



DO IT YOURSELF PACKET

Enrichment & Comfort
Items for Wildlife



Thank you for your interest in helping the animals at San Diego Humane Society's Project Wildlife! We would not be able to provide the level of care and commitment to our animals without the help of people like you. This Do It Yourself packet outlines several fun projects that range from easy to more advanced. They all help the animals have a more enriched experience while going through their rehabilitation process in our care. A Volunteer Log is included on the last page if needed for service hours.

You may drop off items at any of our three campuses from 9:00 a.m.-6:00 p.m. daily:

San Diego
5500 Gaines Street
San Diego, CA 92110

Oceanside
2905 San Luis Rey Road (For Dogs)
572 Airport Road (For Cats, Small Animals)
Oceanside, CA 92058

Escondido
3500 Burnet Drive
Escondido, CA 92027



SMALL MAMMAL POUCH

Used for wildlife patients, especially babies, to make them feel safe and minimize stress. The pouch is enclosed on three sides, making a bag. It should take approximately 15 – 30 minutes to make!

Materials:

- Fabric
 - o **Suggested fabrics:** Flannel, cotton, fleece or other tight-woven strong fabrics are all good to use. We use these fabrics to avoid catching toes during burrowing.
- Ruler
- Scissors
- Sewing Supplies (needle, thread and/or sewing machine)

Instructions:

1. Cut Fabric:

Cut two equal-sized rectangles. The final pouch will have the same width and half the length as the rectangles (minus seam allowances).

You can make pouches of ANY size, but an average pouch will be 6-8" wide x 12-16" long.



2. Fold Fabric:

Fold the rectangles in half, right sides together. (Right side is the side you eventually want to show. For printed fabric, the patterned side is the right side.)

The fold will be the bottom of the sack, and the opposite open end will be the top-entry of the sack.

3. Sew Sides:

Sew the sides together. For a stronger hold, sew small stitches and double-back on the sides closest to the fold.



4. Invert One Bag:

Invert one bag (doesn't matter which) so it is right-side out. For fabric without a print, the seam is on the wrong side and hidden on the right side.

5. Stack the Bags:

Stack the two bags with right-sides together, so that seams are on the outside and inside of the new lined bag.



6. Sew Top Edge:

Sew the top edge of the pouches together, leaving a small opening. The opening needs to be big enough to pull fabric through -- a few inches is usually good.



7. Pull Fabric Through:

Pull the fabric through the opening left in the top seam. Finish pulling the fabric through the opening in the top seam. At this point, all the right sides are exposed (prints and no seams).

8. Hand Sew Opening Closed:

Hand-sew the last opening closed. As this is the weakest point in the bag, keep an eye on it over time to make sure it doesn't unravel.

For more detailed instruction, visit Instructables [here](#).



GREY FOX HOOD

Hoods are used in wildlife rehab on higher stress patients during examination and treatment; they help to make animal feel more secure when being handled.

Notes: All stitches are straight running stitches. You can back stitch for stronger seams. Pattern can be modified to increase or decrease size of nose hole. It is designed for a grey fox.

Materials:

- 24 inches of ribbon – 5/8 inch ribbed works well
- 2 pieces of colorful fabric at least 10" by 10"
 - o Fabric should be plain cotton/poly blend. This stands up well to washing
- 2 pieces of black fabric at least 10" by 10"
- Sewing Supplies: thread, hand sewing needle, pins, sewing machine for speed and strength
- Other supplies: scissors, Post-It, iron

1. Fold fabric

Fold your colorful fabric so you have two layers. Pin the pattern to both layers. Cut out the pattern. Repeat with black fabric. You should end with 4 pieces of fabric.



2. Sew pattern

Pin the colorful fabric together, so the bring sides are facing each other on the inside. Starting 1.5 inches from the top, sew both sides top to bottom with $\frac{5}{8}$ inch seam allowance and leaving the nose hole open in the bottom. It will seem like the nose hole is too small, but it is not. Repeat with the black fabric. You should end with two identical sets of sewn fabric.



3. Sew pieces together

Trim the edges of the seams for the nose in both pieces. Turn the black fabric inside out so the seams are inside. Put the black section inside the colorful section, right sides together. Hand sew the fabrics together at the nose, $\frac{3}{8}$ inch from the raw edge of the fabric.



4. Flip fabric right side out

Trim the seam edges of the nose and turn the fabric right side out. Tuck the black side into the colorful side. The nose will have finished seams and no seams will be touching the animal's face. Hand stitch $\frac{1}{4}$ inch up from the turned edge of the nose to hold the sides together around the nose.



5. Prepare ribbon casing

Where you left the 1.5 inch space at the top of the pattern, sew each raw edge to form a finished seam. Turn the raw edges so that the finished side will be by the finished side. Do not sew them to each other. This will form the casing for the ribbon. You will sew 8 small seams.



