



Make Your Wildlife Feeder Bear Resistant

Updated October 2012



Black bears are opportunistic foragers readily attracted to food sources provided by humans. The increasing use of wildlife feeders for deer and other animals has brought about increased use of these sites by bears. Bears have learned that feeders are an easy source of food and may destroy feeders while trying to gain access to the contents. These situations are not only costly for the persons operating the feeder; they are harmful for bears, too. Once bears begin to associate food with people, they start to lose their natural fear of humans. Such conditioned bears tend to become nuisance animals, making human-bear conflicts inevitable. The best method for preventing bears from approaching human use areas is to remove all food sources. If such removal is not possible, the next best option is to make food unattractive or inaccessible to bears.

Whenever possible, feeders and food plots should be located away from swamps and creeks. These areas are the preferred habitats of bears, and feed sites close to them invite visits from hungry bears. Also, locate the feed site away from any heavy cover, the further the better. Bears often follow heavy cover while traveling. Remember, bears generally are timid. Encountering a bear should not be cause for fear, but you should exercise caution. If a bear approaches, making loud noises and waving your arms usually send them running.

Two methods of dealing with bear damage of wildlife feeders are recommended. The first method is to use food plots instead of feeders. Food plots are cheaper, always present, replicate more natural food sources, and provide better nutrition for wildlife than corn and other grains. If you still wish to directly feed corn, soy beans, rice bran or other grains, install automatic feeders instead of putting the feed directly on the ground in piles. Many types of timed feeding devices are available, ranging from homemade mechanisms to those sold at feed stores or hunting supply outlets. Timing devices cost between \$30 and \$250 and can be found at local hunting supply stores or by searching the internet. Whatever type is used, the most critical factor in making a feeder bear-resistant is its placement.

Bears are powerful, agile, and resourceful, necessitating that any feeder be placed out of their reach. One way to prevent a bear's access to your feeder is to suspend it from a metal post (Figure 1). The bottom of hanging feeders should be a minimum of 8 feet above the ground

(preferably 10 feet). Remember to seal feeder tops tightly to keep grain dry and unfermented.

The metal post should be buried to a depth of 4 feet and set in concrete. A square hole should be dug to increase resistance and prevent a bear from pushing the post over. The cost of materials for this design are less than \$100.00. This price includes: a 20' piece of 3" schedule 40 steel pipe, 3 80-lb. bags of Quickcrete, and a boat winch.

