MP537

Do-It-Yourself Feral Hog Trapping Strategy

U of A DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System

Do-It-Yourself Feral Hog Trapping Strategy

Rebecca "Becky" McPeake, Ph.D.

Professor - Wildlife

University of Arkansas System Division of Agriculture
Cooperative Extension Service
Arkansas Forest Resources Center
Little Rock

Caroll Guffey

Instructor - Forest Resources

University of Arkansas System Division of Agriculture
Cooperative Extension Service
Arkansas Forest Resources Center
Monticello

Acknowledgment. Production of this publication was funded in part by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS). We appreciate Dr. Billy Higginbotham, Professor and Extension Wildlife and Fisheries Specialist, Texas A&M AgriLife Extension Service, for contributing the gate design and reviewing this manuscript.

Cover photos were taken by Becky McPeake, University of Arkansas System Division of Agriculture.

Feral hogs (also known as wild pigs, wild hogs, feral pigs, wild swine, wild boars, etc., of the genus *Sus scrofa*) are known to damage agriculture crop fields, pastures and tree seedlings; degrade wildlife habitat; transmit diseases to livestock, pets and people; and pollute waterways (Figure 1). Corral trapping when done properly is the most effective tool for removing large numbers of hogs. Box traps and opportunistic shooting only remove one or two hogs plus will "educate" other hogs to avoid further encounters. Because of their reproductive potential, removing one or two hogs does little to control population growth.

Figure 1. Feral hogs damage crop fields, pastures and waterways. *Trail camera photo by Becky McPeake and Jon Barry, University of Arkansas.*

The key to success is capturing every hog in a sounder or bachelor group to avoid educating those left outside the trap and escapees. Uneducated hogs are easier to capture because they enter gates and pens more readily than educated hogs. Feral hogs that evade capture will require trapping patience or may never enter a gate, requiring more time and investment in alternative capture methods than if trapping initially had been implemented with a strategy in mind.

This publication describes an inexpensive, do-it-yourself **adaptive feral hog-trapping strategy** using specific materials and procedures to successfully capture feral hogs. Directions for constructing a corral pen and a guillotine-style gate are included.

Figure 2. An inexpensive, do-it-yourself (DIY) guillotine trap can be effective if certain procedures are followed. *Photo by Becky McPeake, University of Arkansas.*

Many trapping systems are available commercially but can be expensive to purchase and maintain, costing an estimated $2,000 to $12,000 for trapping equipment. Wireless, remote-activated systems rely on cellular technology to improve trapping efficiencies, including improved capture rates and reducing operator visitations to the trap location. A camera transmits still photos or live video to electronic devices (cell phone or computer), and the operator determines whether to trigger the gate. These systems tend to be more cost effective where an abundance of feral hogs cause extensive damage on large acreages. However, such systems are costly for smaller acreages and can be ineffective where cellular reception is unavailable, sometimes even with a booster antenna hoisted 10 or 15 feet above ground. They also require a monthly fee ($20 to $70) for a dedicated cellular service tied specifically to the trigger system.

Small-acreage landowners may find the expense of commercial, technology-based systems far outweighs the cost of feral hog damage, yet feral hogs need to be removed from the property. If financial constraints are an issue, a homemade system will do the job **if procedures are followed**. A do-it-yourself adaptive feral hog trapping strategy is suggested for small-acreage landowners who have the time and skills to build and monitor their own trap. Additional information about alternative control methods is available in the publication *Feral Hog Control in Arkansas* (MP534) and online at www.uaex.edu/feralhogs.

Introduction to Hog Trapping

A sequence of steps is recommended for designing a successful adaptive feral hog trapping strategy. The gate and fence are merely tools for capturing feral hogs. A major part of successful hog trapping is preparation. This includes trail camera surveillance and training your quarry to enter the trap. **The best constructed gate and fence will be ineffective if feral hogs are trained to avoid them.**

Developing a mindset about trapping feral hogs is important. The length of time from when a trap is installed to when the trigger is set can take weeks or months or even longer, depending on how quickly feral hogs are trained to enter the trap. Patience is necessary. The trigger is set only when all hogs in a sounder or bachelor group are entering the trap. Remote trigger systems, where the trapper uses a cellular phone to remotely release the trigger, are usually more efficient and effective at capturing all hogs compared to those requiring a hog to trip a trigger. Relying on a hog to set the trigger increases the probability that some hogs will remain outside the trap. Observing and modifying pig behavior helps improve the odds of capturing all hogs in

a group. Be prepared to spend small increments of time over an extended period to successfully capture hogs. This is especially the case when trapping transient hogs or where hog populations are high and many groups must be removed. Bottom line is patience is critical to trapping hogs successfully. This is true when using either mechanical or remote trigger systems.

General recommendations are provided for your adaptive feral hog trapping strategy. In actual practice, the specifics can be adjusted to fit your situation. Your strategy needs to be flexible as more information about your particular feral hogs is collected and circumstances change. Creativity is encouraged. Outsmarting feral hogs, particularly your neighbor's trap-shy hogs, requires ingenuity. Knowledge of feral hog life history, behaviors and local habits play into designing your custom-made strategy. See *Feral Hog Control in Arkansas* (MP534) for additional information. How much time and labor you are willing to invest should be considered too.

Step 1: Trail Camera Surveillance

Observing feral hogs using trail (or game) cameras is very important because the trap needs to be set **where hogs are present**. All work and effort with trap construction will be lost without this important first step.

One or more trail cameras are needed for conducting surveillance. Trail cameras come with many features and prices (Table 1). Ideally, place several cameras at different locations to increase the odds of discovering hogs on your property. Multiple trail cameras are recommended to reduce your surveillance time and improve trapping effectiveness. Optimally, use bait (such as whole grain corn) in view of the trail camera.

