

Deluxe Gourd Rack Winch Add-On

Thank you for purchasing this product from the Purple Martin Conservation Association. Your purchase helps support the education, conservation, and research projects of the PMCA. We hope this product will give you many seasons of use. We're glad to have you as a partner in martin conservation.

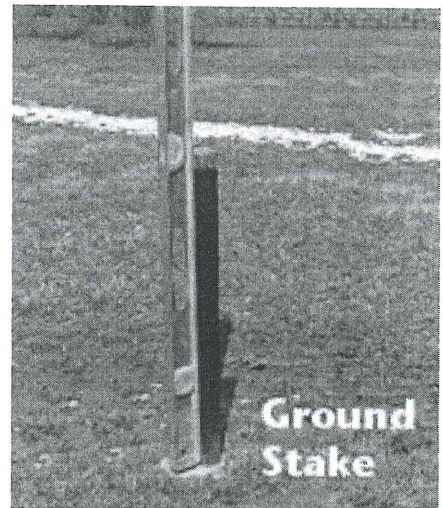
Please read all instructions carefully before assembly!

Location of pole: Your gourd rack should be placed as far away from trees and bushes as possible. The average minimum distance housing can be placed from trees and still attract martins is about 40 feet (southern landlords can get away with less). Martins require wide-open flight paths around their housing. Also, housing should be placed no further than 120 feet from human housing — martins like to be near humans — and no closer than about 25 feet.

Step 1: Digging the Hole and setting the Ground Stake

- Using a posthole digger, dig a hole 36" deep by 9" wide.
- Put the ground stake in the center of the hole, **painted end up**. (The ground stake is the 1-1/2" X 1-1/2" square black steel tube with a long piece of angle iron welded to it.) The end of the ground stake with the long piece of welded angle iron should be the end that sticks out of the ground. (The end with the welded nut goes in the bottom of the hole.)
- Add two 80# bags of wet, premixed concrete and fill the hole to ground level. The lower edge of the bottom section of the pole will rest on the concrete. Depending on soil conditions, a larger hole with more concrete may be needed. Be sure to leave 21" of the ground stake above the concrete.

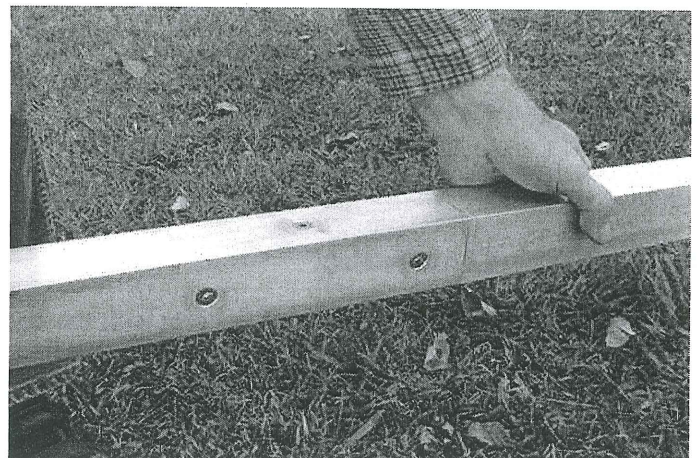
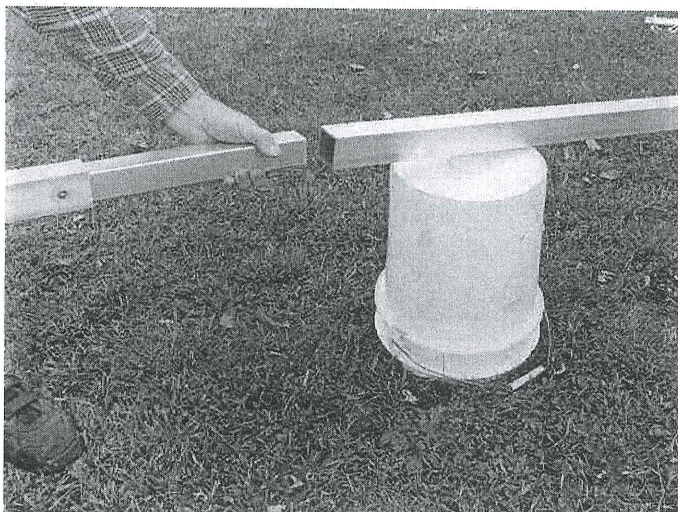
Important: fill the ground stake itself with cement to prevent water from accumulating and freezing inside. This also keeps the inside of the ground stake from rusting and makes it stronger.



