

Section 2
Management Techniques

Section 2 – Management Techniques

There are a variety of management tools that can be employed to control wild pig populations including exclusion fences, hunting with dogs, trapping with snares, still hunting or shooting, baiting and shooting, and a wide variety of trapping methods. A combination of methods will likely give the best control results. For example, hunting with dogs may be effective, after other lethal control methods have been applied. This section will cover some positives and negatives, along with the effectiveness, of each technique.

Exclusion and Fencing

Reproductive potential of wild pigs can be increased when they have access to supplemental feed. Because of this, wild pigs should be excluded from deer feeders, which is relatively easy to do with a solid fence. Deer can easily jump over a three foot tall fence to access the feeder. Money will be saved by feeding only deer, as opposed to feeding the pigs as well. Furthermore, limiting access to an easily obtained food supply could aid in the reduction of the reproductive capacity of the pigs.

Exclusion of wild pigs typically involves fencing, which can be highly effective but very expensive. Many fence materials are available, but common designs include wire mesh, electric strand, or a combination of the two. Multiple fence designs have been used to aid in exclusion. Generally, wire mesh is recommended only for small areas like flower gardens, small crop fields, game feeders, and household yards. Before employing a fence, it is important to conduct a cost-benefit analysis to determine if protection of the product is worth the cost of building a fence. There are several styles of fencing available, and many are considered effective in excluding pigs; however, few designs will exclude their invasion completely.



Figure 7: An example of a non-electric wild pig exclusion fence built by 50yearfence.com.

Section 2 – Management Techniques

Non-electric fences should be constructed using net wire or diamond mesh, also known as chain link, with a minimum of 4 inch spacing. Some managers recommend a minimum of 6 inch spacing; however, smaller mesh size will help prevent piglets from squeezing through the openings.

When constructing a wire mesh fence, consider the following:

- Increasing the spacing of wire mesh with height is generally effective at preventing piglets from entering the area. Start with 2 inch spacing near the bottom and increase to larger spacing until about 2 feet from the ground.
- Use either pressure treated 4 x 4 inch posts, locust posts, or steel T-posts every 10-12 feet.
- Posts should be a minimum of 6 feet tall and a minimum of 20 inches below the ground.
- The mesh should be stretched tight enough to eliminate sagging; this allows for flexibility in case a wild pig charges the fence.
- Fence height can be between 30-36 inches; generally, taller is better.
- To prevent persistent wild pigs from burrowing under the fence, bury the bottom of the wire 12 inches below ground surface.
- Burrowing can also be prevented by adding an electric strand 8-12 inches off the ground along the outside of the fence.
- As with all wire mesh wildlife exclusion fences, the fence must be tight to the ground.
- Pay close attention to changes in topography.
- Regular maintenance to remove fallen trees or limbs is required.

Section 2 – Management Techniques

Stranded wire fences used in conjunction with electric fence chargers are less effective than mesh wire fences but are cheaper to construct. A Texas study found that when compared to a 1-strand fence, a 3-strand electric fence reduced wild pig invasion by fifty percent.

When constructing an electric fence, consider the following:

- Use steel T-posts or locust posts.
- Plastic insulators, either nail-on or snap-on, and a minimum of 14 gauge galvanized steel wire are required. (NOTE: The larger the fenced area, the larger the wire gauge needs to be to account for voltage drop—either a 12 or a 10 gauge.)
- A high output fence charger and an 8 foot ground rod and clamp are needed.
- The bottom strand should be a maximum of 8 inches off the ground.
- There should be a 12 inch spread between strands for a three wire system and an 18 inch spread for a two wire system.

Stranded wire fences are cheaper to construct than mesh wire but tend to be more labor intensive in the long run; to prevent vegetation from growing on and potentially grounding out the fence, regular maintenance is necessary. For more detailed information on fencing, consult other publications.



Figure 8: A multi-purpose electric fence designed to exclude both wild pigs and whitetail deer. Image from the Georgia Peanut Commission.

Hunting with Dogs

Using dogs may improve the number of wild pigs taken from an individual property. This method of hunting involves a team of dogs, including bay dogs, scent trailers, and catch dogs.

Hunters, usually on horseback or in an all-terrain vehicle, supervise the hunt. Typically, scent trailers are a hound breed; these dogs have increased sense of smells and can follow scents until the pig is located. Most often, catch dogs are a boxer breed. To prevent injury, catch dogs should be cloaked in a thick leather or Kevlar vest.

Dog hunting can greatly increase the chances of locating groups of wild pigs. However, this method can be expensive due to the initial cost of dogs, as well as veterinary expenses. Injuries can be caused by wild pigs; goring and biting are common. Additionally, there is the possibility of spreading infectious diseases. Usually only one wild pig is captured so this method is time intensive and not effective in controlling large populations or covering large areas.



Figure 9: Catch dogs taking down a wild pig. The lead dog most often controls the pig by grabbing it by the ear and pulling its head down while the other dogs hobble the animal by grabbing its legs (easttexasdoghoggers.com).

