

Section 3
How-To Guide

This section will review and discuss the many styles of traps and trap doors commonly used in wild pig control or management. There are many designs each with advantages and disadvantages. Users should determine expectations, specifically project size. Large-scale eradication will require a different approach than the removal of just a few problem pigs. This section will review traps and doors previously discussed and will give further instruction on construction.

This section has been formatted for easier listing and contains some abbreviations for building material dimensions.

Building Trap Doors

Wood Guillotine Door

The following materials are needed to build a wood guillotine door:

- (4) pressure-treated 2" x 4" boards, 12 foot
- (1) 4' x 4' piece of $\frac{3}{4}$ " pressure treated plywood
- (2) pressure treated 2" x 2" boards, 6 foot
- 2" and 3" galvanized deck screws
- Drill with $\frac{1}{8}$ " and $\frac{1}{2}$ " wood bit and star-head bit
- Carpenters square
- Circular saw
- Tape measure
- Nylon rope
- Pulley, S hook, and $\frac{1}{2}$ " eye bolt
- (1) 4' x 4' piece of woven wire
- 1 foot of 10 gauge galvanized wire and linesman pliers

Building the Channels for a Wood Guillotine Door

1. Measure and cut four 6' sections out of the 2" x 4" boards.
2. Using the $\frac{1}{8}$ " drill bit, pre-drill 5 equally spaced holes in both of the 6' long 2" x 2" boards; this will keep them from splitting when running screws through them.
3. Lay the 2" x 2" board along the edge of one of the 2" x 4" boards and attach it using 2" deck screws.
4. Lay another 2" x 4" board on top of the 2" x 2" board and screw it down using 2" deck screws. The first channel is now complete. Repeat this process for the second channel.
5. Once the second channel is assembled, lay both of them on a flat surface side by side.
6. Measure to the inside of each channel—at the top and bottom—a width of 37" apart; this will allow space for swelling of the door.



Figure 38: A pulley and S-hook used for guillotine gates.

7. From the third 2" x 4", cut three sections long enough to span the door frame; place one at the top of the channels, one at the bottom, and the last one 4' from the bottom.
8. Arrange them so that they have 5½" of overhang off of each edge of the channels, and screw them down using 3" deck screws. Be sure not to allow screws to pass into the channel.
9. Drill a ½" hole on the end of each of the lower two cross braces; this is where the gate will attach to the frame of the trap.
10. On the top support, use the ⅝" drill bit to drill a hole in the middle of the board. Twist the eye bolt into this hole with pliers. Hang the pulley from the eye bolt using the S hook.

The door should be 3 feet wide and 4 feet tall.

11. Using the ½" drill bit, drill a hole 1" from the bottom at the center of the plywood.
12. Fold the 10 gauge wire in half and pass one end through the hole. Bring the two ends of the wire together and twist them together using pliers.
13. Slide the door into the channel and tie the nylon rope to the draw loop. Pass the other end of the rope through the pulley.



Figure 39: A wooden guillotine door. Notice the rope guided through the pulley; this stops the rope from hanging up when closing.

Steel Guillotine Door and Gate

The following materials are required to build a steel guillotine door and gate:

- (2) 6' sections of 1½" channel steel
- (2) 4' sections of 1½" channel steel
- (2) 4' sections of 1" square steel
- (2) 3' sections of 1" square steel
- (1) 3' x 4' section of utility panel
- (4) ½" eye bolts
- Arc welder, gloves, and welding helmet
- Tape measure
- Flat grinder
- Pulley
- Nylon rope
- Spray paint

Do not attempt to build a steel gate without welding experience. Welding can be extremely dangerous if you are inexperienced. If you do not have experience welding, take your materials and these instructions to a welding shop.

Building the Steel Guillotine Door

1. On a flat surface, lay the 6' sections of channel so that the channels are facing one another.
2. Using the tape measure spread the 6' sections apart so that they are 37" from the inside of the channel.
3. Position one of the 4' channel sections at the top of the 6' section.
4. Fasten the grounding clamp to one of the 6' sections. Be sure that the two pieces fit as tightly together as possible and weld them at the joints.
5. Use the flat grinder to smooth the welds. Before welding the second 4' piece onto the bottom, build the door and slide it between the channels.