The gourd rack pole will be placed over this ground stake later in the assembly process. Wipe off any wet cement from the outside of the ground stake above ground level; the pole will need to slide over this ground stake smoothly. Before the cement hardens, make sure the ground stake is vertically plumb by checking it on at least two planes with a long bubble level. (See photo at left.) Allow the cement to harden for 48 hours. Coat the outside of the ground stake with oil or grease.

Step 2: Assembling the pole

Lay the bottom section of pole on an overturned 5-gallon bucket (or similar object). Slide splice section of pole into bottom section until both sections meet (See two photos below). The two sections of pole are held together by friction and gravity once erected.



Step 3: Sliding Hub on Pole

Slide hub assembly over the pole so the quick link with pre-attached cable is towards the top. The hub assembly is completely assembled at the factory with the quick link attached at the top of the hub.

Step 4: Adding the Pulley Extension

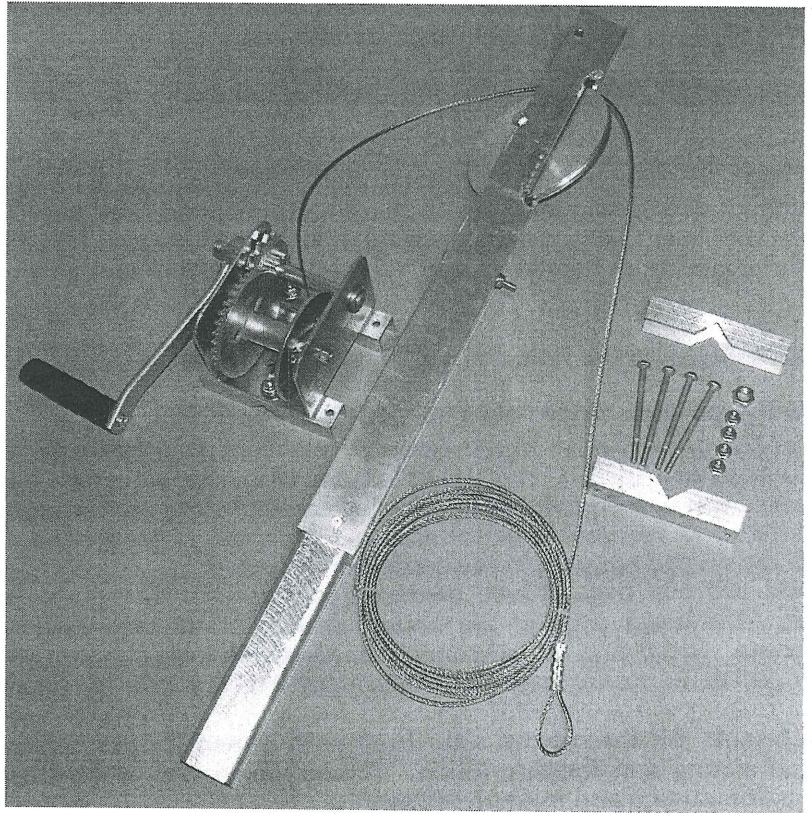
Slide 24" extension, with the 6" pulley installed, into the top of the aluminum pole section. This extension needs to be turned so that the cable is at the same corner as the quick link. **Make sure that the cable does not twist around the pole.** The extension is held into place by friction.

Step 5: Attaching Handle to Winch

Fasten the winch handle to the winch using the winch manufacturer's instructions.

Step 6: Attaching Winch to Pole

Fasten the winch to the aluminum pole using two aluminum u-channels and $\frac{1}{4}$ " x 3-3/4" bolts with flange nuts. The u-channel has a V notch. The corner of the aluminum pole fits into the V notch. When mounted, the winch will be at the corner of the aluminum pole. **Important: mount the winch at the same corner as the cable that extends downward.** The winch can be mounted at any desired height. A suggestion: nest checks will be easier if the winch is mounted close to the ground with a Quick Release Pole Guard mounted above it.



Step 7: Assembling Perch Rods

Slide both perch rods into the holes at the top of the extension. Center the rods and secure with two 10-24 x $\frac{1}{4}$ " set screws.