Trapping with Snares

WARNING: In many states, like Georgia, the use of snares to capture wild pigs is illegal. In Georgia, snares can be set within 10 feet of water for beaver trapping only.

Advantages of using snares for pigs include:

- Low cost
- No pre-baiting required
- Effectiveness of catching trap-shy wild pigs
- Quick set-up time

Disadvantages of using snares for pigs include:

- Can only capture single pig at a time
- Non-target species issues – can be partially avoided by using a deer stop device
- Possibility of large wild pigs breaking snares



Figure 10: A snare set for wild pigs (hotwoods.com). Using snares to capture wild pigs is illegal in Georgia.

In areas where snares are legal, these are usually constructed out of a 3/16" steel cable with a sliding lock mechanism allowing the loop to close but not open easily once closed. Using a swivel at the end of the snare reduces the chance of a captured wild pig breaking the cable. Ends of snares are attached to immovable objects, such as trees or fence posts.

Hunting and Shooting

Most states have very liberal regulations for hunting wild pigs on private property, allowing harvest to occur year-round. Hunting and shooting wild pigs can be done in many different ways, including methods like traditional still hunting, aerial shooting, or night shooting. Each of these methods has advantages and disadvantages and requires excellent marksmanship for quick, humane kills.

Whenever using shooting as a means of control, consider the following:

- Head shots provide the quickest death and minimize the need for tracking.
- Target the adults of a sounder first. If an older pig falls in its tracks, most of the time younger individuals will not break and run.
- Be sure to follow state game laws whenever using any of these methods.



Figure 11: Wild pigs under a mineral block near a tree stand.

Sport Hunting

Sport hunting is commonly used in many areas across the United States as a method to reduce wild pig populations. For many farmers, ranchers, and private land owners, sport hunting provides extra revenue in the form of lease fees. Hunters often use archery equipment, high powered rifles (both semi-automatic and bolt action), or shotguns loaded with buckshot. This control method can be exciting but is not effective because few pigs are taken at one time.

Hunting as a management method can be useful in remote areas, but this approach is often difficult to employ in urban and suburban areas. Hunters typically target adult wild pigs; the removal of these individuals alone is typically not enough to reduce pig densities. Additionally, patterns of learned behavior exhibited by wild pigs suggest that, if under heavy hunting pressure, they will often become nocturnal and learn to avoid humans altogether.

To encourage the availability of hunting land, Georgia has enacted two liability laws to protect landowners who allow access to their land for hunting. The following is a passage taken from the 2013-2014 hunting regulations by the Georgia Wildlife Resources Division.

To encourage landowners to make their lands available for public recreational purposes, including hunting and fishing, Georgia law (OCGA 51-3-20 through 51-3-26) explicitly shields landowners from civil liability for injuries to persons who use their land for recreational purposes without charge unless the landowner willfully or maliciously fails to guard against or warn of a dangerous condition, use, structure, or activity. Landowners will not be liable unless they violate this standard of care. Georgia Courts have interpreted this reasonable standard of care as the “duty of slight care” which is lower than that of ordinary care.

Georgia law (OCGA 27-3-1) further extends this same protection to landowners, lessees of land, or lessees of hunting or fishing rights who have permission to hunt or fish on their property with or without charge.

Aerial Shooting

Aerial shooting, which is often used in Texas and other open areas of the western United States, has very limited use in the forested regions typical of Georgia. However, this control technique has recently been used on a few barrier islands.



Figure 12: Shooting pigs from a helicopter with a semi-automatic rifle in the open range lands of Texas and other Western states. Generally, this is not considered effective in Georgia (americanhunter.org).

Aerial shooting most often employs the use of a helicopter and semi-automatic rifles. Rarely are fixed wing aircrafts used. This method is often effective in remote areas with short vegetation where the conditions include high visibility, fairly smooth topography, and mild weather patterns. In areas with high wild pig densities, it can be highly effective. The high cost of the aircraft is often negated due to the high success rates associated with this type of control.

One study employed aerial shooting over a five day period in Australia and reduced wild the pig populations by 80 percent. Aerial shooting does require trained professionals to implement, may require special licenses and permits, and cannot be used in forested or residential areas. Much like traditional hunting methods, aerial shooting can promote learned behavior in wild pigs, causing them to avoid helicopters and become nocturnal.

Night Shooting

Should wild pigs become nocturnal, traditional hunting and aerial shooting become less effective management tools. At this point, night shooting is often attempted. Night shooting employs the use of bait and specialized equipment such as spot lights, motion detecting floodlights, night vision goggles and scopes, and sound suppressed weapons.

When considering the use of night shooting as a means of wild pig control, consider the following:

- Check state and local regulations on what equipment or lights can and cannot be used.
- Suppressed weapons require special permitting, and other equipment restrictions may apply.
- Several private companies offer night hunting opportunities. However, these can cost up to \$1,000 per hunter per night and generally result in the removal of only a few animals.
- Night hunting may include the use of thermal imaging optics and high-capacity magazines on semi-automatic rifles.
- Using bait typically increases rates of success.