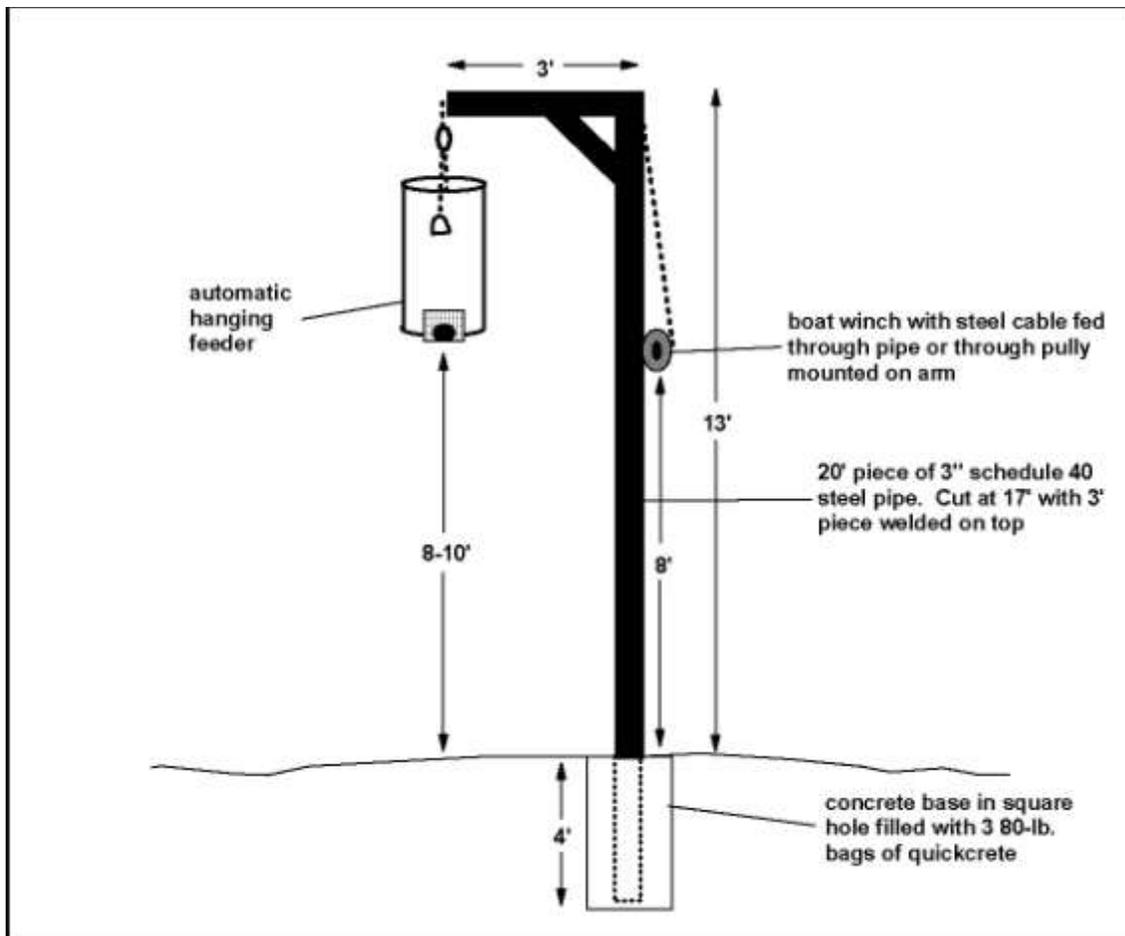


Figure 1. Diagram of how to hang a wildlife feeder out of the reach of bears.

To help offer additional options, FWC launched the “Bear-Proof Your Feeder Competition” in November 2010 for the public to submit their bear-proof wildlife feeder designs. The extremely successful contest ended on April 22, 2011, offering ten field-tested submissions with effective yet varied features and design strategies for bear-proofing wildlife feeders. Many entries were similar to the design already posted on the FWC website,

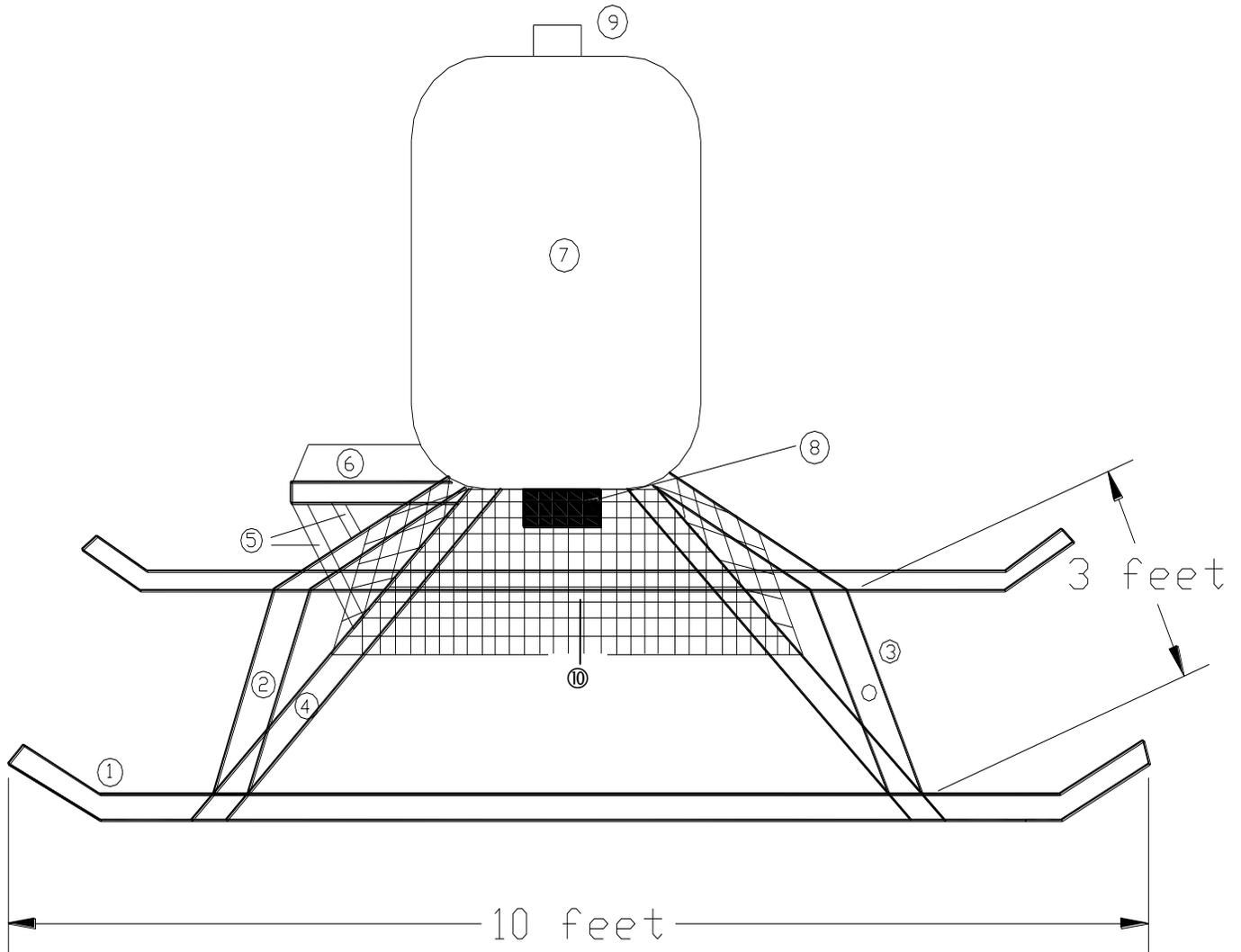
reinforcing FWC's belief that the design above is an effective way to bear-proof wildlife feeders. Grand prize, second place, and third place winners were selected. The winning designs are featured below.