Table 1. List of trail (game) camera features and options available on different models with some recommendations when trapping feral hogs

FEATURE	OPTIONS AND RECOMMENDATIONS
Data collection	• time and date stamp • moon phase • temperature • GPS geotag – automatically embed GPS coordinates of your camera location onto maps • cellular – texts image to smartphone
Picture quality	• lens – view sample photos on-line to compare quality and clarity of images; a very important feature • resolution – number of megapixels; higher resolution increases print size, cropping capabilities and larger display area (for example, television) without images becoming distorted
Picture timing	• time lapse delay – a few seconds to 24 hours • burst mode – number of images per detection; very useful in early stages of feral hog surveillance
Flash type	• incandescent or white flash LEDs; may scare skittish hogs, but excellent color for discriminating between individual pigs and groups • low glow infrared (IR) – wavelength of light outside the visible parameter, flash not visible to game (or trespassers); however, low glow has visible red glow if looking straight into camera; range of 100 feet; black and white images only at night; suitable for most circumstances • no-glow infrared (IR) (also called black flash or black LEDs) – no visible glow, but less range and grainier image; black and white images only at night; recommended if feral hogs are camera shy
Flash range	• closed woods – shorter flash range (for example, 50 feet) • open field – larger flash range (for example, 100 feet)
Detection zone	area where camera senses motion and triggers a photo; usually in a V shape; determined by width and range of field; like flash range, may not need large detection zone in wooded environments to save expense
PIR angle	PIR = passive infrared; degree to which camera can sense movement; low is 10 degrees; high quality is 48 degrees and captures almost everything that passes through the field of view

Table 1. List of trail (game) camera features and options available on different models with some recommendations when trapping feral hogs (continued)

FEATURE	OPTIONS AND RECOMMENDATIONS
Sensitivity adjustment	• high sensitivity rating – captures both large and small animals • low sensitivity rating – larger animals only • some cameras allow users to alter this setting
Trigger speed	time from when camera senses movement to when a photo is taken; speeds range 0.13 seconds to over 1.3 seconds; 1/5 second (or faster) recommended
Recovery time	time required to start up when something detected, or take several photos in a burst; can vary from under a second to over 1 minute; faster is better for photographing skittish hogs; speed not as critical if feeding for extended length of time over bait
Video	• various resolutions, day or night images; very useful for assessing feral hog behavior before setting trigger • with or without sound • some offer capturing both video and still photos simultaneously
Memory	built-in or SD removable memory card (usually purchased separately); check largest size of memory card camera accepts; recommend at least 16GB capability if video mode used
Battery life	• longer duration batteries (for example, lithium AA) recommended to reduce site visits and less disturbance to feral hogs • port for attaching solar panel or external battery; recommended if camera will be used over extended timeframe
Security	• disguise in utility box or bird's nest box • limited accessibility (for example, tree mounted with ladder) – also recommended to improve camera view of feral hogs inside and outside trap • metal security box designed specifically for camera • padlock affixed to camera case • cable lock around tree or post (for example, Python Master Lock™)
Other accessories	• mounting bracket for adjusting view • external booster antennae and cable for cellular systems to improve signal reception

Set trail cameras to activate where feral hog signs are present. Information about identifying feral hog signs is available in the publication *Feral Hog Control in Arkansas* (MP534). Look for nearby waterways with converging hog trails, and affix the camera at least 5 feet, but preferably higher, out of a hog's line of sight. A mounting bracket can be affixed to a tree or fence post and angled downward to maximize a bird's-eye view. At hog-eye level, visible flash, light or noises may alert wary feral hogs. Cameras set at 3 feet will capture images of a few hogs directly in the camera's line of sight and miss others in the group. Make sure the camera is facing north or south, opposite of where the sun rises and sets, for best picture quality. Remove limbs or tall grasses that block the camera's view, but keep such alterations to a minimum to avoid arousing suspicion. Wary feral hogs may detect such changes. After a week or longer, check the camera for feral hog activity. If no activity is evident, move the camera to another location until feral hogs are seen consistently.

During this time and throughout the trapping process, avoid direct interactions with feral hogs as much as possible. If feral hogs are unaccustomed to human activity, some trappers recommend wearing rubber boots and gloves to minimize scent transfer when conducting camera surveillance and especially at potential trap locations. Do not hunt or shoot feral hogs during this time. Feral hogs that are comfortable in their surroundings are more likely to enter traps. Nervous hogs may sporadically enter traps or move elsewhere when disturbance occurs. Even human activity required for installing the camera or trap may cause skittish feral hogs to avoid the site. Given the time and financial investment involved with trapping feral hogs, minimizing disturbance is advisable. You may not want to announce your trapping program even to your neighbors. It is not helpful for them to begin hog hunting in the vicinity while your trapping program is underway.

Step 2: Trap Placement and Size

The trap site should be fairly level and preferably near or in a wooded location to provide cover and concealment for hogs. If livestock are present, use electric fence to temporarily move cattle from the location. Begin baiting and train hogs to regularly visit the trap site. If the initial location is not suitable for trap placement, lure feral hogs to a nearby suitable site using bait over several days or weeks.

Because of their diverse eating habits, types of bait attractants vary. Typically, the easiest and most economical is shelled whole corn, though other locally available baits can also work. Bait can be scattered by hand, or small amounts of dry bait can be scattered daily with a mechanized corn feeder. Scatter bait in front of the trail camera so that hogs can be easily counted. Piled bait may cause hogs to group and impede counting individuals. Fermented corn is sometimes used to reduce consumption by deer, raccoons and other nontarget species.

- **Fermented corn.** Place corn in a bucket and cover with water. Let this set for about a week or longer if corn has not fermented enough. Optionally, add a packet of yeast per 100 pounds of corn to facilitate the souring process.
- **Pig jam.** A bait type called "pig jam" (Texas A&M University) was used successfully to attract hogs for a pilot study at the University of Arkansas at Monticello (*Alexandra Locher, personal communication*). Ingredients were 150 pounds of whole shelled corn, 8 pounds of sugar, 2 or 3 packages of yeast and 5 or 6 packages of strawberry jello. Place mixture in a 40- to 50-gallon metal drum or trash can and fill with water about 3 to 4 inches above the corn. Allow to ferment for about four weeks before application. If placed in sunlight or heated environment, only two or three weeks may be necessary.

