Making a difference 2010





Agriculture and Natural Resources



Abating Feral Hog Damage Using Traps
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Smith County
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Summary

Feral hogs cause an estimated \$52 million damage to agricultural enterprises in Texas each year, with landowners spending an addition \$7 million dollars to reduce the hog numbers present and/or correct the damage they cause. For most landowners, trapping is the first line of defense in order to manage damage caused by feral hogs. Unfortunately, most landowners do not follow "Best Management Practices" (BMPs) necessary in their trapping efforts to be successful at removing hogs in order to prevent/abate damage. As a result, landowners often become frustrated after a few days of trapping effort and give up--or worse, simply educate the feral hogs to the point that they become even more difficult to capture in the future. AgriLife Extension has established a BMP trapping protocol of: 1) determining the sounder size, 2) selecting the proper trap site, 3) using/constructing the appropriate size trap based on the number of hogs in the sounder and 4) pre-baiting/monitoring to increase the efficiency of trapping efforts. To be successful, landowners must adopt a strategy -- feral hog trapping is a process involving several steps—it is not a single event.

A feral hog trapping demonstration was conducted on the Philley Peach Farm in Smith County from June 30, 2010 through August 1, 2010 in order to abate damage to peach trees and ripening fruit. Upon observing signs of feral hog presence near the orchard, the cooperator established a bait site with ripened peaches adjacent to their daytime cover. Once feral hogs responded to the bait, a remote-sensing camera was placed at the bait site in order to record the number of feral hogs in the sounder. This information was then used to erect a "tear drop" shaped trap of appropriate size to capture as many of the hogs in the sounder as possible. The trap was set in place and feral hogs were pre-baited until camera data indicated that they were acclimated to and regularly entering the trap. At that point, the trap gate was set to trip and 12 feral hogs were captured. Potential damage caused by feral hogs has been estimated at \$200 per hog per year. As a result, the successful removal of this sounder of 12 hogs represents the potential damage savings to the Philley Peach Farm and surrounding landowners of \$2,400. In addition, the captured hogs were transported and sold to a local buying station which helped to offset trap and bait expenses.

Objectives

1) Demonstrate Best Management Practices (BMPs) in order to increase the efficiency of feral hog trapping efforts

2) Remove as many feral hogs as possible from a property using BMPs in order to prevent/reduce/abate damage they cause to a commercial peach orchard immediately before and during the peach harvest season.

Materials and Methods

Upon discovery of feral hog sign/damage, the cooperator initiated pre-baiting on June 30, 2010 using ripe peaches. It was important to select a pre-bait site that was in close proximity to the feral hogs' daytime cover. Pre-baiting entailed maintaining 1-2 bushels of peaches placed within a 10' x 10' area immediately adjacent to the peach orchard and upwind of heavy cover that the hogs inhabited during daylight hours. The site was checked daily and peaches were replenished as needed. Other equipment/supplies* included:

- 1. Infra-red remote-sensing camera (\$250) (units range in price from \$80 to > \$800)
- 2. Saloon door style gate (\$300)
- 3. 8 livestock/utility panels-5 feet by 16 feet with 4" x 4" mesh (8 @ \$45 = \$360)
- 4. 25- six foot t-posts (\$95)-To support trap panels every 4'- 5' around trap perimeter
- 5. 5- five foot t-posts (\$18)-To support tripwire from inside of gate to rear of trap
- 6. Tripwire-40 feet of plastic-coated closeline (\$10)
- 7. Pulleys-To accommodate tripwire (5 at \$2 = \$10)

A remote-sensing camera was placed over the bait site (camera faced north in order to avoid direct sunlight on camera lens) on July 7, 2010. A model that featured the image date and time and infrared (no flash) capability was utilized. All brush was removed between the camera and the bait site in order to minimize false triggers. The camera was mounted on a t-post approximately 25 feet from the bait pile. The bait pile was monitored and the camera images were checked whenever bait removal was noted. Once the sounder was consistently "photo captured", a trap large enough to capture the entire sounder of hogs was erected.