6. Sew ribbon casing

1.5 inches down from the top, sew straight around the top of the hood. Use a Post-It to mark 1.5 inches from your needle to make it easier. You will be stitching the colorful fabric to the black fabric. Fold fabric over $\frac{1}{2}$ inch from the top and iron. Sew black to colorful at the top $\frac{1}{4}$ inch from ironed edge. This forms the ribbon casing.



6. Sew ribbon casing

Cut two pieces of ribbon, about 8-10 inches. Thread them through the casing in opposite directions, so you have two loops with tails in opposite directions. This will be the drawstring for the hood. Tie the ribbon ends in knots to reduce fraying. You're ready to try it on a fox! Good job!



OWL HOOD

Hoods are used in wildlife rehab on higher stress patients during examination and treatment; they help to make animal feel more secure when being handled.

Warning: You can still be bitten through this hood. It is intended for calming and to make it harder for an owl to aim to bite you, but it does not protect your fingers. Use caution.

Notes:

- Pattern fits most large owls. Pattern can be modified to fit a smaller owl.
- “Top” refers to the top of the hood, though it may appear on the bottom in pictures

Materials:

- 24 inches of ribbon – 5/8 inch ribbed works well
- 2 pieces of colorful fabric at least 8” by 8”
 - Plain cotton or cotton/poly blend works best for this project
- 2 pieces of black fabric at least 8” by 8”
- Sewing Supplies: thread, scissors, pins, sewing machine for speed and strength

1. Cut fabric

Pin the pattern to a doubled-over piece of fabric. Cut so you have two pieces of colorful fabric, and two pieces of black fabric.



2. Sew fabric

Use the template to measure 1.5 inches up from the bottom on either side. Sew around each piece of fabric on three sides. Trim the corners and top.



3. Sew fabrics together

Turn the black fabric right side out. Put it inside the colorful fabric so the finished sides are together. Sew the colorful fabric to the black fabric with $\frac{1}{4}$ inch seam allowance at the bottom of the hood.



4. Invert fabric

Through the 1.5 inch gap, turn the fabric so the unfinished sides are together.



5. Prepare ribbon casing

Measuring 1 inch from the bottom of the hood, sew around the hood to form the casing for the ribbon. You can use a Post-It to mark the distance from the sewing machine needle.



6. Prepare ear feather protectors

To form the ear feather protectors, pinch the top corner of the fabric with your fingers. Sew about $\frac{3}{4}$ in, to keep your fingers out from under the needle. Repeat on the other corner.



7. Prepare ear feather protectors

Cut two pieces of ribbon, about 12 inches. Thread them through the casing so that they form two opposite facing loops. Tie the ends together. If you have done it correctly, the hood should cinch closed when ribbon is pulled. The optional "easy off" addition is the lower ribbon tabs. Cut two 1.5" pieces of ribbon. Place them around the edges of the ribbon tie opening. Zigzag stitch across the layers for strength.



Congratulations! You made a hood! Try it on an owl. Works with other raptors too.

SQUIRREL BOX

Squirrel Box Bill of Materials						
Qty	Thickness	Length	Width	Item	Diagram # for 4' X 8' Sheet	Diagram # for 4' X 8' Sheet
2	3/4"	14"	12"	Top & Bottom Panels	C	A
2	3/4"	14"	10"	Side Panels	B	B
1	3/4"	10 3/8"	9 3/4"	Back Panel Door	F	D
1	3/4"	10 1/2"	10"	Front Panel	A	C
1	3/4"	6 1/2"	1 1/4"	Back Door Stop	D & E	F
1	3/4"	5 1/4"	5 1/4"	Door	G	E
1	N/A	TBD	1 1/2"	Piano Hinge *	N/A	N/A
1	N/A	5 1/2"	N/A	Metal Handle	N/A	N/A
2	N/A	2"	N/A	Sliding Bolt Latch	N/A	N/A
1	N/A	2"	5/16"	Hex Head Metal Bolt	N/A	N/A
1	N/A	N/A	5/16"	Nut	N/A	N/A
2	N/A	N/A	5/16"	Metal Washers	N/A	N/A
1	N/A	N/A	5/16"	Lock Washer	N/A	N/A

* Piano hinge comes in lengths of 12, 30, 48 & 72" With a minimum installed hinge length of 6" buy/use the most efficient length for the number of squirrel boxes under construction. I.E: 12" = 2 @ 6", 30" = 5 @ 6", 48" = 8 @ 6" & 72" = 12 @ 6"

Recommended Tools:

- Power drill
- Power sander or hand sanding pad with medium grade sandpaper to smooth cut board edges
- 1/16" & 5/16" drill or 5/16th spade bit, #2 Phillips screwdriver bit
- 3" hole saw or use saber saw
- Circular or saber saw (Saber saw with blades for straight and tight turns)
- Screwdriver for hinges and bolt latch. Phillips or straight depending on type of screws
- Pin nailer with 1 3/4" pin nails (Hammer and 1 3/4" nails or screws will work if no pin nailer)
- Crescent wrench & 1/2" socket and socket wrench. Two wrenches needed to secure door bolt.
- Tape measure
- Pencil

Assembly Suggestions:

Read the instructions and identify all the parts.