Information collected from your trail camera will determine the size of your trap. Typically, the larger the trap the better. Feral hogs do not like to be crowded or enter confined locations. For those on limited budgets or where temporary fencing is required, count the number of feral hogs on camera and estimate weight. Provide a minimum of three to four times more space as the size of the hog group entering your corral pen. Where feral hog populations are high, several different groups may visit the same site, so prepare the trap for the largest group size. If capturing a single large boar or sow, be prepared to purchase thicker gauge fence panels and more T-posts. Optionally, secure an additional panel to the top of the fence and allow the top portion to loosely curve inward to prevent a boar or sow from climbing over. The top needs to hang loosely so the hog is unable to hook its hooves and launch over the fence.

Observe which direction feral hogs enter the site according to your camera. Consider where the gate opening or openings should be placed. In some instances, building and installing two gates may improve probability of capture. Permanent traps can be constructed around trails with gates removed from openings on either end, allowing deer and other wildlife to pass through. When feral hogs are detected on camera, gates can be installed and the trapping program begun.

You cannot trap what you cannot bait! Only after feral hogs are regularly visiting the trap site should the gate and fence be installed.

Step 3: Fence Materials and Installation

Once feral hogs are visiting the trap site regularly, the corral trap can be installed (Table 2). Fence panels with 4-inch squares or smaller, particularly toward the lower 2 feet of the fence, are recommended for capturing smaller piglets.

Fence construction tools and materials

- T-post driver
- T-post puller
- wire cutters
- gloves
- safety glasses
- ear protection

Fence specifications

- Purchase utility livestock panels at least 5 feet high by 16 to 20 feet in length. The mesh opening should be no greater than a 4-inch by 4-inch square, particularly along the bottom, to prevent piglets from escaping. Even if no piglets were on camera, this mesh size is recommended anyway because a sow could produce piglets before becoming trapped.
- Panel wire thickness of 4 gauge or 0.25 inch is preferred, though 6 gauge is more common. If hogs are smaller (for example, greater than 150 pounds), 6 gauge wire is the recommended minimum.
- The number of panels depends on the number of hogs in the group. Four 5-foot by 20-foot panels or five 5-foot by 16-foot panels is the recommended minimum. Hogs prefer plenty of space when inside a fence.

Table 2. Fence materials list with estimated expense for a 5-foot high corral pen of minimal size and strength, plus installation of a single gate (described in Table 3)

ITEM	QUANTITY	COST/UNIT	TOTAL COST	ADDITIONAL INFORMATION
5 foot x 16 foot utility panel, 4 inch square mesh, 6 gauge steel wire	6	$53.00	$318.00	Add more panels (and T-posts) for larger feral hog groups
6 foot or 6 1/2 foot solid steel T-post, 1.25 pounds per foot 8 inch zip ties	20 20	$4.50 $3.00	$90.00	7 foot T-post can be substituted when adding barbed wire above fence
Galvanized steel wire, 14 gauge or larger, 100 feet	1	$7.00	$7.00	
Guillotine gate, 4 foot x 6 foot, 3/4 inch treated plywood	1	$131.25	$131.25	
TOTAL COST			**$546.25**	

For groups with two or three sows and piglets, use at least six 16-foot panels, though eight or more panels would be better. The number of panels can be adjusted for larger or smaller groups or if terrain is rough and fence installation is difficult.

- Initially secure panels together (overlapping the edges) using plastic zip ties. After forming panels in the general trap shape desired, use doubled over baling wire (14 gauge or larger galvanized steel wire). Tying panels together adds strength to the construction.

- Drive 6 1/2-foot solid steel T-posts on the outside of the corral panels where the panels overlap. Use baling wire to affix the fence to the T-post, four times for each post. The first tie should be an inch or two from the ground to prevent hogs from digging out underneath. The other ties can be placed about 1 foot from the bottom, then 3 feet and at the top.

- Drive additional T-posts in the middle of each panel for added support and tie to the fence. Use T-posts every 4 feet if hogs are large in size or number.

Fence installation

The number of fence panels and T-posts necessary depends in part on the number of hogs seen on camera and site parameters. Most recommend a T-post where two fences overlap plus T-posts every 4 to 5 feet of the fence panel. The fence needs to be circular and ground level (no gaps) to prevent escape. Larger fences tend to be more effective than smaller fences in capturing hogs. If a large boar is being trapped, consider installing 6-foot high panels or additional wire strands above 5-foot high panels to prevent escape.

Ideally, the fence panels can be connected with each other and supported by a few temporary T-posts, with the gate area left wide open at least 10 feet. It may take a day or two for the hogs to accept presence of the trap. Set at least one camera on video mode to observe pig behavior. Fence panels may be simply brought to the baiting site initially and allowed to lean on trees for a few days. If hogs are skittish, wait a few days until they are comfortable with the new additions at the bait site.

Step 4: Modifying Pig Behavior

Begin the process of modifying feral hog behavior by using a bait so all hogs in the group enter the trap predictably and quickly to improve trapping effectiveness. Achieving this change in behavior is a step-by-step process. Consider partially installing the fence initially. Leave an opening for a fence panel or two to make a wider entry and to lure trap-shy hogs. Once all fence panels are in place, train hogs to enter the opening where the gate is soon to be placed.

Most cameras are equipped with date and time recorders. Feral hogs tend to be creatures of habit and typically follow a temporal pattern of site visitation. If using a timed corn feeder, activate the feeder to release bait immediately prior to the arrival of hogs. Locate the feeder where feed is dispensed both inside and outside the trap near the gate portion of the trap. Using a corn feeder in this manner reduces bait consumption by nontarget species, which not only saves money but reduces the risk of the trap being triggered by nontarget species attracted to the bait.

External conditions, such as ample food resources or human disturbance, may cause hogs to leave the area temporarily. Persistence and patience are necessary when trapping feral hogs. If feral hogs

should disperse, consider leaving the fence and trail cameras in place for several months or even a year until feral hogs return to the trap site.

