



How

To

Do

It

PLANS FOR ATTRACTING BIRDS

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How-To-Do-It Plans for Attracting Birds

Birds have appealed to mankind throughout recorded history because of their beauty, interesting habits, and the assistance which most of them render in eating insects, rodents, and weed seeds. The abundance of birdlife on our farms and around our houses is in direct relation to how well their requirements for nesting sites, food, water, and cover are met. We can increase both the number and kinds of birds around us by supplying these requirements. This bulletin suggests a number of projects for encouraging birdlife; most of the suggested construction can be carried out with materials which are readily available. It should be emphasized that birds require food, nesting areas, water, and cover; and that lack of any one of these four factors will limit the number present on any area. Therefore, plan your projects to supply all four of these requirements.

For brevity's sake, dimensions and sketches for projects are given on the same figure. Each individual can use his own initiative and adapt the suggestions given below to the material at hand and to his own local situation.

NEST BOXES

Dimensions and illustrations of nest boxes for various kinds of birds are given in Figure 1. With the dimensions and illustrations in mind, the following considerations should be of assistance in building the specific type of nest box for the particular birds of your choice.

1. Always build a birdhouse for a particular bird, not just for any bird.

2. Use weather-resistant material when constructing the houses. Cypress and redwood are the most desirable lumbers if they can be secured. Use brass or galvanized screws or nails. The best materials available are cheapest in the long run.

3. Never make a birdhouse entrance hole too large; bore only the size hole recommended for the particular bird for which the nest box is being built.

4. Never locate the entrance hole near the floor, except for purple martins. As a rule, the entrance hole should be located above the center of the house front.

5. Never construct the nest box with more than one compartment, except for purple martins.

6. Do not use a landing perch for small houses as this makes it easier for the English sparrow or starling to enter the house.

7. Do not use metal for building birdhouses as it causes the house to be hot during most of the summer nesting period. If it is necessary to use metal parts, paint the metal with aluminum paint or use aluminum material.

8. Do not crowd your backyard with too many birdhouses. Three to five bird nest boxes are usually ample. When constructing birdhouses for placement over a large area, such as a farm, about one house per acre is satisfactory.

9. Don't leave last year's nest trash in any nest box. All bird houses should have hinged tops or removable screwed-on bottoms for easy access and cleaning.

10. Leave the inside of the nest box rough so that the young birds can crawl upward to get out.

11. Always provide ventilation at the top by means of a crack or bored holes so that the young nestlings will not get too hot.

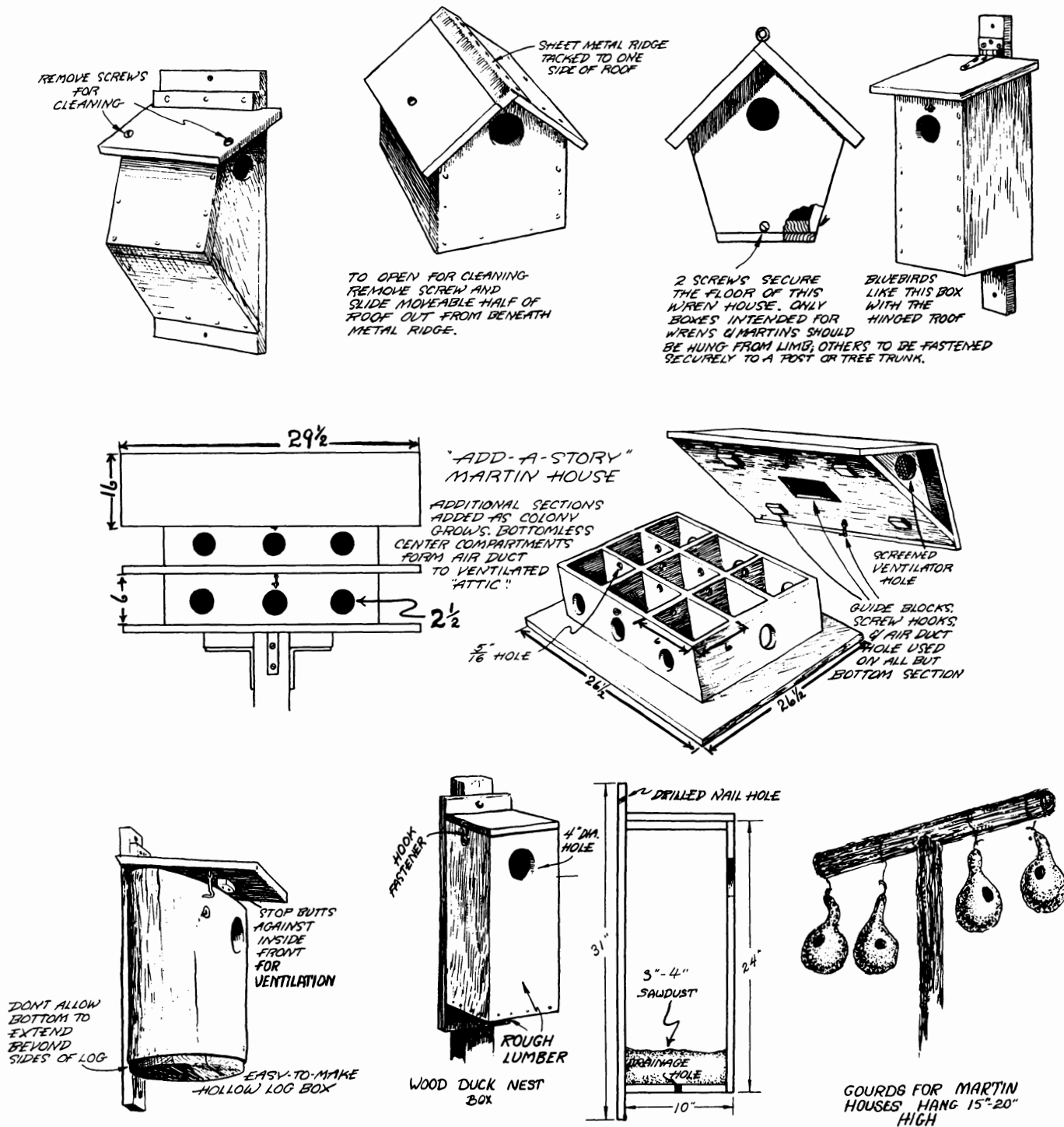
12. Be sure that the nest box drains well at the floor. Several 1/4" holes bored on the bottom of the house will assure this.

