

making a home for wildlife...

MOURNING DOVES



purpose

- To plant and grow food plots rich in grains that seed-eating doves prefer.
- To help landowners determine plantings and locations suitable for their land, management style and preferred hunt.
- To ensure plants produce seed by mid-August and leave seed during September.

before you begin

The top requirement to attract doves is to provide bare ground, where they can forage and walk around on dirt. Many types of food plots attract doves. Doves particularly like sunflowers, but sunflowers have a long growing season and require extensive site preparation. Wheat also works well and needs less site preparation, but requires more planning. Millet varieties and annual weeds are less attractive to doves, but can be a great substitute if planting is delayed or for late season hunting. See Tables 1 and 2 as you consider options.



management

Location is not as important as management in attracting doves. Control two factors to increase success:

- So doves can forage, create bare ground by mowing, disking, burning and controlling weeds with selective herbicides.
- Plan ahead and plant so seeds mature by mid- to late August to condition birds to come to food plots before hunting season opens.

site preparation

Kill any grass with herbicide. For best suppression, spray in the fall and spring, although spring spraying may be sufficient if disking before planting. Once grass turns brown, disk up the dead sod. Or if planting wheat or millet, no-till plant right into dead sod. For cropped sites, lightly disk corn stalks or plant right into bean stubble.

fertilization

Get a soil test to know appropriate fertilizer amounts. In lieu of soil tests, see general recommendations in Table 3 for each species.

specific recommendations

sunflowers

Selecting Seed: Select a seed variety based on maturity dates, generally 90 to 105 days, planting from April 20 to May 10. Planting earlier when soil temperatures are cool may cause seed to rot before germinating.

Herbicide: Disk plot once before applying pre-emergents: Treflan and Eptam. Apply a tank mix of 1 quart per acre of Treflan and 1 quart per acre of Eptam. Disk again immediately following application, and again two days after application. If grasses become a problem, use a post-emergent herbicide like Poast or Select. If you can't incorporate, use a tank mix of Prowl and Treflan, or Prowl H2O right after planting.

Planting: Use a corn planter, drill or broadcaster to plant sunflowers. A corn planter provides the ideal amount of bare ground.

Mowing: To make sunflower seeds more available, mow as soon as seeds mature. Mow part of the food plot each week, increasing the amount mowed closer to Sept. 1. If you have a sickle bar mower and a bush hog,

cut the sunflowers first with the sickle bar. After seed heads dry for a couple of days, run a bush hog over the downed heads. Leave some sunflowers standing to conceal hunters. A ratio of 20 to 25 percent standing sunflowers to 80 to 75 percent mowed is considered ideal, but some mow a strip around the plot's edges. Consider skipping mowing if there is already heavy dove use in early- to mid-August (See Diagram 1).

wheat

Herbicide: Winter or spring wheat food plots should not need herbicide with the possible exception of a glyphosate burndown to prepare site before planting.

Planting: Plant wheat food plots using a conventional or no-till drill.

Mowing/Burning/Disking: To ensure wheat seeds are available for doves, mow, hay, burn or disk it; or use a combination of all four from one month to one day before the season opens. Avoid disturbing the entire field too early because if it rains, wheat seeds may germinate and not be available as food. If you mow, watch how much wheat straw is left on the ground to be sure doves can get to the grain easily.

If there is too much straw, burn the cut/dried straw about two weeks before season opens. Choose a day with a relative humidity of about 30 percent and wind speeds below 15 mph so straw does not burn too hot and completely consume the seeds. It is a good idea to notify the county dispatcher or sheriff before burning.

Windrowing also creates areas where doves can forage. Baling some of the windrows and leaving bales throughout the field provides cover for hunters. Disking standing wheat in areas attracts doves by providing grain lying on bare soil.

table 1: things to consider

	optimum choice	other options
Bird Preference	Sunflowers	Other plants also attract birds.
Timing	Plant sunflowers by May 10 to reach full maturity for dove opener. Doves migrate south early.	Plant millet or weeds if planting is delayed.
Site Preparation	Wheat and millet take less; weeds the least	Sunflowers take the most
Site Topography	Flat, tillable ground	Avoid steep ground to prevent erosion, low ground subject to flooding, and areas next to water for easy bird retrieval
Size	10 acres or more	As small as 1 acre for small hunting groups. Land enrolled in General CRP– up to 10 percent of field but 5 acres maximum
Strip Width	25 yard increments help hunters estimate shooting distances	75 yards total disturbed area makes bird retrieval easy
Hunting Preferences	Plan disturbances for early or late season hunts, depending on preferences. Locate plot so doves fly into the sun. See Diagram 1.	Hunting both early and late may require a larger plot size. Note: Doves may move south with cold fronts.
Cost	Weeds are least expensive	Sunflowers are most expensive in cost and management

millet

Selecting Seed: Choose a millet variety that produces small seeds more easily eaten by doves.

Fertilization: Fertilizer is probably more important for millet than for other food plot types.

Herbicide: Apply a pre-emergent grass herbicide at the labeled rate prior to planting into disked sod or in a tank mix with the glyphosate used to kill the existing sod for a no-till planting.

Planting: Unlike sunflowers, plant millet in closely spaced rows.

