

Bluebird Nest Box Renovation

Mountain Bluebird Trails
Conservation Society





Photo 1

Wash the inside of the nest box to reduce the amount of dust during the repair work.

Disinfect with a 1:10 bleach to water solution if the nest box had mice droppings or a mouse nest.



Photo 2

The renovation of the fixed floor and wooden ridge cap boxes is easier to do in a shop.

- New roof
- New floor
- Repair walls & back

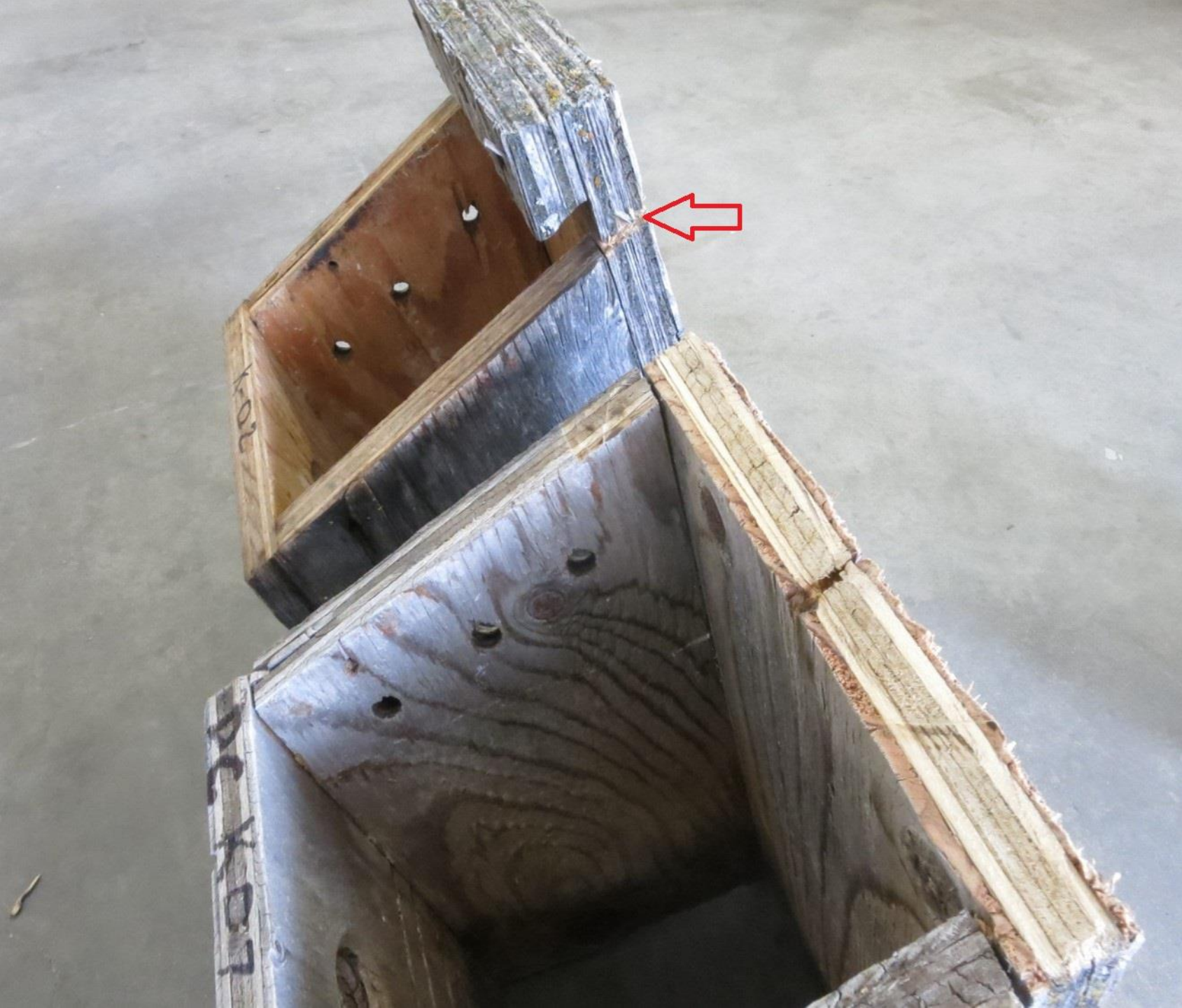


Photo 3

Mark the back wall in line with the slope of the top of the box walls, and cut off the top piece. Some walls are cut at a 22 degree angle, some are at a 15 degree angle.



