

Heated Bluebird Winter Roost Box

Materials Needed:

- 1 x 8 pine board
- 1 x 10 pine board roof
- Hardie soffit covers roof
- 60 watt bulb
- light metal floor (aluminum or copper)
- pine or cedar wood chips
- EH-38 control element (Easy Heat, Inc.)
- outside extension cord
- electrical socket

Heated winter roost boxes can save your bluebirds during periods of bitter cold by providing a warm temperature controlled roosting place. Bluebirds huddle (roost) together in a pile using their collective body heat to help them survive periods of cold weather. They arrange themselves so they don't smother.



Bluebirds Roosting

(Photo taken by Michael L. Smith)

Standard bluebird nest boxes **don't** make good roosting places. A well designed bluebird nest box has ventilation ports at the roof line and a ventilation slot at the top of the entrance door. The vents reduce heat build-up during the summer. In the winter, the vents allow the heat generated by the huddled bluebirds to escape.

It is a fairly simple task to make a 110 volt AC powered, thermostatically controlled, heated

bluebird winter roost box for your yard using relatively inexpensive off-the-shelf material.

If you decide to build a bluebird winter roosting box, **don't** provide perching places inside the box. Bluebirds huddle on the floor.



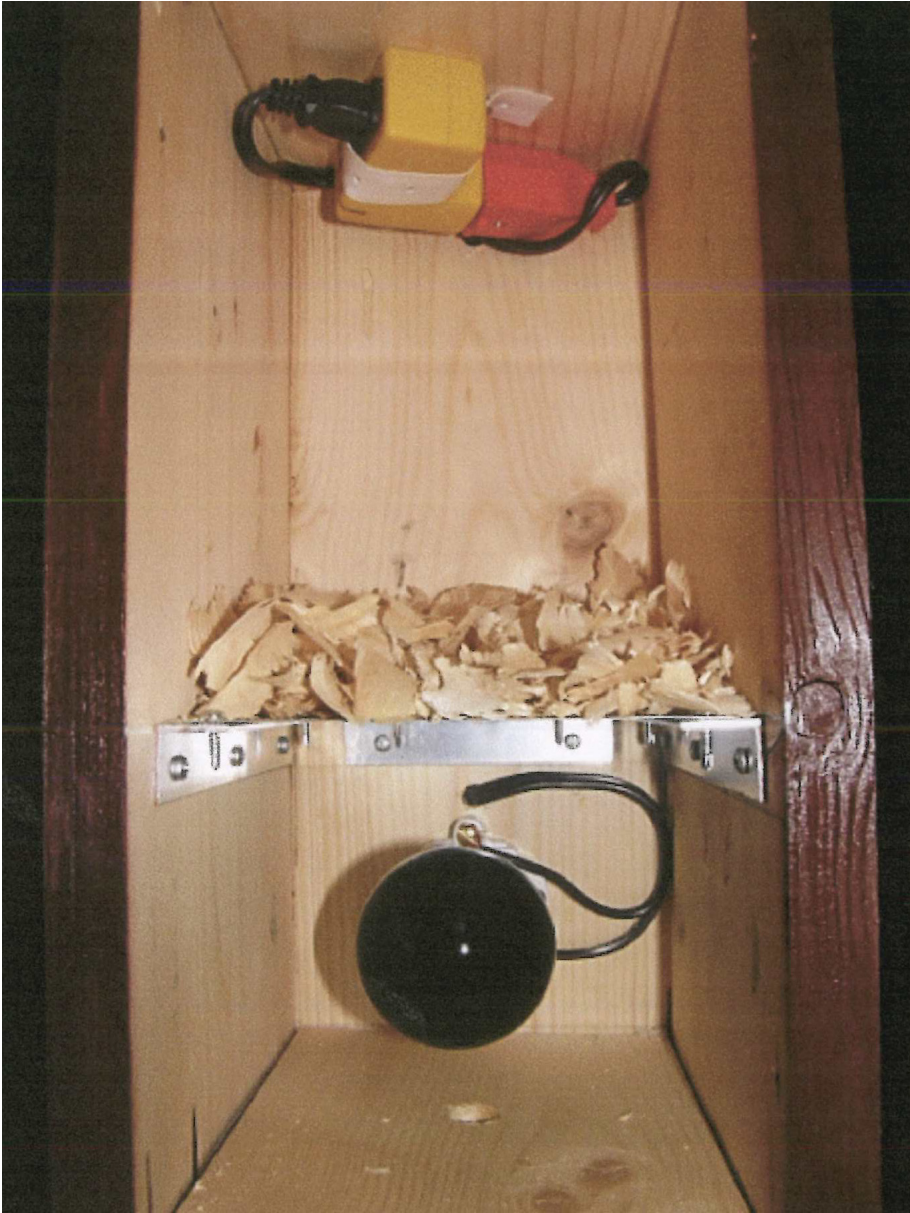
Thermostatically controlled heated bluebird winter roost box (outside view)

