UC Agriculture & Natural Resources

Proceedings of the Vertebrate Pest Conference

Title

The Art and (Some) Science of Trapping Wild Pigs: From Traps to Gates to Triggers and More!

Permalink

https://escholarship.org/uc/item/3xc711wz

Journal

Proceedings of the Vertebrate Pest Conference, 26(26)

ISSN

0507-6773

Author

Higginbotham, Billy

Publication Date

2014

DOI

10.5070/V426110558

The Art and (Some) Science of Trapping Wild Pigs: From Traps to Gates to Triggers and More!

Billy Higginbotham

Texas A&M University Research & Extension Center, Overton, Texas

ABSTRACT: Trapping remains the number one tool for landowners waging war on wild pigs. However, many beginning trappers soon become discouraged, which results in more damage and ultimately, more wild pigs. The Texas A&M AgriLife Extension Service has successfully utilized educational methods to assist landowners with efficient trapping methods to remove wild pigs from their properties. Trap size is largely dictated by the size of the wild pig sounder as confirmed visually or by the use of remote-sensing cameras. The landowner's goal should be to remove the entire sounder in as few trapping attempts as possible; therefore larger traps generally are more efficient. The design or shape of the trap is dictated by the fate of the pigs: if pigs are to be euthanized within the trap, shape does not matter. However, if the pigs are destined to be loaded from the trap and trailered away from the capture site for slaughter or to a buying station for sale, the design of the trap is of utmost importance. Myriad gate designs have been successfully employed to trap wild pigs. Regardless of the design, many experienced pig trappers have come to realize that wider gates can reduce the "training time" necessary for pigs to accept and enter a trap. Trigger designs are as varied (if not more so) than gate designs. They range from traps that are "triggerless," where pigs push through flexible panels, to highly sophisticated remote triggers that can release a gate by sending a signal from a computer or cell phone. However, as important as the trap size, design, gate, and trigger may be, landowners should follow a consistent protocol in order to win their war on wild pigs.

KEY WORDS: capture, control techniques, damage abatement, Extension, *Sus scrofa*, swine, Texas, trap design, trapping, wild pigs

Proc. 26th Vertebr. Pest Conf. (R. M. Timm and J. M. O'Brien, Eds.)
Published at Univ. of Calif., Davis. 2014. Pp. 258-268.

INTRODUCTION

Texas is home to an estimated 2.6 million wild pigs (*Sus scrofa*), and they have been documented in 253 of 254 counties in the state (Timmons et al. 2012). Beginning in the mid-1980s, damage began to escalate on rural agricultural lands. As populations continued to increase and distribution expanded, suburban and urban areas across the state also began to experience damage to lawns, sports fields, golf courses, parks, and other green spaces. Vehicle/wild pig collisions also increased, leading to both personal injury and additional property damage.

The Texas A&M AgriLife Extension Service (Extension) has hypothesized that several factors contributed to this "perfect storm" of the wild pig escalation in Texas, resulting in the often repeated quote: "There are but two types of landowners in Texas, those with wild pigs and those about to have wild pigs." These factors included: 1) clandestine (illegal) trap, transport, and release of wild pigs for the purpose of increasing hunting opportunities, 2) wild pig access to supplemental feed meant for whitetailed deer (Odocoileus virginianus) - it is legal to supplement white-tailed deer in Texas, and an estimated 300 million pounds of shelled corn and 100 million pounds of protein feed are fed annually, resulting in an increased nutritional plane available to wild pigs on the 83 million acres of habitat the two species share, 3) private land ownership patterns in the state resulting in a "patchwork effect" of control efforts across the wild pig range, and 4) the simple fact that the wild pig is the most fecund large wild mammal found worldwide. In concert, these factors contributed to the population explosion in Texas, resulting in control efforts that can only be described today as a "War on Wild Pigs."

Unfortunately, in Texas eradication of wild pigs is simply not an option, given widespread and well-established large populations and the limited legal non-lethal and lethal control efforts available, which include fencing, trapping, shooting (terrestrial and aerial), snaring, and dogging (Sweeney et al. 2003, Campbell and Long 2009). Regardless, strategic control efforts have been successful at significantly reducing economic damage to agricultural systems by 66% in one multi-year study (Higginbotham et al. 2008).

