# GUILLOTINE STYLE WILD PIG TRAP GATE (Banta Model)

## (Or How to Build An Effective Pig Trap Gate for Approximately $100)

Billy Higginbotham-Professor and Extension Wildlife and Fisheries Specialist
Texas A&M AgriLife Extension Service-Overton

| ITEM | QUANTITY | COST/UNIT | TOTAL COST |
|---|---|---|---|
| 3/16" chain (1" links) | 4' | $1.50 | $6.00 |
| 5/16" x 2 ½" lag bolts | 8 | $0.38 | $3.04 |
| Gate Door Handle | 1 | $4.17 | $4.17 |
| Trigger Hinge | 1 | $3.25 | $3.25 |
| 5/16 x 5 ½" carriage bolts | 10 | $0.50 | $5.00 |
| 5/16 x 8" carriage bolts | 4 | $1.33 | $5.32 |
| 2" x 1/16" eye screw | 1 | $0.98 | $0.98 |
| 5/16" flat washers | 20 | $0.10 | $2.00 |
| 5/16" nuts | 14 | $0.10 | $1.40 |
| 3" wood screws (25/pkg.) | 1 | $6.58 | $6.58 |
| 3" x ¼" hex bolts/wash/nuts | 4 | $0.25 | $1.00 |
| 1 ¼" bolts/nuts (4/pkg.) | 1 | $0.98 | $0.98 |
| 4' x 8' x ¾" plywood* | 1 | $35.97 | $35.97 |
| 2" x 4" x 10' board | 2 | $5.17 | $10.28 |
| 2" x 2" x 8' board | 1 | $3.57 | $3.57 |
| 2" x 3" x 8' board | 3 | $4.17 | $12.51 |
| 1" x 6" x 12' decking board | 2 | $5.97 | $11.94 |
| **TOTAL COST** | | | **$113.99** |

- **All wood was <u>treated</u> lumber-plywood sheet cut to 4' x 6'**
- **Tools Needed-electric drill, 5/16" x 8" drill bit, ¼ " standard drill bit, Phillips head screw bit, hammer, electric saw, socket wrench set , carpenter's square, tape measure, hacksaw**

- **<u>*Cost savings hints</u>-Use of ½" vs. ¾" plywood would save an additional $10, untreated or old scrap 2 x 4's will save an additional $10 or more on gate cost. Bottom line-If you are a "scrounger" or a "scrooge", you can drop the cost another $10-$20!!!**
- **<u>Total Trap Cost--</u>$115 for gate, $240 for four 5' x 20' (4"x 4" mesh) panels (minimum size of corral trap recommended-may need more panels if pig sounder is large), $100 for twenty 6 1/2' t-posts and $20 for miscellaneous hardware (turnbuckle, coated clothesline, clamps). So, you can build an effective one wide door corral trap for around $475—and just about all of these items have other uses around the farm or ranch once the pig trapping is done!**

**SPECIFICATIONS-Four Foot Wide Gate**

1. Channels for plywood are 6 feet tall and the channels are at least 1" to 1 ½" wider and 1" to ½" deeper than the plywood's dimensions so it can fall freely without binding when tripped. The channels are formed by using a smaller board between 2 larger boards (Econo Gate uses a 2"x 3"x 6' decking board sandwiched between two 1"x 6"x 6' boards). Long (3") wood screws are sufficient to construct the channels for the Econo Gate. The channels should be set slightly wider apart than the 4' wide plywood, therefore the two channels would be set approximately 4' 1" to 4' 2" apart before being horizontally braced. This will make the gate opening almost 4' wide and 4' tall with the plywood gate set in the raised or catch position. This height coincides closely with the height of the horizontal brace placed 4' above ground level on the inside of the gate.
2. The four horizontal braces that attach the left and right channels together are 5' long 2 x 4s. Carriage bolts of various lengths are needed to secure the braces to the channels on both gates.
3. Plywood sheet is cut to 4' wide x 6' tall. This allows 2' of the plywood to remain in the channels when the gate is raise to its open or catch position 4' above ground level.
4. Eight pieces of chain (6" long for Econo Gate) per gate are lag bolted to each side of the channel at 2' and 4' above the ground and a bolt, washer and nut is used to connect and tighten the chains around t-posts set on each side of the gate frame to provide support and hold the gate erect/in place.
5. A shovel will be needed to dig shallow trench in order to sink the bottom horizontal braces flush with the ground so the pigs do not have to step over them to enter the trap.
6. The trigger is 2"x 3" x 4' long. It is cut in half and the two 2' long sections are connected using a hinge. An eyescrew lag bolt is placed near the center on the opposite side of the trigger from the hinge and the trip wire is connected to the eye screw. When the gate is set, pressure on the trip wire should cause the trigger to fold in the middle releasing it and allowing the plywood door to fall within the channels flush to the ground.
7. Cross braces: These are run horizontally and made from 2 x 4s that are all 5 feet long and the two vertical 6' 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' up) on the outside of the gate. Each cross brace overlapped outside of the frame 2" per side to accommodate t-posts for support.