Hopefully, one of these tips will reduce bear damage to your feeder. For further information, call the Florida Fish and Wildlife Conservation Commission at the regional office nearest you:

Panama City	850-265-3676
Lake City	386-758-0525
Ocala	352-732-1225
Lakeland	863-648-3200
West Palm Beach	561-625-5122

If you suspect illegal activity, call the Wildlife Alert Hotline at 1-888-404-3922.

Skid Design By Donald Pierce



Materials:

2 galvanized steel skids, approximately 10 feet long (①)
1 Metal crossbar, approximately 3 feet long (②)
1 Metal crossbar, approximately 3 feet long with hole drilled in the center (③)
4 metal supporting rods, approximately 6 feet long (④)
2 metal supporting rods, approximately 2 or 3 feet long (⑤)
1 Flat, square metal platform for battery (⑥)
1 100 gallon empty propane tank, or other feed barrel (⑦)
1 Wildlife feeder timer (⑧)
1 PVC (or other crack proof material) cap for feed tank (⑨), if needed
1"X ½ " galvanized wire (⑩)

Read through instructions *before* beginning assembly.

1. Take the two skids ① and lay them parallel to each other approximately 3 feet apart, or the length of the crossbars.
2. Perpendicularly weld one end of crossbar ② approximately two feet from the back end of one of the skids ①. Perpendicularly weld one end of crossbar ③, the crossbar with the hole in the middle of it, approximately two feet from the front end of the same skid ①. Take the other end of crossbar ② and make sure it is perpendicular to the second skid ① and weld to the second skid, about 2 feet from the back end. Make sure crossbar ③ is perpendicular, then weld the other end of crossbar ③ to the second skid, approximately two feet from the front end.

Note: The hole drilled in crossbar ③ will need to be big enough to accommodate the hook to be used to connect the feeder to a vehicle to move it.