Trapping has been described as the first line of defense for Texas landowners. Barrett and Birmingham (1994) stated that trapping efforts were probably the most effective control method in areas with dense pig populations. Indeed, a 2011 survey of Texas landowners confirmed that trapping accounted for 57% of the estimated 753,646 wild pigs removed from the Texas private properties during CY 2010. Along with shooting (35%), these two control efforts accounted for 92% of the pigs removed by private landowners in Texas during CY 2010 (Timmons et al. 2012).

METHODOLOGY

In Texas, Extension recommends that private landowners negatively impacted by wild pigs adopt a set of "best management practices" (BMPs) in order to reduce the damage these invasive exotics inflict upon the landscape (Higginbotham 2012). Everything you read here has been tested by Extension – we just don't recommend anything associated with pig trapping unless it has proven itself via in-field demonstration! Nevertheless, there are many innovative trap designs in use, and there is no question that all of us are smarter than any one of us! Every trap seems to be a little different, and sometimes a new design or trigger/gate mechanism is an improvement that can be passed on to other landowners to give them an additional edge when it comes to increasing trapping efficiency.

Training Pigs to Bait

First and foremost, some words about scent control: *You simply cannot beat a pig's nose!* Take precautions when you are at or near an active bait or trap site to minimize the scent you leave behind.

When it comes to successfully trapping wild pigs, training the pigs to bait is critical. You cannot trap what you cannot bait! The steps for training wild pigs to bait are the same regardless of whether the landowner plans to trap or shoot the pigs. Step 1 of the trapping best management practices is to identify that pigs are present – hopefully, based on their sign left behind, but before damage begins. Damage is fairly obvious, and on rare occasions landowners may even obtain visual confirmation of a pig or sounder of pigs (Figures 1 and 2). Nevertheless, a property can be severely impacted by wild pigs without one ever being seen during daylight hours. Indeed, in areas where pigs have been continually harassed, they often become completely nocturnal in their movements. Therefore, it is imperative for landowners to remain vigilant and remember, in addition to the two types of landowners in Texas, there are but two types of wild pigs: those causing damage, and those that are about to cause damage.

Once the pigs' presence has been documented, back-track them to their daytime cover, if possible. Daytime cover usually consists of heavy vegetative understory that provides security and shade, often in riparian areas due wild pigs' need for water. That daytime cover may be one or more properties away, but get as close as you can. The idea is to intercept the pigs on the way to their feeding area where the damage has occurred. The damaged area itself is often not the best trapping site, yet many landowners insist on establishing traps at these locations. If you have seen pigs or noted areas with abundant sign, establish them as bait sites and become proactive in control efforts before damage occurs.

Offer bait at that site, or if you are unsure of where they spend their daylight hours, establish multiple bait sites. Place the bait so the prevailing wind direction can carry the scent of the bait toward the daytime cover. Hang a remote-sensing (e.g., trail, game) camera on the bait site, or in a pinch, rake the ground smooth and observe for pig tracks, which can be differentiated from deer tracks because the hooves will be more rounded and adult's tracks are often larger than those of a deer (Figures 3, 4, and 5). A camera is much preferred over a rake, since it also records the number of pigs as well as dates and times that pigs are present. That information will prove to be critically important once the trapping efforts begin. In fact, we would not even recommend a trapping effort without the use of a remote-sensing camera (West et al. 2009).

Many baits have been used successfully, and pigs often respond to different baits seasonally (Campbell and

Long 2008). The most difficult time to get pigs on bait is when native food items (e.g., acorns) or cultivated crops (e.g., peanuts, corn) are abundant. While shelled corn is the "gold standard" of pig baits, practically every species of critter out there also eats corn. Williams et al. (2011b) found no difference in catch rates when shelled corn vs. soured corn was used as bait. Nevertheless, be creative – use shelled corn at one bait site and perhaps even try a dry dog food or cheese-based catfish bait in combination with corn or milo at another site. Try mixing an additive with the bait that enhances the bait's scent appeal, such as strawberry-flavored gelatin or soda pop, vanilla extract, or even maple syrup! Also, check state laws and wildlife agency regulations regarding the legality of baiting before proceeding with trapping efforts.