13. Whenever placing the birdhouse on a tree always choose an isolated tree which can be protected against squirrels and cats.

14. Never paint a birdhouse pure white (except for martins); use a dark paint or stain.

Birdhouses should be firmly attached in upright position to a tree trunk, fence post or, in the case of the wren house, to a wire trolley; the house should not lean either forward or backwards. The recommended height above ground for various species of birds is given in Figure 1. Bird houses should be placed where they will not be molested by cats, squirrels, or thoughtless children. A flanged metal shield (Figure 1) placed around the tree or branch below the birdhouse will prevent depredation by most wild animals. It is wise to keep the birdhouse under careful observation when it is occupied by nesting birds to prevent predation losses.

ATTRACTING BIRDS WITH BIRDHOUSES



SPECIES	FLOOR OF CAVITY	DEPTH OF CAVITY	ENTRANCE ABOVE FLOOR	DIA. OF ENTRANCE
BLUEBIRD	5"x5"	8"	6"	1 1/2"
CHICKADEE	4"x4"	8"-10"	6"-8"	1 1/8"
TITMOUSE	4"x4"	8"-10"	6"-8"	1 3/4"
NUTHATCHES	4"x4"	8"-10"	6"-8"	1 1/4"
HOUSE WREN	4"x4"	6"-8"	1'-6"	3/8"
CAROLINA WREN	4"x4"	6"-8"	1'-6"	1 1/8"
CRESTED FLYCATCHER	6"x6"	8"-10"	6"-8"	2"

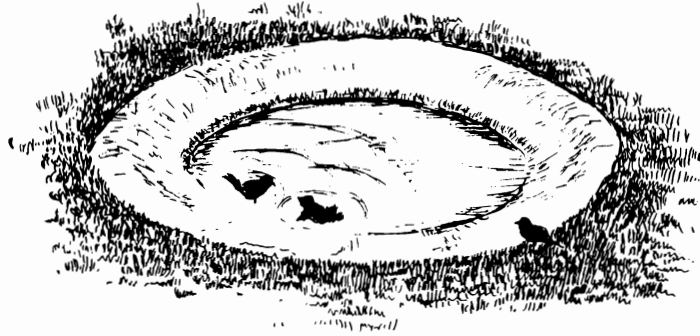
SPECIES	FLOOR OF CAVITY	DEPTH OF CAVITY	ENTRANCE ABOVE FLOOR	DIA. OF ENTRANCE
FLICKER	7"x7"	16"-18"	14"-16"	2 1/2"
RED-HEADED WOODPECKER	6"x6"	12"-15"	9"-12"	2"
DOWNY WOODPECKER	4"x4"	8"-10"	6"-8"	1 1/4"
PURPLE MARTIN	6"x6"	6"	1"	2 1/2"
TREE SWALLOW	5"x5"	6"	1'-5"	1 1/2"
BARN OWL	10"x18"	15"-18"	4"	6"
SPARROW HAWK	8"x8"	12"-15"	9"-12"	3"

