Plan 11 Standard Bat House

SUPPLIES NEEDED:

LUMBER:
4" X 4" X 1/2" CDX EXTERIOR PLYWOOD
4" X 8" X 3/8" CDX EXTERIOR PLYWOOD
1" X 8" X 8" BOARD
1" X 8" X 4" BOARD

OTHER TOOLS AND SUPPLIES NEEDED:

SCREW DRIVER (PREFERABLY ELECTRIC)
1 - 1/4" LONG WOOD OR GALVANIZED DRYWALL SCREWS (1LB). SCREWS ARE REQUIRED FOR ASSEMBLY.
CAULKING: TUBE OF BLACK ROOF CEMENT
CAULKING GUN FOR ABOVE
BLACK, MATT FINISH, DARK BASE, SOLID COLOR ACRYLIC EXTERIOR STAIN (ONE QUART)
BLACK ROLLED ROOFING: 25 - 1/2" X 9 - 3/4"
STAPLE GUN WITH 3/8" STAPLES
UTILITY KNIFE WITH SNAP-OFF BLADES
FIBERGLASS WINDOW SCREENING: 22" X 6"

ASSEMBLY INSTRUCTIONS:

The bat box plan has been successful in attracting nursery colonies of Little Brown and Big Brown Bats.

Bat roosting requirements are strict, necessitating adherence to construction details.

1. Cut out parts as illustrated.
2. Apply a bead of caulk to front edges of box SIDES & attach box FRONT with 6 - 8 screws per side. Clean excess caulk that squeezes out.
3. Score inside of front and sides with utility knife to roughen. Also score bottom 4 - 1/2" on outside of box FRONT below vents. Make horizontal scratches 1/2" apart. While the knife is out, score both sides of all ROOSTING BAFFLES and the interior side of box BACK. These are landing/roosting footholds and are VERY IMPORTANT. Do not use saw to roughen, this will cause plywood to delaminate.

LANDING PLATE AND INTERIOR SURFACES MUST BE ROUGHENED.

4. Attach 2 BAFFLE SPACERS to inside front corners with two screws each, and screwed in from front of box. Space about 2 inches from top of box FRONT with 1/4" dimension to sides. Lay assembled parts FRONT down on table or floor.
5. Attach SHORT ROOST BAFFLE to spacers about 1" down from top of sides. Use 2 screws on each side.
6. Attach two BAFFLE SPACERS into new corners made by short roost baffle. Use 2 screws on each side.
7. Attach LONG ROOST BAFFLE to spacers about 1" down from top of sides. Use 2 screws on each side.
8. Repeat installation of BAFFLE SPACERS and ROOST BAFFLES, alternating short and long roost baffles until six ROOST BAFFLES are in. The last two baffles should be attached to previously affixed BAFFLE and box SIDES for stability.
9. Caulk back edges of box SIDES and attach box BACK with scored side in. Do not caulk inside vent areas. The BACK should extend 2" above top of SIDES. Use 6 - 8 screws on each side. Clean excess caulk that should squeeze out.
10. Center ROOF SUPPORT on inside top of box FRONT. Align angled edge with top edge of FRONT and SIDES. Attach with 3 screws through box FRONT.
11. Center ROOF SUPPORT on inside and 2" below top of box BACK. Align angled edge with top edges of SIDES. Attach with 3 screws through box BACK.
12. Apply bead of caulk to top of SIDES, FRONT, two ROOF SUPPORTS and angled back edge of ROOF.
13. Lay ROOF in position and attach with at least three screws on each SIDE, FRONT and BACK. Clean excess caulk.
14. Caulk back of roof top where it butts against the back. Smooth with damp towel. Inspect all other caulked seams and caulk exterior seams as necessary.

**TOP OF BOX MUST BE AIR TIGHT SO IT CAN HOLD HEAT.**

15. Apply two or three coats of stain to exterior, including the landing plate.

16. Cut section of black rolled roofing to fit on roof top. Apply thin bead of caulk around top of roof edges. Set rolled roofing into position and staple down. Caulk back edge of rolled roofing where it butts against box BACK. Caulk exposed staples on rolled roofing surface.

17. Cut out piece of fiberglass window screening to fit on landing plate to provide a good landing platform. Staple to bottom front of box BACK. Coat exposed staples with black stain. Landing plate should be roughened under screening since screening may eventually fall off.

Attach box at least 10 feet high to a building or pole. See pole mounting directions. Orient box to southeast to catch the morning sun if possible. If not possible, orient between the southeast and southwest to get at least seven hours of direct sun. Many successful bat boxes get 12 hours of direct sun.

If bat box is used in combination with bat eviction from building, **DO NOT EVICT BATS BETWEEN MID-MAY AND THE END OF JULY WHEN FLIGHTLESS YOUNG MAY BE TRAPPED INSIDE BUILDING.**

**Maximum Capacity: 250 Bats**

This box can hold up to 250 bats comfortably. If over 250 bats use this box, heat stress can cause problems on hot, humid days. Should more capacity be needed, additional boxes can be placed side by side.

If wasps become a problem, use a long thin stick to scrape nests out in winter. New nests can be knocked out in May or early June, during cool mornings or evenings, when wasps are less aggressive. If bats are present, don't disturb. Bats and wasps can coexist in boxes. Bats provide travel lanes for wasps to reach their nests. Wasps, in turn, provide some protection against box disturbance.

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**Plan 11 Standard Bat House continued...**

[TWO 3/8" X 3" LAG BOLTS AND WASHERS]

[ATTACH 2 X 4 MOUNTS TO POLE WITH FIVE 3/8" X 3" LAG BOLTS AND 1" FLAT WASHERS]

[PREDRILL 2 X 4s WITH 3/8" BIT USE 3/16" BIT FOR PILOT HOLES INTO POST]

[COUNTERSINK MOUNTING FACE HOLES WITH 1" DIAMETER SPADE BIT 1/2" DEEP USE THREE 3/8" X 3" LAG BOLTS WITH WASHERS]

[ATTACH BOX TO MOUNTS WITH 1 5/8" DECK SCREWS]

[PRESSURE TREATED 4" X 4" X 16 POST]