U.S. Fish & Wildlife Service

National Wildlife Refuge System

Midwest Region

Environmental Assessment for Farming Programs on National Wildlife Refuges

Information and Background

Work Begins on an Environmental Assessment

The U.S. Fish and Wildlife Service is beginning work on an Environmental Assessment related to farming programs on national wildlife refuges in the Service's Midwest Region.

The environmental assessment will address the use of farming and genetically modified crops both as a relatively short-term management tool for fields being prepared for permanent restoration of a natural cover type, as well as the impact of farming and genetically modified organisms used as an ongoing management tool.

Farming on refuges has been used as a management tool to prepare seed beds for restoration of native habitat, to meet migratory waterfowl flyway objectives, set back woody growth maintaining open areas, reduce weed infestations, and provide locations for increased wildlife observations. Typically, refuges contract with cooperative farmers who leave all or a portion of the crop in the field for wildlife consumption.

Farming areas with wheat, corn, soybeans, millet, clover, buckwheat, milo, oats and other crops has been used to supplement natural foods for large populations of migratory or wintering birds that are faced with limited habitats and food sources on their journey to their wintering grounds. Typically cooperators are encouraged to use no-till farming and can only use a limited number of approved herbicides.

Recent comprehensive refuge management plans focus on gradually converting farm fields to more natural, less intense, environmentally friendly, self-sustaining foods. It has been determined that the largest limiting factor for most wildlife species is the dwindling natural habitats.

The Planning Schedule

The planning schedule is subject to change, but the tentative schedule is as follows:

- Complete public scoping of issues by July 9
- Draft EA completed by September 1
- Comment Period from September 1 to November 1
- Final EA completed by December 1

In a Nutshell

The Midwest Region of the U.S. Fish and Wildlife Service has begun work on an Environmental Assessment of farming programs on national wildlife refuges. Your comments on the use of farming as a management tool and the use of genetically modified crops on refuges are welcome. In order to consider your comment in the Draft EA, we need to hear from you by July 9, 2010. Comments can be directed to:

E-mail: Sandra_Siekaniec@fws.gov

Address: U.S. Fish and Wildlife Service
Attention Sandra Siekaniec
BHW Federal Building
1 Federal Drive
Ft. Snelling, MN 55111

Scope of Planning

The Environmental Assessment will cover all of the 54 national wildlife refuges and 12 wetland management districts within the Midwest Region that currently use farming as either a short-term management tool or an ongoing management tool.

Why an EA?

Farming has been used on national wildlife refuges throughout the more than 100-year history of the National Wildlife Refuge System. For a time, agricultural crops were considered valuable food for wildlife. Recent research supports natural sources as a better option.

If farming has been a standard practice for more than 100 years, why is the Service preparing National Environmental Policy Act (NEPA) documents now? The advance of genetically modified crops has created concern about the potential for impacts on refuges and on neighboring lands. Recently, several eastern refuges have been sued over the use of genetically modified crops and the NEPA process. In the Midwest Region we are reevaluating our farming program and the use of genetically modified, or GM, crops on refuge lands. National Wildlife Refuge Staff are currently evaluating the use of glyphosate tolerant corn and soybeans for habitat management purposes in 16 States in the Mountain-Prairie and Midwest Regions.

Glyphosate tolerant, often referred to as Roundup-Ready, corn and soybeans have been genetically modified through insertion of a gene that allows the plant to tolerate applications of glyphosate. When applied to nearly all other species of growing plants, glyphosate kills the plant. The use of glyphosate-tolerant crops, or genetically modified crops, allows for the effective control and elimination of noxious weeds and other undesirable plants prior to the area being reseeded or allowed to revegetate to more desirable species.

Concerns have been expressed about the long-term effect of GM crops on the environment, wildlife habitat, and human health. Specific issues are described as follows:

Unintended Crop-to-weed Gene Flow

While there does not appear to be a significant risk, it has been suggested that GM corn or soybeans could hybridize with related wild species, creating hybrid species in the wild. If the traits of the GM crops are adopted by the next generation, the hybrid plants could be herbicide resistance, making them very difficult to control.

Effects on Soil Communities and Processes

Soil is the basis of all plant health, which in turn plays a significant role in the health, types and populations of wildlife species. There is much more to soil than meets the eye, such as nutrient cycling, organic matter turnover, and the development and maintenance of soil physical structure. Concerns have been expressed that GM crops may negatively impact soil microorganisms and processes such as soil respiration, bacterial communities, and mycorrhizae establishment (which are important relationships between soil fungi and plant roots).

Effects on Non-target Species

Some people are concerned that GM crops with insecticidal traits genetically inserted could have negative effects on non target insect species, in particular *Lepidoptoran* or butterfly species. Insects are a primary food source for many bird species, especially during the nesting season. Negative impacts on insects would likely have negative impacts on many bird species as well.

Effects on Livestock and Humans Who Eat Livestock-fed GM Crops

There is concern that GM crops in the human food chain may have unintended consequences, such as causing increased food allergies. To date, research has generally concluded that GM crops maintain similar characteristics with regard to nutrition, safety for human consumption, and effects on food allergies.

Midwest Region Policy on Farming on Refuges

What is the Regional policy regarding farming and the use of genetically modified crops? In the Midwest Region we do not allow management practices that result in the maintenance of non-native plant communities unless we determine there is no feasible alternative for accomplishing refuge purpose(s). Where we do not require farming to accomplish refuge purpose(s) we cease farming and strive to restore native habitats. If farming is used to accomplish refuge purpose(s) we do allow the use of genetically modified varieties of agricultural crops. This use is restricted to herbicide resistant crops only. (February 14, 2007, Notice from Regional Chief, Midwest Region)

For More Information

More information on the Service's Environmental Assessment and on farming on national wildlife refuges is available. Please visit our website at:

http://www.fws.gov/midwest/planning/FarmingNEPA

If you have questions about the farming program at a specific refuge in the Midwest Region, please call the refuge; see the Midwest Refuges website for information on refuge location and telephone numbers:

http://www.fws.gov/midwest/refuges