Figure 1

ATTRACTING BIRDS WITH WATERING AND FEEDING DEVICES



CAT GUARD

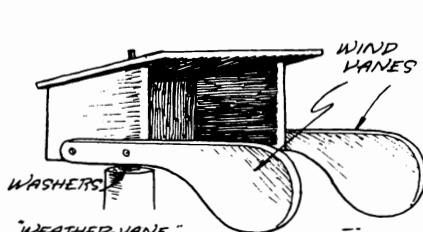


GROUND BIRD BATH



PEDESTAL
BIRD BATH

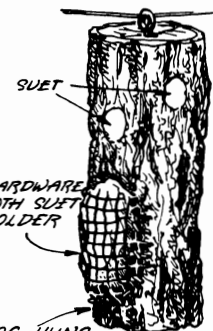
FEEDING STATIONS FOR SONGBIRDS



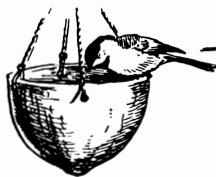
"WEATHER-VANE"
FEEDER PIVOTS ON IRON ROD TO
KEEP OPEN SIDE DOWNWIND.



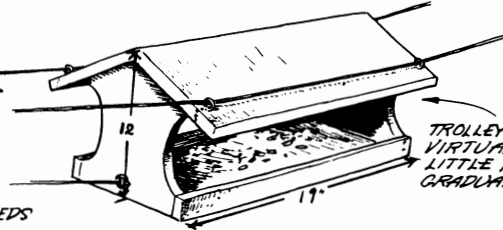
ABOVE-WINDOW-SILL TRAY
FEATURES AUTOMATIC FEEDER, SUMAC
SEED HEAD & PINE BOUGHS



SHORT LOG HUNG
ON WIRE MAKES NATURAL
FEEDER. PACK 1" HOLES WITH SUET.



COCOANUT SHELL FOR SEEDS



TROLLEY FEEDER, SUSPENDED ON WIRES, IS
VIRTUALLY CAT-PROOF. BY DRAWING IT A
LITTLE NEARER EACH DAY BIRDS CAN BE
GRADUALLY COAXED RIGHT UP TO THE HOUSE.

FOOD FOR GAME BIRDS



HERE'S THE "STANDARD" FEEDING SHELTER FOR GAME. WHEN
BUILT ON UNFROZEN GROUND IT CAN BE SUPPORTED BY
FORKED STAVES INSTEAD OF TREES. CAN BE COVERED WITH
CORN STALKS, BARK, OR BRUSH & LEAVES.



THIS HOPPER FEEDER FOR SMALL GAME IS DEER-
PROOFED BY ERECTING AROUND IT A 12'-14' SQUARE
ROOF. THE ROOF IS ONLY 2 FT. ABOVE THE GROUND TOO
LOW TO ADMIT DEER. 4 STURDY POLES SET ON POSTS
SUPPORT THE CROSS POLES & COVERING.

Figure 2

Songbirds may be further encouraged to nest in the birdhouse which have been constructed and erected for them - or to build their own nests - by placing nest-building materials where they are really available. Nesting birds will make use of such material as yarn, silk thread, horse hair, wool, feathers, strips of rags, cotton batting, wool shavings, shredded paper, straw, hemp, sphagnum moss, and similar material. Such nesting material can be placed in the crotch branches of trees or shrubs or, preferably, it can be cached in specially made nesting material racks. Placing the nesting material in racks will protect it from the weather and will help keep it from being blown about the yard.

After the birds have finished nesting, remove the old nesting material from the box, burn it, and spray the box with an insecticide if bird lice or other parasites are observed. Birds often nest in the same box several times each year. The box should be cleaned after each brood is off. In the fall, birdhouses may be taken down, cleaned, repaired, and stored indoors. If this is done, the houses will last for many years. Be sure that all new or reconditioned nest boxes are put up early in the spring, preferably by April 1st.

WATERING DEVICES

A lack of water in our yards and gardens is often the weakest link in the environment of songbirds. Watering areas are very attractive to birds and may serve to draw in species that would not normally be found in abundance around homes. Birds use such watering areas to obtain drinking water and as bathing areas; bathing appears to be one of the main uses.