Step 8: Inserting Top Cap

Insert black plastic cap into the top of the extension. **Without the cap, the top of the pole is open and exposed; it will fill with rainwater. If the water freezes in the pole, the pole will split.**

Step 9: Winding the Cable into the Winch

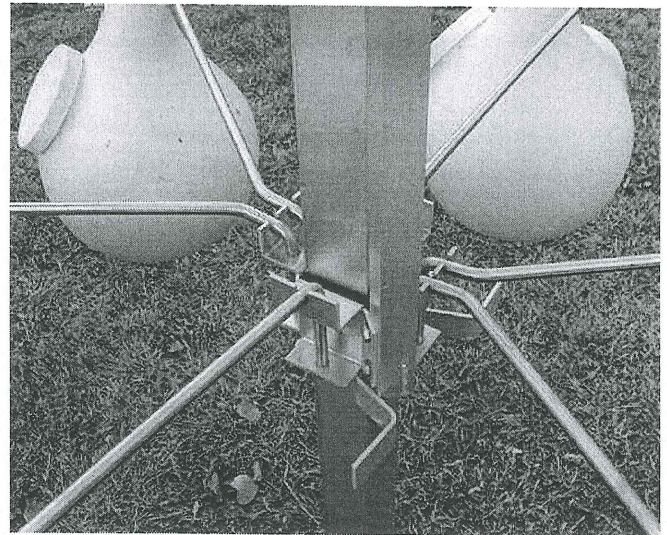
Wind the excess cable into the winch. The cable should be snug. **It is important that the cable lay inside the groove of the pulley located at the top of the pole.**

Step 10: Erecting the Pole

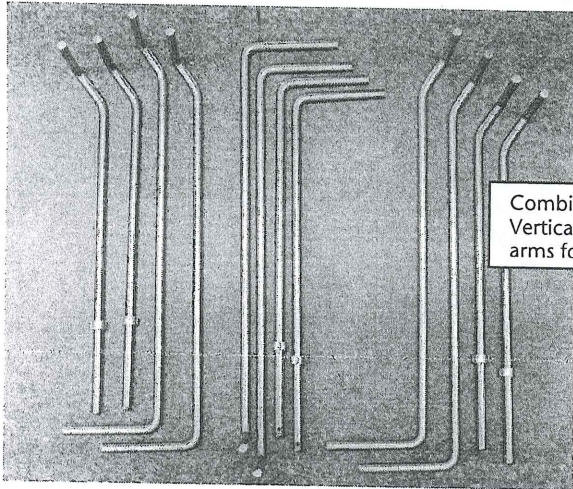
Place the pole vertically over the ground stake and slide it down to ground level.

Step 11: Attaching Arms to Hub

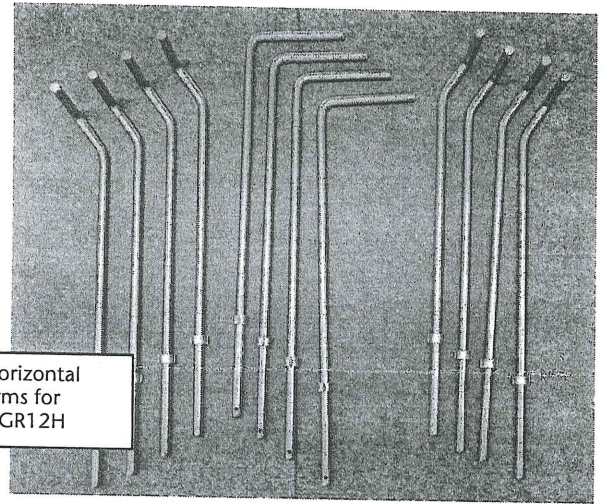
Attach arms to gourd rack. The end of the arm with the small hole drilled in it is the end that the gourd will attach to; therefore, insert the opposite end into the hub assembly. [PLEASE NOTE: The Deluxe Gourd Racks come with 3 kinds of arms: straight, right bend, and left bend. The straight arms



