



Barn Owl Box Manual

Having Barn Owls in your neighborhood is a fun and rewarding experience. Use this manual to maximize the odds of Barn Owls finding your nesting box and making it their home.

Pole vs. Tree Installation

In the past Hungry Owl Project recommended installing Barn Owl Boxes in trees and on wood posts. We recently updated our recommendations after new research was published on how often Barn Owl boxes on trees and wood posts are occupied by other unintended species. We now recommend that Barn Owl boxes <u>only</u> be installed on metal poles. The installation process is described below.

Where to Install a Barn Owl Box

Finding the perfect location for your owl box will increase the odds of it being occupied. Although there is no 100% guarantee that boxes will be occupied, but a good installation will give you the best chance possible. Barn Owl habitat generally consists of open spaces but they can be found in urban areas as well, especially when open spaces are within a few miles. Densely wooded areas are usually unsuitable.

A good site and installation will not only help your chances of attracting owls to your box, but will also help ensure that it will be as successful as possible for both you and the owls for years to come. Use the checklist below to find a suitable place for your barn owl box.

In general, you're looking for a spot in open field with one or two trees nearby and no bodies of water or roads close to the location of the box. Level or near level ground is best, and you want the box to be placed well away from houses.

If you have heard or seen Barn Owls that will greatly increase the odds of your nesting box being occupied.



Rat Poison Warning

Using rat poison to kill rodents will also poison owls.

Rodenticides (commonly called rat poison) are a form of rodent control that kill non-target animals in addition to rodents. If you have used any type of rat poison or other poison to kill animals inside or outside your home in the past three months, do not install an owl box.

Rodents are a main source of prey for Barn Owls and many other species of wildlife. When a predator eats a rat after the rat has eaten poison, the predator is also poisoned. This is called secondary poisoning. Many wildlife rehabilitators have seen secondary poisoning in recent years, and the problem is only getting worse. Since Barn Owls sometimes eat up to 30 rodents in a single night, the danger is even greater to them. If you have used rat poison, please immediately remove and safely discard of it, and wait at least three months before installing your owl box.

Installation Checklist

To find a suitable place to install an owl box, make sure the prospective location meets the following criteria.

No Rodenticides

No rat poison can be in use on the property, inside or out. A single poisoned rodent can potentially wipe out an entire owl family. If rodenticides or other poisons have been used on the property, boxes can be installed after three months since the last use. If possible, confirm that any adjacent neighbors are not using poisons as well.

Opening Facing East

The box hole on the front of the box should face east in most circumstances. Unless there are other reasons not to, point the opening toward the east. Never point the box west, as the setting sun will disturb the sleep patterns of the owls.

■ Noise

Owls can be noisy in and around their nests at night, especially during baby season. Some people may be comfortable with <u>owl sounds within earshot of their home</u>, but as a general rule of thumb, we recommend keeping around 100 feet of distance from the nesting box and any bedrooms.

Prevailing Weather

Avoid facing box opening towards prevailing winds or weather.

☐ Activity Around Box
It is possible to disturb nesting owls to the point that they abandon their nest, eggs or even chicks. Loud noises or activities are the most dangerous, such as turning on a lawnmower right next to the box or banging on the pole. Keep weed whacking, mowing or any noisy or potentially disturbing activity a minimum of 30 feet away from box.
☐ Great Horned Owls
While the territory of Barn Owls and Great Horned Owls can overlap, the much larger Great Horned Owl can prey upon Barn Owls. If you regularly have Great Horned Owls in the area, nesting or hunting, it may not be a safe place to try to attract Barn Owls. However, if Barn Owls are already also in the area, our boxes can provide safe nesting for them as they are sized to allow Barn Owls in and keep Great Horned Owls out. Great Horned Owls are the owls that make the common "hoo-hoo" sound that most people identify as an owl and usually prefer more densely wooded habitat.
☐ Away From Roads
Install boxes at least 100 feet away from busy roads and highways. Barn Owls are a low flying owl and frequently fall victim to busy roads, highways and freeways.
■ Away From Power Lines and Utility Poles
Never install boxes on power lines or utility poles. They can be dangerous for Barn Owls and utility companies do not allow nesting boxes attached to their utility poles. If a bird is killed by a power line, please contact your local utility company. Most commonly, they will need to retrofit the line and poles on either side.
■ Away From Bodies of Water
Keep nesting boxes at least 100 feet away from swimming pools and other bodies of water and ideally, out of line of sight with the box. Owl fledgelings and chicks are at risk of drowning in close bodies of water. Please keep swimming pools covered at night.

Installation Instructions

Once completed, your Barn Owl box will be mounted on top of a metal pole and balanced so that it is centered above the pole. It will be resting on top of the flange and held in place with four bolts, four nuts, and eight washers. The bottom of the pole will be in a two and a half foot deep post hole with the kickstand underground, and concrete will be poured in to fill the hole.

Make sure there is enough flat ground in front of your post installed box for an orchard ladder to stand level. Pick a spot with a tree or two within 30 feet of box and within view of the entrance hole for fledglings to fly to. Make sure there are no branches or anything that can provide access for predators and pests within five feet of the box. Point the front of the box (the side with the hole) toward an open space so the owls in the wild can find it and have a clear flight path in and out.

Never lean a ladder against your installed box or the pole itself.