^{*} Useful life expectancy of equipment/supplies listed above is a minimum of 5 years and could be relocated to other sites receiving damage. Costs can be further reduced by sharing one gate among several traps if each site is being monitored for hog activity using remote-sensing cameras.

Since the main sounder of hogs at the Philley Peach Farm was fairly large, emphasis was placed on using a larger corral trap to maximize the distance between the trap gate and the tap trigger. This would ensure that the maximum number of hogs had an opportunity to enter to trap and feed before the first hog tripped the gate trigger mechanism placed at the back of the trap. A trap with eight panels was erected in a "tear-drop" shape to facilitate load out of captured hogs into



Feral hogs responding to bait.

a trailer for transport to a local buying station. Care was taken to ensure that there were no "gaps" between the bottom of the panels and the ground that could be used by the hogs as escape routes. The longer t-posts were sunk every 4' to 5' outside of the panels, which were overlapped 1 to 2 mesh widths at each panel junction. The panels were secured with wire to each t-post at the bottom, middle and top. Because many hogs are "trap shy", the ends of the panels on the "gate-end" of the trap initially remained splayed open (about 10' apart) in order to encourage maximum hog use of bait placed inside the trap.

The shorter t-posts were then set in a straight line about every 5' to 8' beginning a few feet inside the gate end of the trap leading to within 10' of the back of the trap to support the tripwire. The tripwire was run above "hog height" from the gate to the next to the last t-post, then angled down to the last t-post and run approximately one foot above the ground and secured to the back of the trap. This last section of the tripwire was run one foot above



Gate end of trap opening splayed opened to maximize feral hog access during prebaiting.

ground level to serve as the trigger that would cause the gate to close behind the feeding hogs. Following trap construction, the majority of bait was scattered immediately outside the gate opening and through the gate to about 1/3 to 1/2 of the way to the back of the trap in order to acclimate the hogs to the trap. Once the hogs began to enter the trap to feed on the bait, the ends

of the panels were attached to the gate frame (gate doors remain wired open during this stage) to force the hogs to enter the trap through the gate opening in order to access bait placed inside.

Over time, an increasing proportion of the bait was placed near the back of the trap around the tripwire location. Once camera data indicated that the feral hogs were regularly entering the trap as a group and venturing all the way to the back of the trap to consume bait, the trap gates were unwired and the trigger wire was set to catch. The "tear drop" shape of the trap allowed for the hogs to easily self-load hogs into a trailer backed up to the trap gate to facilitate off-site transport to a commercial buying station.



Completed trap with gate wired open. Note the partial panel placed directly over gate to extend the height to 5 feet.





The majority of the sounder responding to bait near the back of the trap on July 25.

A total of 12 hogs captured on August 1, ready for loading in a trailer for transport off-site.

Results and Discussion

Pre-baiting began on June 30, 2010. Pre-bait consumption was sufficient to justify establishment of a remote-sensing camera over the bait site by July 7. Because the hogs were already well-

trained on the bait at this point, sufficient camera data were obtained by July 10 to determine the size of the trap necessary to potentially capture the entire sounder of 15 hogs photographed. A trap consisting of eight 16' foot panels was erected in a "tear drop" shape and pre-baiting continued from July 18 until camera data revealed the entire sounder was regularly entering the trap (July 25). The trap was set (trigger/gate activated) on August 1 resulting in the capture of 12 feral hogs that same night. In addition to the main sounder, camera data had documented the presence of two large solitary boars utilizing bait outside the gate opening. However, their entry through the trap gate to access additional bait was inconsistent and they generally responded to bait much later at night than the sounder.



Feral hogs funnel toward the trailer.

Feral hogs loaded in trailer and ready for transport to a buying station.

