

AUTO-DROP TRAP INSTRUCTIONS



NEIGHBORHOODCATS



Materials

- Neighborhood Cats Drop Trap (Tomahawk [Model DT-1](#))
- [Corrugated plastic sheet](#), .157" (4mm) thick - need 4' x 4' but typically comes in 4' x 8' sheets
- 7/16" diameter wooden dowel, 48"L
- 1/4" diameter [aluminum dowel](#), 36"L (*Note: a similar size wood dowel will work, but will warp over time and a trapped cat could break it, creating an impalement hazard*).
- 3/8" diameter wood dowel, 48"L (you'll only need three inches).
- [1/8" diamond braided nylon string](#), 40 lb strength
- Small [swivel pulley](#)
- [Concrete bricks](#) (2)
- [Small litter pan](#), 14"L x 10"W
- Clothes pins (3)
- One [over-sink dish drying rack](#) 17 1/2" x 11.8", or two [brightroom stainless steel sink mats](#) 10 1/2" x 12 1/2", or similar product – this is for the screen which will measure approximately 17" x 12".
- Cable ties (multiple 4" and 8")
- (*optional: drop trap base*) 3/4" thick plywood board, 40"L x 38"W

Tools

- Strong scissors
- Drill with 3/16" & 1/4" bits
- Hacksaw
- Awl
- 48" yardstick
- Sharpie/marker

Preparation



Photo 1

- 1) With the yardstick, Sharpie and scissors, cut from the corrugated plastic sheet one 35" L x 35" W piece and two 22" L x 12" W pieces.
- 2) With the hacksaw, cut a 2 3/4" piece off the end of the 3/8" diameter wood dowel.
- 3) With the Sharpie, 1/2" in from one end, make a mark in the center of the 2 3/4" piece of the dowel. Then, with the 3/16" bit, drill a hole through the piece of the dowel at the mark (*photo 1*).
- 4) **(Optional – if you're using a base):**
 - (a) The base is 40" L from front to back and 38" W from side to side (*photo 2 - next page*). In one back corner, use the 1/4" bit to drill two holes, one 4" in from the side and 1 1/2" from the back, the second also 4" from the side and 2 1/2" from the back (*photo 3*). Repeat in the other back corner.
 - (b) In one front corner of the base, drill two holes. One is 3 1/2" in from the front and 2 1/4" in from the side, the other also 3 1/2" from the front of the trap and 3 1/4" from the side. Loop an 8" cable tie through the two holes, leaving the excess tie on the bottom of the base (*photo 4*). Repeat on the other front corner.