If a sounder of pigs is documented at the bait site, the landowner is almost always better served to erect a trap rather than use an alternative method such as shooting into the sounder – removing only one or a few pigs at a time. However, if only one or two pigs respond to bait, they can be easily patterned using the camera's time/date stamp and may be taken by shooting if the approach to the bait site is made from downwind.

Regardless, the hard part is now over – the pigs are on bait and trapping can remove larger numbers, as compared to shooting, when a landowner-initiated do-it-yourself operation is planned – but if and *only* if BMPs are followed. *But remember: never, ever erect a trap until you have wild pigs consistently on bait!* This is where the use of a remote-sensing camera really pays off.

Trap Style, Size, and Shape

Once the pigs are on bait, the next question is the size and style of trap to be used. The two primary trap styles available are the box trap and the corral trap (Choquenot et al. 1993). Williams et al. (2011a) found that corralstyle traps caught 4 times more pigs than box traps. Therefore, corral traps are almost always a better choice than the smaller box traps, in terms of trapping success. An effective corral trap can be constructed for close to the same cost as most box traps (\$400-\$600), with the added advantage that the trap materials can be re-purposed on the farm or ranch once the last pig is captured. The disadvantages of corral traps versus box traps are twofold: 1) reduced portability, and 2) time invested to construct. While it may take several hours to erect, the potential for removing entire sounders of pigs in as few as one trapping episode makes the extra effort of using corral style traps worthwhile.

Once the pigs are consistently (meaning nightly) on bait, the sounder size dictates the corral trap size. The idea is to maximize the distance from the gate to the trigger mechanism to ensure that the maximum number of pigs is inside the trap before the gate is triggered to close. The minimum corral trap size recommended consists of four 15-ft or 20-ft-long by 5-ft-tall panels, using 4×4-in mesh with 6½-ft 't' posts driven every 4 to 5 ft around the perimeter. If a large sounder (30+) of pigs is identified on camera, a trap with as many as 6 to 10 panels may be necessary. This maximizes the distance from the gate to the trigger, which is essential to successfully capture large sounders of wild pigs.



Figure 1. Watch for signs of wild pig presence including wallows and mud on trees and poles.



Figure 2. Pasture damage by wild pig rooting is a common problem for Texas landowners.



Figure 3. A trail camera records the times and dates as well as the number of pigs visiting a bait site.



Figure 4. Bait should be distributed and monitored by the use of a trail camera.



Figure 5. Pigs responding to a camera-monitored bait site. Monitoring is critical in pig removal.



Figure 6. Note the large opening in this trap to encourage pigs to enter and consume bait that will be placed inside.

The t-posts should be secured to the panels with smooth wire tied at the top, middle, and bottom of the panels. Make sure there are no gaps between the bottom of the panels and the ground, and always overlap the panels one mesh-width before securing to a t-post. Leave the opening for the gate at least 10 to 15 ft wide early in the baiting process, as it reduces the training time necessary for pigs to begin entering the trap. However, if a wide (e.g., 8+ ft) gate is used, it can be set in place during initial trap construction and secured in the "open" position without the need to splay the panels open as described.

Although corral traps can be moved, they can also be expected to continue to catch pigs into the future if they are initially placed in strategic locations. When additional pig sign is evident near existing traps, deer feeders that dispense shelled corn are often used to train the new pigs to bait and to re-enter the trap. We have captured pigs in existing traps repeatedly over the years. Corral traps, even when pigs were euthanized within the traps a week or so earlier, will continue to catch pigs if the prebaiting/training protocol is employed.

The shape of the trap is dependent upon the fate of the pigs that are trapped. In Texas, private landowners have the option to load and transport wild pigs to a buying station and receive payment for the pigs, which are then destined for human consumption in the U.S. as well as abroad. The payment received for the wild pigs can be used to offset trapping expenses and/or repair of damage they caused. If this is the landowner's intent, the trap should be built in a "teardrop" shape with the gate placed in the mouth of the funnel or neck. Post-capture, a trailer can then be backed up to the gate (after first placing a board between the trailer and the gate to prevent escape underneath the trailer) and the pigs can be "herded" toward the open gate and into the trailer for transport away from the trap site. In addition, be sure to check local regulations regarding transport of wild pigs.