Photo 4

Remove the floor. The nails are often badly rusted and hard to get a hammer under the nail head to pull out the nail. Chip off 1/2 of the plywood floor to expose the rusted nails using a chisel or sturdy screwdriver.



Photo 5

Replace damaged walls and backs.

Drive in loose nails.

Insert a minimum of two #8 - 1-3/4" screws on each side of the back of the box.

Green #8 - 1-3/4" deck screws





Photo 6

When the hole has been enlarged by woodpeckers, attach a new piece of 3/4" plywood with a 1 9/16" hole.



Photo 7

Measure and mark the hinge location on the nest box walls or make a jig – the hole is 1" from the back wall and 3/8" from the bottom of the wall for 3/4" floor plywood, or 1/2" for 1" floor plywood.

Drill 1/8" holes on each wall for the hinge.

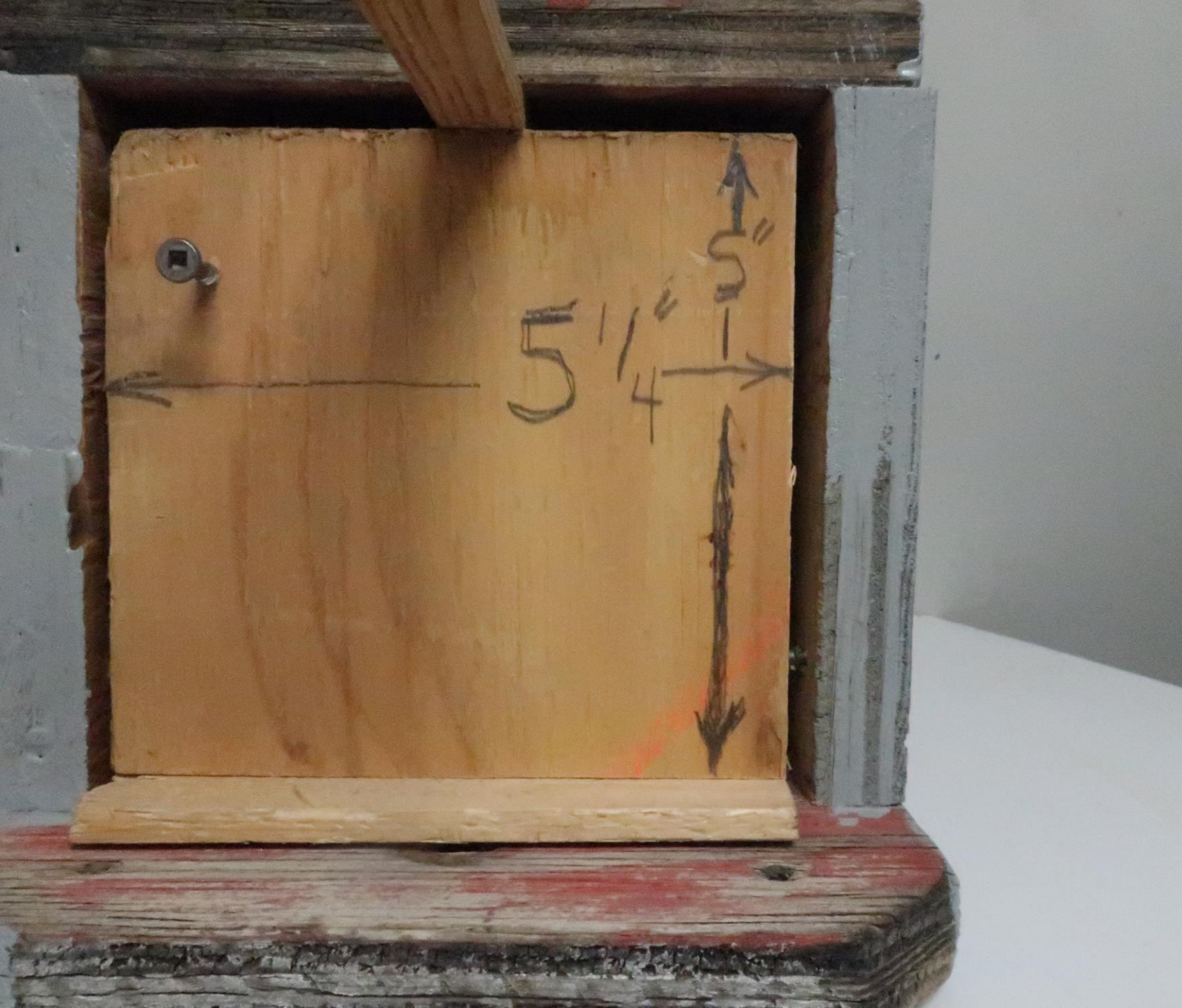


Photo 8

Position the floor into the opening and secure with a 1/4" spacer under the floor on the hinge side and a wedge on the pin side. Drill a 1/16" pilot hole through the 1/8" hole in the wall into the floor. Screw the #8 x 1-3/4" screws through the walls, or drive a 1-1/2" nail for the hinge.

Add a screw on the bottom of the floor as a handle.



Photo 9

Make pins from 12 ga. high tensile fencing wire or similar. The pins must have bends in the wire to make the pin difficult to insert and remove. Twist and push to insert the pin, twist and pull to remove the pin. If the pin goes in easily it will fall out in the field. Plan for 130 km/h wind.

Make roof 10-1/2" x 10-1/2" with cuts on top and bottom edges at 22 degrees. 1/8" cut on underside of roof for drip stop.

For nest boxes in a pasture make the roof 8" x 10" and round the corners to reduce cattle rubbing on box.

