

Food Plots for Wildlife

Iowa Job Sheet

Natural Resources Conservation Service (NRCS)
Des Moines, Iowa

March 2012



Traditional growing food plot

Helping Wildlife

Food plots can benefit many types of wildlife. They can serve as supplemental or emergency food supplies during extreme cold or snow in winter months, or may help wildlife get ready for winter. They can also assure that wildlife species have adequate food supplies in the spring and summer months for reproduction and raising their young of the year. You can attract the wildlife you want to see on your land by choosing the food cover they favor as their habitat.

Where do food plots apply?

Food plots work well in or near protected grassland or woodland areas that offer good shelter and water but are lacking an adequate supply of food. In particular, food plots may be beneficial on large blocks of CRP land and other lands under conservation easements. Note, food plots are not allowed on some CRP land. Check with your local Farm Service Agency (FSA) office to see if your CRP land is eligible for food plots.

Where to get help

This job sheet does not cover all possible food plot options. Land varies in its capability to support wildlife; changes in habitat will affect species other than those that may be emphasized in any food plot plan.

For help in establishing food plots and other habitat for wildlife, contact your local Natural Resources Conservation Service (NRCS) office, or go to the publications tab at www.ia.nrcs.usda.gov for more job sheets and conservation information.

Changing food preferences

It is important to ensure there is adequate food for wildlife throughout the year. Well-designed food plots can provide year-round, high-quality wildlife foods by including a variety of plant species.

For instance green growing plants are the choice for many wildlife species in the spring. But their preference changes to fruits and seeds in the fall and winter so utilizing mul-

tiple food plots with a variety of plant mixtures is recommended.

Location, erosion control

The location and spacing are critical elements of food plots and should be carefully thought out.

Food plots should be located on the least erosive areas of each field. Contour planting and minimal tillage prior to seeding are both methods recommended to address erosion concerns.

Grain plots

Grain food plots should be located next to winter cover on the upwind side, to reduce snow drifting into critical winter cover. It is recommended that for best wildlife value locate your food plots within 660 feet of winter cover.

Recommended minimum size of a grain food plot is one-quarter acre. Plots should be at least 30 feet wide. One grain food plot for every 40 acres is recommended. Some programs may cap acres of food plots, check with the local USDA office to confirm allowed food plot sizes.

Each year one-half of the grain food plots should be allowed to grow annual plants or be over seeded with a legume, while the other half is replanted to grains.

Adequate vegetative cover must be developed and maintained to provide both wildlife and erosion control benefits. Protect the plot from livestock.

The food plot may be fertilized, but you do not want to use crop production rates. Use only enough N-P-K to meet the minimum requirements for the grains planted. In order to protect water quality, you should limit the amount N used. Only 40 to 60 pounds of N will meet the needs of corn. Other grains will need less nitrogen. No P or K is needed if soil test are in optimal ranges.

Except for a spring burn down, weed control is not recommended. Weeds such as foxtail and ragweed have many seeds with high protein value for wildlife.

Grain food plots seeding rates

Many commercial food plot seed mixtures are available and these are often targeted to provide food for specific wildlife species. When using commercial mixes, planting should be done following the tag seeding rates.

If you want to develop your own food plot seed mix, it is recommended that you use a combination of several grains for the food plot.

However, if only one grain is planted, grain sorghum (milo) will often give the best results for multiple wildlife species. Sorghum seeds are rich in energy, persistent on the plant, and usually available to wildlife when snow or ice covers other seeds.

Some other options and seeding rates are shown below. Note these seeding rates are only a recommendation and not a requirement since site conditions and species targets may be better met with lesser or greater rates.

However, use caution when developing seeding rates since planting at too high a rate will make plants compete and reduce the amount of grain produced.

Table 1. Single Species Seeding Rates

Grain	Broadcast Pounds per Acre*
Grain Sorghum	8
Corn	12
Sunflowers	8
Oats	50
Wheat	50
Buckwheat	40
Millet	20
Soybeans	40

* Cut this rate by 50 percent if plot is row planted or drilled.

Table 2. Grain Mixture Seeding Rates

Mixture	Broadcast Pounds per Acre
Grain Sorghum/ Soybeans	4 4
Grain Sorghum/ Soybeans/ German Millet	4 4 2
Grain Sorghum/ Sunflowers	4 4
Grain Sorghum/ Corn	4 4

Non-grain food plots

Non-grain food plots may be composed of annual or perennial vegetation, such as grasses, legumes or other flowering plants.

One of the primary purposes of these types of food plots is to attract the insects needed by young birds in the summer.

