

Mourning Doves

For many reasons the mourning dove is a popular bird. Its beauty of form and delicate, lustrous shades easily attract the birdwatcher's eye. Some listen to the dove's gentle cooing for soothing comfort. For others, the dove's swift, arrowlike flight can test one's marksmanship and thus make it a popular game bird.

DESCRIPTION AND HABITAT

The "gray ghost" is a good descriptive name for the mourning dove. Its plumage ranges from gray to buffy-brown with occasional black spots dotting the wings. The crown of the dove's head is bluish gray, the cheeks are olive brown, and the throat color varies according to sex. In males a purplish, metallic iridescence accents the throat, whereas in females it is mostly brownish. For size, this bird is a sleek 12 to 13 inches long and has a wingspan of 17 to 19 inches. Weight ranges from 4 to 6 ounces.

The mourning dove ranges over the entire United States, from Canada to Mexico and points south, from sea level to elevations of some 10,000 feet in the mountains.

Mourning doves migrate but their migration is not as defined as other migratory birds, such as waterfowl. It seems the more hardy birds in the North like to remain at home during winter. Some doves move south a short way while others travel deeper southward. In general, most Eastern doves winter in the Southeastern Gulf states, while other doves remain yearlong in certain Southern states. The Migratory Birds Treaty Act afforded the mourning dove protection because of its migrational tendencies.

Wherever a dove decides to call home, it is likely to find suitable space for nesting. Nesting begins in February and usually

continues into August. A few doves nest on the ground, but most build their nests in coniferous trees, such as pines and cedar. Mourning dove nests can be found in town and country.

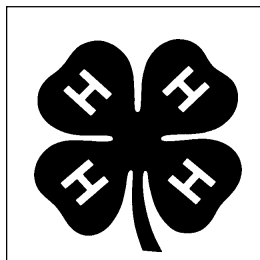
Nests are made of whatever is available — normally twigs, roots, sticks and straw. In fact, doves sometimes use old or abandoned nests of other birds such as robins, bluejays and mockingbirds.

Working leisurely, the male gathers twigs and sticks which are used in construction by the female. Nests started from scratch are located on the tops of branches near the central trunk or on suitable crotches or flat forks. Nests from scratch are typically flimsy, as twigs and sticks are arranged in a loose manner. Because of their flimsy nests, doves are considered lazy nest builders.

On the other hand, doves can be very busy during breeding season. Unlike most other birds, some pairs of doves will raise two or sometimes even three broods per season. Two eggs are laid at each nesting and incubation lasts for 14 days.

Both parents take part in incubation and feeding. Both are needed because if one parent dies it is doubtful whether the young will survive. The young are *altricial*, which means they have to be cared for intensively by the parents. The young doves are fed "pigeon milk" from their parents' crop. This liquid food substance is pumped from the parents' throat, where the curd is taken by hungry young. After 10 days, small seeds are added to the diet.

The dove's diet consists almost entirely of plant food. The raw insects it eats are incidental. Mostly cultivated crops like corn, small grains, milo, wheat, millet, sorghum, peas and peanuts are favored.



However, weed and grass seeds are heavily consumed in summer and fall. Small seed varieties like croton, pigweed, crabgrass, ragweed and mustard are preferred wild foods.

Mourning doves winter around feedlots, barns, cultivated fields and in woods next to these places. There they find waste feed, grain and seeds.

Other vitals in the dove's subsistence are grit and water. Often doves are seen on a roadside or along a stream close to a field where they feed. Here, sand and small gravel are picked up to grind against seed in the bird's gizzard. Grit is important in the diet of many birds. Its presence in the digestive tract aids in grinding of food. With enough seed and grit in their crops, doves fly to water close by. The doves will dip their beaks to the water and suck it up in a stooped position.

Predators, weather and disease all contribute to dove mortality. These factors account for an annual 60 to 80 percent turnover or replacement in local dove populations. Juvenile mortality is high with snakes, squirrels, bluejays and raccoons doing the most damage. Parasites and disease such as trichomonas and fowl pox take their toll on weak and unhealthy birds. Weather's greatest impact probably is on doves that remain north over winter. Contrary to popular belief, hunting does not limit overall dove numbers. The death rate for doves in states where hunting is allowed is the same in states where hunting is not allowed. Hunters harvest birds that would probably be lost to weather, disease, predators and other death-causing agents.

Food and water seem to be no great problem for mourning doves. This is due to their mobility and choice of food. Mobility allows the dove to attain these needs and their choice of food is wide. This adds to the dove's flexibility.

Mourning doves require open or semi-open lands. Forest management practices for even aged stands of trees can improve habitat conditions for doves. These practices allow small seed bearing weeds and shrubs to grow. Seeds compose 99 percent of the dove's diet. Doves, however, will not feed in woods where ground cover is heavy or in switch grass range.