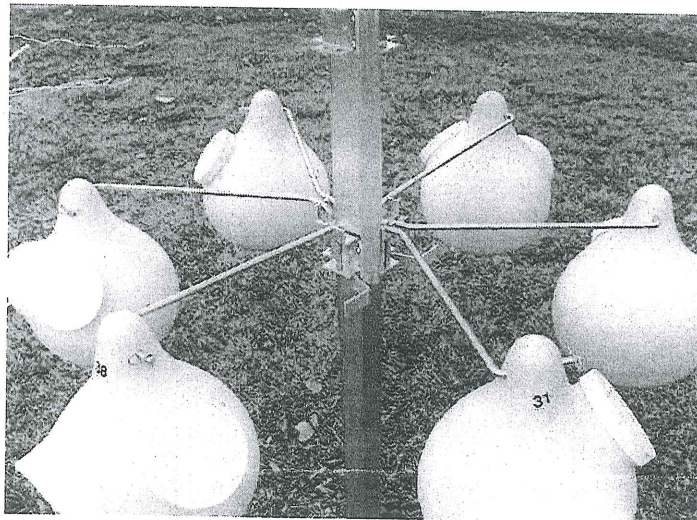
go into the hub side with *single* holes. Right bend arms (bundled with red rubber bands) go into the hole on the right side of hub bracket with two holes, as looking out from the pole (left side as landlord looks at hub). Left bend arms (bundled together with blue rubber bands) go into the hole on the left side of the hub bracket with two holes as looking out from the pole (right side as landlord looks at hub)].



Combination
Vertical/Horizontal
arms for DGR12C

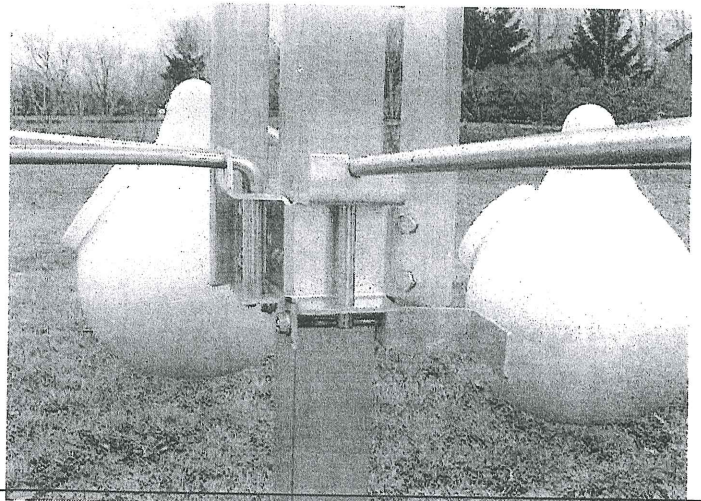


Horizontal
arms for
DGR12H



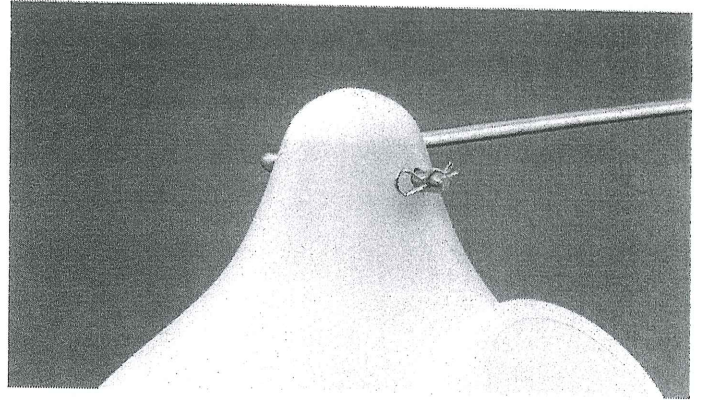
Step 12: Seating the Arms

Make sure the gourd arms are pushed all the way down in the U-shaped slot, as shown in the photo.



Step 13: Attaching the gourds

Slide the gourds on the arms and insert one hitch pin (1) per arm to keep the gourd from sliding off. Vertically hung gourds may need to have their hanging holes enlarged with a 3/8" drill bit to fit on the arms. Horizontally hung gourds will need 2 hitch pins inserted per arm, one on each side of the gourd.



Caring for your gourd rack:

It is **HIGHLY** recommended that the pulley be oiled once a year to keep them functioning properly (and to prevent them from squealing) and to wax the aluminum pole once a year with car wax. Remove the nests and hose out the gourds at the end of the season (late August or early September). Bring the gourds in out of the weather and store them in an outside shed. It's also recommended that landlords bring the pole, arms and hub in out of the weather at season's end. Remove the arms before disassembling the upper pole system for winter storage. Check all the bolts and fasteners to make sure they are secure before reinstalling the Deluxe Gourd Rack each spring.

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