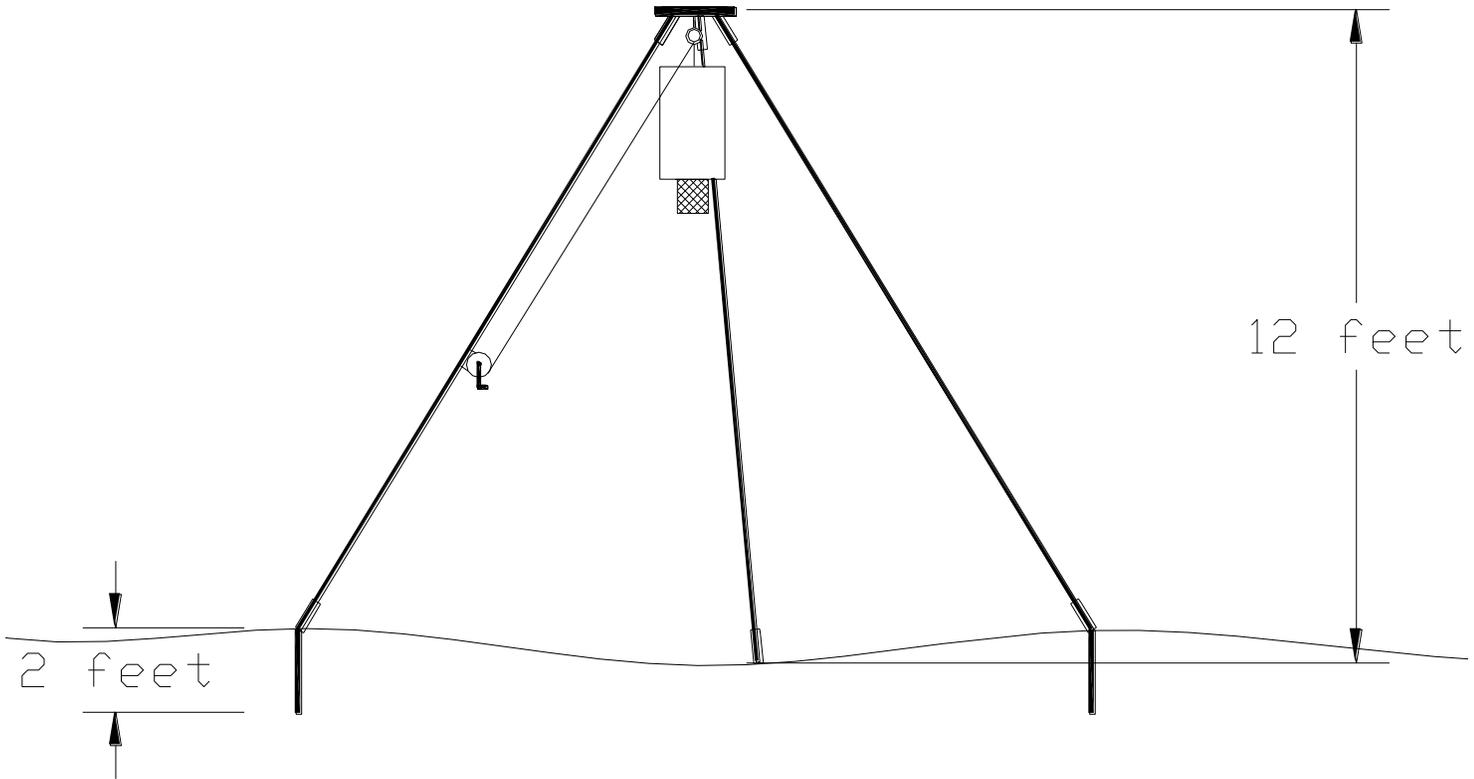
3. Place a supporting rod ④ slanted vertically upward at approximately 45 degrees from the skid ① and leaning in towards the interior of the two skids. Take one end of one of the supporting rods ④ and weld it to one of the skids ① approximately 2-3 feet from the back end of the skid. Repeat this process for the other three supporting rods. All four supporting rods ④ will need to be the same length and need to be pointed upwards at the same angle and pointed in towards the middle of the skids ① in the same way so the large feeder barrel ⑦ can be attached to and be supported by them.
4. Before continuing, make sure the feeder tank ⑦ has a bear-proof cap ⑨. A screw-on cap made from crack-proof material is preferable, such as PVC.
5. Attach feeder device ⑧ to bottom of tank ⑦ if it is not already attached.
6. Weld the tops of all four supporting rods ④ to bottom of feeder tank ⑦ so it is fully supported by and securely attached to all four of the rods.
7. Protect the feeder device ⑧ by welding galvanized wire ⑩ around all four sides of the feeding device and below it. Weld securely to all four supporting rods ④ and make sure the wire covers all the space between the rods. Try to use one piece of wire to cover the area, bending where

applicable for attaching to avoid unneeded seams. In order to prevent bear claws from making contact with the feeding device, secure wiring ⑩ at least 6 inches away from the feeding device ⑧. It is important there are no gaps in the wiring on any of the sides or bottom. If voids are present bears may be able to get their claws in and rip away the wiring to get to the feeding device.

8. Take two smaller supporting bars of the same length ⑤ and weld to two adjacent supporting rods ④, so they are sticking upward and outward at approximately 45 degrees. Make sure they are tilted outward at the same angle.
9. Take the metal platform ⑥ and weld it to the tops of the smaller supporting bars ⑤. Weld the other end of the platform ⑥ to the upper portion of the longer supporting rods ④. Make sure this platform is secure enough to support your weight so can you stand on it to refill the feeder. Secure the battery or solar panel for the feeding device ⑧ to this platform if necessary.

Note: This design was originally made from scrap metal and the primary technique used to assemble it was welding. However, this design can be successfully executed using various dimensions and techniques (e.g. sand/concrete filled PVC).

Tripod Suspension Design By Jerry Saraceno



Materials:

1.5 foot wide metal platform
6" bicycle hook
3 – 12 ft. or longer metal legs, 1" or 2" heavy gauge steel square tubing
Boat winch or electric winch, if power is available
U-clamps
Wire cable
Feeder barrel with timing device
Kandy-kane® shaped rebar
Concrete or mobile home tie-downs (optional)
1" X 1/2" galvanized wire or metal cage for feeder timer

Read through instructions carefully *before* beginning assembly.