However, if the pigs are to be euthanized and disposed of on-site, the shape of the trap is irrelevant. If the trap has corners (e.g., square or rectangular shape), it is advisable to cover those corners with additional paneling. Pigs tend to pile up in corners and can effectively use other pigs as a "stepladder" to climb over the trap walls if the corners are left uncovered. It is also advisable to cover the neck of the trap, if a teardrop-shaped trap is employed, to prevent this same effect.

Trap Acclimation

At this stage, most bait is placed outside the opening of the gate, but some can be placed in the throat of the trap where the gate will be or is located (Figures 6 and 7). It may take several days for the pigs to accept the presence of a new trap. Once the pigs are back on bait, continue to progressively offer less bait on the outside and more inside the trap. As the pigs enter the trap consistently, relocate the camera from the front of the trap to the back of the trap and record the pig activity as they enter through the gate opening, recording movements progressively toward the back of the trap where the trigger is located (Figures 8 - 11).

Trap Gates / Doors

When it comes to trapping wild pigs, no subject conjures up more discussion than the style of gate selected for a trap. In Texas, we have used them all successfully, beginning with the guillotine gate over 30 years ago, and then transitioning to the so called "continuous catch" designs which include the saloon door, rooter gate, swinging door gate, and the "no gate" design (discussed in the "Trigger" section below). All of these gates work and it is largely a matter of personal preference. However, Long and Campbell (2012) found that while there were no differences in adult wild pig capture rates between box traps using rooter gates versus swinging door gates, juvenile catch rates were higher in traps employing rooter gates. We moved away from the guillotine gate for a period of time and favored these continuous catch designs, which would allow more pigs to push in even after a gate has been tripped and closed. However, after reviewing countless video sequences captured by camera at trap sites, we have come to the conclusion that there really is no such thing as a "continuous catch" gate. The simple truth is that in almost every trapping sequence, you capture what you are going to capture on the first trip of the trigger – it is on very rare occasions that additional pigs push into a trap through a closed gate, even if the gate design allows them to easily do so. Indeed, Smith and Smith (2013) found that in very few instances (5%) pigs actually pushed open and entered through a closed continuous catch gate. As a result of these observations, Extension often recommends the guillotine-style gate for those who are do-ityourselfers. At a cost of \$100, a reliable 4-ft-wide guillotine gate can be made from pressure-treated lumber and hardware that are readily available at any hardware/ lumber retail outlet. Again, gate selection and style are largely matters of personal preference, and each of these designs has been responsible for its fair share of wild pigs removed from the landscape.

A related topic concerns the optimum gate width. Metcalf et al. (2014) did not find a significant difference in catch rates based on gate widths of 3, 4, 5, or 6 ft. However, wider gate openings may reduce the training time necessary for pigs to acclimate to the trap's presence and enter to feed on a consistent basis. This is the same effect as splaying the panels open before the gate is set in place, as previously described.

Manual Trap Triggers

Lots of information is out there on trap designs and gates that can be used in the War on Wild Pigs. But when it comes to trap triggers – not so much! There are triggers that simply close the door, and there are triggers that can be a bit more selective (West et al. 2009).

Although not the focus of this article, there are at least 5 companies that offer "remote trigger" technology that allows for the trap to be tripped remotely by phone or computer by sending a text message, photo, or email. Talk about selective! This is fantastic for anyone interested in availing themselves of this technology. While extremely efficient, this technology does come at an increased cost.



Figure 7. Note the line of bait extending from well outside to deep inside this trap as part of the early pre-baiting process.



Figure 9. Pigs will initially feed up to the open gate but it may take several days for them to enter the trap.



Figure 8. A completed corral trap. Note panel placed over the top adjacent to the gate opening.



Figure 10. As the pigs begin to feed inside the trap, more bait is offered inside and less outside.



Figure 11. Pigs can be trained to accept the presence of a trap and begin to feed more inside over time.

