



Dove Field Management

BEST PRACTICES

The fast flying mourning dove is considered a popular game bird in Pennsylvania and marks the kickoff of each years hunting season. Hunters flock to the fields and farms of the keystone state to try their luck at bringing down these feathered speedsters. Doves are highly attracted to agricultural areas and when fields are managed specifically for them, they come from miles around to take advantage of the bounty. Here's how to create such a place.

WHAT DOVES NEED:

There are several important needs of the mourning dove to keep in mind when creating a dove field:

- Bare Ground – open dirt with food on top
- Grit – small stone or rocks
- Water – easy and open access to surface water
- Food – seeds ranging from annual forbs to agricultural row crops
- Loafing – dead snags and power lines provide perches throughout the day
- Roosting – conifer trees are preferred night roosting areas

LOCATION:

When deciding on a location for developing a managed dove field, all needs should be considered carefully. Just as we build our houses with all our needs close at hand, we should do the same when selecting a dove field. Several questions to ask when deciding upon location:

- Is the area located within a large agricultural landscape from which to draw birds?
- Is the area geographically close to the equipment storage location for easy and quick access?
- Is the area located within an open landscape where birds can easily see and be seen?
- Is the area well drained and free of restrictions for planting and manipulation?
- Is the area near adequate parking areas with easy access for hunters?
- Is the area located where it will not negatively impact waterfowl hunting?

Caution: Keep in mind both powerlines and distance to surrounding structures to avoid damage from shooting.



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FIELD DESIGN:

When considering field design many managers have questions concerning several important aspects:

What size should the field be?

It's not as important to consider field size as it is total acreage of a dove management area. It may be more advantageous to have several smaller fields in close proximity (<1/8th mile apart) rather than one large field. Overall, whether a single field or multiple smaller fields, acreage should exceed 5 acres, with 10 – 20 acres considered optimal to attract larger numbers of doves and maximize hunter participation.

What shape should fields be?

Field shape should be long and rectangular, if possible (fig. 1). This allows for a maximum number of hunters to be able to utilize a field safely while all shooting in the same general direction.

How should fields be oriented?

Field orientation should be of utmost importance, especially when considering groups of smaller fields. Fields should be placed in a way to prevent hunters from shooting towards each other or other hazards such as parking areas, roads, or houses. Where practical, field layout should be with hazards in mind. Place the standing cover towards the hazard and the managed portion of the field further away from the hazard to encourage hunters to shoot away from the hazard. When possible orient fields North to South to allow for management strategies that benefit hunters whether utilizing in the morning or evening.

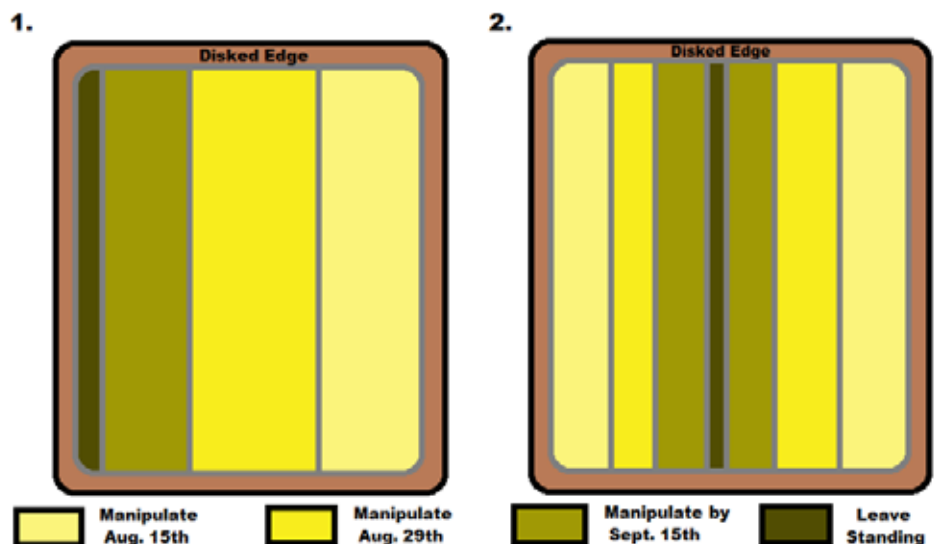


Figure 1. Above are two options commonly used for dove field layout, orientation, and manipulation. Fields run north to south to accommodate different times of the day with sun rise or set. Managers can use option one should there be a hazard they wish to avoid by placing standing residue towards hazard. Keep the outer edge (in brown) disked or sprayed to provide needed bare ground.