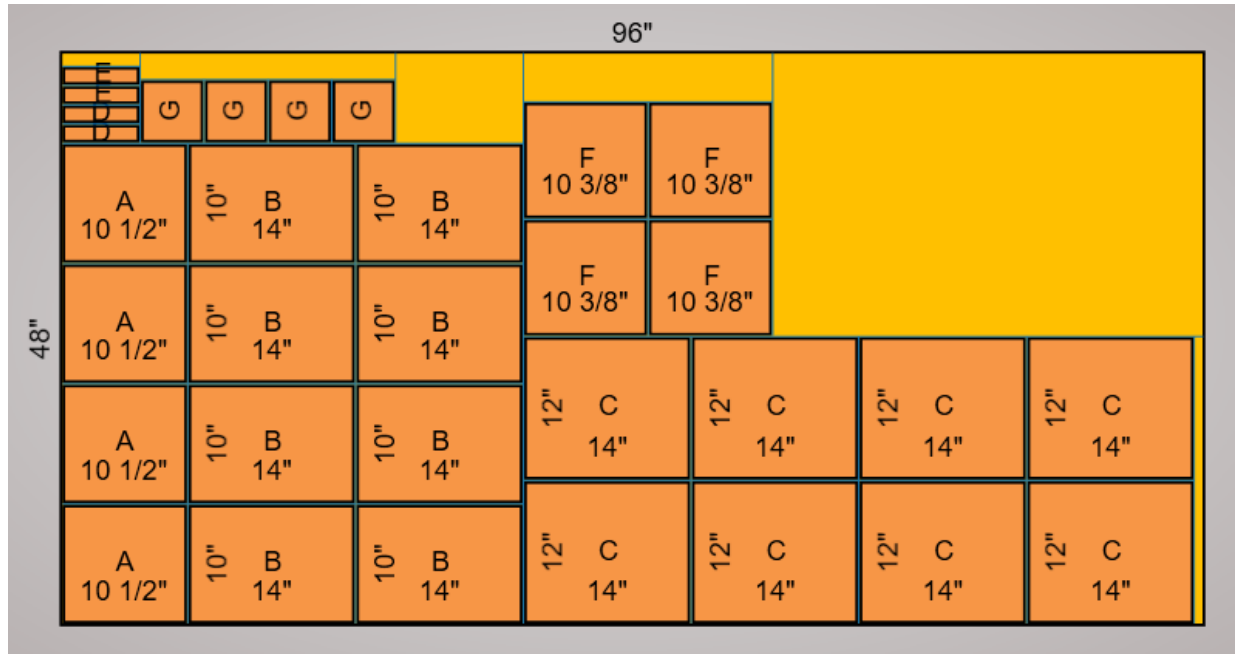
Dry fit them to ensure fit, having all the right parts.

Sand off any splinters to avoid being stuck.

Two people will make the work go faster and easier.

Bill of Materials (Continued)

Cutting diagram for a 4' X 8' sheet of 3/4" plywood for four Squirrel Boxes using a 1/8" blade