8. A small block of wood (2" x 3" x 12") is bolted horizontally on the inside of the plywood door about 52"-54"" above the bottom of the gate. 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 (See note in #7 above) placed on the inside of the gate about 4 feet off the ground.
9. The 2" x 2" x 8' is cut in half to use as stops in the channels to lock the gate up in an open position. Another option is to drill a hole in the plywood and run a foot long piece of rebar or a heavy bolt thru it as it rests on top of the 6' top horizontal brace to hold the gate open while training the pigs to enter the trap with the door held in the "open position".

*Tip: Build the two channels first, then install them along the sides of the plywood allowing enough room to prevent binding (an extra 1 ½"-2" total width—a 4' stick of 1" pvc pipe run between the plywood and the channel on each side will serve as a temporary spacer andl insure enough slack side to side so the door can drop without binding). Next, attach the 4 horizontal cross braces using carriage bolts, checking the opening with a carpenter's square. It should take one person less than 3 hours to construct the gate from start to finish.*

*Guillotine Gate or "Continuous Catch" Gate ?*

*I started using a guillotine gate in the early 1980's on my first wild pig trap. I quickly moved away from it in favor of the so-called "continuous catch" gates (saloon door, rooter gate, swinging door) because I thought it was costing me pigs—more pigs could not push in using a guillotine once it was tripped and closed like they could a continuous catch gate. Well, recent research has clearly shown that you are going to catch what you are going to catch on the first trip of the gate. Very rarely do additional pigs push open a continuous catch gate once it has been tripped and closes-- even though they can. I have caught many, many pigs with the various continuous catch gates and continue to use them. But, I can build an effective guillotine gate for much less than the cost of any of the continuous catch gates. And remember, regardless of which gate style you choose, you do not have to build or buy a gate for every trap—Sharing gates between traps represents a cost-savings since pigs will not likely be visiting multiple trapping sites on your property at the same time.*

**THE FOLLOWING IMAGES ARE FROM/FOR A DOUBLE GATE* "FOOTBALL SHAPED" TRAP DESIGN**

**(You can just use one gate if you prefer)**

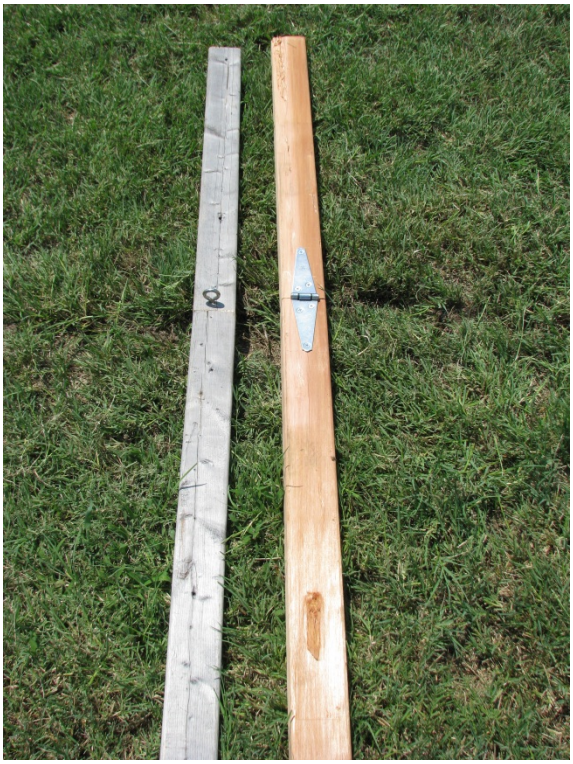
*(Once the first gate is tripped by pigs rooting the trigger, the second gate trips and falls automatically)

Upper left- View from one gate to the other inside the trap. Upper right-Trap set with both gates set to catch. Lower left-Tripwire (plastic-coated clothesline) shown attached to the trigger located on the inside of one gate which runs/attaches to the far end of the trap and also has a dropwire attaching it to the tire --Note second wire (lower center) pulled tight when the gate falls—this action trips the opposite gate trigger. Lower right-Chain and hex bolts are used to secure the gate frame to a t-post set on each side of the gate.

Top Left-Gate Frame (note cross brace 4’ above the ground faces inside of trap

Top Right-Closeup of channel bolted to bottom cross braces. A shallow trench should be dug to “bury” these cross braces flush to ground level

Left-Closeup of cross braces with one 4’ off the ground that faces inside of trap and one at top 6’ above the ground facing out and away from trap. Channels are formed by sandwiching a 2” x 3” x 6’ board between 2 decking boards measuring 1” x 6” x 6’ and securing all 3 boards together with wood screws from both sides.



Top Left-Inside of gate door. Note block to hold gate up with trigger resting against it. Top Right-Outside of gate door. Note handle at bottom to raise the gate. Lower Left-4' triggers (front side (L) shows eyebolt and back side (R) shows hinge). Lower Right-Tripwire secured to trigger and to the far end of the trap near gate. A dropwire secures the tire to the main wire. Bait is placed inside of tire and gates tripped by pigs rooting/moving the tire to access bait.

**Modified Gate Design – 8’ Wide Door for Single Door Trap**

This version simply turns a full sheet of ¾” plywood sideways to make an even wider doorway. The cost for this gate vs. the 4’ wide guillotine gate detailed previously is slightly higher because of additional lengths of boards in the frame and the need to place a panel piece 2’ tall x 16’ long above the door to prevent escape over the doorway once the door is tripped and pigs are caught inside. See accompanying photos.