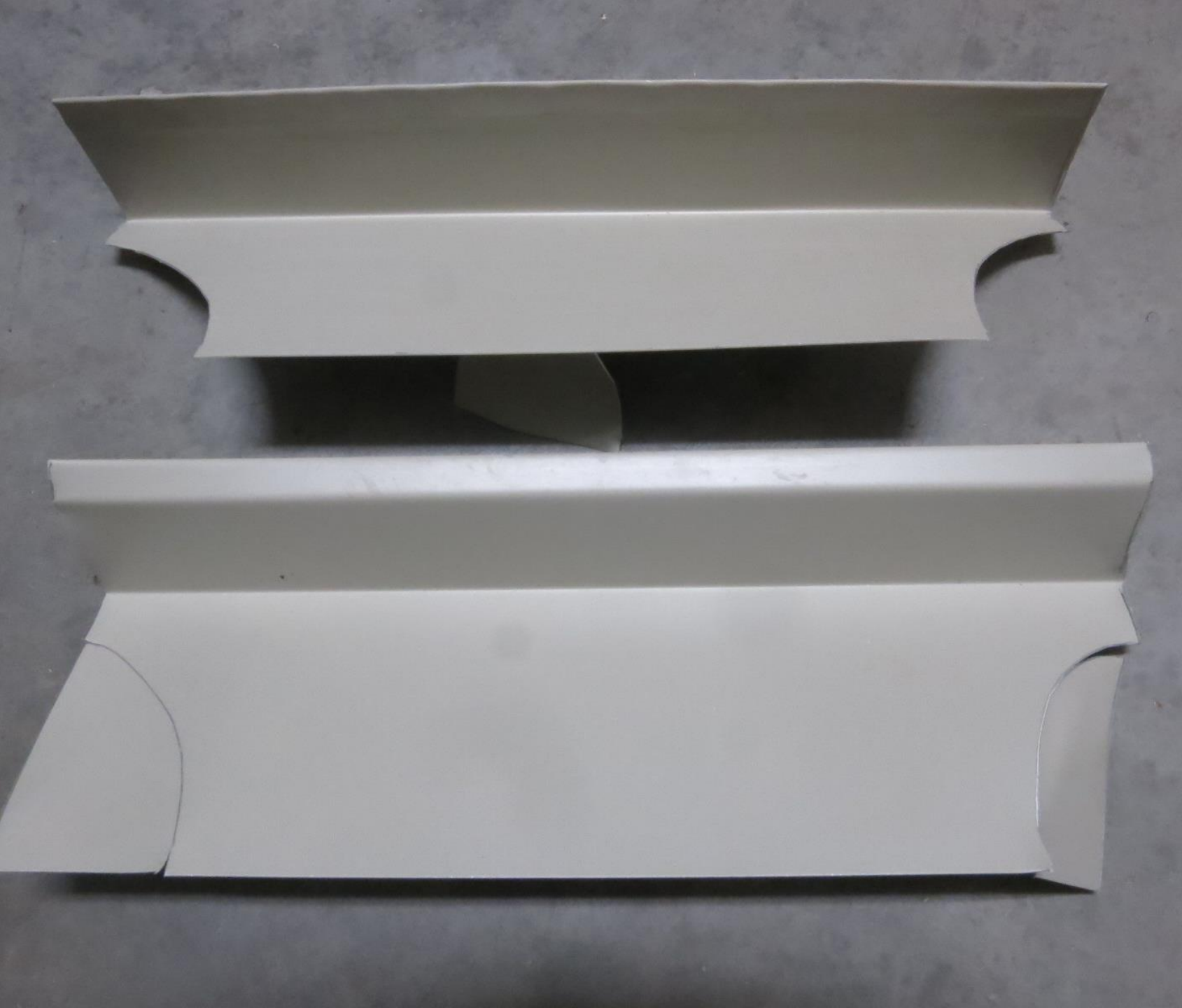


Photo 10

Make metal ridge cap from aluminum or sheet metal.

You can contact MBT on the website to request the metal pieces.



Photo 11

With roof in place, attach ridge cap to back of nest box using two #8 x 1/2" screws.



