

Nest Boxes for Wildlife

Habitat Extension Bulletin

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Many species of birds and mammals nest in cavities created in trees by woodpeckers or natural decay. In many areas, however, the lack of mature trees with suitable cavities limits populations of several desirable wildlife species. An excellent way to attract and help species that depend on cavities is to install nest boxes.



Table 1. Recommended nest box dimensions (inches).

Species	Hole Diameter	Floor	Box Depth
House Wren, Mouse	1-1 1/4	4 x 4	6
Chickadee, Nuthatch, Downy Woodpecker	1 1/4	4 x 5	8
Swallow, Bluebird, House Finch, Sparrow	1 1/2	5 x 5	10
Hairy Woodpecker	2	5 x 6	12
Small Owls, Flicker, Bufflehead, Grackle	2 1/2	6 x 8	10-15
Kestrel, Fox Squirrel	3	8 x 8	12-18
Goldeneye, Merganser	4x5 oval	10 x 12	25
Wood Duck	4x5 oval	12 x 12	22

Different species require different sized cavities with different sized entrance holes. A variety of nest boxes will attract the greatest variety of wildlife. Table 1 gives nest box dimensions for some common species. The entrance hole diameter is the most critical dimension. Too large an entrance hole will allow undesirable species access to the nest box, possibly excluding the target species.

Nest box designs are limited only by your imagination. Good nest boxes can be made of wood, or plastic bottles, buckets, or pipe. Metal is a poor choice, because of excessive heat from the sun. Other important nest box features include:

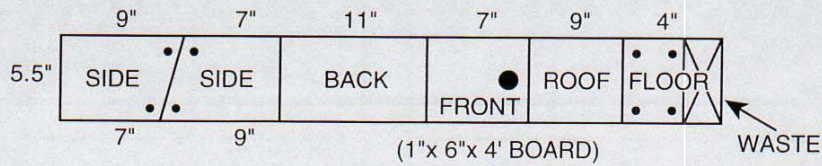
1. Small drainage holes in the floor.
2. Ventilation holes in the sides near the top.
3. A rough interior (or small section of screen inside below the entrance hole) to help young birds or mammals exit.
4. No perch outside the entrance hole.
Perches allow aggressive exotic species, such as house sparrows and starlings to attack the adults and young inside the nest box.

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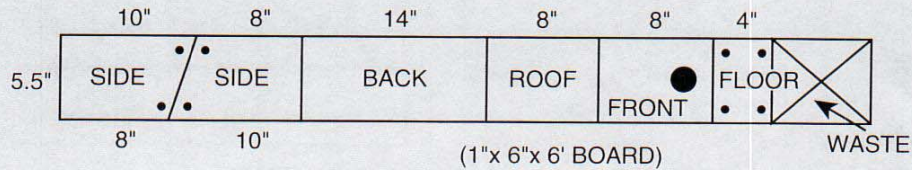


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WREN, CHICKADEE, NUTHATCH, MOUSE, ETC.



SWALLOW, BLUEBIRD, FINCH, ETC.



FLICKER, SMALL OWLS, ETC.

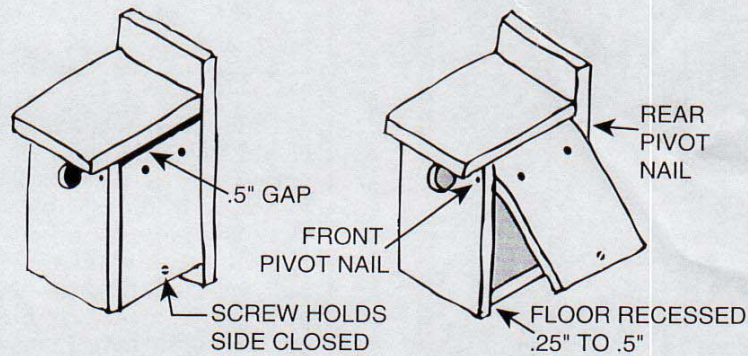
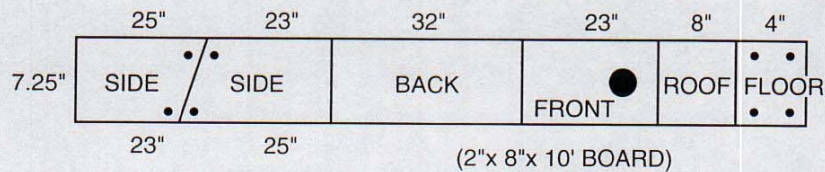


Figure 1. Plans for a simple nest box. See Table 1 for correct size of entrance holes. Holes in sides and floor are for ventilation and drainage.

Table 2. Nest box placement recommendations.

