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Use an Electric Unwelcome Mat to Deter Bears

Bear Management Program

The Florida Fish and Wildlife Conservation Commission (FWC) recommends people secure anything that might attract a bear. Bears may enter yards and approach houses, sheds, or barns looking for food. An electric unwelcome mat is a highly effective way to prevent bears from accessing parts of your property and can reduce or eliminate human-bear conflicts. Electric unwelcome mats works in the same way as an electric fence: they deliver a brief electric shock every 1 to 2 seconds to cause momentary pain, and then allow enough time for the animal that made contact to safely retreat.

Electric unwelcome mats can be very effective at deterring bears from specific areas, like around a garbage can (A) or in front of shed door (B). Below is a list of materials, tools, and instructions to build an electric unwelcome mat, however, these instructions are only to be used as a guide. Be sure to follow the *specific* manufacturer instructions provided with your electric fence charger. For more information on reducing human-bear conflicts, visit MyFWC.com/Bear.

Tools Needed:

A) Wire cutter

B) Screwdriver

C) Electric fence voltage tester

D) Bolt cutters

E) Hammer

F) Hacksaw

G) Extension cord *(only if using AC-powered electric fence charger and charger cord cannot reach outlet)*

Materials Needed:

A) 4" X 4" 4-gauge wire panel

B) 1/2" thick rubber stall mat

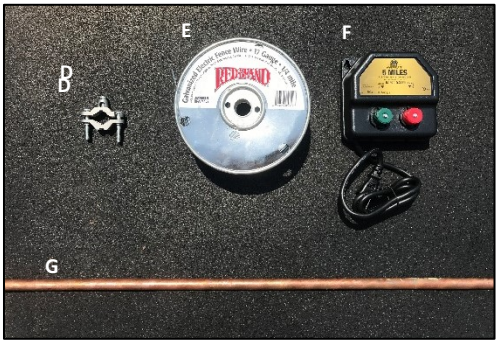
C) 6' T-post

D) Ground rod clamp

E) 17 to 14-gauge wire

F) 2 to 5-mile range electric fence charger (AC-powered pictured)

G) 6' grounding rod



NOTE: The amount of wire panel (A) and size of the mat (B) needed depends on the area you are trying to protect. For example, if you are trying to protect a 95-gallon capacity garbage can, the panel and mat must be large enough that a bear must step on the panel and mat in order to reach the can. Allow for at least 2' of panel and mat extending out from all sides of the can. For most doors and windows, a 4' by 4' section of panel and mat should be appropriate. The distance you place the charger (F) from the mat (B) and ground rod (G) will dictate how much wire (E) you will need.

Step 1: Determine the size you need for the unwelcome mat (see above *NOTE*). Cut the wire mesh with bolt cutters to the desired size. Then, use a hacksaw to cut the rubber mat, allowing the mat to extend at least 1" past the wire mesh panel on all sides.

Step 2: Place the rubber mat in the location it will be used and lay the wire panel on top of it (You do not need to attach panel to the mat).

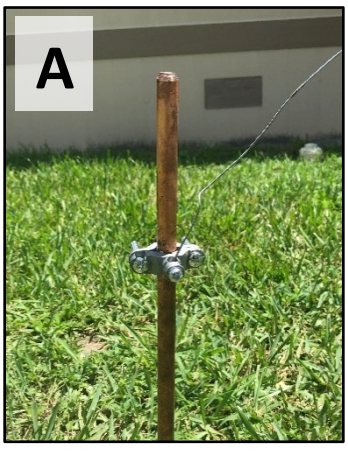
Step 3: Use a hammer to drive the T-post into the ground in an ideal location for the charger. Attach the charger to the T-post using a zip tie or some wire.

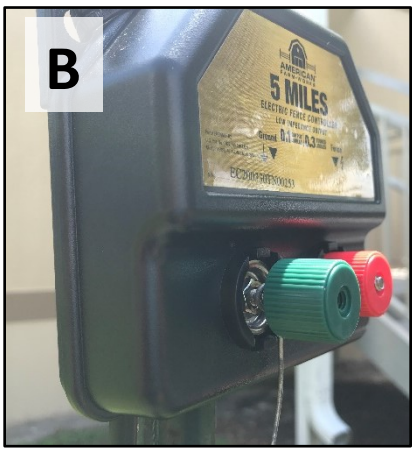
Note: Place the charger in an area where you can easily access it to turn it on and off when desired.

Step 4: Use a hammer to drive the ground rod into the ground, leaving it a few inches above ground level. Attach the ground rod clamp to the ground rod.

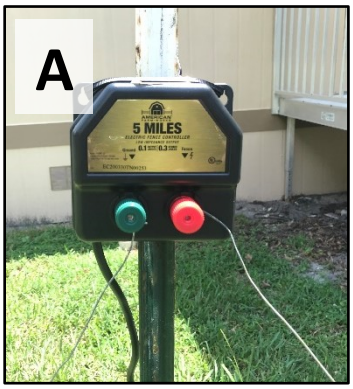
Note: If you are working in a dry site you may need to regularly wet the ground around and under the ground rod to ensure the fence carries enough charge.

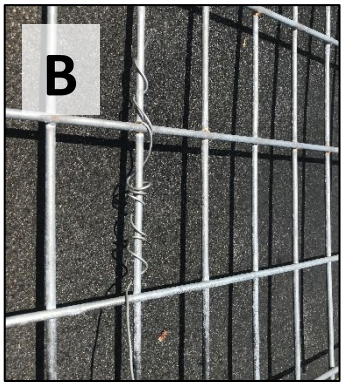
Step 5: Measure the length from the charger to the ground rod and cut that length of wire using the wire cutters. Attach one end of the wire to the ground rod using the ground rod clamp and a screwdriver (A). Attach the other end of that wire to the ground charger terminal on the charger by wrapping the wire around the screw (B). The charger terminals are labeled ground and fence.





Step 6: Measure the length from the charger to the panel/mat and cut that length of wire using the wire cutters. Attach one end of the wire to the fence charger terminal (A) and attach the other end of the wire to the panel by wrapping it around a side of the panel several times (B).





NOTE: Attach the wire to the panel where it is unlikely to be stepped on by the bear; the corner closest to the electric fence charger usually works well. Ensure that the wire does not touch the ground and the T-post.

Step 7: Make sure there is no debris on the rubber mat or the panel, then follow the charger's manufacturer's directions and plug in the charger. If the charger cord does not reach the outlet, use an outdoor-rated extension cord. Use an electric fence voltage tester to check the electrical charge of the mat. The charge should be at least 4000 volts.

NOTE: The bear in this picture previously accessed this garbage can weekly. After setting up the electric unwelcome mat, the bear returned and received a shock, preventing it from accessing the garbage can and limiting its visitation on the property.