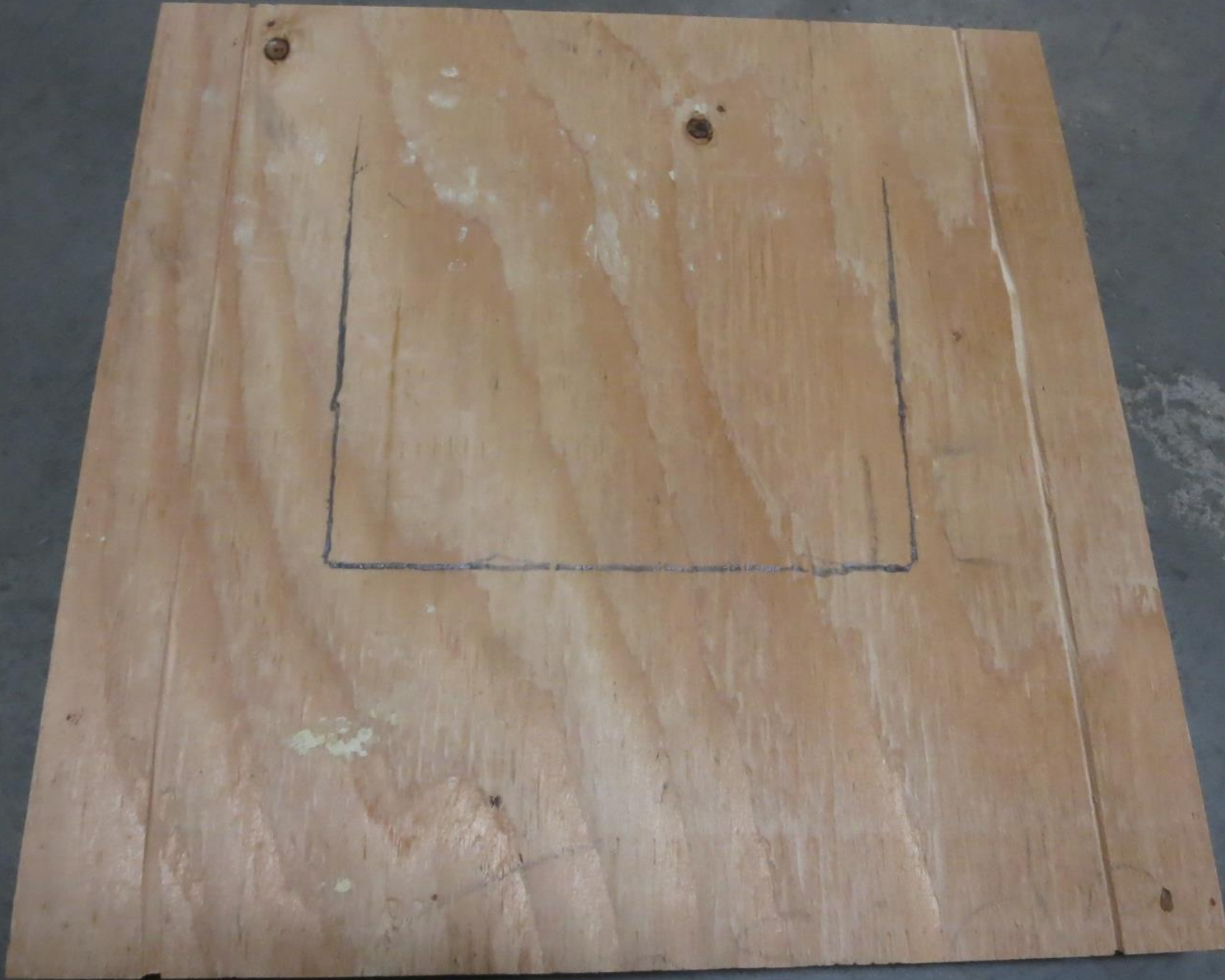


Photo 12

Insert roof into metal ridge cap, centre on the box, draw a line on the roof from the inside of the box to mark the opening at the top of the nest box.



Photo 13

Make roof insert piece 5 1/4" wide by 4" [3/4" or 1" plywood], position the insert between the lines, and attach to inside of roof with glue and nails/screws.