Spotlighting

The oldest means of night shooting utilizes spotlights with traditional rifles and scopes. Typically, spotlights of 1-5 million candlepower (or 900-1,000 lumens) are used. These lights are fairly inexpensive, ranging between \$30 for basic hand-held styles and \$150 for scope-mounted versions. While spotlight technology has improved with the development of LED bulbs, these lights tend to have a focused beam, which only illuminates one or two animals at a time. Plus, the constant turning on and off could spook pigs and deter them from coming back to bait set out by shooters.

In Georgia, a light must be carried by or attached to a belt system or hat of the hunter. In Georgia, there are no voltage restrictions on lights used for night hunting of wild pigs.

Solar Powered Motion Detection Floodlights

An alternative to traditional spotlights are solar powered motion detection floodlights, which range in cost from \$50-150 depending on brand and lumen output. Most lights operate from a solar panel that charges a 6 volt battery during the day and has several settings that allow the bulb to stay on for 1, 3, or 5 minutes.

Solar powered motion detection lights can be mounted on a 4 x 4 inch pressure treated post about 10-12 feet tall or to a tree with the light and motion detector facing downward on bait. The beam created by the flood head should be about 10-15 feet in diameter, depending on the height of the fixture. During the pre-baiting period, the light can be set for five minute intervals to allow wild pigs to become accustomed to it.



Figure13: Solar powered flood lights with a motion detector mounted to a tree (survival-gear-guide.com).

How to Set Up a Floodlight:

- Select an area where signs of pigs are clear.
- If no suitable trees are available, purchase a 16 foot long 4 x 4 inch pressure treated post.
- Purchase a solar powered floodlight from your local home improvement store.
- Open the light and connect the red wire to the positive terminal on the battery and the black wire to the negative terminal.
- Mount the light 1-3 feet from the top of the post using the mounting screws provided.
- Mount the solar panel on the opposite side of the pole from the light and plug the cord into the provided socket on the light.
- The solar panel must face south or southwest and have a clear view of the sky. Trim branches as necessary.
- The flood head should face the ground.
- Turn the dial on the bottom of the light to 5 minutes to set duration.
- Using a set of post-hole diggers, dig a hole 3 feet deep and slide the post into the hole.
- Pack dirt tightly around the post.
- Pour bait where the light will hit it directly.
(See Page 24-25 for information on baiting.)



Figure 14: An example of an adjustment dial on the bottom of a solar floodlight. Photo from dealaday.co.nz.

Night Vision Technology

Spotlights and motion detecting floodlights are fairly low tech, inexpensive, and often limited to baited areas. Recently, night vision goggles and scopes have made their way onto the public market after being used primarily for military operations.

While this technology works best with bait, it can be used to eradicate an entire sounder feeding in open terrain. Night vision technology allows shooters to get fairly close to a group of pigs using the dark of night to their advantage. However, night vision optics tend to be fairly expensive, ranging in price from \$300-5,000. The following two types of night vision optics are commonly used for pig control: near-infrared light and thermal imaging.

Near-infrared Light Imaging: This technology, which has been on the public market longer than thermal imaging, involves the collection and concentration of light, including a portion of the infrared spectrum invisible to the human eye. Incoming light particles hit a photoelectric plate inside the device, causing the release of electrons. Following a series of reactions, freed electrons strike a phosphor screen, creating a reaction that makes light visible to the human eye.

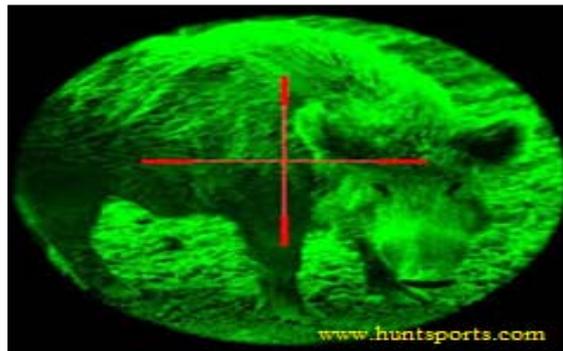


Figure 15: Infrared scope image of a wild pig.

Most people identify near-infrared light technology by the characteristic green images produced in the eyepiece. Early models made for public use often produced very blurred and unclear images. Today's models can provide very clear images, but the initial costs for this type of technology can still be as high as \$200 or more, even for a low resolution scope.

Thermal Imaging: With the simplest models starting around \$2,000, this very expensive technology creates images from heat, rather than light. All objects in the environment have a certain temperature and radiate waves of energy known as infrared radiation. Hot objects produce more energy than cold objects. Heat signatures of warm bodied animals appear as white images in the scope because they radiate more heat than their cold backgrounds. Because the equipment works by capturing heat energy, no light source is required to operate the device.

The best models on today's market can detect heat sources from a half mile away, making it possible for a far-away shooter to kill a pig in an open space. However, due to the high cost of this type of equipment, it is not cost-effective for the average landowner to use.