There are basically 6 types of manual wild pig trap triggers, 7 if you count the no-trigger-at-all version. Of course, there may be some additional triggers in use out there that we are unaware of, given that pig trappers are such an ingenious lot. But for our purposes here, let's go through those we have used and offer an assessment on each one:

No Trigger

This design features a throat where two panels come together and it relies on the "memory" of the metal in the panels to close or spring back or at least narrow once a pig pushes through – only after being trained to enter the wired-open throat during the pre-baiting process. There are several variations of this trap design including the Wexford, "Figure 6" or "Figure 9" trap (Figures 12 - 14). While this trap design reduces cost by eliminating a formal gate and employs no trigger, there are a couple of drawbacks. We have captured many pigs up to about 100 pounds in this design, which may be most of the pig population on a property. This, of course, requires a prebaiting period with the throat of the trap wired open to ease the training process. However, we have experienced great difficulty in consistently training large adults, be they sows or boars, to "push in" this design once it is set to capture. We know this, because multiple cameras have been employed at many trap sites where one camera faces into the trap throat to record which pigs enter the trap, while a second camera captures which pigs show up to eat bait on the outside but refuse to go inside. We have video evidence of large boars eating bait up to the "pushin point" but refusing to enter the trap. We also have video of small pigs opening the panels and exiting the trap, although this could be due to a design flaw on our part. The bottom line is big pigs just do not like tight spots. The necessity to push two panels apart to enter the trap results in capturing only a portion of the pigs showing up, rather than the entire sounder. If you are unsure, hang an extra camera to monitor pigs that may be showing up to the party but don't have their ticket punched to get inside!

Pressure Plate Trigger

This trigger trips when the pigs step on a "pan" or plate, much like a steel trap. Some of these plates are designed so the pressure can be adjusted somewhat to prevent the weight of smaller pigs from tripping the trigger and closing the gate. However, we have found that pigs do not really like stepping on these various shapes and sizes of pans because of their solid surfaces; therefore, we discontinued using them years ago.

Trough Trigger

This trigger was originally deployed in the smaller box traps that began appearing in the early 1980s on the front end of the population explosion of wild pigs in Texas. It is tripped by moving or pushing up or down on a trough filled with bait (Figure 15). It is effective but can often be activated by smaller pigs, those most likely to enter the trap first. The adults are often still outside when the gate is tripped, making it the least discriminant of the triggers discussed here.

Tripwire Trigger

The tripwire trigger simply is a length of wire, cable, or other line that the pigs encounter while foraging for the bait, causing the gate to trip and close. We often employ plastic-coated clothesline as the main tripwire but make a "leader" (think fishing) out of *braided* saltwater fishing line of at least 60 pounds test in the critical area where pigs will encounter the tripwire. The braid does not stretch like monofilament line, and its small diameter and dark color make it difficult for pigs to detect. Educated pigs can often avoid tripwires if they are made exclusively out of heavier material such as the aforementioned plastic-coated clothesline. Does it sound like we are a bit paranoid? You bet we are – the boar in Figure 16 crossed the heavy tripwire 8 times in a 20-min span before he finally tripped it, as he was able to detect and avoid it! The tripwire should be run above hog height from the gate along a series of t-posts to about ³/₄ of the way to the back of the trap, where it is then angled down





Figures 12 and 13. The "Wexford" (left) and "Figure 6 or 9" trap (right) designs feature no gate or trigger and have accounted for many pigs removed from the landscape.



Figure 14. Pre-baiting a no gate trap with the panels wired in the open position.



Figure 15. Movement of the trough triggers the gate to close via a tripwire connecting the two together.



Figure 16. Note the "short trigger" rig in use. Since the camera confirmed only one boar entering the trap, there was no need to bait him all the way to the back of the trap where the tripwire is normally set.

and run 12 in high and parallel to the ground over about a 5 to 10-ft distance, where it is then attached to the back of the trap. If actual baiting a live trap is done properly, the sounder of pigs should "feed their way" to the back of the trap to ensure more of the pigs are inside when the bait placed along the tripwire is consumed and the trap tripped. Smaller pigs can be prevented from tripping the gate to some degree by raising the tripwire higher above the ground— if camera data confirms that one or more sows in the sounder have small pigs. This tripwire approach has accounted for thousands and thousands of wild pigs trapped, but it is not as selective as the next three trigger types (Figures 17-19).

Rooter Stick Trigger

The rooter stick is a novel approach that relies on the pig's rooting behavior to cause the gate to close (Figure 20). Since juvenile pigs don't root nearly as much as the adults, this technique can serve to delay gate closure until adult pigs enter the trap and all of the other bait placed inside the trap has been consumed.