1. Take the metal platform and weld the bicycle hook to the center of the platform so it is hanging down from the platform perpendicularly. If your platform is lying upside down on the ground, the hook should be sticking straight upwards out of the platform.
2. Next, the tops of the three metal legs will be attached to the metal platform. Attachment is accomplished by welding the top of each leg to the metal platform. Make sure the three metal legs are arranged 120 degrees apart in a triangular fashion. The legs should be equal distances from each other and at approximately 60 degree angles from the platform. If your platform is lying upside down on the ground, the three metal legs should be sticking up in the air in three different directions.

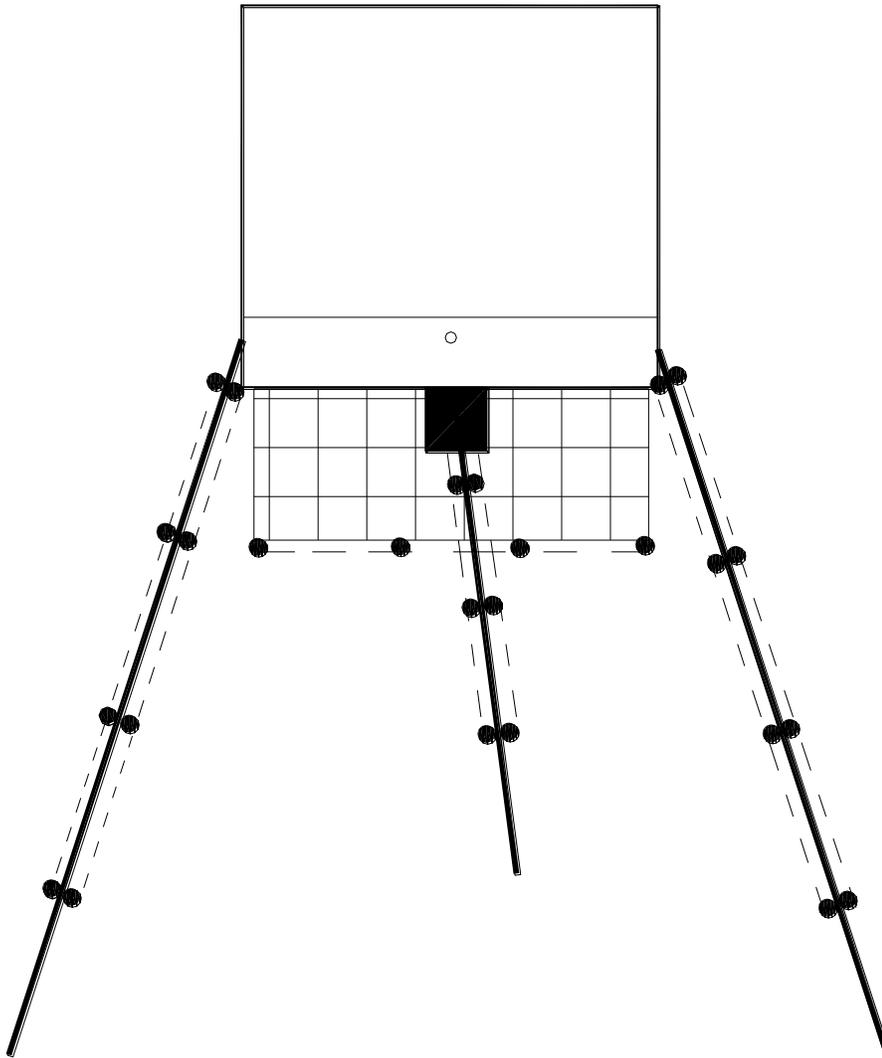
Note: The three metal legs will need to have appropriately sized holes drilled through them at the bottom so the Kandy-kane shaped rebar can be vertically inserted through the legs into the ground to secure the stand.

3. Attach a boat winch using U-clamps to one of the metal legs, approximately halfway up the leg. Then feed the wire cable from the boat winch through the bicycle hook.

Note: Feeder owners in the past have stored a cinder block nearby to place next to their feeder to stand on to operate the boat winch and move away again to prevent bears from accessing the winch.

4. Stand the tripod upright and insert the rebar through the holes in the bottom of the three metal legs. The rebar will need to be at least 2 ft. in length.
5. Hammer the rebar into the ground, so all three metal legs are firmly secured to the ground. Other options for securing the tripod to the ground are using mobile home tie-downs or digging three 2 ft. deep holes, filling them with concrete, and then inserting the rebar into the concrete.
6. Make sure the timing device and the feeder are secured with a steel cage or galvanized wire bolted to the bottom of the feeder barrel. Then using U-clamps secure the feeder to the wire already strung through the bicycle hook and raise into place.

