

## **A Basic Tree Swallow Nest Box**

The following pages show how to make a nest box designed for Tree Swallows, one that has the spacious interior their nestlings need, depth and an overhanging roof that make it difficult for predators to reach nest contents, and thick walls and adjustable ventilation to reduce detrimental impacts of temperature extremes. It also has a drop-down side door for convenient monitoring and post-nesting cleaning. We think this Basic Tree Swallow Box is superior to most commercially available boxes for similarly-sized birds, and also to most build-it-yourself options, so if you plan to make your own boxes, we hope you consider this design.

### **A word about wood**

The Basic Tree Swallow Box uses boards from building supply stores like Home Depot and Lowes. You can make one box from a single board 1" thick, by 10" wide, by 6' long, but the cutting is simpler if you buy a 1" x 10" x 4' board and also a 1" x 6" x 4' board. It's important to realize that the store measurements are not true, however. Boards listed as 1" thick are actually only 3/4" thick. 6" wide boards are only 5-1/2" wide, and 10" wide boards are only 9-1/4" wide. Our plans take the true measurements into account.

### **Construction Suggestions**

Power tools make the work easier, but exercise all possible cautions.

Use a hand-held power drill to make "pilot holes" for nails and screws.

1-1/2" galvanized "finish nails" work well for fastening most box parts.

Use 2" finish nails for "hinge nails."

Be careful positioning hinge nails so the door opens and closes smoothly.

Use 1-1/4" #2 square drive "pocket hole screws" for "keeper screws." These require a square-tipped screwdriver, making it hard for unauthorized people to open boxes.

Make very sure no nails or screws protrude into the box interior.

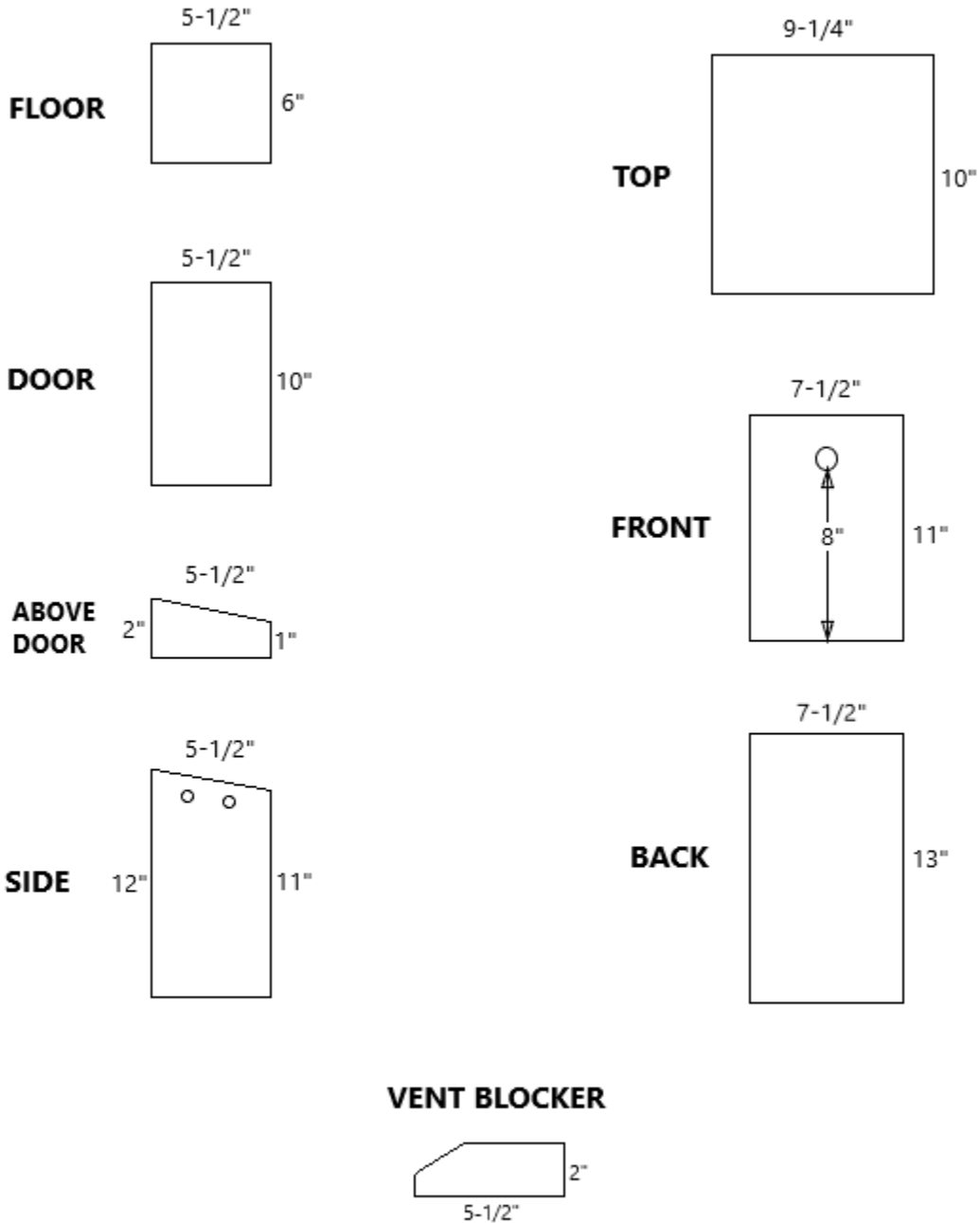
Sand rough spots around entrance hole.