Species	Habitat	Height	Comments
House Wren	wooded, shrubby	5-10'	shady spot in tree or under eave
Nuthatch	conifer stand	12-20'	on large tree trunk
Chickadee	mature trees	5-15'	50% sunlight, 1" sawdust in bottom
Woodpecker	mature trees	4-10'	fill box w/ wood chips
Kestrel	open, grassy	16-30'	2" of wood chips inside, facing S or W
Bluebird	grasslands	5-15'	facing N, NE, or N, 100' apart
Swallow	near water	5-15'	on tree or building
Duck	near water	15-25'	2" of wood chips inside
Squirrel	mature trees	15-30'	facing E or S, 1/2 full of dry leaves

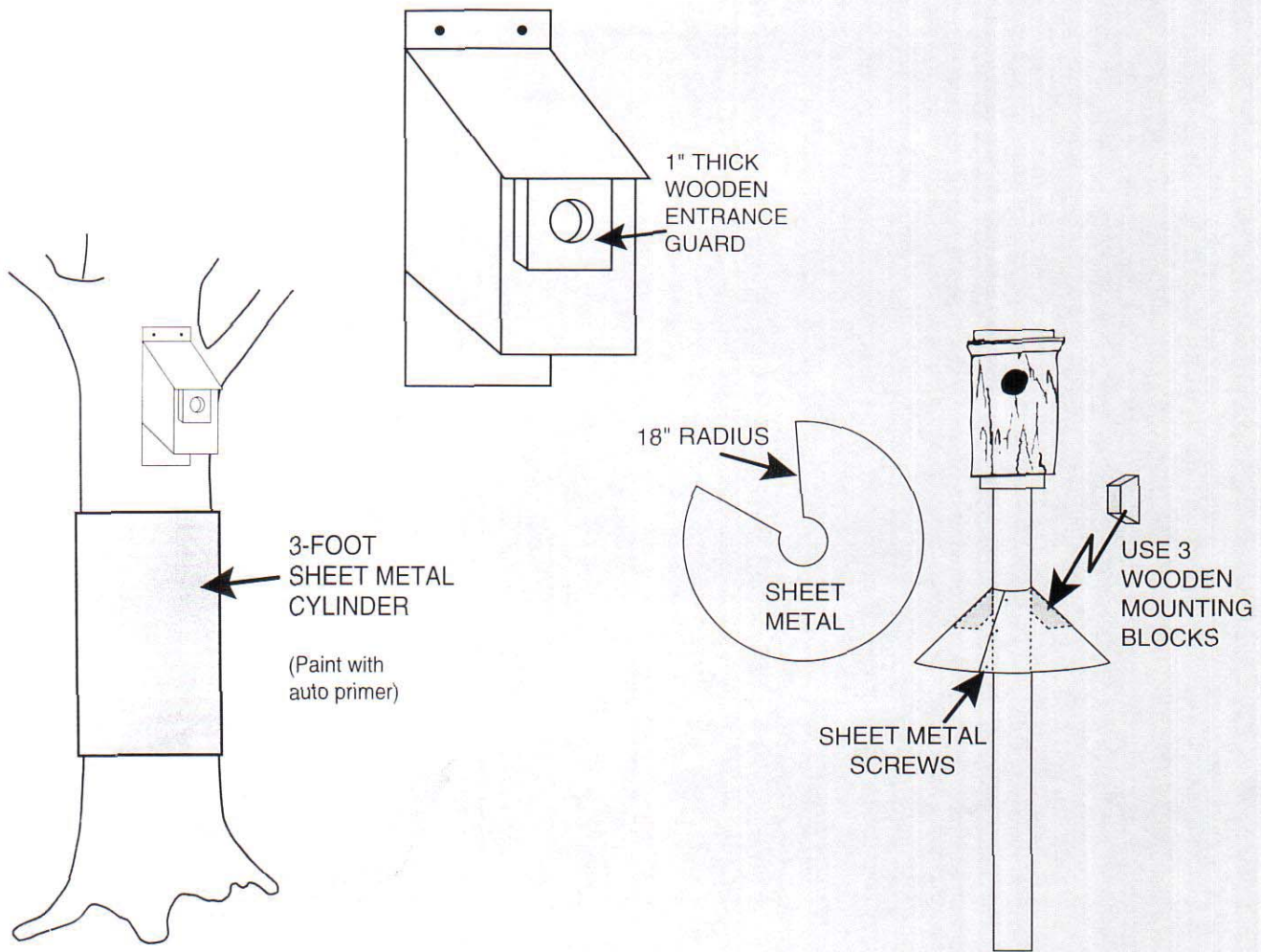


Figure 2. Three styles of predator guards.

