Building Houses and Feeders for Backyard Birds: A New Publication is Available

by Scott R. Craven

Since it was first written over 20 years ago by Agricultural Engineer Glenn Barquest and Wildlife Ecologist Bob Ellarson, University of Wisconsin Extension publication G2091—“Shelves, Houses and Feeders for Birds and Squirrels”—has been UW Extension’s most popular wildlife bulletin. Revised by Scott Craven in 1980 and given a new look with an Owen Gromme painting as a cover illustration, it remained popular during the 1980s. Now in 1990 it has undergone another, more significant revision. Numerous new house designs have been added, and the name has been changed slightly to “Shelves, Houses and Feeders for Birds and Mammals” to reflect the inclusion of new mammal housing. It has also been adopted as an Extension “regional publication,” so it will be available in a number of North Central states. Of course, it’s available anywhere in the world by mail order.

Building and erecting wildlife housing is a quick way to improve wildlife habitat, especially if natural cavities or other nest sites are in short supply. For some species such as Purple Martins, housing construction is the only way to attract them to your property on a regular basis. When I was a kid pounding boards together in my dad’s workshop, a “bird house” was nothing more than a wooden box with a roof and floor and a hole of whatever dimension a handy drill bit or circular template would yield. Now there are a multitude of designs and modifications targeted to specific birds and the exclusion of unwanted tenants. It is certainly possible to modify and even improve existing plans. New house designs or a novel use of materials can contribute to our knowledge of wildlife housing. However, the designs presented in “Shelves, Houses, and Feeders” are “tried and true.”

Beyond the satisfaction of providing housing for birds, house building offers a chance for off-season activity and improvement or exercise of woodworking skills. Bird houses or feeders make excellent gifts and fund-raising or community service projects for conservation clubs, school classes, or youth groups such as 4-H or scouts.

“Shelves, Houses, and Feeders” begins with an introduction to wildlife housing and construction techniques...
WREN HOUSE

MATERIALS
1 piece 1 x 6 (about 3/4" x 5 1/2") x 24" 
1 piece 1 x 4 (about 3/4" x 3 1/2") x 12" 
Use box lumber, bevel siding, exterior plywood, heavy asphalt roofing or tin for roof. 
4 roundhead wood screws to attach one side of roof 
9 1 3/4"-2 1/4" nails 
B 1 1/4" nails 

CONSTRUCTION
Attach one side of roof with wood screws, so it can be removed for annual house cleaning.

MOUNTING
Attach to a tree or post 5-6' above ground with roundhead or lag screws.
NEST SHELF FOR ROBINS AND PHOEBES

MATERIALS
1 piece 1 x 6 (about 3/4” x 5 1/2”) x 18”
1 piece 1 x 2 (about 3/4” x 1 1/2”) x 10”
8 1 3/4”-2 1/4” nails

MOUNTING
Attach to the side of a building at least 10-12’ above the ground in the shelter of the eaves or on the main branch of a tree in a shaded area.

ROOFED SHELF FOR ROBINS AND PHOEBES

MATERIALS
1 piece 1 x 10 (about 3/4” x 9 1/4”) x 30”
1 piece 1 x 2 (about 3/4” x 1 1/2”) x 36”
1 3/4”-2 1/4” nails
1 1/4” nails

MOUNTING
Use round head or lag screws to mount on the south or east side of a building or in a tree at least 10-12’ above the ground.
WOOD DUCK HOUSE

MATERIALS
1 piece 1 x 12 (about 3/4" x 11 1/4") x 5'
1 piece 1 x 10 (about 3/4" x 9 1/4") x 6'
1 piece 1 x 2 (about 3/4" x 1 1/2") x 1' for cleat
1 3/4" x 2 1/4" nails
1 1/4" nails for roof section
1 1 1/4" round head wood screw
1 piece 3" x 12", 1/4" or 3/8" mesh hardware cloth
(see construction notes)
poultry netting staples (galvanized)

CONSTRUCTION
If inside surface of front board is smooth, attach a
3" x 12" strip of hardware cloth on the inside. Have
it extend from the bottom of the hole down 12 inches. Saw cuts 1/8" deep and 1/2" apart in the
same area are suitable.

Use a piece 1 x 12, with the grain direction front to
back, for roof. To reduce warping and to keep the
roof piece in position, attach a piece 1 x 10, with
the grain direction side to side, on the underside.
Reduce in size and slightly bevel the front edge of
the 1 x 10 piece so it can be raised when the screw
is removed. The 1 x 2 permanently attached cleat in
the back and the screw in front keep the roof in
place.

MOUNTING
Attach to tree trunk 8-30' above the ground where
no branches shield the entrance. It may also be at-
tached to a sturdy pole in shallow water just a few
feet above the water. Use a lag screw and washer
at both top and bottom of back piece.
and materials. Then, for each selected species or group of animals, one or more house designs, materials lists, construction guidelines, and tips on house placement and species ecology are presented. The new revision includes almost 40 blueprints for housing for House Wrens, Purple Martins, Eastern Screech-Owls, American Kestrels, Common Barn Owls, Eastern Bluebirds, Tree Swallows, Wood Ducks, Black-capped Chickadees, and other birds, as well as squirrels and bats. Several samples are included in this article. All 4 designs for bluebird houses recommended by the Bluebird Restoration Society of Wisconsin are presented, as well as the Ohio DNR plans for a barn-owl box. Bat Conservation International graciously gave us permission to reproduce BCI’s plans for a bat roost. Granted, bats are not birds, but I now receive more calls for bat house plans than any other type of wildlife housing.

The new revision also contains a section devoted to recycling 2-liter pop bottles, milk cartons, old tires, and other potential landfill into useful and inexpensive feeders and houses. These designs are especially useful for children.

In Wisconsin, about 45 birds utilize tree cavities. Eliminating the woodpeckers, which are quite capable of excavating their own cavities, that means almost 40 secondary cavity nesters are potential tenants for your housing. To maximize your occupancy rates, pay careful attention to placement recommendations. Be patient; a martin house, for example, may go unused for several years. To minimize house use by House Sparrows and starlings, don’t put houses in place until the desired species are due to arrive in spring (e.g., Purple Martins) and remove House Sparrow or starling nests if and when they are built.

The revised version of “Shelves, Houses, and Feeders for Birds and Mammals” is due in stock about 1 June. It will be available at all county UWEX offices or by mail from: Agricultural Bulletins, Room 245, 30 North Murray Street, Madison, WI 53715, (608) 262-3346.

If you like birds and can use a saw and drive a nail, I believe you will find this publication very enjoyable and useful. It is not, however, the only publication of its kind. Other states and resource management agencies also provide housing plans. In fact, as noted, some of the designs presented originated with other sources. My goal is to promote wildlife conservation and bird houses are one way the public can make a contribution.

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