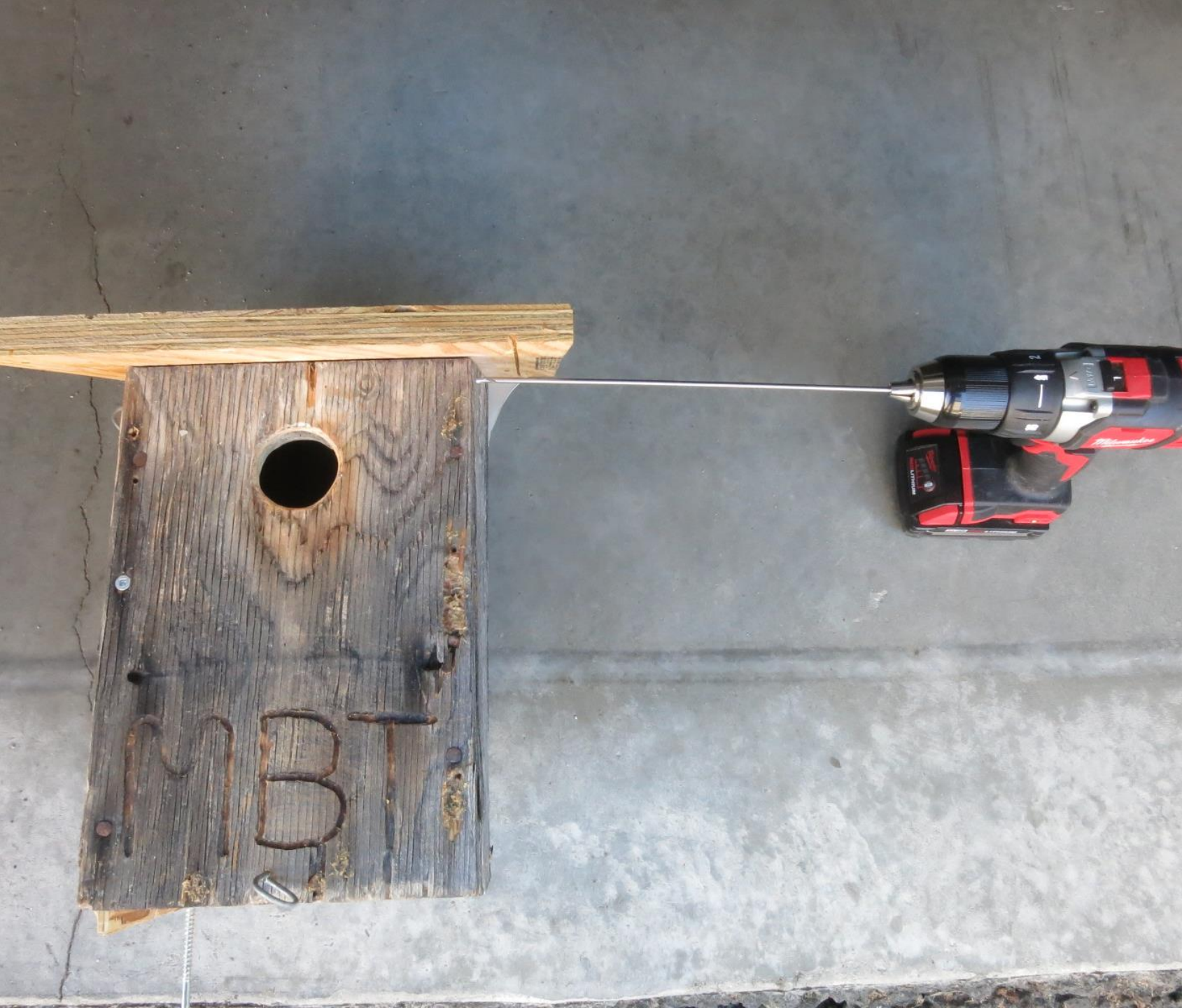


Photo 14

Drill holes for new roof pins or nails. Use a long 1/8" bit to drill holes for pins. Pins should be slightly bent to offer resistance to removal.

Loose pins fall out in transport and will work their way out in the 100 km/hr winds.

Drill hole for floor pin.

Plug any old holes for pins on the side of the box with a glue and sawdust mix. Plugging the holes eliminates confusion about which hole to use when the nestbox is installed.



Photo 15

Enlarge entrance to holes drilled in floor and roof insert pieces. 1/8" hole on left, enlarged entrance to hole on the right, about 1/4" deep.

Enlarging the entrance to the hole makes it easier to insert the pin when the two holes are not perfectly aligned.



Photo 16



– Photo 17

- Aluminum can be attached to roof edges to prevent chewing.



Photo 18

Remove sharp edges from entrance on outside and inside of nest box.





Photo 19

Paint new plywood roof or walls with a grey stain or paint. The colour should be similar to the colour of the female bluebird.





Photo 20

Paint renovated nest box with 1:4 mix of exterior wood glue and water to waterproof the wood.





Photo 21

Install renovated nest box on a suitable fence post close to the original location, or get GPS coordinates for new location. Use two #8 x 3" wood screws 2 or more inches apart, toward the top of the inside of the box and one wood screw at the bottom of the box if possible.



Photo 22

Do not put nest box over fence wires. If the barb wire is at the same elevation as the nest box, move the wire to the other side of the post.

Face opening to south-east whenever possible to protect from strong winds from the south-west and spring snow storms from the north-east.



Photo 23

Tie wire around the nest box to secure it very firmly to the post in areas where cattle rub on the nestbox. #9 wire shown





Photo 24

Happy Renovations and
preparations for next season!