Electrified Tripod Design By Peter Wolk



Materials:

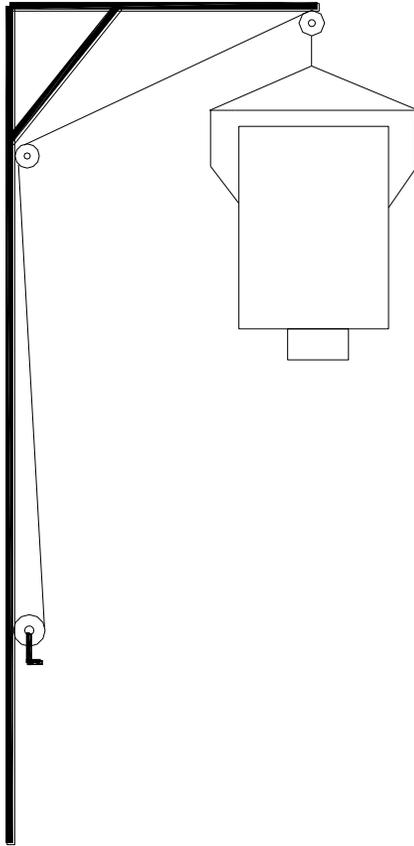
Western screw tight insulators
3 metal legs, 1" or 2" steel tubing, approximately 8 ft. long
3 - 8 ft. long sections of 2" electric conduit
Elfin insulators
1/4" stainless steel nuts and bolts
Electric fencing materials
Feeder barrel with timing device
1" X 1/2" galvanized wire or "wildlife feeder bear exclusion device" (patent pending by Peter Wolk)

Read through instructions carefully *before* beginning assembly.

1. Place the feeder barrel on its side and attach the feeder device to the bottom to allow the foodstuffs to gravity feed.
2. Secure the feeder device by welding, using structural epoxy (this must be a structural bond joint), or using sheet metal screws to attach the metal caging around all four sides and the bottom of the feeder device.
3. Install western screw tight insulators to the bottom section of the metal caging and run electric fencing along the insulators on the bottom side of the cage.
4. Take the 3 metal poles (legs) and slide electric conduit over each of them.
5. Attach four elfin insulators with ¼” nuts and bolts to one side of the conduit covering the pole. The first insulator should be 2 feet above ground level (allowing other, smaller wildlife to brush against the legs without getting shocked) and the last one should be near the top of the pole. Repeat this process for the other side of the conduit covering the pole with another four elfin insulators so the pole will have two strands of electric fencing, one along each side.
6. Repeat this process for the other two poles.
7. Attach the three poles to the feeder barrel to form a tripod.
8. Run electric fence wiring along the poles through the elfin insulators.
9. Set the tripod upright and secure to the ground by using either rebar or mobile home tie-downs for each of the three poles.
10. Attach an appropriate length electrical cable to the tripod electric fence wiring.

Note: The use of a solar panel fence box can be used in place of a dedicated ground power source.

Pole Suspension Design By Luis Oliver



Materials:

1 - 24 ft. pole, 2½" X 2½" X ¼" square tubing
6 inches of 2" X ¼" flat bar
Two pulleys
900 to 1,000 lb. capacity boat winch or electric winch, if power is available
Approximately 24 ft. of ¼" or 5/16" stainless steel wire cable
Shackles
Feeder barrel with timing device
U-clamps (optional)
Four bags of cement
3/8" X 1" stainless steel bolts

Read through instructions carefully *before* beginning assembly.

1. Make a cut at a 45 degree angle 3 feet from the top of the square tubing. Then make another cut 2 feet further down the tubing at a 45 degree angle going in the opposite direction (see Diagram 1). You should now have three pieces of tubing.

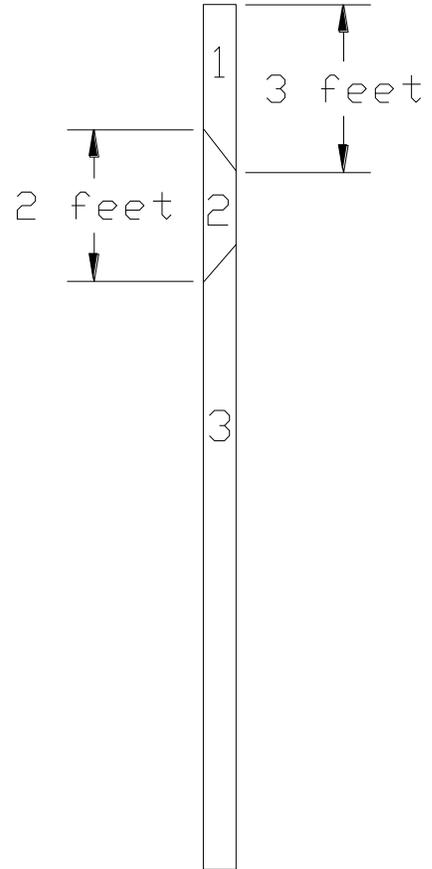


Diagram 1.