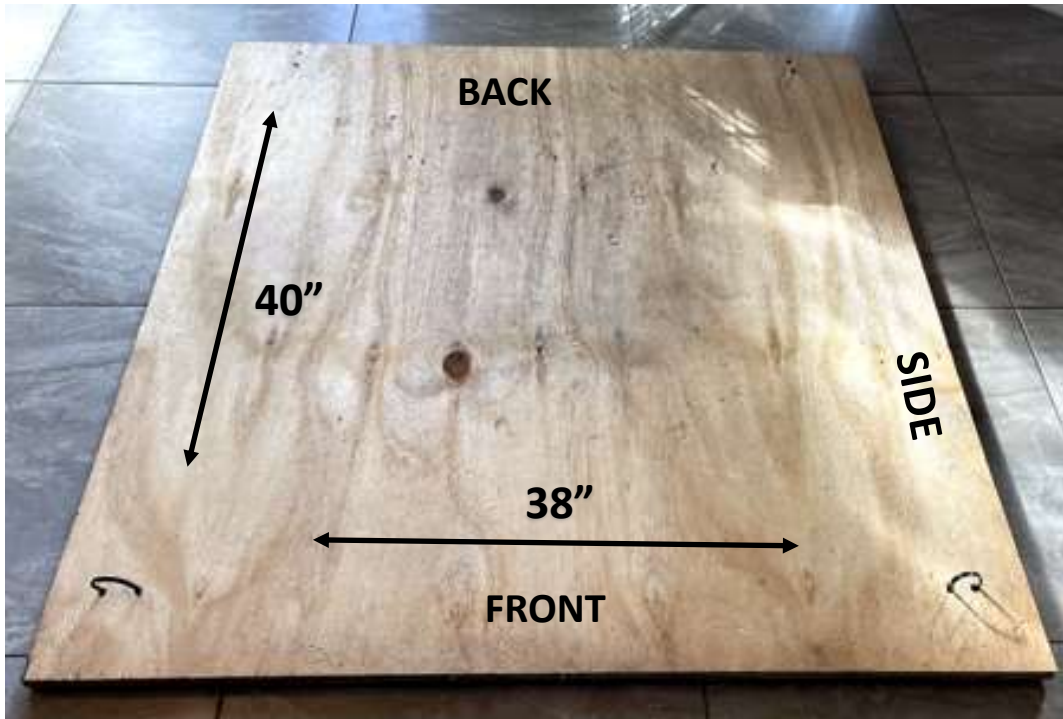


Photo 2



Photo 3

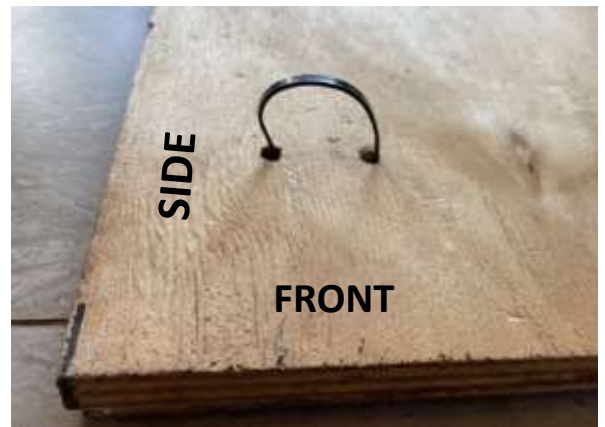


Photo 4

Assembly

Trip plate/trigger

- 1) Join the two 22" L x 12" W pieces of corrugated plastic together. Lay one piece on top of the other, then punch holes in the corners with the awl and tie the pieces together with 4" cable ties, leaving the extra length of the ties on one side, which will now be the bottom of the trip plate (*photos 5 & 6*).
- 2) On the top of the trip plate, towards the upper right (*photo 7*), make a mark 7" in from the right side and 3/4" in from the back. Punch a hole through with the awl.
- 3) Run one end of the string through the hole from the top and secure with a knot to the bottom of the trip plate (*photo 8*).



Photo 5 - top of trip plate



Photo 6 - bottom of trip plate

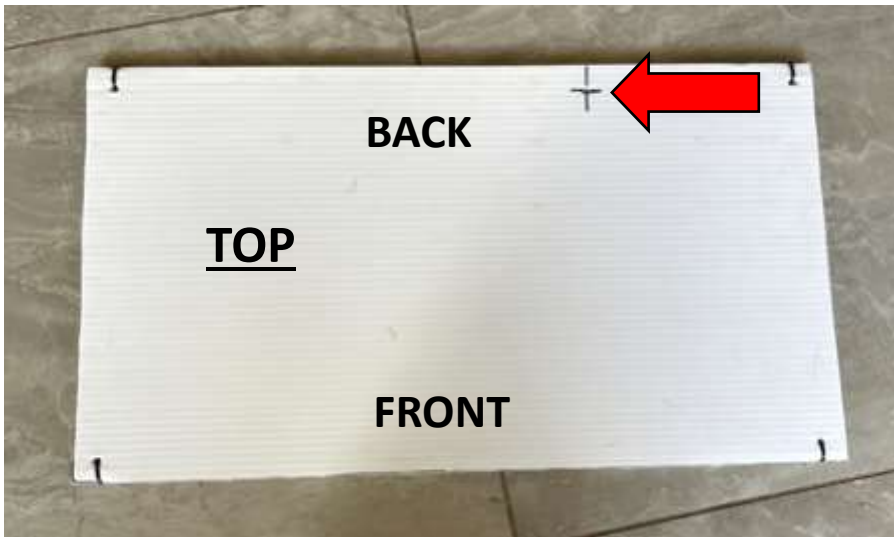


Photo 7



Photo 8

- 4) With the yardstick, measure 40" of string from the top of the trip plate and mark with the Sharpie (*photo 9*).
- 5) Cut the string, leaving several inches of extra length beyond the 40" mark.
- 6) Push the end of the string through the trigger hole and knot it so the 40" mark is next to or inside the hole (*photo 10*).

Photo 9



Photo 10

Attaching the trip plate/trigger to the drop trap

- 1) Along the front edge of the trip plate (the string is at the back edge), punch holes with the awl at three marks: (a) 1" in from the front and 2" in from the left, (b) 1" in from the front and 11" in from the left and, (c) 1" in from the front and 2" in from the right (*photo 11*).
- 2) Loop 8" cable ties loosely through each hole, leaving the extra length of the ties on the bottom. Don't tighten the loops (*photo 12*).