PLANTING:

Site Preparation: For new field prep, use herbicide (glyphosate) to kill existing grass and forbs and then traditional tillage methods such as disking and cultipacking to create a firm bare dirt seedbed. If following a previously cropped site, lightly disk or mow existing stubble prior to planting.

| Crop Type | Sunflowers | Millet |
|--------------|---|---|
| Seed Variety | Black-oil Sunflower Hybrid (90 day maturity) | Browntop Millet (60 day maturity) |
| Fertilizer | Test soil prior to planting. If no test, 200 lbs/ac: 12-12-12 | Test soil prior to planting. If no test, 150 lbs/ac: 18-18-18 |
| Herbicide | Following disking, apply pre-emergent and immediately re-disk. After planting, a grass selective post-emergent herbicide such as Poast or Select can be used within the first few weeks after crop emergence or cultivation. | Following disking, apply pre-emergent mix and immediately re-disk. Options are limited following emergence. Row spacing is important in helping crop out-compete weeds. Herbicide options are limited. |
| Planting | <p>Date: No later than May 10th</p> <p>Soil Temp: above 55°</p> <p>Depth: ¾"-1 ¼"</p> <p>Seeding Rate: 5-12 lbs./ac. or 14,000 to 28,000 seeds/ac</p> <p>Within Row Spacing: 6-12"</p> <p>Row Spacing: 30-40"</p> <p>Equipment: row planter (plate or vacuum) or seed drill. Use seed size and instructions on bag for appropriate planting guides.</p> | <p>Date: No later than June 15th</p> <p>Soil Temp: above 63°</p> <p>Depth: ½"-1"</p> <p>Seeding Rate: 14-20 lb/ac drilled 25-30 lb/ac broadcast</p> <p>Equipment: Grain drill, no-till drill, broadcast spreader.</p> |
| Management | Maintain edge of field so bare ground is exposed throughout growing season by herbicide or use of a disc. Following maturity, mow 25-yard width or 1/3 of field (depending on field size) August 15th . Mow an additional 25-yards or 1/3 of field (depending on field size) 1-3 days prior to September 1st . To extend attraction later into the season, mow remaining standing crop except 1 mower width by September 15th . | Maintain edge of field so bare ground is exposed throughout growing season by herbicide or use of a disc. Following maturity, mow and lightly disk 25-yard width or 1/3 of field (depending on field size) August 15th . Mow an additional 25-yards or 1/3 of field (depending on field size) 1-3 days prior to September 1st . To extend attraction later into the season, mow/disk remaining standing crop except 1 mower width by September 15th . |

Please note that within a single plot over successive years, crops should be rotated to avoid excessive nutrient depletion and mitigate disease & fungus threats.



Jacob Dingel



FURTHER IMPROVEMENTS:

As resources and time become available, there are many things that can be done to make further improvements to an intensively managed dove program area and should be considered as regular practice if possible. Here are a few ways to make those changes:

Water Resources: Creating and manipulating impoundments within or nearby the field complex will greatly attract doves to the location. Landing access is crucial for doves to access surface water so ensuring there is an open sloping bank adjacent to the water or drawing down water level prior to the opening of the season will achieve this goal. Please keep in mind the fact that impoundments and wetlands may provide important early season waterfowling opportunities; if this is the case establishing managed dove fields in the vicinity should be avoided.

Loafing Areas: For field complexes with surrounding fencerows containing mature trees, there is great opportunity to create perches for doves to use during mid-day. During early season, trees still containing leaves will be utilized by doves, but dead snags are much preferred. Snags can be created by girdling trees prior to growing season.

Roosting Areas: Mourning doves prefer clumps of conifer trees for overnight roosting and by locating these close to managed dove fields, doves will immediately move into fields after first light and continue to linger throughout the day and late into the evening before returning to roost. Conifer plantings can be inexpensive and effective at creating these roosting areas and species such as cedar, spruce, or pine are all good choices.

Grit: Many agricultural fields have an existing 'lane' or access road running along the edge or through the middle for equipment travel. This area provides an excellent opportunity for doves to safely land and collect grit for food processing. These can be enhanced by mowing the center to keep open, occasionally grading, and even building up with fine aggregate such as stone dust. Allowing annual weeds to grow along either side will also attract doves during the hot days of summer as they seek shade and fallen weed seeds.

Bare Ground: That most important characteristic of bare ground can be enhanced beyond just the edge of the field. Single width disk lanes can be inserted throughout the field and kept open either through disking or herbicide treatments post-planting. This will attract doves throughout the summer even prior to manipulation.



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This document is designed as a concise guide for the manager wishing to create an intensively managed dove field program on their property. An important thing to remember is that dove fields are very popular with sportsmen and receive a great deal of pressure at the opening of the season. Thus, fields are often only utilized heavily during the first few days of the season by both doves and hunters. Although short lived, they provide a crucial opportunity to not only experienced wing-shooters, but new generations of hunters alike and are an effective tool in recruiting and retaining our hunting heritage in Pennsylvania. Throughout the year these areas also offer important habitat and food resources for a myriad of other game and non-game species as well.

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