Figure16: Actual thermal image of a wild pig.

Baiting and Shooting

Typically, using bait for pig control by means of shooting begins with a pre-baiting period. This period should last a minimum of three days and occur in an area where signs of pigs are prevalent. Pre-baiting, or the act of presenting bait in an area before actual hunting efforts take place, can lead to more successful control measures. Following the pre-baiting period, shooting over bait can be done during the day or at night from a tree stand or on the ground from a distance. Longer pre-baiting periods, like those lasting up to a week, tend to be more effective than shorter periods. Pre-baiting is legal for hunting wild pigs in Georgia, and duration should depend on the type of control method being utilized. Check regulations for specific details.

Bait of choice should be placed in one large single pile. This area should be checked daily, and anyone visiting the area should wear rubber boots to reduce human scent. Place your bait of choice in one large pile. Replenish the bait as needed for a minimum of three days.

Baiting is used to increase success with both still hunting and night shooting efforts. While it is not required for either, baiting creates a central location for pigs to gather and allows shooters to focus on one area. Since wild pigs are omnivorous, a variety of foods can be used as bait, including pelletized pig feed, rotten produce, and soured corn. Whole corn and pelletized baits can be used in broadcast game feeders or in gravity feeders.



Figure 17: Soured corn can be used as bait for wild pigs. Spreading the soured corn on the ground allows for the aroma to be carried by the wind. Normal feed corn can be used inside of a game feeder for prolonged attraction.

How to make soured corn:

- Use a 50 pound bag of whole kernel corn.
- Fill a 5 gallon bucket half full of corn.
- Add two cups of sugar or molasses.
- Add two or three cans of inexpensive beer.
- Fill the bucket with water so that the level is 2-3 inches above the corn.
- Stir well using a stick.
- Cover with lid.
- Place in a sunny area for 3-5 days.
- Check daily adding water as needed.

NOTE: Some individuals add 1-2 packages of gelatin powder or fruit jelly. Some trappers claim that strawberry jelly or gelatin powder increases bait acceptance by wild pigs. No study known to the writers supports or denies this claim. Soured corn recipes tend to reflect individual preference.

Trapping

Regardless of the type of trap used, successful trapping requires a period of pre-baiting, and baiting must continue as the trap is being set up. Because wild pigs are such opportunistic feeders, a variety of food items can be used to bait traps. However, it is important to select bait that will minimize the chances of impacting non-target species, or those species not meant to be captured.

Not only is trapping the most popular method of removing wild pigs, it is also the most successful at reducing densities. Because multiple wild pigs can be removed at one time, some trapping techniques require significantly less effort and have better results than most other control strategies.

Before using trapping as a method of control consult state trapping regulations. Consider the following:

- Generally, trapping is legal in Georgia.
- Snaring wild pigs is illegal in Georgia.
- When using trapping as a control strategy, be sure to check traps daily. This is required by most state trapping regulations, and it reduces the risk of damage to the trap by caught pigs.

If traps are set up improperly, such as incorrect trigger placement, escaped pigs will become trap-shy and will not enter the trap again. Wild pigs are extremely intelligent animals; any mistakes made in the capturing efforts that allow their escape will result in the avoidance of traps in future attempts. Prior to setting traps, it is important to find the locations that will provide the highest rate of success. Once a proper location is established, pre-baiting should occur before trap construction and/or implementation.

Scouting the Area

On large properties, it may be prudent to set up multiple traps. When scouting any tract of land, look for signs of wild pig presence. Evidence of recent rooting, wallows, mud-rubs on trees, heavily used trails, and an abundance of pig tracks could suggest a population present in the area. Special attention should be placed along river and creek bottoms, as well as in swamps and marshes, especially during the summer months. Knowing the difference between pig tracks and the tracks of other animals will help in determining where to place traps. Once an area with ample pig activity has been located, start pre-baiting the site.



Figure 18: An example of a wild pig wallowing.

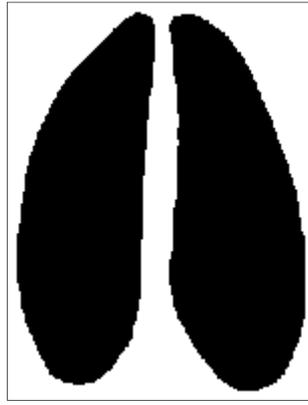


Figure 19a: Deer track. Image from Texas Parks & Wildlife.

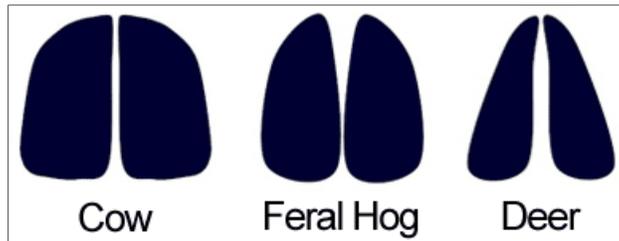


Figure 19b: Comparison of tracks. Image from Iowa State Extension.