Step 5: Gate Construction and Installation

Using wider gates may reduce the training time it takes for hogs to enter the trap. Feral hogs are more likely to enter wider gates, such as an 8-foot gate. Consider how the gate will be transported, location where it will be set and available labor for gate and fence installation. Carrying a 4-foot gate through heavily wooded areas around trees with one or two people may be preferable to a heavier, bulkier 8-foot gate. If the trap will be moved frequently, upgrading to a portable system using metal fence welded to square piping with corner pins and a dedicated trailer should be considered.

Gate construction tools and materials

- electric drill
- 5/16 inch x 8 inch drill bit
- 3/8 inch x 8 inch drill bit
- 1/4 inch standard drill bit
- Phillips head screw bit
- hammer
- electric saw
- socket wrench set
- carpenter's square
- tape measure
- hacksaw
- drywall panel "lift and carry" device for moving plywood door (optional)

Construction of a 4-foot wide gate

Many styles and types of gates can be constructed from wood or metal. This particular guillotine-style gate is the Banta model recommended by Dr. Billy Higginbotham, professor and Extension wildlife and fisheries specialist, Texas A&M AgriLife Extension Service. When triggered, a large door falls between two parallel channels and lands inside a channel. When installed, the ground-level channel is buried to prevent detection by entering feral hogs. Safety features are included in the design. The heavy sliding door could cause serious injury if precautions are not taken.

An experienced woodworker can construct this gate in three to four hours from start to finish (Table 3). A video demonstrating the step-by-step construction and installation of this gate is available on a website, *Feral Hog Control in Arkansas*, at www.uaex.edu/feralhogs.

Table 3. Gate and trigger materials list with estimated expense for a 4-foot wide, guillotine-style Banta model capture gate for feral hogs

ITEM	QUANTITY	COST/UNIT	TOTAL COST	ADDITIONAL INFORMATION
Hardware 1/4 inch chain (1 inch links)	4 feet	$0.70	$2.80	cut into 8 pieces; used to affix gate to T-posts
2 1/2 inch x 5/16 inch lag bolts	8	$0.38	$3.04	attach chain to gate channels
gate door handle (collapsible) and screws	1	$2.35	$2.35	used to raise the door may need bolts to secure if screws not included with handle
strap hinge	1	$3.40	$3.40	trigger component
5 1/2 inch x 5/16 inch carriage bolts	8	$0.71	$5.68	attach horizontal braces to channels
8 inch x 3/8 inch carriage bolts	4	$2.23	$8.92	attach base to channels 5/16 size not available
8 inch x 3/8 inch carriage bolts	2	$2.23	$4.46	safeties; can substitute rebar
Eye screw #8 x 1 5/8 inches	1	$0.99	$0.99	trigger component
5/16 inch flat washers	16	$0.10	$2.00	for carriage and lag bolts
5/16 inch nuts	14	$0.14	$1.40	for carriage bolts
3/8 inch flat washers	4	$0.14	$0.56	for carriage bolts
3/8 inch nuts	4	$0.21	$0.84	for carriage bolts
3 inch wood deck screws with torque or square heads	26		$1.77	for building channels
3 inch x 1/4 inch hex bolts	4	$0.31	$1.24	secure chain on gate to T-posts
1/4 inch nuts	4	$0.10	$0.40	for 1/4 inch hex bolts

Table 3. Gate and trigger materials list with estimated expense for a 4-foot wide guillotine-style Banta Model capture gate for feral hogs (continued)

ITEM	QUANTITY	COST/UNIT	TOTAL COST	ADDITIONAL INFORMATION
Hardware (continued) 1/4 inch washers	8	$0.03	$0.24	for 1/4 inch hex bolts
1 1/4 inch bolts/nuts (4 packages)	1	$0.98	$0.98	to attach handle (not used)
Lumber 4 inch x 8 inch x 3/4 inch treated plywood	1	$29.00	$29.00	gate door; cut to 4 feet x 6 feet
2 inch x 4 inch x 10 foot treated lumber	2	$3.86	$7.72	cut into 5 foot pieces (4 pieces) for base and braces
5/4 inch x 6 inch x 12 foot treated lumber (also called treated deck board)	2	$7.41	$14.82	cut into 6 foot length (4 pieces) "outer rails" exterior pieces
2 inch x 4 inch x 8 foot treated lumber	2	$3.19	$6.38	ripped to 2 inch x 3 inch; then cut to 6 foot length (2 pieces); 1 board in the middle of "outer rails"
Wood Scraps 2 inch x 3 inch x 2 foot	2			left over from ripping the 2 x 4 into 2 x 3 for trigger stick
2 inch x 4 inch x 6 inch	1			scrap to rest the trigger stick (may need to purchase if you do not have)
Trigger Components (optional) dark clothesline	50 feet	$12.19	$12.19	darker colors are less visible to hogs
braided saltwater fishing line, 60 pound test	150 feet	$20.07	$20.07	tie from dark clothesline to root stick, trip wire, tire or bucket
TOTAL COST			**$131.25**	

Cost-savings hints – Using 1/2 inch versus 3/4 inch plywood would save an additional $10. Using untreated or old scrap two-by-fours will save an additional $10 or more.

Gate building sequence

Overview: Build the two channels first, and then install the sides with enough room to prevent the plywood door from binding. An extra 1 1/2 inches to 2 inches total width is needed inside the channel for the door to drop without becoming off track. While constructing the sides, a 4-foot stick of 1-inch board or PVC pipe can be propped between channels on each side of the gate as a temporary spacer to ensure enough slack. Four horizontal cross braces are attached using carriage bolts, while periodically checking the opening with a carpenter's square. (Unused boards can be temporarily screwed onto the frame to keep the sides square.) The gate opening is almost 4 feet wide and 4 feet tall when the plywood door is in the raised or catch position. This height coincides closely with the height of the horizontal brace placed 4 feet above ground level on the inside of the gate. Holes are drilled through the horizontal brace with carriage bolts (or rebar) run through to safely hold the heavy door and prevent an accident. These are removed when the trigger is set for catching feral hogs.