Building the Steel Guillotine Gate

1. Lay the 3' sections of steel 4' apart. Create a rectangle using both of the 4' long 1" steel sections and both of the 3' long 1" steel sections (NOTE: The ends of should meet, but not overlap). Weld at the joints and use the flat grinder to smooth the welds.
2. Place the section of utility panel on top of the door frame and spot weld it to the frame. There should be one weld at each corner and every 3" thereafter.
3. Slide the gate into the channel and weld the second 4' channel to the bottom.
4. Weld the pulley to the top cross brace in the center. Measure 4 feet from the bottom of the frame and weld one of the eye bolts to it; do this on both sides.
5. Weld the remaining two eye bolts 1 foot from the bottom on either side of the frame. The eye bolts are used to wire the gate to the trap.
6. Pass one end of the nylon rope through the pulley and tie it to the lowest section of the utility panel on the gate.
7. Tie the other end of the rope to the trigger mechanism.



Figure 40: Steel guillotine gate on round cage trap. Photo Credit- MT Mengak, March 2014.

When using a steel guillotine door, turn the utility panel side of the door to the inside of the trap; this will reduce the chance of pigs ripping the welds off in case they charge the gate.

Building Rooter Doors

Three Panel Rooter Door

The following materials are required for building a three panel rooter door:

- (3) 38" sections of 2" angle steel
- (2) 6' sections of 2" angle steel
- (1) 24" piece of 1" angle steel
- (15) 36" sections of 1" square tube steel
- (8) 1' sections of 1" square tube steel
- (1) 38" x 32" piece of utility panel
- (8) 3" x 3" steel butt hinges
- Arc welder, gloves, and welding helmet
- Tape measure
- Nylon rope



Figure 41: The three panels of a rooter door assembled within a frame. Photo from Mississippi State University's Center for Resolving Human Wildlife Conflicts.

Building the Frame for a Three Panel Rooter Door

1. Lay both of the 6' sections of 2" angle steel on a flat surface 38 inches apart.
2. Place one 38" piece of angle steel flat on the bottom and one on the top of the 6' sections so that they are flush.
3. The third 38" section should be placed so that the bottom edge is 39 inches from the bottom piece.
4. Weld each of these three pieces to the 6' sections.

Building the Three Panels for a Rooter Door

1. Start by laying two of the 1' sections of 1" square steel on a flat surface 36 inches apart.
2. Place four of the 36" sections of square steel between the 1' pieces; two of them should be flush with the outer edges of the 1' pieces, and the other two should be 4 inches from each of the edges.
3. Weld each of these sections to the 1' pieces.
4. Finally, weld two of the butt hinges to the top of the 1' side of the panel 2 inches from the outer edge so that the edge of the hinge is flush with the edge of the 1" square steel. Build the other two panels in the same way as the first.

Assembly of a Three Panel Rooter Door

1. Arrange the panels inside of the frame so that the edges of the first and last panel are $\frac{1}{2}$ inch from the edge of the frame.
2. Place the middle panel so that it is $\frac{1}{2}$ inch on either side from the outer panels.
3. The bottom of the panels should be $\frac{1}{2}$ inch from the bottom of the frame. Be sure that the panels are arranged so that they will open to a 90° angle.
4. Weld the other side of the hinges to the frame.
5. Spot weld the utility panel to the side of the frame that faces to the outside of the trap.

Building the Out-Rigger for a Three Panel Rooter Door

An out-rigger should be used to hold the panels up during the pre-baiting period.

1. Measure 1 foot from the top of the middle cross brace and weld one of the remaining 36" square steel pieces perpendicularly to the 6' angle sections.
2. Weld another piece of the remaining 36" sections to the other side of the frame in the same manner.
3. Weld the remaining piece between the two perpendicular square steel pieces, flush to the ends.
4. Weld the two remaining butt hinges 1 foot from the outer edges of the out-rigger.
5. Weld the last two 1' square steel pieces perpendicularly on the hinges.
6. Weld the 24" piece of 1" angle steel to the door side of the two 1' pieces.
7. Tie the nylon rope to either the lower right or left corner of the 1" angle steel. This is for the trip wire.



Figure 42: An example of an out-rigger used on a three panel rooter door. Photo Credit - MT Mengak, March 2014.