Bucket Trigger

The bucket trigger (Figure 21) works on the same principle as the hangman's platform used in the Old West- most assuredly on cowboys guilty of trapping, transporting, and re-releasing wild pigs to another area! Its selectivity comes from the fact that the bucket contains both "bait and weight" (e.g., a couple of bricks or scrap iron added as ballast). The bucket should have large enough holes drilled in the sides near the bottom so bait can dribble out. Smaller pigs typically cannot knock the bucket off its perch of a cinder block or similar structure. The trigger can be made even more "adult pig specific" by increasing its height out of the easy reach of smaller pigs. It is important to have the bucket present (with some bait inside) during the pre-baiting phase to acclimate the pigs to its presence. Like other trigger designs, sufficient bait is placed inside the trap and around the trigger when camera data confirms the pigs' acceptance of the trap during training. If a soured bait such as corn or milo is used, a lid can be placed on the bucket to help maintain moisture content and to dissuade non-target species.

Tire Trigger

The tire trigger is absolutely the most specific manual trigger in targeting adult pigs we have tested. The Fort Worth Nature Center (FWNC) has been successfully using a tire trigger design for years (Robert Denkhaus, FWNC, pers. commun.). Once the pigs are on bait, go ahead and place the tire at the bait site so the pigs can grow accustomed to its presence. Once they are eating around the tire, begin to place more bait under and inside the tire to encourage rooting behavior so they gain better access to the bait (Figures 22 and 23). As the pigs enter the trap and feed on bait the night the gate/trap is set to catch, enough bait should be concentrated under and inside the tire, which should be located near the back of the trap, to attract the attention and focus of the adult pigs. The smaller pigs seem to be drawn more to bait poured around the inside perimeter of the trap walls. Only by



Figure 17. Note this adult pig touching a heavy tripwire but avoiding triggering the gate to close.



Figure 18. A trip wire trigger is commonly used in corral traps but is more easily tripped by smaller pigs as compared to the tire and rooter stick trigger styles.



Figure 19. Saltwater braid fishing line doesn't stretch, and its small diameter makes it more difficult for pigs to detect, as compared to heavier tripwires.

pushing or flipping the tire can the gate be tripped to close- which usually only occurs once all other bait has been consumed— and "competition" for the remaining "tire bait" increases. It is not unusual for one old "boss sow" to try and dominate or defend the tire's food source from other adult pigs in the sounder. An automobile tire in the 13 to 16-in size range is preferred. While the tire trigger design works great on a single door trap, it is absolutely custom-made for a double door trap. The double door trap is football-shaped trap with the nose of the ball lopped off of each end for a two-guillotine gate installation (Robert Denkhaus, pers. comm.). When the tire is flipped or pushed, the wire leading from the tire that is attached to the main tripwire causes the first door to trip and the weight of that door falling causes the opposite gate door to trip and fall – almost simultaneously with the first door. It is a true marvel of and tribute to redneck technology!

In Texas, Extension has used each and every one of these gate triggers successfully. Choose the one that works best depends on the sizes and numbers of pigs encountered. The right trigger in the appropriate design/size trap makes for a great combination... but also rely on pre-baiting and camera monitoring. One picture can indeed be worth a thousand words when it comes to determining if your trigger choice leads to the successful trapping of wild pigs!

Baiting a Trap to Catch

As the pigs venture deeper into the trap, continue to reduce feeding outside and put increasing amounts of bait toward the back of the trap, where the trigger is routinely located (Figures 24 and 25). If a tire trigger is to be employed, go ahead and place the tire in-side the trap so the pigs can become accustomed to its presence, eventually placing corn under and inside the tire itself so the pigs will equate it with food. If the throat of the trap was left splayed open, you can now set the gate in place with the door(s) locked open in order to train the pigs through the narrower opening. This may require placing bait both immediately outside and inside the gate threshold to encourage the pigs to enter the narrower opening.

Once the pigs are entering through the gate opening consistently, continue to concentrate most of the bait deep inside the trap (Figures 26 and 27). When the pigs are consistently entering the trap through the locked open gate, you get to pick the day that you set the trap to catch. There should be no guesswork involved as to whether you are successful at catching pigs once the trap is set. If you have properly trained the pigs to bait and then to the bait inside the trap near/at the trigger (all documented by camera), you should be virtually guaranteed to be successful!