1. The sides of the trap have channels for the piece of plywood to drop. The sides are 6 feet tall and at least 1 inch to 1 1/2 inches wider and 1 inch to 1/2 inch deeper than the dimensions of the plywood so it can fall freely without binding when tripped. The channels are formed by using wood screws to fasten a smaller board between two larger boards (Figure 3). (A more economical gate would use a 2-inch x 3-inch x 6-foot board between two 5/4-inch x 6-inch x 6-foot decking boards). Three-inch wood screws are sufficient to construct the channels.

Figure 3. The channel for dropping the plywood gate is formed by fastening a smaller board between two larger boards. *Photo by Becky McPeake, University of Arkansas.*

The channels should be set slightly wider apart than the 4-foot wide plywood; therefore, the two channels are set approximately 4 feet 1 inch to 4 feet 2 inches apart before being horizontally braced.

2. Four horizontal braces that attach the left and right channels together are 5 feet long two-by-fours (Figure 4). Carriage bolts secure the braces to the channels. The two vertical 6-foot channels attach to them to form the gate frame. Two are bolted across the bottom (one brace each on the inside and outside, one about 4 feet up on the inside of the gate and the other at the top (6 feet) on the outside of the gate. Each cross brace extends about 2 inches outside the frame per side to accommodate T–posts for support.

Figure 4. Two braces are secured at the bottom of the trap, one brace 4 feet on the inside of the gate and one brace 6 feet on the outside of the gate. *Photo by Becky McPeake, University of Arkansas.*

3. Plywood sheet is 4 feet wide x 6 feet high. This allows 2 feet of the plywood to remain in the channels when the gate is raise to its open or catch position 4 feet above ground level.

4. Pieces of chain (eight total) are attached using lag bolts to each side of the channel at 2 feet and 4 feet above the ground (Figure 5). A bolt, two washers and a nut are used to connect and tighten two chains around T-posts set on each side of the gate frame to provide support and hold the gate in place.

Figure 5. Attach a pair of five links of one-inch chain to each side of the trap, at 2- and 4-foot intervals from the bottom of the trap. Each pair is attached to a T-post using a bolt, two washers and a nut. *Photo by Becky McPeake, University of Arkansas.*

5. A small block of wood (2 inch x 4 inch x 6 inch) is bolted horizontally on the inside of the plywood door about 52 to 54 inches above the bottom of the gate (Figure 6). The top of the trigger will rest against the bottom of this board when the plywood is raised approximately 4 feet off the ground. The other end of the trigger will rest on the top of the cross brace placed on the inside of the gate about 4 feet off the ground.

Figure 6. A hinge connects two pieces of wood, which rest on a block holding up the door. Just a light tug with a string causes the hinge to collapse and the door to fall. *Photo by Becky McPeake, University of Arkansas.*

6. The trigger is two pieces of 2 inch x 3 inch x 2 foot long piece of board. The two 2-foot long sections are connected at their ends with a hinge. Leave a slight gap between the boards when affixing the hinge so that the boards easily fold. An eye bolt is placed near the center on the opposite side of the trigger

from the hinge. A trip wire is connected to the eye bolt. When the gate is set, pressure on the trip wire causes the trigger to fold in the middle, releasing it and allowing the plywood door to fall within the channels flush to the ground (Figure 6).

7. Drill a hole about an inch below the horizontal brace through the two boards inside the channel. Repeat on opposite side. Hole should be large enough to insert a piece of rebar or heavy bolt through the channel and sides of the gate (Figure 7). Once the plywood door is installed, it will rest on the rebar or bolt. This effectively holds the gate open while training pigs to enter the trap and allows safe entry for baiting or setting the trap without the door falling and causing an accident.

Figure 7. Prepare safeties for the door using carriage bolts or rebar. *Photo by Becky McPeake, University of Arkansas.*

Construction of an 8-foot wide gate

To construct a wider gate and improve your capture success, simply turn a full sheet of 3/4-inch plywood sideways to make an even wider doorway. The cost for this gate compared to the 4 foot wide guillotine gate detailed previously is slightly higher because of additional lengths of boards in the frame. Add a panel piece 2 feet tall by 10 feet long above the door to prevent feral hogs from escaping over the gate once the door is tripped.

Gate installation

Feral hogs vary in their response to gates. Some feral hogs may enter a gate opening with little difficulty. Others may balk at the appearance of tall plywood above the gate opening. Some trappers use tree branches to camouflage gates and fences. If feral hogs appear wary of entering the gate opening, try placing tree branches above the opening prior to gate installation to train hogs with the expectation for material being present overhead.

When installing the gate, use a shovel to dig a shallow trench and sink the bottom horizontal braces of the gate flush with the ground. Wary pigs will avoid stepping over these braces to enter the trap. Avoid leaving any gap where the fence panel and gate meet. This is the weakest location in the fence where a hog could slam into the gate, get its nose through and tear out the fence. Set T-posts with the panel attached inside the T-posts used to support the gate. Do not use the same T-post to hold both the gate and fence panel.

The gate should be propped open with safeties in place until all hogs are comfortable entering. A trail camera viewing the gate and another outside is helpful for determining when all hogs are entering the pen. Watch how feral hogs respond to the installed gate and adjust accordingly. Wary feral hogs can be lured through the gate using bait. Place bait in lines in front of and near the gate. After hogs consume bait in front of the gate, place bait just inside the door.

Step 6: Setting the Trigger

Monitoring pig behavior

A trigger should be set only when all feral hogs in the group are seen on video rushing into the trap to consume a limited amount of bait (Figure 8). If large amounts of bait were used initially to attract feral hogs, bait should be decreased. Limiting the amount of bait will encourage all hogs to enter the trap quickly, such that the “last pig at the trough” risks getting little bait.