Prescribed burning in open pine stands is an inexpensive technique for improving habitat. Burning reduces heavy ground litter, exposes seeds, retards development of woody undergrowth and favors important herbaceous dove foods. Species like partridge pea, tick clover, common lespe-deza and croton are found more abundantly in one- or two-year burns than in older roughs.

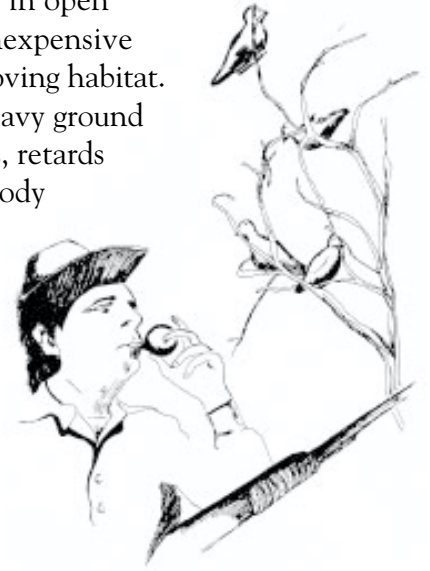


Figure 1. Hunters often use special bird calls to lure doves.

Remember, too, that clumps of evergreen trees are preferred for nesting sites. Establishing and maintaining windbreaks and hedgerows provide excellent nesting and roosting sites. Development of water supplies through springs, water holes and ponds is another good practice.

Since doves prefer open land, many types of farming practices are good for doves. Farm-produced grains and weed seeds compose the dove's major food diet. Row cultivation and normal harvest methods leave seeds of wheat, rye, browntop and proso millet, corn, sorghum and sunflower available for feeding. Plowing or disking of land keeps fields open and this favors volunteer seed plants, such as barnyard grass, birdeye, croton and common ragweed. The planting of browntop millet in orchards is helpful as a food and cover crop.

Doves nest in all 48 contiguous states and from sea level to elevations of 10,000 feet. The birds use about everything and anything that may provide a platform to build on. Space is doubtful a factor in nesting. Doves are versatile in their choice and, even though large nesting territories are preferred, there is likely no shortage of nesting space.

However, in some areas of the country, some conservationists have voiced concern for nesting space. In the prairie country trees are scarce. In the Southwest

and other Southern parts of the country, certain plant eradication programs have caused a loss of nesting space. In these areas, planting shelterbelt trees is wise for aiding nesting doves and other bird species.

The mourning dove builds a loose, flimsy platform of twigs for a nest. The flimsiness of the nest is probably a factor in nesting survival. However, it cannot be assumed that sturdier structures can improve the total number of young produced. Although heavy rains and wind may destroy nests, doves will re-nest making up the loss. Thus artificial nest structures may not be necessary, but in any event it is fun to see a dove come in and build its nest on a structure you put up. In the following activity, you will have the chance to construct artificial nest platforms (cones on which nest will be made). In the process you will be given a birdwatching opportunity.

BUILDING A NESTING PLATFORM

Artificial nest structures improve nest survival and are made in several forms. The following are two easy varieties to construct and install.

One can be constructed of 90 lb. roofing paper with one side black and the other green gravel. Another form can be fashioned from hardware cloth. The directions are the same for both materials.

The following will be used in the construction depending on the type platform you make.

- 90 lb. roofing paper with one side black and the other side green gravel (amount depends on number of platforms you build)
- Scissors

OR

- 1/4- or 3/8-inch mesh hardware cloth
- Wire cutters

AND

- Roofing nails and hammer
- Tie wire

To begin, cut out a circle 9 inches in diameter from the roofing paper or wire. Next, cut a "V" shaped sector

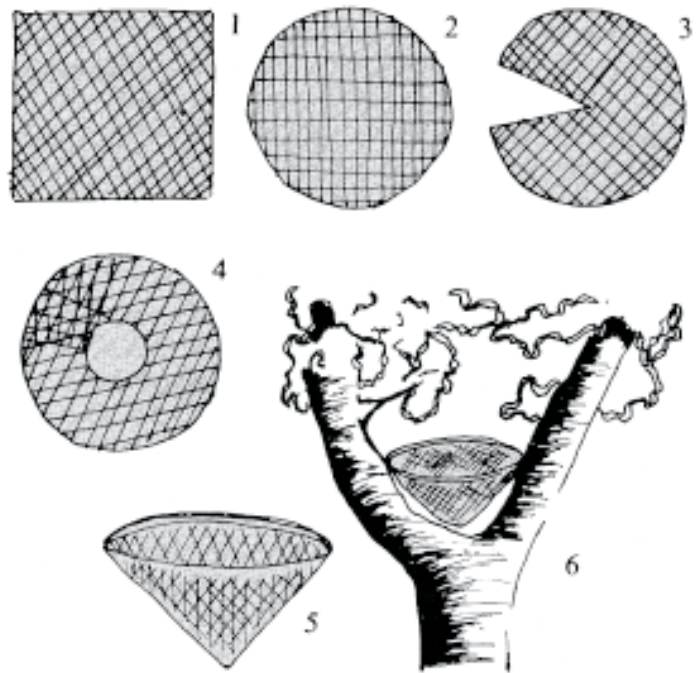


Figure 2. The stages involved in building a nesting platform.

together with the black surface of the paper inside. If using wire, the two ends should be overlapped 3 inches and then adjoined by tie wire. When done, the cone will be 7 inches in diameter and 2 inches deep.