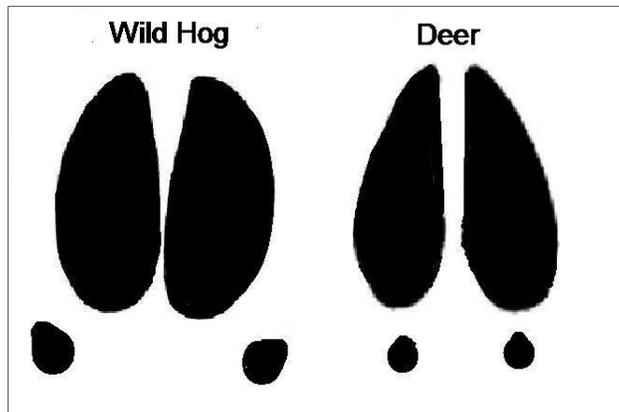


Figure 19c: Comparison of deer and wild pig tracks. Image from Indiana Wildlife.

Baiting the Traps

Regardless of the type of trap used, pre-baiting is required for effective trapping control measures.

When baiting traps, consider the following:

- Soured grain has the advantage of reducing the risk of catching non-target species.
- The pre-baiting period for trapping will last much longer than the pre-baiting time for shooting and duration should depend on trap type.
- Usually, pre-baiting for a week or longer prior to placement of the trap will allow the pig family group, or sounder, to become accustomed to feeding in the area. This will help ensure their return to the trap grounds.
- Bait can be poured directly on the ground or into a cut out barrel, a broadcast feeder, or a pipe feeder.
- Place the bait as far to the back of the trap and away from the door as possible. This will allow the greatest number of wild pigs to enter the trap.
- A small line of bait can be placed near the door and trailed to a larger bait pile at the back of the trap.
- At the very least, the pre-baiting period should last three days.
- For the best success rates, pre-bait for two weeks prior to setting the trap door.
- During pre-baiting, keep the trap door tied open so that pigs can go in and out of the trap freely.
- A trail camera can also be used and checked daily to determine how many pigs are coming to the trap and whether or not they are entering it.



Figure 20: Texas A&M AgriLife Extension Agent pre-baiting a semi-permanent coral trap.

Trapping typically utilizes the following three trap styles: portable, semi-permanent, and permanent. However, there has also been experimentation with drop nets to capture wild pigs. Portable traps are typically box or cage traps. Corral trap types are considered semi-permanent and permanent traps. These types, along with trap-door designs, will be covered in the remainder of this section.

Cage or Box Traps

These traps have the advantage of being portable and can easily be moved to different locations on a property.



Figure 21: Wooden box trap constructed out of decking boards and pressure treated lumber with a wood drop door.

Cage or box traps are most commonly used by landowners or individuals attempting to capture only a few wild pigs. Styles vary; traps of this type can be constructed entirely from wood, consist of a wood frame with heavy gauge wire livestock panels, or have a steel frame with livestock panels welded to the frame.

When constructing a Cage or Box Trap, consider the following:

- The panels of an all wood box trap can be built in a shop and transported to the trap site for assembly. This allows for a one-person set up.
- Typically, traps work best with no bottom; pigs will avoid standing on wire.
- Be sure the bottom edges of the side rails are flush against the ground. This will prevent wild pigs from pushing their snouts underneath it.
- For easy transport, wooden box traps should be the size of the bed of a pick-up truck (8 feet long and 4 feet wide) and about 5 feet tall with an open top.

Section 2 – Management Techniques

- If you choose to build a trap with a closed top, it should only be 4 feet tall. Side boards should be narrowly spaced at the bottom (2 inches apart) and can be spaced farther near the top (6-7 inches).
- Drive steel T-posts at the corners of the trap and wire the trap to them with bailing wire to prevent wild pigs from lifting the edge of the trap and escaping.

Steel-framed cage traps are often available for commercial sale and also come in circular designs. Circular models tend to be the strongest because they lack corners, which are weak points. If using a wire box trap, the bottom wires must be covered with dirt. Pigs will avoid standing on wire.



Figure 22: Steel framed cage trap. These can be circular or shaped like the one in this photo.

Corral Traps

Corral traps have proven to be the most successful style of trap for catching entire sounder groups. However, the success is heavily determined by the style of door. Much of the corral design's success can be attributed to openness of the trap. When wild pigs can see a great deal of open space within a trap, they are more likely to enter it. Some traps can be disassembled and moved from one location to another; these are considered semi-permanent.

When constructing a Corral Trap, consider the following:

- Use 16 x 5 foot utility panels in a circular design or tear drop design.
- 3-4 cattle gates can be inverted for a similar design. Gates should be 12-16 feet in length. Line the inside of the trap with 4 x 4 inch woven wire (NOTE: To prevent escape, cover hard corners with woven wire.)
- Utility panels should be supported by steel T-posts where the panels overlap and every 4-5 feet apart thereafter; use T-posts to mark where the door will be as well.
- A diameter size of 16-20 feet is most common for semi-permanent corrals.