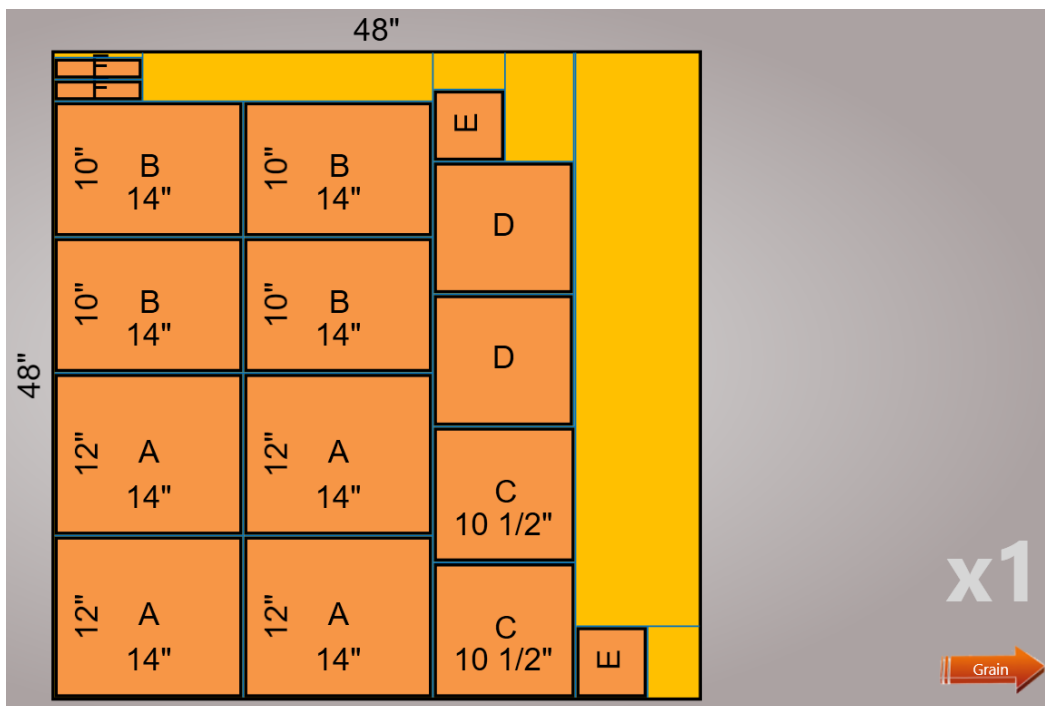


When cutting panels, saw blade is on outside edge of the cut line to ensure required size.

Length – Will be going with the grain.

Width – Will be going against the grain.

Cutting diagram for a 4' X 4' sheet of 3/4" plywood for two Squirrel Boxes using a 1/8" blade



x1



Note 1: Cut extra smaller pieces for use as spacers during Squirrel box construction.

Note 2: Panel designation letters for the 4' X 4' sheet are different from the 4' X 8' sheet. Use the dimensions listed to identify the panel.

Hardware Items



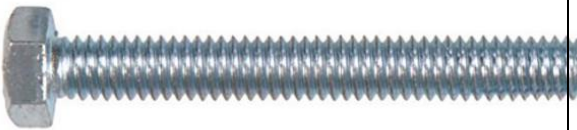
2" Bolt latch



5 3/4" long handle



Piano hinge



Hex head bolt, 5/16" X 2"



5/16" Nut



5/16" Washer

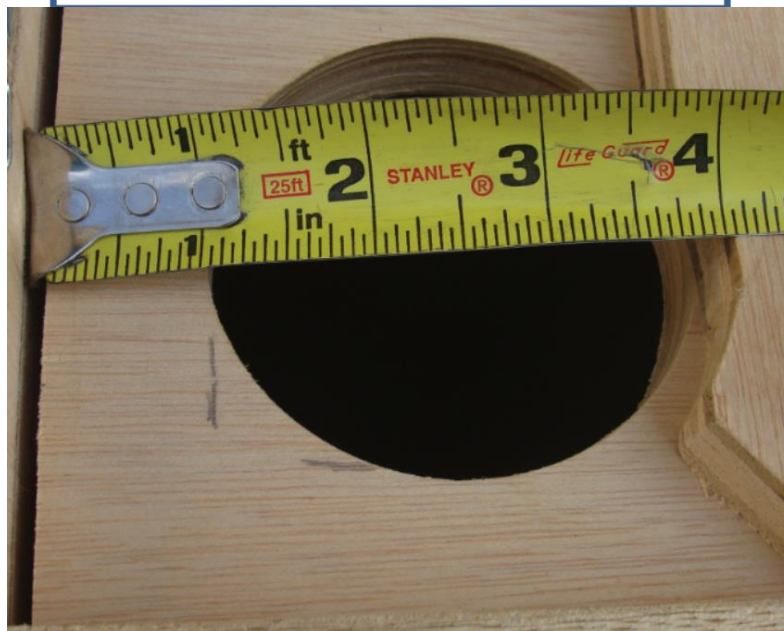
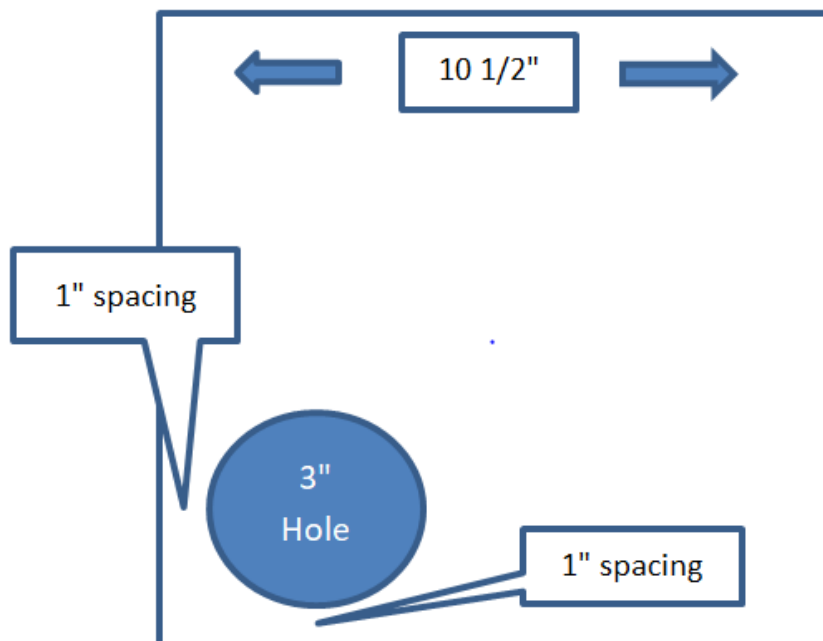