2. Take Section 3 of the square tubing and invert it so the pointed end will go into the ground. Then take Section 1 of the tubing and align it perpendicularly to the top of Section 3, with the flat end of Section 1 meeting the surface of Section 3 and the pointed end of Section 1 sticking out. Then align Section 2 with the slanted edges lined up with one edge of Section 1 and one edge of Section 3. (See Diagram 2).
3. Weld these sections together as shown in Diagram 2.
4. Cut two pieces from the flatbar for pulley tabs. They should each be 3 inches long and have a hole, of proper size, drilled in them for the shackles.

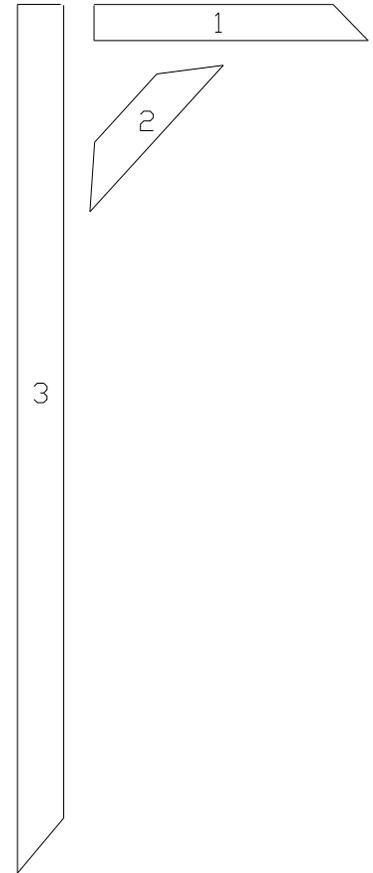


Diagram 2.

5. Weld pulley tabs as shown in Diagram 3.
6. Next, weld the 3 bolts to Section 3, seven feet from the top of the pole (three feet above the ground), in a layout to allow attachment of the boat winch to them.
7. Bolt the boat winch to the 3 bolts from step 6.
8. Run the cable through the pulleys.
9. Attach the shackles to the pulleys and attach the other end of shackles to the pulley tabs.
10. Dig a four foot deep hole in the ground and put four bags of cement in the hole along with the appropriate amount of water.

