more frequent for farmers and ranchers in the South. One study reports that feral hogs cause at least \$52 million in agricultural losses each year in Texas (Adams, et al., 2005) and raise concerns about



disease transmission to livestock and humans, competition for resources with native wildlife, and contamination of drinking water. Additionally, feral hogs have made their way into urban settings and cause damage to golf courses, commercial properties and residential areas.

Efforts to control hog populations will be increasingly important as conflicts between the animals and humans increase. The list of hog control strategies is diverse and often dependent on the landowner's or manager's goals, knowledge and financial means. Trapping is often the most effective method to mitigate damage. However, previous trap designs have resulted in only a fraction of the population being removed, non-target captures and



trap-wary hogs. In the July 2011 *Ag News and Views* article, *Using Drop-nets to Capture Feral Hogs* (www.noble.org/ag/wildlife/drop-nets), we introduced drop-nets as a potential tool for more effective control. The results of that two-year study indicated that 86 percent and 49 percent of feral hogs could be removed from established populations with drop-nets and corral traps, respectively.

Certain characteristics of the drop-net proved to be vital to its success while others limited its usefulness. A suspended net could capture a large group of hogs, but needed an observer to activate the drop and euthanize the hogs. Using the advantages of both

techniques, a new trap was developed.

The BoarBuster™ trap system is a fully suspended corral trap that can be observed and dropped remotely from anywhere with Internet service. The automated trap has been designed to send text or email messages upon motion activation and streams live video through a designated Web server. This trap technology allows the user to observe and activate the traps via smartphone or computer. The suspended feature of the trap allows animals to enter or leave from all directions, eliminating trap-wary behavior associated with conventional trap gates. The user-activated trigger eliminates non-target animals from ►

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being captured. The corral design allows for captured hogs to be loaded out through an integrated door when convenient. Preliminary data suggests that the BoarBuster trap has the potential to capture 88 percent of the hogs from established populations while reducing the labor time per hog to one-third of that needed by drop-nets and corral traps.

The BoarBuster trap technology was designed at the Noble Foundation to help mitigate the economic and ecologic damage caused by growing populations of feral hogs in the U.S. and other countries. The Noble Foundation is working with local manufacturing and distribution partners to bring this technology to the marketplace. The new technology is expected to benefit a number of potential users, including:

- Farmers, ranchers and landowners.
- City municipalities (e.g., animal and pest control, park and cemetery management).
- Federal land management authorities/agencies (e.g., Bureau of Land Management, Natural Resource Conservation Service).
- State land management authorities/agencies (e.g., Oklahoma Department of Agriculture, Oklahoma Department of Wildlife Conservation, Texas Animal Health Commission).
- Private and commercial land management companies (e.g., golf courses, gated communities, parks).
- Entrepreneurs engaging in feral hog trapping and mitigation services.

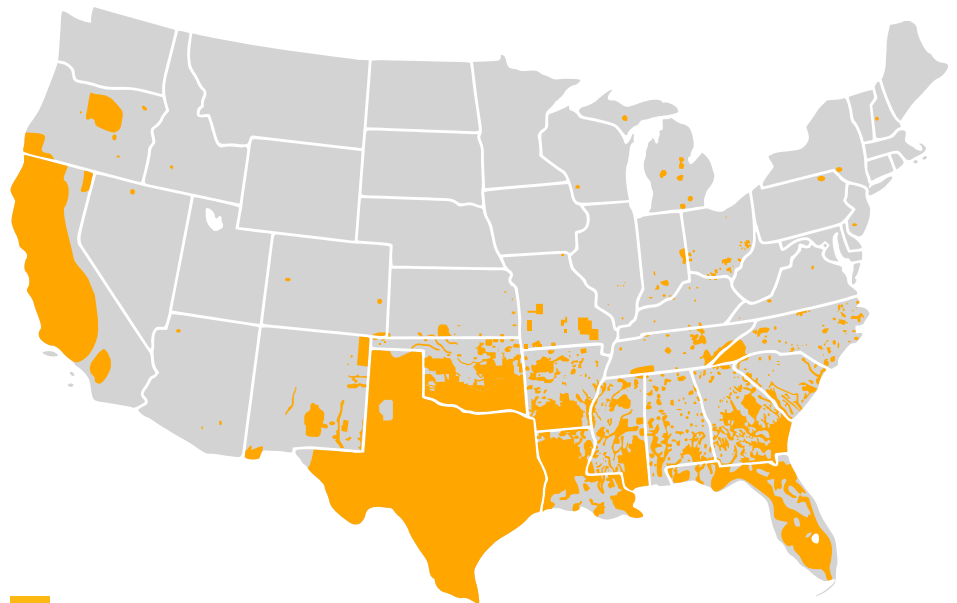
Feel free to contact us with questions about BoarBuster™ technology at jagaskamp@noble.org. ■

Reference:

Adams, C. E., B. J. Higginbotham, D. R. Rollins, R. B. Talor, R. Skiles, M. Mapston, and S. Turman. 2005. Regional perspectives and opportunities for feral hog management in Texas. *Wildlife Society Bulletin* 33: 1312-1320.



Josh Gaskamp, agricultural research assistant, monitors feral hog activity using an iPhone app developed with Roland Stolfa of the Computing Services Department.



■ Areas of confirmed wild swine invasion in the continental U.S.

Sources: National Feral Swine Mapping System and *The Feral Hog in Oklahoma, Second Edition*