5/16" Lock washer

Instructions:

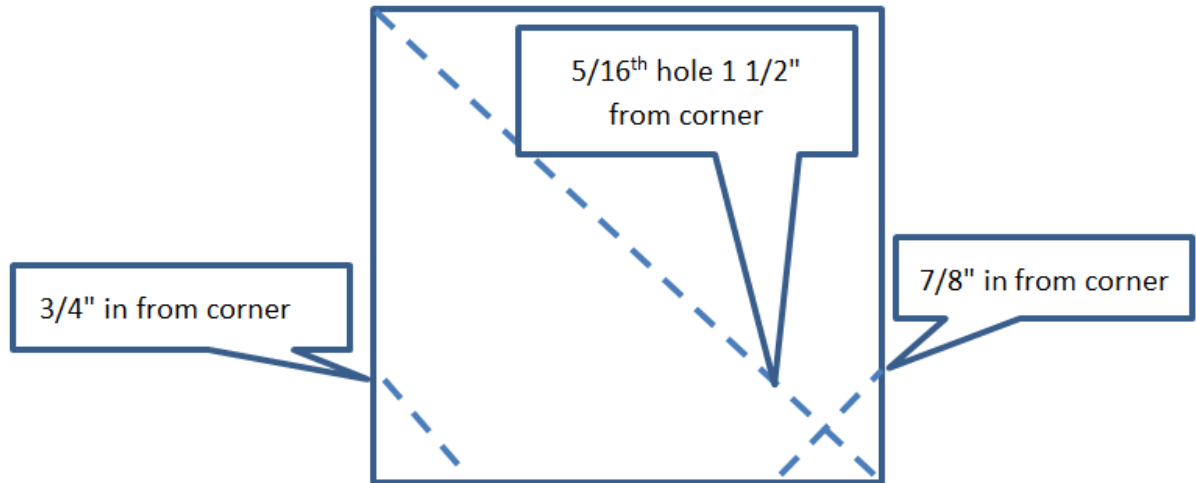
1. Squirrel Box Assembly – Front Panel A with Door G

- Position Front Panel A with the length $10\frac{1}{2}$ " going from left to right. In the lower L/H corner place the 3" hole saw 1" in from the L/H side & 1" up from the bottom. Use a piece of scrap plywood under the panel to support the wood, prevent cutting in to the surface below. Cut out the opening.
- If no hole saw is available, draw a 3" circle with the L/H side 1" from the edge, bottom of the circle 1" above the bottom of the panel. Drill a $\frac{5}{16}$ " hole inside the circle to insert the saber saw blade to cut out the circle.



1. Squirrel Box Assembly – Front Panel A with Door G (Continued)

- With Door Panel G wood grain going left to right, use this diagram to cut and drill the hole for the door pivot bolt. (See Door Picture a Pg 6)



- On the L/H corner measure in 3/4" left and right, draw a diagonal line.
- On the R/H corner, measure in 7/8" left and right, draw a diagonal line.
- Cut off the two corners along the line.



1. Squirrel Box Assembly – Front Panel A with Door G (Continued)

Installing the Door

- Place the Door on the Front Panel covering the 3" hole with 1/8" clearance on the L/H and bottom sides. Insert the 5/16" bolt into the hole in the Door.
- Pressing down on the bolt, rotate the Door up and back to ensure both angled corners do not go beyond the edges of the Front Panel. Adjust the door as needed. It may be necessary to round the corners by sanding them. Ideally when the door is all the way open it will not cover any of the opening. (See Door Picture b)
- When the door is positioned just right, use a hammer to tap the head of the bolt to indent the Front Panel showing where to drill the bolt hole.
- Alternatively insert the drill bit into the Door pivot hole, using it to pivot the Door. When the right Door position is found drill the spot.
- Install bolt through Door & Front Panel from the outside in, one washer under the bolt head.
- On the inside place one washer against the wood, lock washer next, then the nut. Tighten the nut until the door moves with gentle pressure. (See Door Picture c below)