Figure 8. Prebaiting and temporary gate removal may be necessary for capturing trap-shy sounders. *Photo by Skip Armes, University of Arkansas Cooperative Extension Service.*

If bait is distributed by hand, the group of hogs should "feed their way" to the trigger to ensure more pigs are inside when the gate is activated. Bait can be piled in lines inside the pen to guide feeding hogs from the entry to the trigger location. Continue placing bait deeper inside the trap until hogs are taking bait at a point furthest from the gate or gates. Ideally, the trigger is set at the back of the trap if one gate is used or the middle for two gates. Try to maximize the distance between feeding hogs and the gate. Feral hogs respond very quickly to unexpected noises, such as those created by the trigger mechanism. Use the trail camera to monitor progress.

Check the trap daily preferably from a distance, if bait doesn't need to be replaced, to minimize human activity in the immediate area. All feral hogs in the group should be comfortably entering and leaving the trap on camera before the trigger is set and the gate activated.

If any hogs are overly cautious about entering the trap, **delay setting the trigger until all have entered**. It is important to capture all hogs, because even one sow that eludes capture can become trap-shy and difficult to recapture. She will quickly reproduce and repopulate the area, making your trapping effort less effective.

Trigger types

Deciding which trigger is best for activating the gate is based on trap conditions and personal choice. Usually, triggers are set to activate when adult hogs enter the trap while avoiding activation by smaller pigs, raccoons, opossums and other nontarget species. The trigger components should be set inside the fence prior to activation, allowing feral hogs to become accustomed to their presence. Four common homemade trigger types are described.

- **Root stick.** A root stick trigger (Figure 9) relies on the hog's rooting behavior to lift a stick propped behind stakes driven at an angle in the ground. Subadult hogs do not root as much as adult hogs, reducing the risk of the trigger being set off prematurely. A trigger wire is attached to the root stick. The rooting hog jostles the root stick from under the stakes to trigger the gate. Root sticks are less effective in sandy or loose soil or hard rocky ground where it is difficult to drive stakes into the ground.

- **Trip wire.** A trip wire trigger (Figure 10) is a length of wire or line that feral hogs bump into while feeding on bait. The trip wire is usually set towards the back of the trap opposite the gate. The trip wire should run above hog height from the gate along a series of T-posts to the back of the trap, where it is angled down to run about 12 inches high and parallel to the ground for about 5 to 10 feet, and then attached to the back of the trap. Trip wires are more trigger sensitive than root sticks, which require more effort to activate. Trip wires are preferable to root sticks where soils are too loose to hold a root stick or too rocky to drive stakes (such as rebar) into the ground.

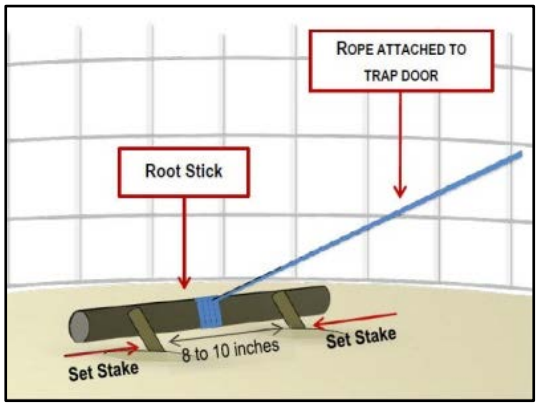

Figure 9. Root sticks work best in firm soils where stakes can be driven into the ground. *Illustration courtesy of Mississippi State University.*

Figure 10. Trip wires need to be set high enough such that the largest (and last) hog entering the trap will set the trigger. *Photo by Becky McPeake, University of Arkansas.*

- **Old tire** (Figure 11). Larger hogs can be trained to push or flip old automobile tires containing bait, whereas younger pigs lack the strength. A small tire in the 13- to 16-inch range works well. Place baited tires inside the pen prior to setting the trip wire so hogs become accustomed to its presence. Prebaiting tires will train larger hogs to move the tire in search of bait. Concentrate enough bait under and inside the tire to attract adult hogs. When ready to set, a trigger wire from the tire is attached to a main tripwire.

Figure 11. Large hogs can be trained to push old tires that can serve as a trigger. *Photo by Billy Higginbotham, Texas A&M AgriLife Extension Service.*

- **Elevated bucket** (Figure 12). A bucket is placed on a stand consisting of one or two wooden flat boxes or a cinder block. The stand and bucket are set next to a T-post. The T-post has a loop with a trigger wire that is attached from the bucket to the gate. The tension of the trigger wire causes the bucket handle to stand upright and activate the gate once disturbed. The bucket contains something heavy (for example, concrete, rocks, bricks or scrap iron) and bait. The bucket should have holes drilled in the sides near the bottom so that bait can dribble out. The weight of the bucket triggers the gate when an adult hog pushes it off its stand. For larger hogs, increase the height of the bucket. In the prebaiting phase before attaching the trigger wire, be sure to set the bucket (complete with weight and bait) on its stand to accustom feral hogs to its presence.

Figure 12. Large hogs can be trained to push over a bucket that can serve as a trigger. *Photo by Tyler Kee.*

The type of line used for triggers is an important consideration. Educated hogs may avoid trigger wires if highly visible. Higginbotham (2015) uses plastic-coated clothesline as the main tripwire, attached to a dark color "braided saltwater fishing line of at least 60 pounds test in critical areas where pigs will encounter the tripwire" (p. 4).

The wire leading to the trigger should be high enough off the ground so the back of an adult hog can pass underneath without prematurely triggering the gate. Wire guides can be fashioned simply by twisted loops of galvanized 14-gauge steel wire or metal O-rings affixed to T-posts and/or wire panels. Suspending a wire 16 to 20 inches above ground reduces the chance of a nontarget species triggering the gate. Since smaller piglets typically enter the trap first, higher and heavier triggers reduce the chance of them tripping the gate before adult hogs enter.

Bait placement around the trigger is very important. Hogs will converge on the larger, closer bait piles near the gate and slowly work their way through the trap. Following are some suggestions for baiting the trigger:

- **Root stick** – Pile bait in a crescent shape around the outer fence with only a small amount, if any, around a root stick near the back of the trap.
- **Trip wire** – Avoid placing bait under the trip wire; this will allow a jostled hog to set the trap.
- **Old tire** – Place bait inside and underneath a large, heavy tire. This ensures only a larger hog, such as a sow, will trigger the trap.
- **Bucket** – Adjust the weight and height of the bucket to match the hog selected to set the trigger.

