



The Role of Food Plots on Wildlife Management Area Lands Insights and Objectives

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Wildlife Management Defined

- Wildlife management is the art and science of making the land produce a sustained annual crop of wildlife. At its core it is the manipulation of food and cover (i.e., habitat) across the landscape.
- Any habitat management action we take to provide food or cover will have consequences – either positive or negative – for a range of wildlife species. A balancing act based on science and ecological setting.
- Management decisions are often based on the local site characteristics understanding the broader landscape setting.

What is a wildlife food plot?

- Isley (1993) described farming as a wildlife management tool used to enhance the carrying capacity of the land for resident wildlife and provide a seasonal food supply for migratory birds.
- Minnesota DNR (2007) defined food plots as typically a small area planted to annual or perennial agricultural crops to provide a food source for wildlife.
- Definition also includes soil disturbances (e.g., a light tillage or cattle grazing) or water level manipulation that encourage the germination and growth of native annual plants.
- Food plots are wildlife habitat - annual habitat type – can provide both cover and food.
- Food plots are consistent with statewide deer and pheasant action plans.
 - Our definition of a wildlife food plot does NOT include grain piles (supplemental feeding) or feeder cribs.

The Role of Food Plots – Objectives

- Tranel et al. 2008 in their report, Functions of food plots for wildlife management in Minnesota's Wildlife Management Areas, identified seven major functions; these functions overlap:
 1. Provide winter food (nutrition) and keep wildlife in secure winter cover.
 2. Provide food and loafing areas for migratory birds.
 3. Depredation abatement.
 4. Outdoor recreation – hunting and wildlife viewing .
 5. Aid in grassland development and management.
 6. Reproductive habitat.
 7. Foster relationships and establish partnerships.