The roost box is constructed of 1 X 8 pine board. The roof is made of 1 X 10 pine board covered by Hardie soffit. The exterior of the roost box should be painted or stained a dark color to facilitate solar energy absorption. Don't paint or stain the interior. The floor of the roosting chamber is made of light metal used in heating and air conditioning applications. The metal floor acts as a heat exchanger. Notice the entrance hole in the roost box is located much lower than the entrance hole in a nest box. Since heat tends to rise in an enclosed space, the lower entrance hole helps preserve the heat that rises above it.

You can use a regular 60 watt clear or soft white light bulb as the heat source but it will give off a lot of light that might be distracting to birds. You can solve this problem by using a 60 watt black bulb as the heat source. Black bulbs can be purchased at Wal-Mart and other similar stores.

I cover the metal floor of my heated roost box with a thin layer of white pine wood chips. Don't worry if you add too many chips, the birds will eject them until they are satisfied with

the depth. You can buy white pine wood chips (pet bedding) from stores such as Wal-Mart or PetSmart.



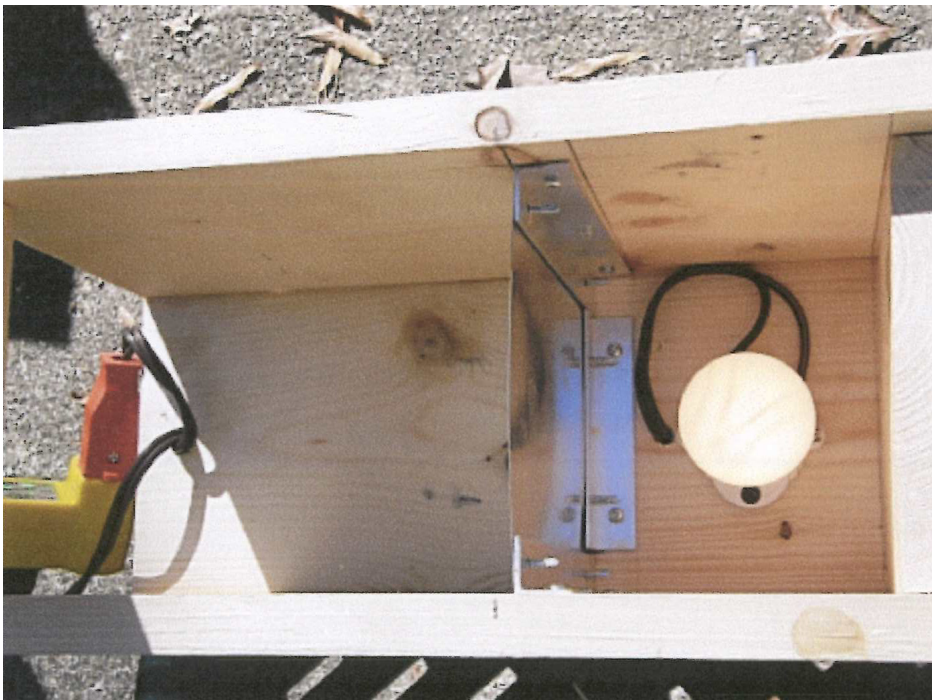
Thermostatically controlled heated Bluebird Winter Roost Box (inside view)

The bulb is controlled by an Easy Heat, Inc. EH-38 current tap attached to the ceiling. The EH-38 activates at ~38° F and cuts off at ~50° F. The light bulb is mounted under the metal floor plate and provides heat that is conducted into the roosting chamber. The EH-38 control element is mounted near the top of the roosting chamber and turns the light bulb on and off. The EH-38's preset cutoff point (~50° F) keeps the roosting chamber from overheating.



EH-38 control element

Tip: It's always a good idea to test the electrical functions of a winter roost box before you button it up for use. You can put your EH-38 control element in a plastic baggie and stick it in the freezer compartment of your refrigerator. It won't take long for it to drop below 38° F. Then you can hook it up and make sure your bulb comes on and then turns off. All of this can be accomplished at room temperature.



Test of EH-38 control element just after it was removed from the freezer compartment

I prefer to mount my roost boxes on portable concrete pedestals so they can be placed near enough to a window to be easily observed.



Thermostatically controlled heated bluebird winter roost box (operational)

All the material needed to make a heated bluebird winter roost box can be purchased from building supply stores such as Lowes and Home Depot.

A heated bluebird winter roost box can help your bluebirds survive during winter. All it takes is a few hours of bitter cold for them to perish due to hypothermia.