Late on the afternoon of the day that you plan to set the trap to catch, place bait in a horseshoe pattern around the inside of the trap, maybe 2 or 3 ft inside of the panel walls (Figure 29). If smaller pigs are in the sounder, they will go to this bait first. Place sufficient bait around whichever trigger is used (Figures 20, 23, and 28). This is where the tire trigger really shines. (Small pigs are the first to go in a trap, followed by the sows and younger



Figure 20. A post hole is filled with bait and a rooter stick placed over the top. Rooting behavior to access bait moves the stick and triggers the gate to close.



Figure 21. The weight of the bucket triggers the gate to close when the pigs push it off of its stand.



Figure 22. Tire trigger used in a corral trap with a double door design.



Figure 23. Baiting a tire trigger for pig capture





Figures 24 and 25. Traps with bait concentrated near the gate opening (left) and deeper into the trap (right). Over time, proceed with baiting deeper inside the trap with a minimum of bait placed on the outside. The wider gate opening may reduce the training time required to have pigs enter a corral trap.



Figure 26. Continue feeding in and around the trigger while monitoring by camera.



Figure 27. Placing bait inside the trap to prepare the trap to catch.



Figure 28. The tire trigger usually requires a larger pig to flip the tire in order to trip and close the gate.

boars, with the larger boars in last – if they are even running with the sounder). Often, mature boars show up at a bait site on a different time schedule than a sounder, unless a sow is in estrus. Bait is placed under, around and even inside the tire that is tied to the tripwire trigger. Smaller pigs cannot easily move the tire, so tripping the trap is delayed until larger pigs are present. The idea is for the last pig to be inside the trap before the first pig trips the trigger releasing the gate. The larger the sounder of pigs, the greater distance needed between the gate and the trigger and therefore the more bait placed between the gate and trigger – which means employing a larger trap. The idea is for the sounder to feed their way methodically back to the trigger – not rush the trigger immediately upon entering the trap. The delay in tripping the gate works in your favor by allowing more time for the entire sounder to enter the trap before the gate is tripped.

The smaller pigs will eat the easily-accessible bait first, while the adults will generally feed their way to the bait at the trigger. As more bait is consumed by the sounder, more competition is created for the decreasing supply of bait. Eventually, the pigs are forced to nose the tire trigger to access more bait, move closer to the tripwire to feed, or root into a posthole if a rooter trigger has been employed. The rooter and tire triggers delay trap trip simply because the pigs have to work harder to get at the remaining bait. The tripwire (Figure 18) is least sensitive of these three trigger types, but it can be adjusted height-wise to some degree in order to avoid being tripped by the smaller pigs in the sounder. As stated, feed placed between the gate and tripwire delays the pigs tripping the gate.

Plan to check the trap the next morning shortly after daylight. The longer you leave pigs in a trap, the more time they have to escape. If you have followed your BMPs protocol, you should have pigs in the trap.

So how long does this process take? In areas where the pigs have not been pressured and the correct bait sites are selected, we have gotten the pigs on bait as early as the first night, entering the trap within 5 days of initial baiting, and captured in as little as 7 days from start to finish (Figure 30). However, be prepared for it to take much longer – a month is not unusual if the pigs have been pressured.

For absentee landowners who may visit their properties only occasionally or on weekends, employ a deer feeder (where legal) with a camera. However, the use of a feeder does restrict the bait choices that can be offered to shelled corn and perhaps a few other baits that funnel through the feeder without stopping it up. We prefer to set the feeder to go off shortly after dusk and then again after midnight; in other words, when pigs are likely to be the most active. One word of caution: be sure to stake the feeder legs in place, otherwise pigs can and will overturn the feeder and damage the mechanism. Once the camera confirms pigs on bait, erect the trap as described but initially position the feeder so it feeds both inside and outside the gate, and then progressively only inside toward the back of the trap. These two devices used in tandem can take much of the guesswork out of the process but still allow absentee landowners to effectively reduce pig numbers at their convenience.



Figure 29. On the afternoon before setting the gate to catch, bait heavily around the trigger (see Figure 23) and also place bait in a line around the inside of the trap to encourage all pigs to feed simultaneously.