If by accident all hogs in the group are not captured, reset the trap and try again. Not all hogs have the same degree of trap shyness and may return, particularly if food resources are scarce.

If a trap-shy hog consistently does not enter the trap despite all efforts, it may be necessary to set the trigger anyway. After the trigger is set, quietly approach the trap and be prepared to dispatch a feral hog lingering outside the pen. Other options are placing snares around the perimeter of the corral, hunting over bait, night shooting and hunting with dogs. Hunting and shooting should be considered a "cleanup" operation to remove sounder remnants after trapping attempts have failed.

Step 7: The Next Round

After capturing an entire group of hogs, consider leaving the trap a week or longer at the site in case another group moves through the area. If no

feral hog activity is viewed after a week or two, the trap can be removed and stored or reset at another site where feral hogs have been observed on camera and are ready to trap.

Several groups of feral hogs are sometimes captured at the same site in the same pen. At other times, feral hogs avoid traps where others have been previously captured. Reasons for avoidance are unclear. One expert recommends washing and scrubbing a trap visited by a boar. In theory, the boar leaves a scent that discourages others from entering. Another recommends dispatching hogs shortly after capture to reduce urine, feces and other odors lingering inside the pen.

In areas with high feral hog populations, trapping can occur year-round. Fences can be left in place permanently, and the trap reactivated when feral hogs return. The wooden gate can be removed temporarily and stored under shelter to extend its utility. When signs or camera observations indicate feral hogs are present again, repeat steps to capture the next group of hogs.

Traps that are carefully located in areas where feral hogs frequent may continue to catch sounders for many years. Take the time to read the signs and camera data before site selection. This will avoid the need to relocate corral traps on a routine basis.

Common Mistakes

- **Doing nothing.** Having problems deciding between trap designs? gates? baits? Do not get hung up on the details. Often such details are a matter of personal preference. It is more important to develop a sound trapping program based on known feral hog attributes and following through. Your adaptive strategy may change or become more refined as you gain experience trapping hogs.

- **Placing trap in a convenient spot.** Trap placement should be where feral hogs are present, not necessarily where it is convenient. Scout for feral hog signs and set trail cameras in areas where feral hog activity is evident. Prebait sites before setting the corral trap. Cease shooting or disturbances that could cause feral hogs to leave the trapping vicinity.

- **Lack of prebaiting to condition all hogs to enter trap quickly.** Setting a trap before conditioning all hogs to enter could allow some to escape. With the gate propped open, just enough bait should be available so any stragglers will go hungry. This should encourage all hogs to enter the trap quickly and improve chances of capture. Placing too much bait may allow stragglers to remain outside the trap after it is triggered. Those that escape will reinforce learned behaviors to avoid traps, leading to more trap-shy hogs that are difficult to recapture, plus these hogs continue causing damage and reproducing.

- **Baiting heavily around the trigger.** A trigger set prematurely before all hogs are inside will teach those outside the pen to avoid traps. Initially, bait may be scattered in front of a trail camera so all hogs can be counted. In later stages of trapping when preparing to set the trigger, less bait is offered to encourage quick entry. If too much bait is piled around the trigger, the first hog in the gate may prematurely set the trap before other hogs have time to enter. Often a line of bait is piled from the gate along each side of the fence towards the back of the trap, where the trigger is set by a jostled hog competing for limited bait. This gives late arrivers ample time to enter the trap before the trigger is activated. It is important to view feeding behavior on video camera and make adjustments before setting the trigger to ensure all hogs are entering the trap. Adjustments in bait placement may be needed using camera evidence of hog behavior to ensure all are caught.

- **Not capturing the entire sounder.** Feral hogs remaining outside the pen learn to avoid traps and become more difficult to capture, plus these hogs continue causing damage and reproducing. Though it may be tempting to set a trigger, patiently waiting several days until all are entering the trap is often the better choice.

- **Using too small a pen relative to sounder size.** Some anecdotal evidence suggests feral hogs are more likely to enter wider gates (greater than 4 feet) and larger pens than narrow gates and smaller pens. If pen size is too small, feral hogs remaining outside the pen learn to avoid traps and become more difficult to capture, plus these hogs continue causing damage and reproducing.

- **Not trapping all year.** Landowners sometimes quit trapping during uncomfortable weather conditions. Professional hog trappers report these times can be the most productive periods of the year in capturing

hogs. However, it may be necessary to suspend trapping operations for several reasons: (1) during hunting season, human disturbance causes hogs to move elsewhere; (2) an abundance of acorns may cause hogs to walk past a baited trap; and (3) when trapping small groups of transient hogs, it may save labor and expense to suspend operations until signs indicate transients have returned to the area.

- **Not asking for help.** The possibility exists where a sounder or bachelor group, even with a sound plan, may never enter a trap. Should that occur, consultation with a wildlife biologist from the Arkansas Game and Fish Commission (1-800-364-4263) or USDA Wildlife Services (870-673-1121) is recommended. Contact these resources if any technical assistance is needed with capturing feral hogs.