Front Panel & Door Pictures



a. 1/8" gap around Door L/H & bottom side

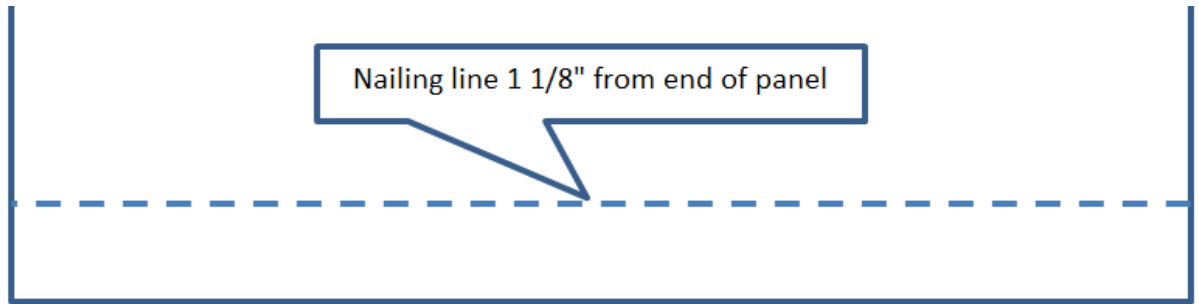
b. Ensure Door clearance when rotated



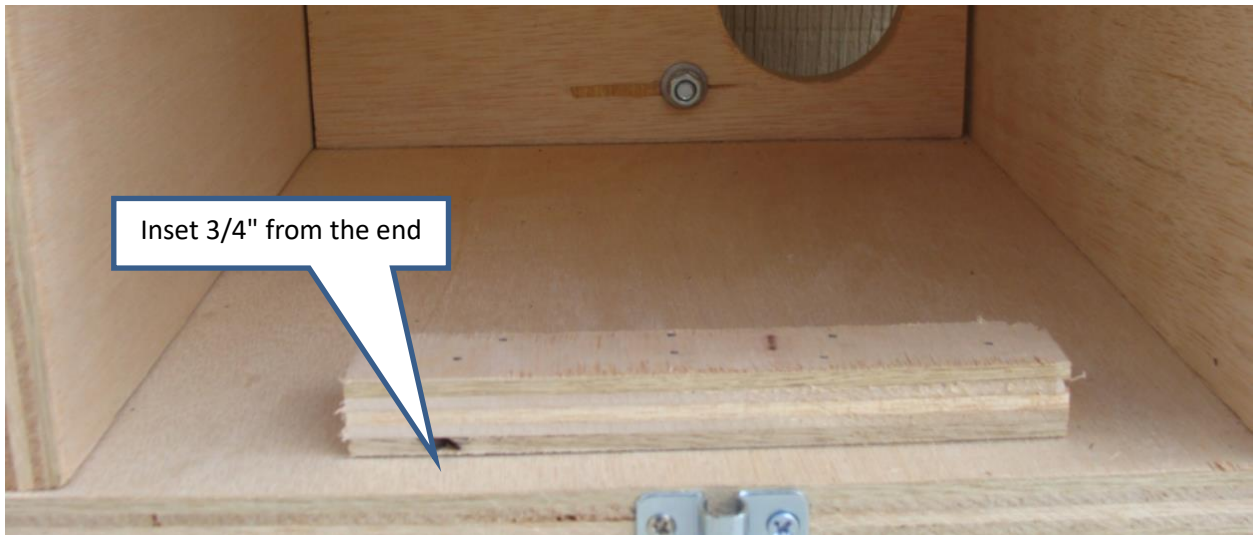
c. Door securing bolt with washer, lock washer & nut

2. Assembling the Squirrel Box

- Front Panel with Door will be inset $3/4$ " from the edge of the four side panels.
- To ensure pin/nails enter the front panel edges in the center for best strength, drawing a light line $1\ 1/8$ " in from one end of all side panels is an option. Nails will go in on the line.