Photo 11



Photo 12

- 3) Unfold the main frame of the drop trap but leave the roof off.
- 4) Fold up the prop stick and anchor weight flap on the main frame and secure to the frame with 4" cable ties (*photo 13*).
[NOTE: if you are assembling the trap in the field and will not be using a base, leave the anchor flap down.]



Photo 13

- 5) Place the trip plate/trigger inside the drop trap towards the back left, approximately 1" from the back and 2" from the left side (*photo 14*).
- 6) On the righthand side of the drop trap (looking from front to back of the trap), on the bottom row of wire grid squares, locate the 14th square from the back - it's the grid that spans 13" to 14" from the back of the trap (*photo 15*).
- 7) Insert the 7/16" wood dowel through the 14th grid square, the 8" cable tie loops at the front of the trip plate and the lefthand side of the drop trap, also at the bottom row grid 14 squares from the back. Extend each end of the dowel approximately 6" out from the trap's sides (*photo 16*).



Photo 14



Photo 15



Photo 16

- 8) Rotate the trip plate forward so it flips over and the bottom is facing up (*photo 17*).
- 9) Position the dowel so it is resting on top of the bottom edge of the trip plate, then tighten the cable ties , leaving no slack (*photo 18*)
- 10) Flip the trip plate towards the back of the trap so the top is upright again. Note how the front edge of the trip plate now sits on top of the dowel, not next to it (*photo 19*).

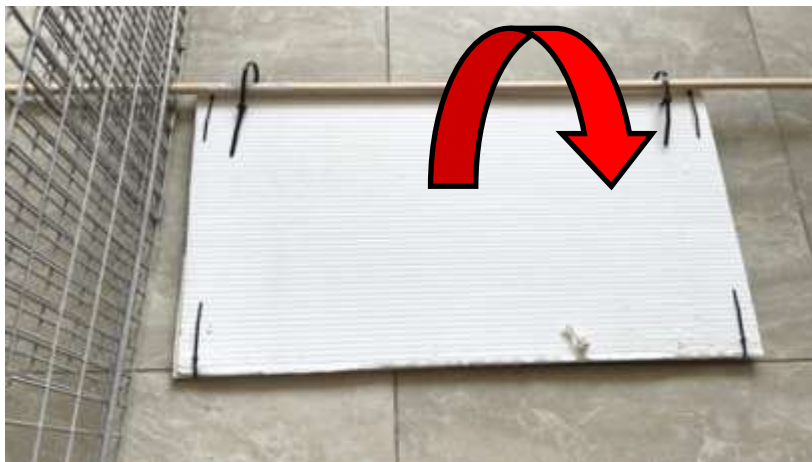


Photo 17



Photo 18



Photo 19

Pulley

- 1) Place the roof on top of the drop trap without engaging the spring clips.
- 2) On the back of the roof, locate the grid 18 squares in from the left side of the trap (the side where the trip plate is) and 2 in from the back.
- 3) Raise the back half of the roof and attach the swivel pulley with an 8" cable tie to the bar between the 2nd and 3rd grids in (*photos 20 & 21*).
- 4) Run the trigger and string through the pulley (*photo 22*).



Photo 20



Photo 21



Photo 22

Screen

- 1) The screen should measure approximately 17" x 12". In these instructions, we've used two kitchen sink mats 10 1/2" x 12 1/2" and joined them together with 4" cable ties to create the correct size screen (*photo 23*).
- 2) On the roof, on the farthest right-side row of grid squares, count 15 squares from the back (the grid which sits between 14" to 15" from the back - *photo 24*).
- 3) Raise the front half of the roof and attach the screen to the roof with three 8" cable ties. The screen extends from the right side of the trap towards the center of the trap. Don't tighten the cable ties all the way but leave enough slack so the screen can swing freely (*photo 25*).



Photo 23



Photo 24



Photo 25

- 4) On the top row of wire grids on the righthand side of the trap, count 15 grids from the back and 2 down from the top. Through that grid and the edge of the screen, very loosely loop an 8" cable tie. The screen should still be able to swing forward enough to slide a litter pan under it, but the cable tie should limit its range of motion somewhat to help avoid injury to a frantic cat (*photo 26*).



Photo 26

Trigger rod

- 1) Run the aluminum rod side-to-side through the trap, inserting through the top corner grids at the front of the trap (*photo 27*).



Photo 27

- 2) At either end, the rod should extend approximately one inch (*photo 28*). Using two or three 4" cable ties, tightly attach the rod to the bottom rear corners of the grids. Make sure the rod is securely in place and difficult to move or slide (*photo 29*).