5. A removable wall, floor, or roof to facilitate annual cleaning.
6. No chemically preserved wood, which may be toxic. Cedar, redwood, or exterior-grade plywood are weather resistant and safer.
7. Ring-shank or galvanized nails which hold tighter and last longer than smooth-shank nails.
8. A coat of nontoxic (latex), dull-colored exterior paint to make the nest box less conspicuous and more weather resistant.
9. A sloped, overhanging roof to keep rain out of the entrance hole.

Nest boxes should be installed by mid-March to be available for returning migrants. Boxes should be mounted at the proper height and orientation (direction) for the wildlife species you are trying to attract. Table 2 offers some recommendations. With few exceptions, nest boxes should be mounted solidly, not swinging from a string or chain.

Any nest box may be ignored the first year it

is installed, but it may be occupied in later years. Installing several nest boxes will increase the chances that some will be occupied.

Nest boxes should be cleaned of old nesting material each fall for two reasons: many species prefer to build their own nest each spring. If a nest box already has an old nest present, the birds may look elsewhere; and cleaning the boxes also reduces the chances of passing mites, lice, or other parasites to future tenants.

Raccoons, cats, or squirrels may raid nest boxes to dine on eggs or young birds. If this is likely to be a problem, nest boxes can be mounted on metal poles, or a three-foot band of sheet metal can be wrapped around the base of the tree or post (figure 2) to discourage marauders. The metal band can be camouflaged with automobile primer paint.

Another way to discourage predators is by cutting a hole the same size as the entrance hole in a one-inch thick piece of wood and installing this block over the entrance to the nest box. This creates a longer "tunnel" into the

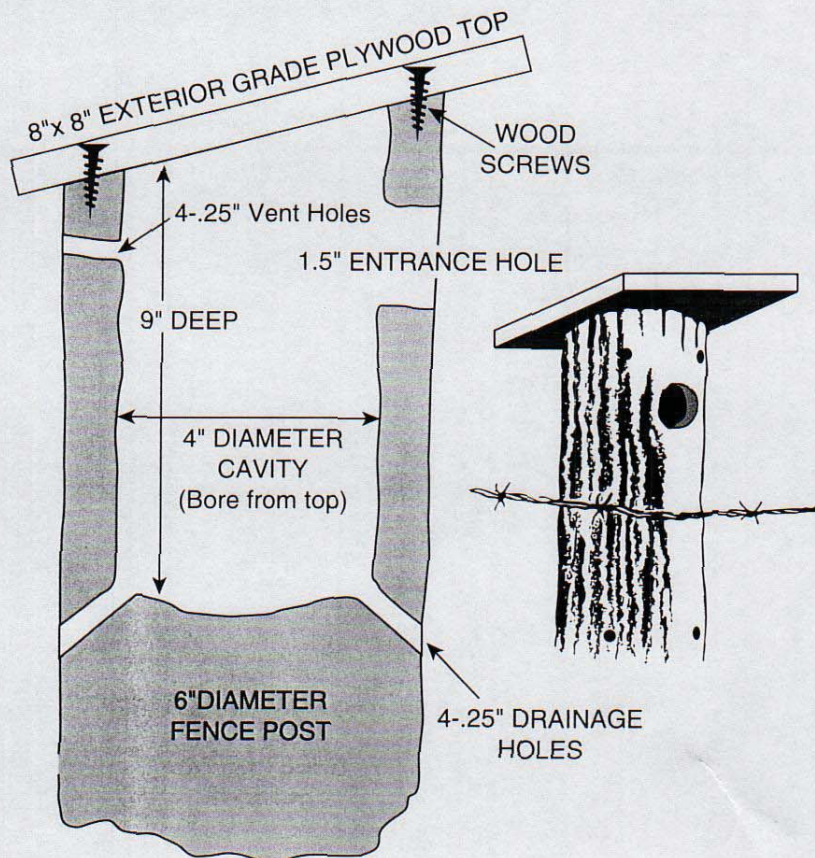


Figure 3. A bluebird nesting post. A cordless drill is used to bore a 4-inch hole in the top of an existing fence post. Select a post with no large knots in the area of the cavity.

nest box, making it more difficult for a predator's paw to reach the eggs or young inside the box (figure 2).

The kinds of animals attracted to your nest boxes will depend largely on surrounding habitats. Wrens, for example, will be encountered where dense shrubs and brush are available. Bluebirds (figure 3) prefer open grasslands or meadows with scattered trees. Squirrels, woodpeckers, finches and others require trees. Swallows and wood ducks need open water nearby. In almost any area, however, there is wildlife that will benefit from nest boxes.

For information on duck nesting structures, refer to the Wyoming Game and Fish Department habitat extension bulletin number 6b, "Design, Placement, and Maintenance of Duck Nesting Structures."

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This publication is one in a series of habitat extension bulletins produced by the Wyoming Game and Fish Department. Call 1-800-842-1934 for additional information or assistance.