Saloon Door

The following materials are needed to build a saloon door:

- (4) 15" pieces of 1" square steel tubing
- (10) 46" pieces of 1" square steel tubing
- (2) 4' pieces of 2" angle iron/steel
- (2) 31" pieces of 2" angle iron/steel
- (4) 3" x 3" steel butt hinges
- (2) 15" extension springs
- (4) ¼" quick links
- Arc welder, gloves, and welding helmet
- Tape measure
- Flat grinder
- Drill and ¼" metal cutting drill bit

Building the Frame for a Saloon Door

1. Start by laying the 31" sections of 2" angle iron on a flat surface 4 feet apart.
2. Arrange them so that one piece forms an L and the other forms a backwards L.
3. Place one of the 4' sections of angle iron on the left hand side of the 31" sections so that it looks like a backwards L; on the right hand side, it should look like an L.
4. Measure 49 inches between the top and bottom of the frame; this will allow for a ½ inch of space above and below the door.
5. Weld the four joints where each section meets.
6. Weld the hinges to the frame so that the swivels of the hinges are facing the inside of the trap; there will be two hinges per side. These should be welded between 6-10 inches from the top and bottom of the frame. The other side of the hinges will be welded to the doors.
7. Weld one quick link to the outside of the frame on both the left and right sides the same distance from the top as the upper hinge.
8. Use the flat grinder to smooth all welds.

Building the Saloon Doors

1. Lay two of the 15" pieces of 1" square tubing on a flat surface 46 inches apart.
2. Arrange five of the 46" pieces of 1" square tubing in between the two 15" sections spaced 3 inches apart.
3. Weld at the joints and smooth the welds with the flat grinder.
4. Weld one of the quick links to the front right side of the door; this makes the left door when looking from outside of the trap. The quick link should be welded the same distance from the top of the frame as the corresponding quick link on the frame.

Build the second door in the same way.

Assembly of a Saloon Doors

1. Lay the frame on a flat surface so that the side that faces outside of the trap is face down.
2. Set the left door into the frame and butt the edge of the door up to the hinges. Both the top and the bottom of the door should be $\frac{1}{2}$ inch from the top and bottom of the frame.
3. Weld the door to the hinges. Repeat the process for the right door. There should be a $\frac{1}{2}$ inch gap between the door edge and the frame.
4. Using the drill and drill bit, drill three holes in the frame between the door edges on both sides of the frame. There should be one hole in the center of the frame while the other two should be just above and below the hinges. These holes will allow the gate to be wired to two T-posts.
5. Once the doors are in place, stand the gate up and open the quick links. Hook one end of each spring to each quick link and close the links.
6. Spray paint the entire gate to prevent rusting.



Figure 43: A wild pig caught in a coral trap using a saloon door.

Eight Fingered Gate

The following materials are needed to build an eight fingered gate:

- (2) 40" pieces of 1 3/4" pipe
- (2) 36" pieces of 1 3/4" pipe
- (9) 37" pieces of 3/4" rebar
- (1) 29" piece of 2" pipe
- Arc welder, gloves, and welding helmet
- Saws-all with metal cutting blade or electric hacks-all
- Tape measure
- Spray paint

Assembly of the Eight Fingered Gate

1. Lay one of the 40" pieces of pipe on a flat surface.
2. Arrange the two 36" pieces of 1 3/4" pipe perpendicularly to the 40" piece so that they are 30 inches apart.
3. Weld the 36" pipes to the 40" pipe.
4. Using the electric hacks-all or saw-all, cut the 2" pipe in to eight 3 5/8" lengths.
5. Slide each of these lengths over the second 40" piece of pipe, leaving 5 1/2 inches of the 1 3/4" pipe on either end.

6. Weld this piece to the 36" pipes.
7. Arrange each of the pieces of rebar so that they are centered on each of the 2" collars; weld the rebar to the 2" pipes.
8. Using the saws-all cut nine 3½" pieces of rebar.
9. Weld these in between each of the fingers at the bottom of the frame.
10. Spray paint the gate to prevent rusting.



Figure 44: Eight fingered roofer door.