Figure 23: A female wild pig inside of a corral trap. This is a unique trap set up in Baker County, Georgia. It is a smaller corral trap set up inside of a larger one. The sow is left inside to draw in other wild pigs. Photo taken by Ashley Warren.

Section 2 – Management Techniques

Permanent corral traps are similar to semi-permanent traps, but they tend to be larger in size, up to 35 feet in diameter. They also use 8 foot landscaping timbers or pressure treated 4 x 4 inch posts instead of steel T-posts to support the utility panels or chain link fencing. These posts can be moved, but setting up and breaking down can be labor intensive.

Due to their large size, permanent corrals can utilize a door on both ends, allowing pigs to enter from two directions. Because this set-up is permanent, be sure to choose a location with ample evidence of pig activity and where the trap will not interfere with future land use. Permanent traps are rarely recommended because they lack versatility and adaptability.



Figure 24: Permanent trap with cattle panels and treated posts.



Figure 25: Pre-baited circular corral trap constructed with utility panels and T-posts.

Door Design

Single Catch Doors

Once the trigger of a single catch door has been tripped, no more pigs can enter the trap. Most single catch doors use a guillotine or drop door to close the trap. A sliding door can also be used, but this type is not as common. The lower channel in which the door slides often fills up with dirt and debris, preventing the door from closing all the way. This design is similar to a guillotine gate, but instead utilizes heavy-duty springs to draw the door shut from the side rather than the door falling from the top.

When constructing a Single Catch Door, consider the following:

- Most guillotine gates are constructed of wood, using 2 x 4 foot channel frame and $\frac{3}{4}$ inch plywood for the actual door.
- The frame is 6 feet tall and has a pulley mounted on an eye bolt on the top cross brace.
- A draw loop made of wire is mounted to the bottom of the door so that a rope can be used to hold the door up once the trap is set.
- A steel frame barred door constructed out of 1 inch square tubing can be used for guillotine doors. Doors are usually 4 feet high by 3 feet wide and trigger off of a root stick or trip wire.



Figure 26: An example of a common wooden guillotine gate. Photo taken by M.T. Mengak.

Most trap and door combinations are limited in the number of pigs that can be trapped during any given event. Proper pre-baiting and baiting, as well as strategic trap and trigger mechanism placement, are required for the majority of the sounder to enter a trap before its door falls. When using a drop door or guillotine gate design, place most of the bait away from the trigger mechanism. Too much bait around the trigger may cause a pig to spring the trap before any other pigs have had a chance to enter.

Several commercial companies have taken this door design to new levels. Some companies include:

- Jager Pro Hog Control Systems, Columbus, GA (M.I.N.E. System);
- Tusk Innovations, Conway, AR; and
- Wireless Traps, Dallas, TX

These companies market wireless door trigger mechanisms that can be remotely activated from a computer or cell phone. This can be a major advantage over older systems of manual release from a hunting blind or a trip mechanism activated by the pigs. The remote system essentially eliminates the need for regular trap checks. However, state regulations may still require daily trap checks. The primary disadvantages to remote control door systems are cost and the need for a strong cellular signal. Optional equipment includes an automatic corn feeder and corn or other bait.



Figure 27: Remote controlled door design triggered by a cellular signal.

Table 1: Estimated costs for 30 foot diameter wild pig corral with remote activation camera system. Prices from July 2014.

Equipment	Unit Cost	Quantity
Door/Gate	\$500	1-2
Panels (16 foot long)	\$23	5
T-Posts, heavy duty (7 foot long), 4 foot spacing	\$6	21
Camera	\$600	1
Antenna	\$275	1
Cellular service (monthly fee)	\$50	1
Activation fee	\$30	1
Accessories (cable lock, panel wires, etc.)	\$100	1
Total	\$1,900	

Multiple Catch Doors

These doors allow pigs to continue entering the trap after the trigger has been tripped. The most common designs of this type are saloon doors, rooster doors, and swing doors.

Saloon Doors use two doors that swing away from one another when open and utilize two heavy springs to pull the doors closed.

When constructing Saloon Doors, consider the following:

- Each door, measuring 15 inches wide and 4 feet tall, is built from 1 inch square tube steel and barred like jail cell doors.
- The doors are mounted to the inside a 4 feet tall by 31 inch wide frame. The frame is constructed out of 2 inch angle iron using 3 x 3 inch stainless steel butt hinges, ¼ inch thick.



Figure 28: Saloon style doors set up on a corral trap.

Rooter doors are often used on multiple catch pig traps. There are two main styles of rooter doors: the three paneled gate and eight fingered gate.

Three Paneled Gates have three barred panels that can be raised individually. The three separate panels allow wild pigs to push the doors open. There is some speculation of escape with this design; however, many people still use this door with some limited success.



Figure 29: An example of a three paneled rooter door.