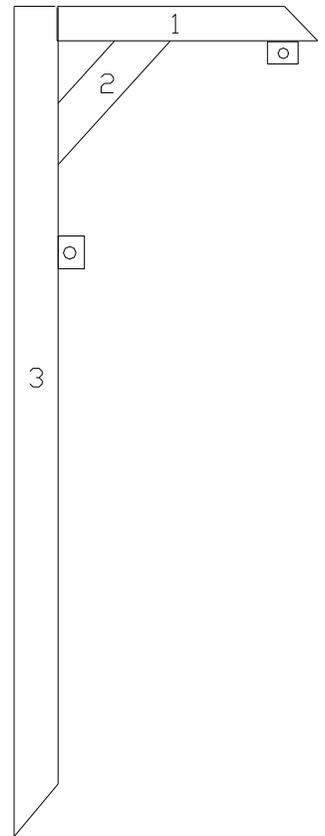
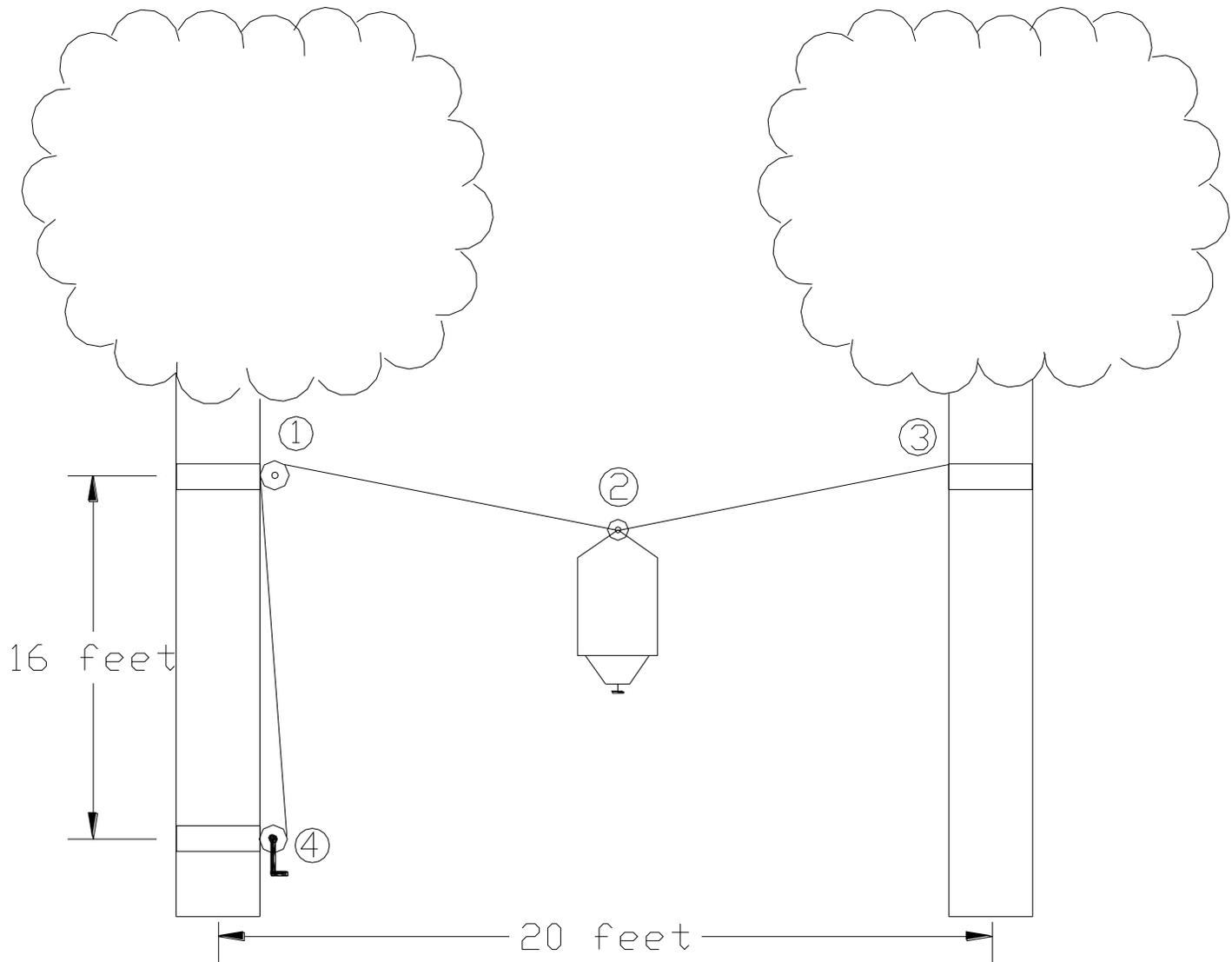


Diagram 3.

Note: The number of bags of cement is dependent on the brand/type used, read the label carefully.

11. Use a tractor or other machine, if needed, to lift the pole into place. Place four feet of the pole into the cement. Brace pole as needed to ensure it is perpendicular to the ground while cement cures (up to 72 hours).
12. Once concrete is set, attach the feeder to the cable with shackles or U-clamps and raise into place using the boat winch, at least 10 feet off the ground.

Suspended Cable Design By Donald Pierce



Materials:

Boat winch or electric winch if power is available
3 hammock straps or firehose or ratchet straps
2 pulleys
Feeder barrel with timing device
Wire cable

Read through instructions *before* beginning assembly.

1. Locate two large trees, approximately 20 feet apart that can support the weight of a full wildlife feeder.
2. While all the materials are on the ground, string the wire cable through both pulleys. Spread them out along the cable, then attach one pulley to one of the straps ① using U-clamps or appropriate hardware for ratchet straps, and weld the other pulley to the feeder ②. Another option for attaching the feeder to the cable is using an eye bolt instead of a pulley. Securely attach the free end of the steel cable to the other strap ③ using U-clamps or appropriate hardware for ratchet straps.
3. Using a ladder, secure the strap with the end of the cable attached to it ③ around one of the trees, approximately 16 feet above the ground. Make sure you have enough slack in the wire cable so you can do this with the feeder still resting on the ground.
4. Secure the other strap ① to the other tree, also 16 feet above the ground. Again, make sure you have enough slack in the steel cable so you can do this with the feeder still resting on the ground.
5. Attach the boat winch to the third strap ④ and secure this strap to the base of the tree with the pulley strap ③ on it.
6. Crank the winch so the cables become taut and the feeder is lifted at least 10 feet above ground level and suspended at least 4 feet from either tree to prevent bears from coming into contact with the feeder.