Building Traps

Box Traps

The following materials are needed to build a wooden box trap:

- (14) 12' pressure treated decking boards
- (4) 6' pressure treated 4" x 4" posts
- (5) 6' pressure treated 2" x 4" boards
- 3" deck screws
- Battery powered circular saw
- Cordless drill with star-head drill bit
- Tape measure
- Guillotine gate
- (4) steel T-posts
- 10 gauge steel wire and pliers
- Sledge hammer or T-post driver

Building the Panels of Box Traps

1. Start by cutting 14 pieces of the decking boards into 8' lengths.
2. Lay two of the 6' posts on a flat surface 8 feet apart.
3. Using the drill with the bit, attach seven of the 8' boards to the posts with screws.
4. Start from the bottom of the two posts and screw the first 8' board at the bottom end of the post. The next two boards will be spaced 2 inches apart. The following boards can be spaced 3 inches apart.
5. Screw two of the 2" x 4" boards to the decking boards; place one of them 24 inches from one post and the other 24 inches from the other post.
6. Repeat these steps for the other side panel. The rear and front panels can be assembled during set up.



Figure 45: The side panel of a wooden box trap. Photo taken by MT Mengak.

Set-up of Box Traps

Close in the back of the trap using seven of the remaining 4' sections of decking boards.

1. First, lay each of the side panels on the ground where the trap will be set up.
2. Next, lay the two panels on the ground 45 inches apart to allow the overall width of the trap to be 4 feet.
3. Stand one of the panels up and screw the ends of the 4' pieces of decking boards at 90° angles to the boards on the side panel. Each of these boards should be at the same spacing as the boards on the side panel.
4. Stand the other side panel up and repeat the process.
5. Set the guillotine gate between the 4" x 4" posts. Screw the gate to the posts by running the screws through the cross braces into the posts.
6. From the remaining 4' segments of decking board, screw three of them to the 4" x 4" posts above the door of the trap to close off the open space above the door.
7. Cut eight 6" segments of decking board and use them to fill the open spaces between the slide channels of the gate and the posts.

8. Using a sledge hammer or T-post driver, drive one post at each corner of the trap 1 foot into the ground.
9. Wrap a segment of wire around each of the corner posts of the trap and the T-post and twist the ends together using the pliers. This will prevent pigs from lifting the edges of the trap up and escaping.



Figure 46: A completed wooden box trap. Photo taken by MT Mengak.

Steel Framed Cage Traps

The following materials are needed to build a steel framed box trap with a saloon door:

- (4) 8' lengths of 1½" square tube steel
- (4) 4' lengths of 1½" square tube steel
- (5) 5' lengths of 1½" square tube steel
- Saloon door (see instructions on Page 59)
- (2) 5' x 16' graduated utility panels
- (1) pulley
- Bolt cutters
- Arc welder, gloves, and helmet
- Saws-all with metal cutting blade
- Flat grinder
- Four T-posts, T-post driver or sledge hammer, and 10 gauge wire



Figure 47: Pigs trapped in a steel cage trap. Photo from louisianatrappers.proboards.com.

Building the Steel Frame and Door

1. Start by building the side panels of the frame. Lay two of the 8' sections on a flat surface 5 feet apart.
2. At each end of the 8' sections, weld a 5' piece of square tubing to create a 5' x 8' rectangle.
3. Using the remaining 8' pieces and four of the 5' pieces of tubing repeat the process and build another rectangle the same dimensions.
4. The remaining 5' section will be welded to the frame of the saloon door and welded in to the front of the trap.
5. Once the rectangles are built, join them at the corners by welding the 4' sections of steel tubing between them.
6. In the center of the top-back 4' piece of steel, tack-weld the pulley. This will be used for the trip wire. When welding the front-bottom section, do not weld one of the corners.
7. From the unwelded corner, measure 31 inches and insert the remaining 5' piece of tubing; weld it at the top and bottom.
8. Using the saws-all, cut out the 31" section between the unwelded corner and the 5" section just added.
9. Slide the door into the 31" opening. The bottom of the frame should touch the flat surface that was just worked on.
10. Weld the door frame to the frame of the trap.

Building the Cage of a Steel Framed Cage Trap

1. Spot weld the utility panels to the frame. Start with the sides. Roll frame onto the 5 foot tall side.
2. Measure out an 8" section from one of the utility panels and cut it with bolt cutters.
3. Lay the 5' x 8' section of panel on to the 5' x 8' side of the trap frame.
4. Weld the panel to the frame. The welds should be no more than 4 inches apart.
5. Roll the frame over and repeat the process for the other side of the trap.