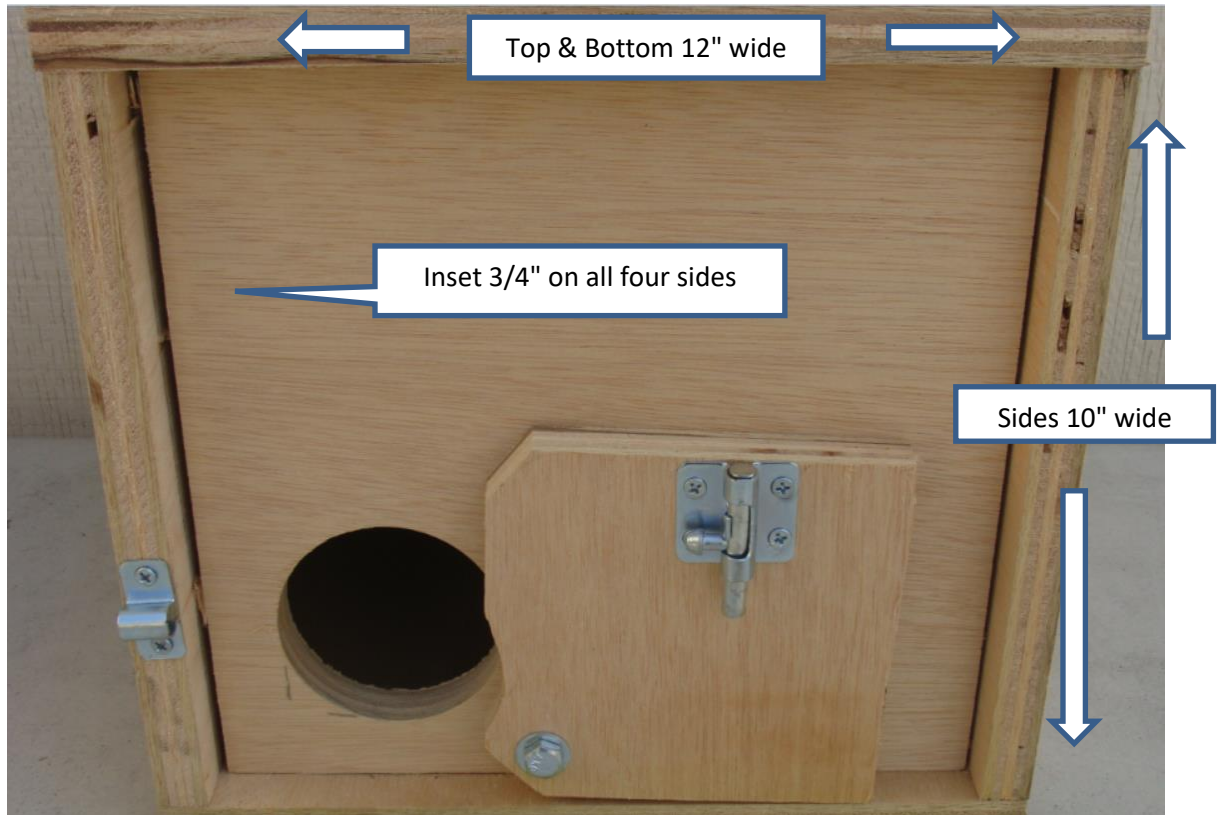


- Taking the Bottom Panel C, install the Back Panel Door Stop D/E. Measure in $3/4$ " from the end of the panel and draw a line.
- Place the Door Stop flush with the line and centered on the panel. Nail in place.



2. Assembling the Squirrel Box (Continued)

- Start with Bottom Panel C, placing the Front Panel with the Door at the end. *(Other assembly option is to nail all four sides, top and bottom panels together then insert the Front Panel. Test fit first to ensure the Front Panel will go in.)*



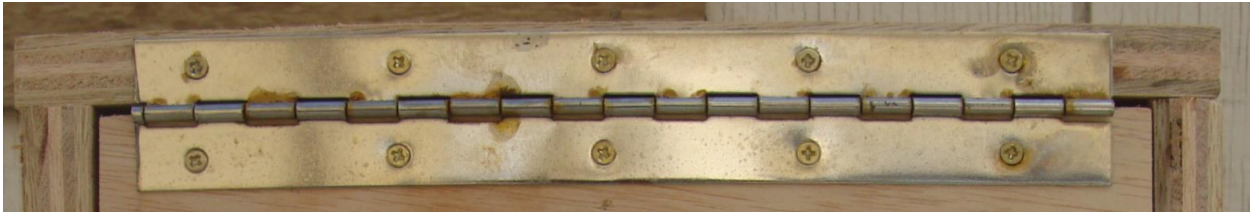
- Put one of the Side Panels in place as shown above. Using the small Back Stop as a spacer guide or spacer pieces, ensure the Front Panel is inset $3/4$ " from the end of the Side Panel. Spacer must be flush with the end of the panel at the top and bottom. Nail the side panel in place.
- Repeat this step until all four panels are nailed to the front panel. The Back Panel can be used to hold up the panel ends while nailing.
- Nail the edges of all panels together to create the box. Nails should be $3/8$ " in along the long side edges.

3. Install the Back Panel Door

- The Back Panel Door is cut to have roughly a 1/8" clearance top and bottom, 1/16" on left and right sides to ensure ease of opening.
- With the 10 3/8' long panel laid flat, mark the bottom center of the panel where the Bolt Latch will go. End of the latch will be flush with the edge of the door panel. Install the latch.



- Install the Piano Hinge centered on the Back Panel Door first. Hinge pin will be positioned parallel along the top edge of the Door.