Shopping for a Pole

Finding the various parts for the pole at a hardware store can be difficult. Our ideal pole for Barn Owl boxes is described here. Try to find something that matches as closely as possible, or buy one of the Hungry Owl Project poles directly from us locally. You may also be able to hire a welder to build a custom pole for you if you live outside Northern California.

An Ideal Barn Owl Box Pole

- A 12 foot tall galvanized steel pole.
- Made of three inch wide tube with a 1/8 inch or thicker wall.
- Has a four inch metal flange on the top of the pole with four bolt holes.
- Has a four inch kickstand at the bottom to prevent spinning when set into the hole.

Four inch flange with four bolt holes Galvanized metal tube 12 feet Three inch wide tube with 1/8 inch wall Four inch kickstand to prevent spinning

Hardware & Supplies Needed



- A 60 pound bag of high strength Quikrete.
- Water container and water. See bag of concrete for required amount.
- Four 5/16" x 2" carriage bolts.
- Four 5/16" nuts.
- Eight 5/16" washers.
- A four inch square piece of scrap 1/2" plywood.
- A high quality drill and/or impact driver.
- A 3/8 inch drill bit.
- A deep socket drill attachment to match the 5/16" bolts.
- A <u>magnetic post level</u>.
- A post hole digger.
- An analog compass or compass smartphone app.

How to Install the Pole Mounted Box

- Center the flange on the bottom of the box, and mark holes to drill.
- Put the four inch plywood on the inside of the box, opposite the markings and hold it in place.
- Measure to make sure it's centered.
- Drill four holes through the box and through the plywood square, aligned with the flange and matched to the size of your bolts.
- Measure again to make sure it's centered.
- Put a washer on each bolt and put the bolts through the holes with the heads inside the boxes.
- Put a washer on each bolt on the outside of the box.
- Put the nuts on the bolts on the outside of the box and tighten with a hex bit on a drill or ratchet.
- Attach the pole to the flange.
- Check that the box is attached securely and the screws are snug.
- Put a few handfuls of mulch in the bottom of the box.
- Lay the pole and box unit down carefully and get ready to dig.
- Dig a two and a half foot hole using a post hole digger. Make a slight bowl at the bottom, wider than the top of the hole.
- With a buddy or two, lift the pole and box unit into the post hole, and turn it so the hole is facing East. If it's too heavy don't hurt yourself.
- Make the pole plumb using a magnetic level and hold it in place.
- Double check it's plumb in all directions. Forward, back, left, right.
- Once the pole is perfectly plumb, pour the concrete in the hole. You might need your buddy to pour while you hold it level.
- Then add the amount of water called for on the bag of Quikrete.
- Hold it for five minutes and gently release. It should be perfectly balanced and the owl box on top should be perched atop the pole.

Cleaning and Maintenance

Owl boxes need to be cleaned every year. Cleaning your owl box is very important for the health and safety of the owls. Barn Owls regurgitate the undigested bones and fur of the rodents they eat and cough up a pellet. The mother owl will use these pellets, by breaking them up with her beak, to form a soft nest to lay her eggs. The chicks, once hatched, begin regurgitating one to two pellets a day not too long after they hatch. While this pellet material serves as natural bedding material, too much can be detrimental to the wellbeing of your owl family. An excess build up of pellets can leave little room for owls the following year, can contribute to higher heat and poor ventilation inside the box and the extra weight can put additional strain on the box floor.

Clean in October

Boxes should be cleaned annually in October, as this is the time of the year when the owls are least likely to be present. Any needed maintenance or tree work can be completed during this time as well. This time may be different in other regions.

It is possible for owls to be inside your box at any time of the year, please be very cautious when approaching your box. If you find owls or other occupants inside, try to avoid flushing them out of the box.

Hungry Owl Project Cleaning Service

If you are unable to or do not wish to clean your box, have the Hungry Owl Project clean your box. Contact us at $\frac{1}{100}$ at $\frac{1}{100}$ or $\frac{1}{100}$ at $\frac{1}{100}$ or $\frac{1}{100}$ at $\frac{1}{100}$ or $\frac{1}{100}$

Our cleaning service prices are available at:

https://www.hungryowls.org/price-list

How to Clean Your Barn Owl Box

Recommended Tools

- Crow bar or pry bar
- Phillips screwdriver
- Work gloves
- Tyvek suit
- N95 respirator
- Bucket or bag to collect and dispose of materials

Always wear gloves, a Tyvek suit, and an N95 rated respirator to help minimize the possible health risks of dealing with non-sterilized owl pellets. In over a decade of cleaning owl boxes, we've yet to have any problems, but it is better to be safe than sorry. We recommend using an orchard ladder to reach your box. Try to never lean a ladder directly against your box.

Open Cleaning Flap

After verifying that no owls are present, open the cleaning flap. Our Barn Owl boxes have a cleaning flat on the bottom-front of the box. Loosen the two eye-screws to open with a screwdriver shaft.

Remove Material

The pellet material inside the box can occasionally be very hard. This is where a crow bar or pry bar can come to use. Scoop the material into your bucket or bag. If material is hard, use the crow bar or pry bar to loosen it up. Sometimes it only takes a little pull from the back and the whole thing slides out. Do not use any cleaning or disinfecting products. Tighten the two eye screws and your box should be good to go.

Scatter or Dispose of Material

The contents of the box can be scattered on the ground, but we recommend doing it far away from your box. Otherwise, just toss the material in the trash.