Use wood filler to close gaps at joints, especially where roof meets back.

"Pipe hanger straps" make handy door handles and pole fasteners.

# BASIC TREE SWALLOW NEST BOX

Cut from 1" thick boards (actually 3/4" thick)



## TWO POSSIBLE CUTTING OPTIONS

You can cut all pieces from **one board**:

**1" x 10" x 6'**

(Actually 3/4" x 9-1/4" x 6')

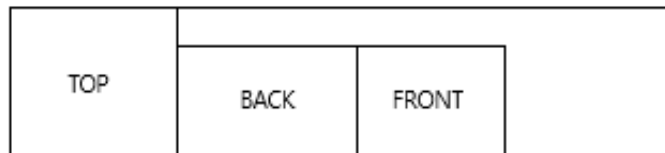


**OR**

You can cut pieces from **two boards**:

**One 1" x 10" x 4' board**

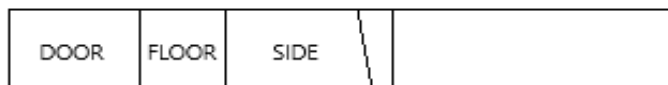
(Actually 3/4" x 9-1/4" x 4')



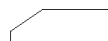
**And**

**One 1" x 6" x 4' board**

(Actually 3/4" x 5-1/2" x 4')



Cut **Vent Blocker** from a thinner piece of board or plywood. Note curve at one corner.

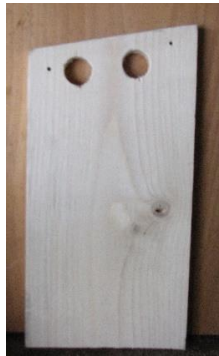


## Before Assembling Box

Drill **1-3/8" Entrance Hole** in FRONT piece, 8" from the bottom of FRONT to bottom of Entrance. If Bluebirds are possible nesters make Entrance 1-1/2" or 1-9/16".



Drill two 7/8" or 1" **Vent Holes** in upper end of SIDE, about 3/4" from upper edge.



On the inner FRONT surface either glue on **Cleats** (our preference) or cut shallow **Kerfs** with a saw. These help young swallows climb to the entrance.



If you want extra ventilation and drainage trim Floor corners.



## Assembling Box

1. Draw line 1" up from bottom of SIDE showing where FLOOR bottom edge will be. Photo shows where floor will be positioned and also pilot holes for nails.



2. Nail SIDE to FLOOR's 5-1/2" edge.



3. Nail FRONT to SIDE and FLOOR.



4. Nail BACK to SIDE and FLOOR



5. Position DOOR so one corner is flush with bottom of FRONT.



6. Drill pilot hole through FRONT into DOOR 3/8" up from bottom of FRONT and 3/8" in from FRONT's edge.



7. Drill a second pilot hole through BACK into DOOR 1-3/8" up from bottom of BACK and 3/8" in from BACK's edge.



8. Insert Hinge Nails and pound them only part way in to test Door.



If DOOR swings open without hitting FLOOR, pound nails in rest of way.



If Door hits Floor, remove nails and round off DOOR edges that hit the FLOOR. If this doesn't work you may need to reposition DOOR slightly down from flush with the FRONT.



9. Position PIECE ABOVE DOOR and nail it from BACK and FRONT.



10. Attach Hanger with screws for DOOR grip.



11. Position ROOF so its rear edge is even with BACK. Nail ROOF to BACK, SIDE, and FRONT.





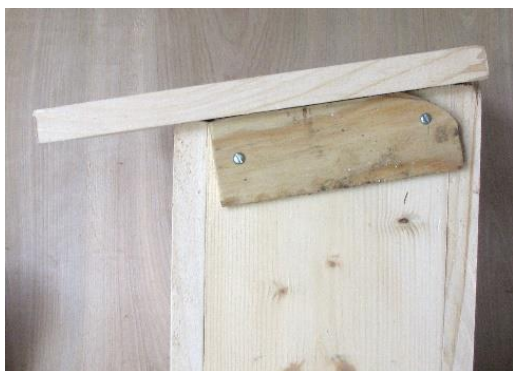
12. Fill gap between ROOF and BACK with wood filler.



13. Drill slanting hole and insert Keeper Screw.



14. Screw VENT BLOCKER in place on upper SIDE. Right-hand screw is the pivot.



15. If you plan to mount the box on a metal pole, you can add hangers at this point. Mounting screws point outward from the inside of the box. We use round head machine screws, #8-32 x 2" long, with nuts and washers.



16. A coat of paint, applied only to the exterior surfaces, will help the box last longer.