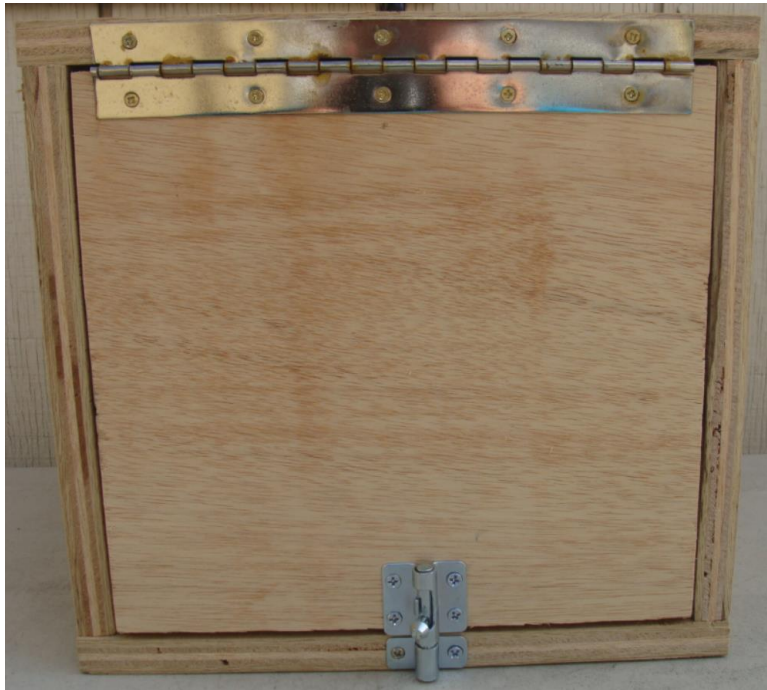
- Rotate the Squirrel Box until the back end is facing up. Put the Door into position.
- Ensure the door is centered left and right between the side panels. Mark the center of two hinge screw holes at the left and right end. (*Easier to match up two holes than all of them and reduces chances of hinge shifting*) Use the 1/16th drill for pilot holes to reduce the chance of splitting the plywood. Install the end screws. Ensure the door moves freely.
- Drill the pilot holes for the remaining screws and install them.



- Position the bolt latch receiver on the plywood edge and slide the latch bolt latch forward into the receiver.
- Drill pilot holes and install the two retaining screws. Ensure the bolt slides freely.

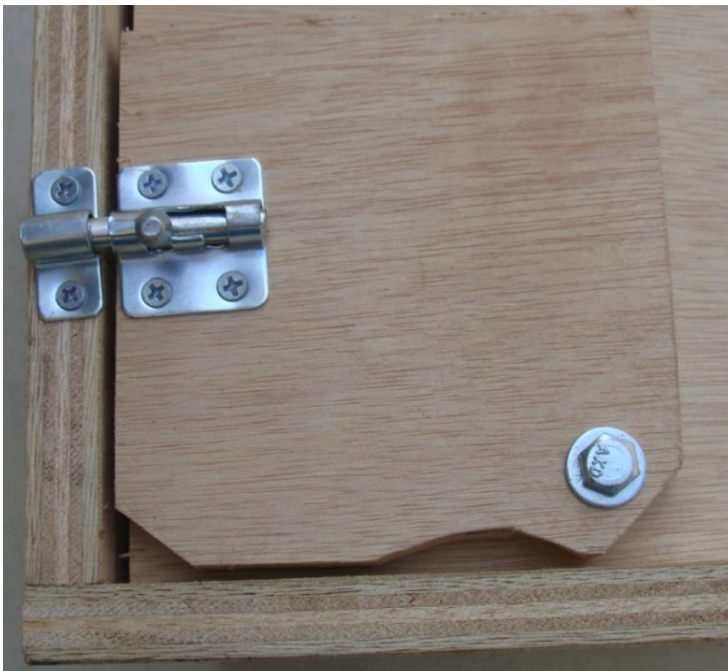
3. Install the Back Panel Door (Continued)

Finished Back Panel Door



4. Install Front Door Bolt Latch

- Stand the Squirrel Box up so the Front Door is on top. Maintaining an even gap around the Front Door, center the Bolt Latch on the door and install.



- Position the bolt latch receiver on the plywood edge and slide the latch bolt latch forward into the receiver.
- Drill pilot holes and install the two retaining screws. Ensure the bolt slides freely.

5. Install the Squirrel Box Carrying Handle

- Center the handle width and lengthwise on the top panel and install. Handle will go with the grain lengthwise.



Handle centered width wise.



Handle centered lengthwise.



Volunteer Hours Log

Name _____

Parent Name _____ Parent Signature _____

Email _____

DATE	HOURS	PROJECT	HOW DID YOU COMPLETE THIS PROJECT?
		TOTAL HOURS	

SDHS Representative Signature _____

For questions, email Kris Hamilton, volunteer engagement supervisor, PW, at khamilton@sdhumane.org

Thank you for volunteering!