Installation

To allow for proper usage, certain guidelines should be considered in installation. The best location usually is along limbs where branches have forked off and where there is moderate shade. Sites should command good visibility and have enough clearance of brushy limbs so birds can escape easily as danger approaches. In addition, consider the fact doves prefer to nest 6 to 16 feet above ground.

Once a cone is properly secured, attach it by nailing three to five roofing nails to the tree. Cones can be bent to fit the angle of the fork or crotch. The roughed down edges act as a smooth place for doves to alight. The cone diameter is such that a parent and two young ready to be fledged may sit side by side in the nest. Best results are obtained by installing the cones in late February, March and April before most doves have chosen their nesting territory.

Periodic checks should be made to see that the nesting platforms are not obstructed by new branches. Brush

out old nest material from the cone each year and let the bird make a nest with new twigs. By doing so you will be given numerous chances to study doves in the breeding season.

ESTABLISHING AND MANAGING DOVE FIELDS

The use of dove fields is an excellent means of attracting doves for public hunting. In some areas it is becoming a common practice. Regulations vary, though, and in some areas such practices may not be allowed (regulations change year-to-year so check to make sure).

In order to increase the benefit of these fields, plant preferred foods which ripen in the shooting season. Then doves are drawn to these fields to feed. In the following activity, you and some other 4-H members can develop planting fields for hunting (this activity is designed for several members to work on). Other birds (game and nongame) also will feed on these fields before and after the hunting season, so there are benefits for other wildlife, too.

Material

The following is only an estimate of what will be needed.

1. Seed mixture of
 - a. Proso millet 7.5 lbs.
 - b. Grain sorghum 25.0 lbs.
 - c. Sunflower
per 5 acre 7.5 lbs.
50 lbs.

Note: This seed mixture, or others like it, usually can be obtained free from soil conservation districts or state game departments.

OR

2. 25 lbs./acre browntop millet
Note: This is available from most commercial seed firms.
3. Tractor
4. Lime and/or fertilizer

The Plan

Selecting a planting site is the first step. Cropland is the best choice. This will save the most time and effort. If working with rejuvenated land, you should have a county soil conservationist test your soil for liming (6-6.5 pH range ideal).

Your selection site should consider some habitat features that also satisfy doves. Nearby woodlots are helpful. Here doves are provided loafing sites and cover. Water should be available close by since doves will invariably drink after feeding. In short, the happier doves are, the more likely they will remain in the area.

The size of your field will be your own choice. However, considering the different circumstances and limits of most 4-Hers, an area of 5 to 10 acres is suitable (others may choose large plots but do not overextend yourself). In the late spring, plow and harrow the area as for any field crop. Rows should follow the contour of the land to prevent erosion. Additionally, skip 4 to 5 feet between rows. This will enable doves to have plenty of room in finding ripened seed.

Now you are ready for the seeding. The seed mixture of proso millet, sunflowers and sorghum is as good as the browntop millet. The browntop millet is used more often, however. Plant the seed in rows at the rates specified earlier. Seed when the soil moisture is good and do not seed later than June 15, or seed will not be available for the hunting season.

The millet and other plants should "seed out" by the hunting season. If these dove fields are to be open to public hunting, one must cooperate with the State Game and Fish Commission and the U.S. Fish and Wildlife Service. Be familiar and obey federal and state game laws. Law enforcement in the field is essential and should be respected at all times.

Heavily hunted dove fields require restrictions as to times hunted (generally once or twice per week rather than daily shooting). These specific times should be rotated between other fields in order that the doves will be allowed to feed in some fields without being shot at.

From managing shooting fields, the next step is managing the hunters themselves: checking them in and out of areas, designating shooting stands, and controlling access.

Where there is suitable dove habitat, an excellent opportunity already exists to lease the area to hunting parties. A considerable amount of money can be made from this practice.

OTHER THINGS TO DO

1. Keep a record of expenses and money derived from leasing hunting rights.
2. If you shoot, use the doves as a learning source. Examine crops and determine what food is utilized. Examine throat and wings to determine age and sex.

The following agencies can provide assistance.

1. A State Game Agency
2. U.S. Fish and Wildlife Service
3. Soil Conservation Service

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