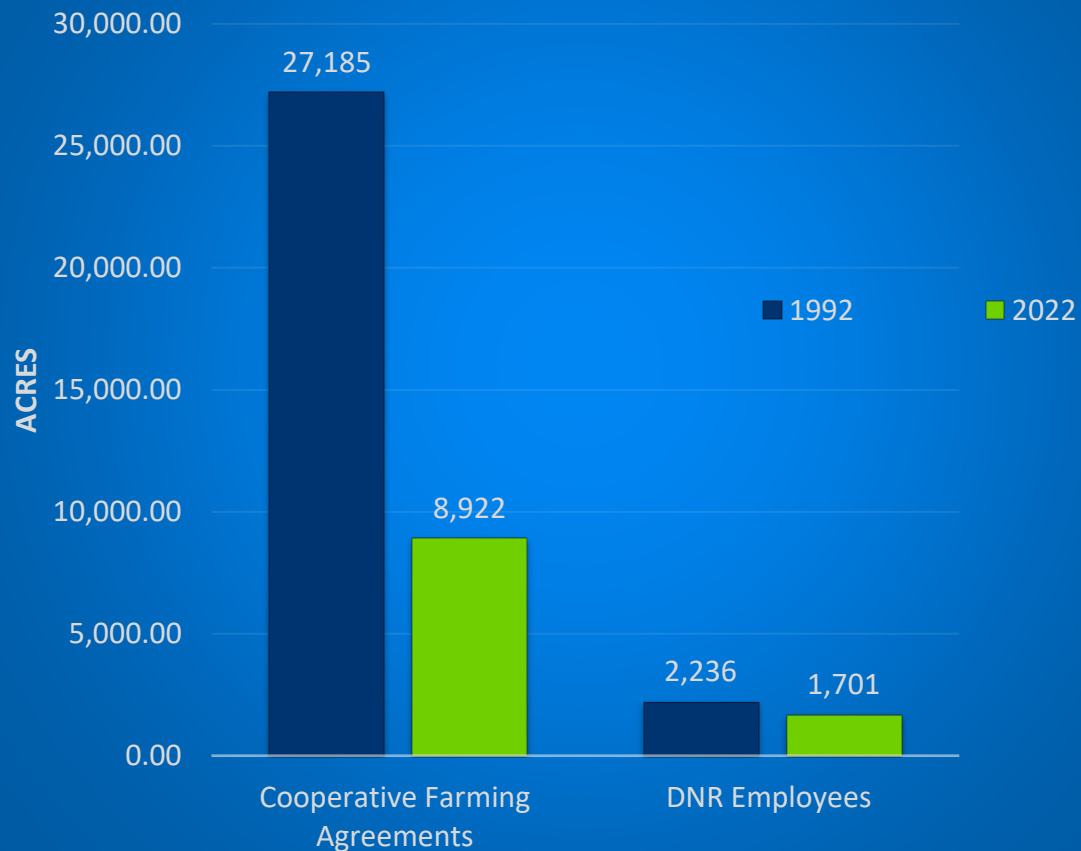
Authority and Delegation Orders

- Area wildlife managers are charged with habitat development and management decisions on wildlife management areas in their work areas. This includes the decision to establish food plots. Communication is frequent with regional staff.
- Area wildlife managers have the delegated authority to enter into and sign Cooperative Farming Agreements.
 - Responsible for determining crops to be planted, crop rotations, and crop shares working closely with the cooperator.
 - Responsible for enforcing terms and conditions of the cooperative farming agreement.
- Regional Wildlife Managers have the delegated authority and must sign and approve all Cooperative Farming Agreements.

2017 Fish and Wildlife Farming Reform

- Based on a 2-year review of farming practices and research.
- The Guidelines:
 - ✓ Prohibited the use of all insecticides (including neonicotinoid-treated seeds) and fungicides effected 2017.
 - ✓ Minimize the use of herbicides and no fall application of nitrogen.
 - ✓ Moving toward no-till or minimum tillage.
 - ✓ Prohibited fall tillage.
 - ✓ Moving toward more multi-species mixes and utilizing cover crops.
 - ✓ Instructed staff to take a comprehensive and intentional look at their food plots and eliminate those not meeting the needs of wildlife.

Overview of DNR Farming – Entire WMA System



2022 Data:

- 1,506 Wildlife Management Areas
- 1.37 million acres of habitat
- 10,623 acres are farmed (<1%)
- Average food plot or field size 15.8 acres (range 0.6 to 140 acres; 562 individual food plot types) scattered across approximately 247 wildlife management areas.
- We work with over 347 landowners

- Region 1 = 1,874 acres (17.6%)
- Region 2 = 10 acres (0.1%)
- Region 3 = 2,916 (27.4%)
- Region 4 = 5,823 (54.9%)

In comparison, 4% of our WMA land base was farmed in 1992.

Overview of DNR Farming – Outdoor Heritage Fund Acquisitions

- Since 2008, 52,140 acres acquired on 314 wildlife management areas.
- Food plots occur on 49 (16%) of the 314 wildlife management areas acquired.
- 672 acres are currently farmed (1.2%).
- Average food plot size – 12.9 acres (range 1.5 to 74 acres).

Waterfowl Production Areas and Wildlife Management Areas – Guiding Principles

- Waterfowl Production Areas are units of the National Wildlife Refuge Systems and are managed for the purpose of providing breeding and migratory habitat for waterfowl. Waterfowl and other migratory birds are federal trust species managed on waterfowl production areas. The federal waterfowl stamp is the primary source of funding.
- Wildlife Management Areas are units of the Minnesota Outdoor Recreation System and are managed for “maximum production of a variety of wildlife species.” Trust obligation for both resident and migratory species. Game and Fish Fund with various dedicated accounts.

Conclusion

- Food plots are a wildlife management tool based on science. The decision to farm lies with our wildlife professionals based on ecological principles, planning documents, and wildlife area characteristics.
- Food plots are wildlife habitat and can provide both food and cover.
- Food plots are valued by hunters and wildlife watchers.
- Farming on wildlife management areas is targeted and limited in scope.

Thank You!

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