6. Measure and cut two 4' x 5' sections of utility panel. Weld one to the back of the trap the same way that the sides were done.
7. Weld the other 4' x 5' section around the frame of the front of the trap.
8. Using bolt cutters, cut out the 31" x 49" section of the panel around the saloon door. Once this section has been cut out, weld the panel to the frame of the door. **DO NOT WELD IT TO THE MOVING PARTS OF THE DOOR.**
9. Weld an 8' x 4' section of utility panel to the top of the trap.

Notice there is not a panel on the bottom of the cage. Commercially manufactured pig traps will put a bottom on the cage to keep users from having to stake the trap down. However, woven wire gets caught between hooves; because of this, pigs tend to avoid stepping on wire. If using a trap with a woven wire bottom, a layer of leaf litter should be spread over top of it. Be sure not to make the leaf covering too thick or the doors will not close properly.

Set-Up of Steel Framed Cage Traps

1. Choose your trap site as discussed in the Trapping Section of this manual.
2. Off load the trap from the truck or trailer used to carry it to the site.
3. Drive one T-Post at each corner of the trap using a sledge hammer or T-Post driver.
4. Wrap wire around the T-Post and the corner of the trap and twist tightly.

Corral Traps

Corral traps are meant to be built on site, typically with two or more people. The following materials are needed to build a corral trap:

- (6) 16' x 5' utility panels with graduated openings—start off with 2" x 6" openings at the bottom and graduates to 4" x 6" at the top.
- Trap door of your choice
- 10 gauge wire
- Linesman or fencing pliers
- (19) 6' T-posts
- T-Post driver or sledge hammer

Set-Up

1. Lay all six of the utility panels on the ground so that the vertical bars of the panels are facing up.
2. Overlap each panel by one grid.
3. Using the wire and pliers, connect the panels. Each joint should have at least eight wires that are twisted across welds of the panels.
4. Once all the panels are wired together, stand them up so that the vertical bars of the panels are facing what will be the inside of the trap.
5. Make a circle out of the entire assembly, leaving just enough space for the door. Circular shaped traps are more effective because there are no corners that a pig can use to climb out.
6. Drive two T-posts into the ground the same width as the door frame.
7. Sandwich the ends of the panels between the door frame and the T-posts, with the T-posts being in front of the door.
8. Make sure the panels are tight against the ground and wire them to the T-posts and the gate. Double the wires here; this is the weakest point in the trap.

9. Drive a T-post into the ground at every point where the panels overlap. The T-posts must be on the outside of the trap; this gives the trap more strength against a charging pig.
10. While one person is driving the posts, another person can be wiring the panels to them. There should be five wires per post, starting from the bottom and working up.



Figure 48: Steel T-Post wired to a typical guillotine door.



Figure 49: More than one person being present during corral trap setup makes the process much easier.

11. After all joints are secured, start at the post at the gate, move 4' down from it and drive another post. Drive one post every 4' after that. Wire these posts to the panel the same as before. There should be a total of nineteen T-posts for this trap.

12. Now that the trap is built, open the gate and pour a line of soured corn around the outer edges of the trap leading to a large bait pile on the inside. This will guide the pigs to the larger bait pile.
13. Wire the gate open and set a game camera up to keep track of how many wild pigs are coming to the trap at any given time.



Figure 50: Pre-baiting an area for wild pig trap.

NOTE: If using the saloon door with this style of trap, use a piece of wire mesh above the door to close the open space. This door is only 4' tall; blocking off the area above will prevent escape of pigs.

Permanent Corral Traps

The set up and materials are the same for this style of trap as the semi-permanent corral trap. The difference between the two is in the posts that are used for construction. Steel posts are used for more portable semi-permanent traps. However, when constructing the permanent corral trap, pressure treated landscape timbers should be used. Permanent traps can be made larger by adding more panels and timbers.

Tips and Troubleshooting

Trapping is not an exact science. Every trap has advantages and disadvantages. Every trapper has tricks and tips to increase his or her success. It is important to be creative and innovative. If an element is not working properly or effectively, try something different. The most common problem reported is of pigs not entering the trap. Pigs in the area may already be educated about traps, which could be due to past failed efforts by you or by a neighbor.