When constructing a Three Paneled Gate, consider the following:

- The panels are built out of 1 inch tube steel and are welded to two butt hinges.
- Hinges are either welded or bolted to a steel frame made of 2 inch angle steel.
- Panels are 36 inches tall and 12 inches wide and fit inside of a 38 x 38 inch frame.
- The frame is normally extended above the panels and is fitted with a wire panel to prevent wild pigs from climbing over the gate.
- During pre-baiting, the doors are propped open using two small sections of rebar, which are tied off to a trip wire once the trap is ready to be set.

Section 2 – Management Techniques

Eight Fingered Gates have eight bars that rise individually. This design allows smaller pigs to easily raise the gate and open the trap.

When constructing an Eight Fingered Gate, consider the following:

- Bars are constructed out of $\frac{3}{4}$ inch rebar, are 37 inches long and are spaced 3 inches apart.
- The inside of the frame is 30 inches wide by 36 inches tall and is constructed out of 1 $\frac{3}{4}$ inch ridged steel pipe. This can be found at any electrical supply or home improvement store.
- Each stem of rebar is welded to the center of a piece of 2 inch ridged pipe cut 3 inches long. These pieces are slid over the 1 $\frac{3}{4}$ inch pipe that is used for the top of the frame, creating the hinge.
- At the bottom of the frame, 2 $\frac{3}{4}$ inch segments of rebar are welded between each bar to provide a resting location once the gate has closed. This will keep wild pigs from spreading the bars apart.



Figure 30: Eight fingered roofer door built by Dakota and Michael Foster.

Both of these roofer door designs reduce the chance of a trapped pig escaping as other pigs enter the trap.

Trigger Mechanisms

Root sticks and trip wires are the two main styles of trigger mechanisms used for trapping wild pigs. Both styles are effective; however, trip wires are generally more effective with saloon and rooster doors due to the amount of pressure required to pull the props. In addition to root sticks and trip wires, the M.I.N.E. system mentioned earlier is also available.

Root sticks are the easiest trigger mechanisms to construct. Only two pieces of rebar about 12 inches long, a piece of rope, and a stick are needed.

When using a Root Stick trigger, consider the following:

- Rebar should be driven into ground at the far back of the trap at a 45° angle about 12 inches apart.
- Tie one end of the rope around the draw loop on the door and route the other end through the pulley at the top of the frame.
- Tie the free end of the rope to the middle of the stick and pull the draw rope toward the back of the trap. Place the stick behind the rebar.
- Rooting stick should be placed near the back of the trap so as to allow several pigs to enter the trap before the door is tripped.
- Bait should be spread from the middle of the trap to the back so that several pigs can enter and begin feeding. Place a small amount of feed near the root stick.



Figure 31: A root stick trigger.

Section 2 – Management Techniques

Trip wires are lines or wires that are strung across a corner of the trap, routed around one of the trap's sides, and tied to the triggering device on the trap door. Trip wires should be strung at the back of the trap at a minimum of 12 inches off of the ground. If the wire is tied lower than this, smaller pigs may trip the door before adults can center, or it could be tripped by non-target species like raccoons or opossums. Trip wire triggers work because of pressure; the amount of force required to pull the pin, hook, or prop stick can be adjusted by tightening or loosening the line.

When using a Trip Wire, consider the following:

- Route the rope through the pulley at the top of the door frame.
- Extend the rope to the top pulley mounted at the back or far side of the trap.
- Route the rope through the lower pulley at the back of the trap.
- Tie the end of the rope to one side of a marine snap shackle.
- Using a monofilament line, or fishing line, tie one end to the other side of the sailing clip.
- Stretch the monofilament line out and tie the other end to a stake driven into the ground 4-5 feet from the edge of the trap.

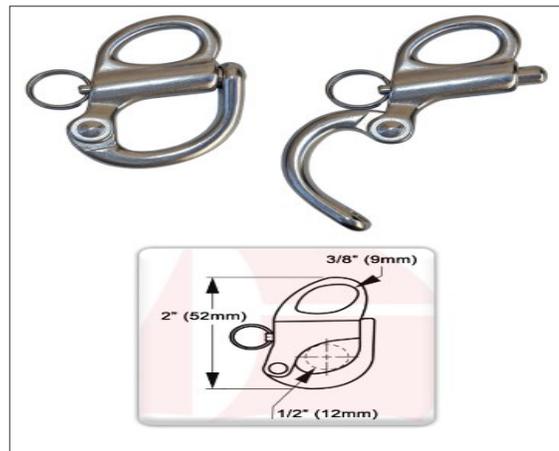


Figure 32: A marine snap shackle can be used with a trip wire.

A marine snap shackle can be purchased at any boating supply store. It has a fixed steel loop and a break-away steel loop that pulls apart once a certain amount of pressure is placed on it. Use a shackle with a 50-75 pound breaking load. The monofilament line is tied to the break-away loop when the trigger mechanism is set up.



Figure 33: A diagram on how to set up a trip wire on a rooster door.