Non-grain food plots – including the traditional green browse food plots – can provide late fall or early winter green forage for wildlife grazing, in addition to attracting insects.

Non-grain food plots can also include plantings of native forbs and legumes that, in addition to attracting insects, can supply seeds for wildlife in the fall and winter.

Food plots that utilize either native or introduced species are eligible for use on USDA program lands, such as WRP, and those CRP practices which allow the use of food plots. Check with your local NRCS office since some program restrictions may apply.

These non-grain food plots should be at least one acre, and located near suitable cover. Place the plot at least 50 feet from the edges of any woodland to reduce competition from trees and allow sunlight to reach the planting.

It's a good idea to establish a buffer strip of grasses, perennial weeds and/or fruiting woody shrubs between the browse plot and any nearby timber, especially if the food plot is not part of a larger wildlife planting.

A mixed planting of forbs, legumes and grasses will produce a greater abundance of insects, which are critical during brood rearing time.

Insects provide a protein rich diet for fast growing young birds as well as helping migratory species like wrens and bobolinks recover from their long return flights.

Adding shrubs, especially those that fruit during summer months, add another food component for birds and browse for other wildlife. This increases diversity of wildlife, especially songbirds that will use the area.

It is recommended that when establishing perennial food plots, that you never use introduced, non-native species when the surrounding cover is a native prairie planting. These introduced species will be a potential invader of the native planting.

On areas planted to native prairie species, it is recommended that any perennial food plots be composed of entirely of native species with a high rate of native legumes.

If you choose to use introduced species for food plots, limit them to annuals since these are less likely than perennials to adversely impact the surrounding native prairie plantings.

To reduce competition and shading, it is recommended that the grass component be composed of upland sedges or short, bunch grasses like Little Bluestem or Sideoats Grama rather than the taller grasses like Big Bluestem, Indian-grass, or Switchgrass.

Since some birds nest early and other species later in the summer or have multiple broods, it is recommended that you incorporate native forbs and legumes that bloom in the spring and early summer and also species that bloom later in the summer and fall to ensure there are insect throughout the nesting and brood rearing seasons.

Both types of perennial food plots are designed to attract insects for brooding birds. Native food plots also supply seeds for fall while traditional green browse plots serve as a source of forage.



Non-grain native species food plot

Table 3. Example Perennial Non-grain Native Food Plot Mix

Species	lbs./acre
Little Bluestem	0.75
Sideoats Grama	0.75
Prairie Dropseed	0.50
Purple Prairie Clover	1.00
Partridge Pea	0.50
Showy Tick Trefoil	0.25
Illinois Bundle Flower	0.25
Tall Tickseed	0.25
Wild Bergamont	0.25

Native food plots should be disturbed as needed to maintain their forb and legume components viability. If needed, disturb these types of sites by fire or disking outside the primary nesting season, preferably in late fall or winter. If grasses begin to dominate the plot or legume and forb density begins to decline, these native plots may need to be reseeded.



Non-grain native species food plot

Example of an introduced non-grain green browse mix:

Species	lbs./acre
Winter Wheat	30
Ladino or Alsike Clover	2
Alfalfa	5

Optional: Substitute 2 lbs. red clover for alfalfa.

Fall broadcast seed between Sept. 1 and Oct. 15

Alternative example of a green browse mix:

Species	lbs./acre
Winter Wheat	30
Orchardgrass	2
Alsike or Ladino Clover	2

Overseed with 10 lbs. of lespedeza in spring before April 30.

Broadcast seed between Sept. 1 and Oct. 15:

Green browse plots composed of non-native species should be mown annually between July 15 and Aug. 30 to maintain palatability of browse. **NOTE:** Food plots on lands enrolled in CRP cannot be mowed during the primary nesting season of May 15-Aug. 1. CRP food plots can be mowed after Aug.1.

You will need to renovate and re-establish these types of green browse food plots every 3 to 4 years.



Introduced green browse species and grain food plot



United States Department of Agriculture
Natural Resources Conservation Service

USDA is an equal opportunity provider and employer.

Food Plot Seeding Plan

Plot Number: _____ SEE ATTACHED PHOTO FOR LOCATION(S)

Grain, perennial non-grain, or green browse species to use	Seeding Rate per Acre	Acres to be seeded	Total amount of seed needed

Seedbed Preparation Method(s): _____

Seeding Date(s): _____

Additional Comments: _____

LANDOWNER SIGNATURE: _____

Date(s) Seeded: _____

CERTIFICATION DATE: _____