Landowners should view feral hog trapping as a process, not as an event. That process requires 1) determination of the sounder size by direct observation or through the use of a remote-sensing camera monitoring of a bait site, 2) placement of a bait site directly upwind and adjacent to the cover that is suspected as harboring the hogs during daylight hours—this may be at a different location than where the actual damage is occurring. In almost every trapping effort, locating a trap nearest to and immediately upwind from daytime cover occupied by feral hogs is a better location choice than the immediate site where damage is noted. Therefore, landowners are advised to "backtrack" the hogs from the damage site to their daytime cover. Once the sounder size is determined, 3) the construction/use of the appropriate size trap is essential. The landowner's goal should be to use a trap that is large enough to facilitate the capture of the entire sounder of hogs at one time—although follow-up trapping efforts may be necessary. If the camera data indicates the presence of a just a few hogs, then smaller corral or box traps can be effective. However, as sounder size increases, so should the size of the trap utilized in order to capture as many hogs as possible on one gate trip in order to maximize efficiency. This can be accomplished by maximizing the distance from the gate to the trigger (accommodating the last hog's entrance inside the trap before the first hog trips the gate release trigger). Lastly, 4) the importance of pre-baiting cannot be over-emphasized. Feral hogs that have been subjected to various previous failed control efforts or otherwise subjected to pressure by humans must be trained onto pre-bait immediately outside and then into the trap in order to acclimate them to its presence. This process may take as little as a week but often requires 2-3 weeks of pre-baiting

effort until the hogs become accustomed to the trap's presence and consistently enter it and use the bait placed at or near the back of the trap where the gate trigger is located. Then, and only then should the gate and trigger mechanism be set for capture. Landowners following this protocol should be successful at removing feral hogs and thereby reducing damage to their agronomic enterprises.

Trapping Timeline

- June 30 Cooperator establishes a bait site with peaches to attract feral hogs
- July 7 Remote-sensing camera placed over bait pile to determine sounder size
- July 18 Trap erected; panels splayed opened at gate end of trap to maximize entrance size. Bait placed immediately outside and inside of trap. Camera moved to back of trap facing gate while monitoring continued.
- July 21 First feral hogs enter front of trap. .
- July 23 Numerous hogs feeding toward back of trap while increasing amount of bait was placed near trigger mechanism
- July 25 Feral hogs consistently entering trap. Panels connected to the gate and gate doors remained wired open. Increasing amounts of bait placed at rear of trap near trigger.
- July 29 Hog use of entire trap was consistent each night. Sounder is ready for capture.
- August 1- Trap trigger set to catch and gate doors unwired. 12 hogs captured that night.
- August 2 Captured feral hogs loaded and transported to buying station. Gate doors were wired back open, pre-baiting and camera monitoring continued.

The tear-drop shape design becomes particularly useful if the landowner intends to market the captured hogs to a buying station in order to offset some of his/her trapping expenses. A trailer can be backed up to the gate and a board placed at the bottom of the trailer immediately outside of the trap gate to prevent hog escape underneath the trailer. Once the trailer is in position and the trap gates are secured open, a person can simply walk to the back of the trap causing the captured hogs to funnel away from human presence toward the gate and self-load into the trailer. A second individual is usually needed to close the trailer gate behind the hogs. The hogs are then ready for transport to a Texas Animal Health Commission approved buying station (http://www.tahc.state.tx.us).

Absentee landowners should find this technique particularly useful if hogs respond favorably to a deer feeder filled with shelled corn. A remote-sensing camera positioned to photograph activity at the feeder will reveal hog response to pre-bait and in turn become accustomed to a trap's presence--allowing the landowner to schedule capture at a time that is most convenient for them.

For additional information on feral hogs and damage abatement go to the Texas AgriLife Extension Service website entitled "Coping With Feral Hogs" found at http://feralhogs.tamu.edu Specific details on this trapping demonstration can be found under the 5 part series entitled "Hogs in the Peaches" located on the website.

Conclusions

This trapping demonstration successfully prevented/reduced damage on the Philley Peach Farm in Smith County with an estimated value of \$2,400 based on the removal of 12 hogs. However, while current legal control tools (trapping, shooting, snaring, catch dogs) have proven to significantly reduce agronomic damage, we cannot expect to permanently eradicate feral hog populations by these methods alone. Landowners are advised to monitor their property for feral hog sign and initiate control efforts before damage occurs whenever possible.

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