Bird baths may be constructed directly on the ground or they may be placed on pedestals. A simple ground-placed bird bath is easy to construct but maybe hazardous to birds if predators are present. A hollow depression can be dug and lined with concrete, using four parts of sand to one part cement. The size and shape of the bird bath is not of importance, but the depth should not exceed three inches. In general, the ground-placed bird bath should be about 30 inches in diameter, with gentle sloping sides and with a maximum depth of about three inches. Lining the bottom of the bath with small pebbles makes it possible for birds to secure a firmer footing in entering and leaving the water. Planting the edges of the bath with moss, ferns, or flowers will make the bath more attractive to the eye.

A home-made pedestal bird watering area is not difficult to construct. A cement basin can be made as outlined above; and, when the basin is dry, it may be placed on a 30-inch pedestal made of concrete, rocks or a log. Where cats are present, the pedestal type of waterer is safer for songbirds to use.

Moving water is highly attractive to birds. If water can be piped to the bath and permitted to drop into the basin, such movement will make the watering area more attractive to birds.

FEEDING STATIONS

Songbird feeding stations do not have to be elaborate to be effective. In fact, a shelf nailed to the outside of a window and supplied with a constant source of suitable food will attract a large number of birds. Various types of songbird feeding stations are illustrated in Figure 2. All of these feeding devices can be easily constructed in the home workshop, and they can be made as elaborate or as simple as desired. Birds avoid going under a roof or into a closed area. Therefore, they will feed much more freely in an open shelf-type feeder than they will in a roofed feeder. The bottom of the feeding station should be well drained, by having a few 1/4 inch holes bored in the floor or by an open section of the floor covered with screen wire. Large quantities of food should not be placed on the feeding shelf at one time as it will be exposed to the weather and may deteriorate before it is taken by birds. "Self-feeders"-or closed top hoppers which supply additional food as it is eaten by birds - are very helpful as they offer protection against the weather for the stored food and reduce the need for frequently resupplying food to feeding station.

Experience has shown that the most important considerations in the operation of a songbird feeding station are: (1) keeping a constant supply of food of the right kinds available, (2) protecting the feeder - by means of a flanged metal guard - from cats and squirrels, (3) placing the feeder near cover such as pine or hemlock trees, rose bushes, or shrubs where the birds will not be disturbed and (4) making it as convenient as possible to tend; if the station can be refueled with food from a house window during periods of snow or other inclement weather, this is very desirable.

Trolley feeders meet the above requirements from many aspects. In addition, the trolley feeder can be started at a distance and moved gradually, and over a period of days, right up to the house window where the feeding birds may be observed at close range.

Various birds have different feeding habits: some prefer animal foods such as beef suet, others prefer grain, and still others like fruit. All three types of food should be supplied at each songbird feeding station. Suet-seed cakes are easily made by heating beef suet until it is fluid and then pouring the semi-liquid suet into a cake or bread mould, adding grain as the mould is filled, and allowing the mixture to cool. The moulded suet-grain mixture can be cut and placed in hardware baskets or pressed into holes drilled about 1 inch into small logs. (Figure 2) This mixture also can be poured into half grapefruit husks or into coconut shells. The suet-grain filled grapefruit halves or coconut shells can be hung on the feeding stations. If suet is not readily available, peanut butter-grain mixture is relished by a number of birds.

Seed eating songbirds will take a wide variety of foods such as millet, buckwheat, corn (both whole and cracked), sunflower seeds, wheat, peanut pieces, pecan meat, hemp, and similar foods. Sunflower seed appears to be one of the most desirable seeds; many bird-watchers grow their own sunflower seed which they use at their feeding station. A good balanced mixture for grain eating birds contains 30 percent sunflower seed, 30 percent hemp seed, 30 percent millet, and 10 percent buckwheat. Whole corn and starch grain are taken by a large number of birds but may attract such undesirable species as the English sparrow, starling, blue jay, and

domestic pigeon. Many hardware, garden supply, and feed stores have packaged grain mixtures available for feeding wild birds.

Game bird feeding stations for doves, quail, and similar sporting birds are generally of the lean-to or flat top construction (Figure 2). Such feeding stations should be open on at least three sides to permit easy escape in the event predators attack the birds when they are at the feeding station. The food may be placed directly on the ground or a "self-feeder" may be used. Once feeding has begun at a game bird feeding station, it is of the utmost importance to keep a constant supply of food available to the birds if the feeder is to be regularly used by the birds and be of real benefit to them.

Many FFA and 4-H groups and sportsmen's organizations are now planting food for game birds rather than operating a game bird feeding station. Experience has shown that suitable food plantings are more effective under most conditions than are the feeding stations. Your local game warden can assist you in selecting and securing the proper planting materials, either perennials or annuals, for the establishment of game and songbird food plantings.