The M.I.N.E system utilizes a guillotine door that is triggered remotely via computer or cell phone. This system incorporates a camera with a transmitter. Whenever the camera senses motion in front of it, live video or a picture is taken and sent to the owner's remote device. At this point, the owner can decide whether or not to send a signal that will close the gate. Waiting until an appropriate number of pigs are inside the trap is vital to trapping success.



Figure 34: Jager Pro remote trigger control box.

Drop Nets

The use of drop nets is a relatively new method of capturing wild pigs. Traditionally, this method has been used for capturing wild turkeys, prairie chickens, and whitetail deer. It has since been modified to capture entire sounders of wild pigs. Recent studies at the Samuel Roberts Noble Foundation in Oklahoma have documented success in with this method. Success has been attributed to the reduction of animal fear. Prior to capture, pigs do not associate the overhead net canopy of with danger.

When using a Drop Net, consider the following:

- A 60 x 60 foot net with 4 inch mesh is suspended above the ground using light weight steel tubing at each corner and one in the center.
- The corner posts are 10-12 feet tall, and the center pole is 12-15 feet tall.
- Steel chains are stretched from the top of each pole and anchored to the ground using $\frac{3}{4}$ inch steel rebar to provide support for each corner post.
- Each of the corner posts have a winch located in the center and pulley at the top.
- A steel cable is passed through the pulley to the winch; this mechanism is used to pull the corners and center of the net off the ground.
- A rope is tied to each corner of the net and fixed to the end of each of the steel cables.
- Each rope can be rigged with a blasting cap that when detonated cuts the cord in half, allowing the net to fall.
- Either 16 or 18 guage thermostat wire can be used to carry the charge needed to detonate the blasting caps. Wire should be run up each pole so that blasting caps are detonated simultaneously.
- A junction also needs to be made at the ground end of each wire, and another wire should be run back to the detonator.



Figure 35: Wild pigs under a drop net at the Noble Foundations research site in Oklahoma County, Texas.

Newer, high-tech trigger mechanisms utilize magnets to release the nets; however, they tend to be more expensive than those that use blasting caps. As with other methods of trapping, pre-baiting must occur prior to setting up the drop net. Using soured corn during the pre-baiting period will aid in reducing the chances of non-target species utilizing the area. Using drop nets offers the advantage of capturing an entire sounder quickly. However, drop nets require human presence at the site to trigger the net to fall. In addition to this, trapped pigs must be dispatched immediately once captured to avoid damage to the net and the potential escape.

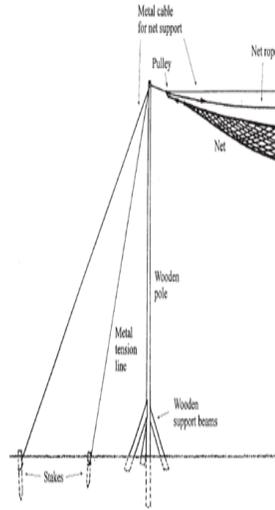


Figure 2. Close view of the corner components of the drop-net trap. Drawing by U. Stenkewitz.

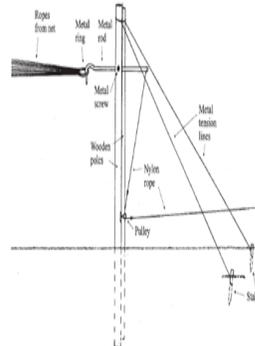


Figure 3. Components of the trigger mechanism for the drop-net trap. Drawing by U. Stenkewitz.

Figure 36: A diagram on the set up of the aluminum or steel poles used for a drop net with a simple hook and ring trigger mechanism.

Section 2 – Management Techniques



Figure 37: Wild pigs under a drop net in Smokey Mountain National Park.

Table 2: A list of the material costs for a drop net.

Item	Qty	Price	Total	Vendor
40' x 40' Net (21 Gauge, 4")	1	\$231.78	\$231.78	www.custom netting.com
Aluminum Posts (5' post, 3' overhang)	6	\$10.47	\$62.82	Local Hardware Store
Panel Clamps (2/pk)	6	\$4.98	\$29.88	Local Hardware Store
Tytan Soft Tie Rope (Top Hang)	2	\$17.50/ 100'	\$35.00	Local Hardware Store
Vertical Haul Rope (100', 3/8")	1	\$9.47/ 100'	\$9.47	Local Hardware Store
2" Welded Rings	6	\$0.85	\$5.10	Local Hardware Store
Pulley (3/8")	1	\$6.05	\$6.05	Local Hardware Store
Quicklinks	6	\$1.15	\$6.90	Local Hardware Store
Quick Release Clevis Hook	1	\$2.85	\$2.85	Local Hardware Store
Total Cost			\$389.85	

Another trigger mechanism used is simply a hook through a metal ring, which releases when another rope is pulled. The rings are attached to the net corners. When the rope is pulled, the hook mechanism swivels up, causing the net to fall. The correct set up of this type can be seen on the right side of Figure 36.

(page intentionally left blank)