Photo 28



Photo 29

Roof

- 1) Engage the spring clips to attach the drop trap's metal roof.
- 2) Place the 35" x 35" piece of corrugated plastic onto the roof. With the awl, punch holes in each corner and then attach the sheet to the roof with 8" cable ties. Be sure the front of the roof does not block the drop trap's side door tracks (*photos 30 & 31*).



Photo 30



Photo 31

Base (optional)

- 1) Place the auto-drop trap on top of the base with the side door facing the front.
- 2) In each back corner of the base, straddle the back edge of the trap between the two drilled holes (*photo 32*).
- 3) Then in each back corner, run an 8" cable tie through the bottom grid of the trap and the two holes in the base, then tighten (*photo 33*).

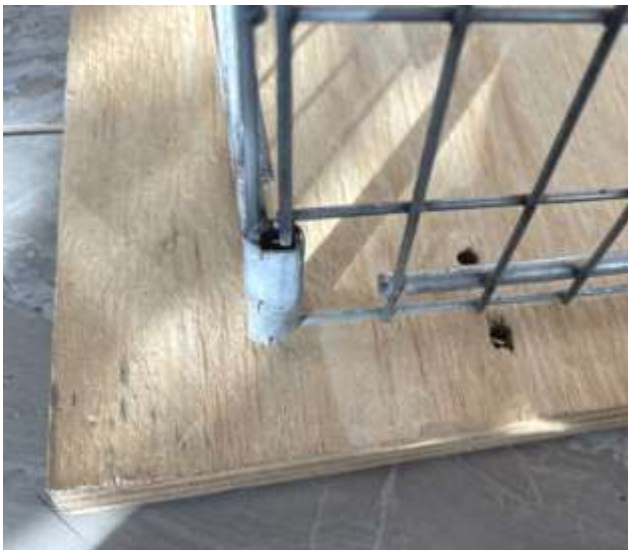


Photo 32



Photo 33

- 4) In each front corner of the base, run an 8" cable tie through the base's loop then through a grid on the second row up on the front of the trap (*photo 34 - next page*). Tighten the ties and make sure the trap is now securely on the base and can't be pushed off it.



Photo 34



Last step for assembly (with or without the base)



- 1) **IMPORTANT!!** To prevent the trip plate from sliding out of position, place a concrete brick (or similar) at both ends of the trip plate dowel (*photo 35*). Don't press the bricks against the ends, but leave only a very small amount of space between the brick and the dowel, approximately 1/8" (*photo 36*).
- 2) If you're not using a base, weigh down the anchor flap, being sure not to interfere with the trigger plate's dowel.



Photo 35



Photo 36

Setting the trap

- 1) Put bait in the litter pan.
- 2) Reach into the drop trap, swing the screen forward and up, and place the litter pan in the back right corner of the trap, behind the screen and the trip plate dowel (*photo 37*). The long side of the litter pan should run parallel to the right side of the trap. Attach the pan to the side and back of the trap with clothes pins, two on the side and one in the back (*photo 38*).



Photo 37



Photo 38

- 3) Run the trigger and attached string through the screen (near the roof) and towards the top of the side door opening (*photo 39*).



Photo 39

- 4) Place the side door backwards in the side door tracks and lift almost all the way up.
5) The trigger goes under the aluminum rod and through the side door, 2nd grid row up from the bottom of the door, 6th or 7th square in from either side. The front of the trigger protrudes approximately 1/2" out from the side door (*photo 40*).



Photo 40

- 6) The trap is now set. When the trigger is in the correct position, the side door of the trap is pressing down on the front of the trigger, while the back of the trigger is pushing up against the aluminum rod. This should cause the trigger to be close to parallel to the ground (*photo 41*). If the trigger is pointing noticeably upwards, it's not correctly set and could jam. If the trigger is pointing clearly downwards, the door could drop too soon if a cat brushes against the trap on the way in. Also when the trigger is correctly set, the back of the trip plate should be raised.



Photo 41

- 7) After setting the trap, test it once. Place a dowel or similar object through the back of the trap and press down on the trip plate. The trigger should pull back as the trip plate comes down, causing the side door to drop. Re-set the trigger and you're good to go!
- 8) To disassemble, pull the trip plate dowel out of the trap and off the trip plate, and cut the cable ties attaching the various parts to the drop trap. Once you have all the parts made (including the trip plate, trigger, screen), it should take about 15 to 20 minutes to re-assemble in the field.



Questions? Contact us at info@neighborhoodcats.org