Literature Cited

Barrett, R. H., and G. H. Birmingham. 1994. Wild pigs. D 65-D-70, S. E. Hygnstrom, R. M. Tim and G. E. Larson (eds.). Prevention and control of wildlife damage handbook. University of Nebraska-Lincoln, USDA APHIS Animal Damage Control and Great Plains Agricultural Council Wildlife Committee. Last accessed 1/14/14: http://www.icwdm.com/handbook/mammals/mam_d65.pdf

Flores, Steve. 2016. A guide to trail camera features. Last accessed 5/11/16: http://deerlab.com/blog/trail-camera-feature-guide

Gaskamp, Joshua A., and Kenneth L. Gee. 2011. Using drop-nets to capture feral hogs. *Ag News and Views*, The Samuel Roberts Noble Foundation, July issue. Last accessed 1/31/14: http://www.noble.org/Global/ag/news-views/2011/07/drop-nets.pdf

Gaskamp, Joshua A., Kenneth L. Gee, Nova J. Silvy and Tyler A. Campbell. 2012. Efficacy of drop-nets versus corral traps for feral hog capture. International Wild Pig Conference: Science and Management Abstracts, p. 23. Last accessed 1/14/14: http://wildpigconference.com/pdf/2012%20International%20Wild%20Pig%20Conference%20Program.pdf

Higginbotham, Billy. 2015. Selecting a manual gate trigger for wild pig trapping. Texas A&M AgriLife Extension Service. Last accessed 12/3/15: http://feralhogs.tamu.edu/files/2010/04/Selecting-a-Manual-Pig-Trap-Trigger.pdf

Higginbotham, Billy. 2015. Guillotine-style wild pig trap gate (Banta model). Texas A&M AgriLife Extension Service. Last accessed 12/3/15: http://overton.tamu.edu/files/2013/02/GUILLOTINE-STYLE-WILD-PIG-TRAP-GATES-Banta-Model.pdf

Holtfreter, Robert W., Brian L. Williams, Stephen S. Ditchkoff and James B. Grand. 2010. International Wild Pig Conference: Science and Management Abstracts, p. 30. Last accessed 1/14/14: http://www.wildpigconference.com/pdf/Program.pdf

Mathis, Greg. 1999. Existing Arkansas laws regulating feral pigs. Feral Swine Conference Proceedings 1:37. Last accessed 1/29/14: http://feralhogs.tamu.edu/files/2010/05/Feral-Swine-Conference.pdf

Mayer, John J. 2009. Taxonomy and History of Wild Pigs in the United States. Pages 5-23 in Wild Pigs: Biology, Damage, Control Techniques and Management, Savannah River National Laboratory, Aiken, South Carolina. Last accessed 8/18/2014: http://www.sdmmp.com/Libraries/Management_Plans_and_Reports/SRNL-2009_Wild_Pigs_biology_damage_mgmt.sflb.ashx

Mayer, John J. 2011. Wild pig attacks. Urban Wildlife Management and Planning Conference, May 22-25, Austin, Texas. Last accessed 1/7/14: http://urbanwildlife2011.org/media/mayer2.pdf

McAllister, Kelly, and Patricia Cramer. 2015. Securing Trail Cameras to Reduce the Likelihood of Theft. Proceedings of the 2015 International Conference on Ecology and Transportation. Retrieved from http://www.icoet.net/ICOET_2015/program-proceedings.asp.

McPeake, Rebecca. 2014. Perceptions of County Agriculture Agents About Feral Hogs in Arkansas. University of Arkansas Division of Agriculture, Cooperative Extension Service, Arkansas Forest Resources Center.

National Feral Swine Mapping System. Southeastern Cooperative Wildlife Disease Study. Last accessed 2/11/14: http://128.192.20.53/nfsms/

Richardson, C., P. Gipson, D. Jones and J. Luchsinger. 1995. Extirpation of a recently established feral pig population in Kansas. Eastern Wildlife Damage Management Conference 7:100-103.

Rollins, Dale. 1999. Impacts of feral swine on wildlife. National Feral Swine Conference 1:46-51. Last accessed 1/15/14: http://feralhogs.tamu.edu/files/2010/05/Feral-Swine-Conference.pdf

Texas A&M University. 2011. Coping with feral hogs: feral hog baits (PowerPoint). Last accessed 1/15/14: http://feralhogs.tamu.edu/files /2011/12/Website-Feral-Hog-Baits.pdf

Timmons, Jared B., Blake Alldredge, William E. Rogers and James C. Cathey. 2012a. Feral hogs negatively affect native plant communities. Texas A&M AgriLife, SP-467. Last accessed 1/15/14: http://feralhogs.tamu.edu/files /2010/04/feral-hogs-native-plants.pdf

Timmons, Jared B., Janell Mellish, Billy Higginbotham, Jonathan Griffin, Roel Lopez, Aaron Sumrall, James C. Cathey and Kevin Skow. 2012b. Feral hog population growth, density and harvest in Texas. Texas A&M AgriLife, SP-472. Last accessed 1/10/14: http://www.invasivespecies.wa.gov /documents/squealonpigs/FeralHogPopGrowth-Density&HarvestinTX.pdf

Stribling, H. Lee. 2001. Build it – feral hog trap. *Wildlife Trends*, May issue, pp. 12-15. Last accessed 1/31/14: http://www.wildlifetrends.com/pdf /feralHogTrapPlan.pdf

University of Arkansas. 2009. Tusk: the Razorback live mascot. Athletic Department news release. March 18. Last accessed 1/14/14: http://www.arkansasrazorbacks.com /ViewArticle.dbml?ATCLID=1514556

West, Ben C., Andrea L. Cooper and James B. Armstrong. 2009. Managing wild pigs: A technical guide. Human-Wildlife Interactions Monograph 1:1-55. The Berryman Institute, Starkville, Mississippi, and Utah. Last accessed 1/7/14: http://feralhogs.tamu.edu/files/2010/05 /managing-feral-pigs.pdf

Wyckoff, A. Christy, Scott E. Henke, Tyler Campbell and Kurt C. VerCauteren. 2006. Proceedings of the Vertebrate Pest Conference 22:370-372. Last accessed 1/14/14: http://www.aphis.usda.gov /wildlife_damage/nwrc/publications/06pubs /campbell062.pdf

Printed by University of Arkansas Cooperative Extension Service Printing Services.

University of Arkansas, United States Department of Agriculture and County Governments Cooperating

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Director, Cooperative Extension Service, University of Arkansas. The University of Arkansas System Division of Agriculture offers all its Extension and Research programs and services without regard to race, color, sex, gender identity, sexual orientation, national origin, religion, age, disability, marital or veteran status, genetic information, or any other legally protected status, and is an Affirmative Action/Equal Opportunity Employer.

MP537-PD-12-2016N