If your camera data post-trapping suggest that another sounder is present or not all the pigs in the sounder were actually captured, immediately lock the gate open and start the baiting process again. Sometimes AWOL pigs return immediately, but sometimes it may take a week for them to re-appear after their comrades have been removed. In addition, pregnant sows that are regulars at the bait site often leave the sounder for a few weeks immediately before and after farrowing, but should eventually return with their litters. Only careful monitoring of camera images/video, identification of individual pigs by color or coat pattern, and numerical counts can reveal if all pigs were captured in one trapping episode or if follow-up trapping will be required.

SUMMARY

There is no cure-all for eradicating wild pigs in Texas or any other state that has large, well-established populations. However, trapping used with a set of best management practices remains the first line of defense for Texas landowners in the War on Wild Pigs. While eradication is not possible at this point in time, we can and do significantly reduce the economic damage they cause by working smarter instead of harder.

LITERATURE CITED

- Barrett, R. H., and G. H. Birmingham. 1994. Wild pigs. Pp. D65-D70 *in*: S. E. Hygnstrom, R. M. Timm, and G. E. Larson (Eds.), Prevention and Control of Wildlife Damage. Cooperative Extension Service, University of Nebraska, Lincoln. NE.
- Campbell, T. A., and D. B. Long. 2008. Mammalian visits to candidate feral swine attractants. J. Wildl. Manage. 72: 305-309.
- Campbell, T. A., and D. B. Long. 2009. Feral swine damage and damage management in forested ecosystems. For. Ecol. Manage. 257:2319-2326.
- Choquenot, D., R. J. Kilgour, and B. S. Lukins. 1993. An evaluation of feral pig trapping. Wildl. Res. 20:15-22.
- Higginbotham, B. 2012. Abating wild pig damage using trapping best management practices. Proc. Vertebr. Pest Conf. 25:13-16.



Figure 30. After pre-baiting and using best management practices, this sounder of 21 pigs was captured in less than two weeks. However, if additional pigs are photo-captured but not trapped, wire the gate open and start feeding outside the trap again with camera monitoring.

- Higginbotham, B., G. Clary, L. Hysmith, and M. Bodenchuk. 2008. Statewide feral hog abatement pilot project 2006-2007. Paper 9 in: Proceedings, 2008 National Conference on Feral Hogs. Missouri Dept. of Conservation, 13-15 April 2008, St. Louis, MO.
- Long, D. B., and T. A. Campbell. 2012. Box traps for feral swine capture: A comparison of gate styles in Texas. Wildl. Soc. Bull. 36:741-746.
- Metcalf, E. M., I. D. Parker, R. R. Lopez, B. Higginbotham, D. S. Davis, and J. R. Gersbach. 2014. Impact of gate width of corral traps in potential wild pig trapping success. Wildl. Soc. Bull. 38(4):892-895.
- Smith, T. N., and M. D. Smith. 2013. Effectiveness of continuous catch doors for removing wild pigs. Auburn Univ. Journal of Undergraduate Scholarship, Spring 2013: 54-58.
- Sweeney, J. R., J. M. Sweeney, and S. W. Sweeney. 2003.
 Feral hog Sus scrofa. Pp. 1164-1179 in: G. A. Feldhamer,
 B. C. Thompson, and J. A. Chapman (Eds.), Wild Mammals of North America: Biology, Management, and Conservation, 2nd Ed. The Johns Hopkins Univ. Press, Baltimore, MD.
- Timmons, J. B., B. Higginbotham, R. Lopez, J. C. Cathey, J. Mellish, J. Griffin, A. Sumrall, and K. Skow. 2012. Feral hog population growth, density and harvest in Texas. Publ. SP-472, Texas A&M University, College Station, TX. 7 pp.
- West, B. C., A. L. Cooper, and J. B. Armstrong. 2009. Managing wild pigs: A technical guide. Human-Wildl. Interact. Monogr. 1:1-55.
- Williams, B. L., R. W. Holtfreter, S. S. Ditchkoff, and J. B. Grand. 2011a. Trap style influences wild pig behavior and trapping success. J. Wildl. Manage. 75:432-436.
- Williams, B. L., R. W. Holtfreter, S. S. Ditchkoff, and J. B. Grand. 2011b. Efficiency of time-lapse intervals and simple baits for camera surveys of wild pigs. J. Wildl. Manage. 75:655-659.