Mowing/Disking: Mow and lightly disk portions of millet plot after seeds mature, staggering the disturbance so the seeds are gradually available over the

two weeks prior to the season opening. Ensure most of the field is disturbed before opening if early hunting is desired. Leave a few strips for hunters to use for cover. (See Diagrams 1 and 2.)

annual weeds

For an easy, inexpensive and later-yielding dove food plot, disk or spray to set back grass and release annual weed seed. Doves like common ragweed, foxtail, wild hemp and pigweed. Disturb in spring from frost out to May 15 to stimulate foxtail growth – a dove favorite. Disturb ground in fall from Sept. 1 through first killing frost to favor ragweed. Spray when temperatures are above 70 degrees during the day and above 50 degrees at night. Mow or disk after weed seeds have matured.

dove field design

The strips in Diagram 1 run from north to south. Leave the west strip standing if planning to hunt most often in the evening. That provides hunters with a clear view and the doves looking into the sun. Reverse the order and dates of management, leaving the strip on the east standing if morning hunting is preferred. Another possibility is for hunters planning to hunt both morning and evening, add a few strips and leave the middle strip standing, managing strips to the east and west of the middle strip.

Consider managing half the plot for opening weekend and half for late season hunting as shown in Diagram 1.

diagram 1: orientation and management of dove food plot



Manage for Opening Weekend

1. Manage Aug. 15
2. Manage Aug. 23
3. Manage Aug. 30
4. Leave standing

Manage for Late Season Hunting

5. Manage Sept. 5
6. Manage Sept. 10
7. Manage Sept. 15
8. Leave standing



table 2: pros and cons of different food plots

	pros	cons
Sunflowers	<ul style="list-style-type: none"> ● One of best all-around and attractive food plots for doves ● Seed is readily available and inexpensive, may be free from local non-profits if reserved in the fall ● Can be planted with a corn planter or drill, or broadcast 	<ul style="list-style-type: none"> ● Have longer growing season ● Early planting may leave seed susceptible to rotting due to high moisture and low soil temperatures ● Need pre-emergent and often post-emergent herbicide ● Timing and following management steps (fertilizing, planting, managing weeds, mowing at right time) is difficult ● Provides little winter cover or food for upland game birds
Wheat	<ul style="list-style-type: none"> ● Fall planting provides more planting time for crops in the spring ● Seed readily available and inexpensive. ● No pre- or post-emergent herbicides needed ● Winter wheat provides fall and early winter forage for deer when planted early enough ● Late harvest allows much of wheat and straw to be harvested, while still providing a good dove food plot 	<ul style="list-style-type: none"> ● Doesn't attract doves as well as sunflowers ● Plan ahead to seed at right time ● May mature early and be unavailable for hunting season ● Timing of mowing, burning, disking or harvesting can be tricky depending on weather, and use by doves and songbirds ● Burning can destroy seed if it's too dry ● Does not leave much winter cover or food for upland birds
Millet	<ul style="list-style-type: none"> ● If you miss planting sunflowers or wheat, there's still time to plant some millet varieties ● Cheap ● Provides some winter cover and food for upland birds 	<ul style="list-style-type: none"> ● Not as attractive to doves as sunflowers and wheat ● Seed can be harder to find ● Needs pre-emergent herbicide ● May not succeed if too dry
Weeds	<ul style="list-style-type: none"> ● Cheap. ● Easy to grow – comes up after ground is disturbed ● Provides excellent nesting and brood rearing habitat ● Provides late season hunting ● Undisturbed areas provide early winter cover and food for upland birds 	<ul style="list-style-type: none"> ● Not as attractive to doves as sunflowers, wheat or millet ● May not mature before dove season begins.

table 3: planting and fertilizer recommendations

	fertilizer recommendations (if no soil test)	planting dates	seeding rates	row width	cultivation/ disturbance
Sunflowers	200 lbs. per acre 12-12-12	April 20 to May 10, so plants mature by mid-August, well before hunting season opens	5 to 12 lbs. per acre or 14,000 to 28,000 seeds per acre	30 to 36 inches	Cultivate weeds 1 to 3 times until sunflowers are 12 inches high. Mow early to mid-August
Wheat, winter	Often none needed, but 250 lbs of urea per acre, or a 12-12- 12 or the equivalent per acre	Aug. 15 to Oct. 15. Plant before Sept. 15 for fall deer forage	1 bushel per acre	Usually drilled, conventional or no-till	Mow, hay, burn or disk plot one month to one day before hunting season opens.
Wheat, summer		April 10 to May 5			
Millet	150 lbs. per acre of 18-18-18.	<ul style="list-style-type: none"> ● Foxtail millet: May 1 to 15 ● Proso millet: May 10 to 20 ● Browntop millet: May 20 to June 1 ● Pearl millet: June 10 to 20 ● Plant so seed matures 2 weeks before opening day 	20 to 25 lbs. per acre if drilled; 30 to 40 lbs. per acre if broadcast.	Closely spaced rows	Mow or lightly disk starting two weeks before opening day
Weeds	None	Disk or spray grass spring or fall to stimulate weed production			Mow or disk after seeds mature

for more information

DNR wildlife biologists can help plan your food plot.

Contact your DNR biologist at
www.iowadnr.gov/Environment/LandStewardship/WildlifeLandownerAssistance.aspx

Find out more about doves at
www.iowadnr.gov/Hunting/MigratoryGameBirds/MourningDoves.aspx


 Iowa Department of Natural Resources
www.iowadnr.gov



diagram 2: example of different types of disturbance

