

TECHNICAL NOTE

USDA – Natural Resources Conservation Service
Boise, Idaho

Biology Technical Note No. 5

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Wildlife Food Plots

The purpose of this technical note is to provide information on establishing annual or perennial wildlife food plots that will enhance wildlife habitat. Food plots *alone* generally do not provide adequate habitat cover. Landowners should strive to provide permanent wildlife habitat for the species of interest. See NRCS Field Office Technical Guide (FOTG) Standard 645: *Upland Wildlife Habitat Management* for further guidance.

A food plot is an annual or perennial planting of grasses or grains, legumes, and forbs. Shrubs may be included in perennial food plots. Food plots should be planned where a habitat evaluation has determined that cover and water needs are met, but food is a limiting factor. Deer, rabbit, quail, pheasant, gray partridge, and a variety of other wildlife found on rural land can benefit from food plots. A food plot offers wildlife a place to forage in late fall, winter and early spring after field crops are harvested. When located adjacent to adequate cover, food plots can enhance wildlife survival over winter by reducing the amount of energy and exposure to predation needed to find food. Food plots can also help connect habitat patches.

PLANNING CONSIDERATIONS

- Food plots should be at least 50 feet wide, with a minimum size of 1/2 acre. Blocks are preferred over strips. If ungulates are expected to feed heavily in the food plot, plant in squares and increase the size to 2-5 acres. Food plots greater than 5 acres in size are not encouraged. Multiple small food plots at least 1/4 mile apart are preferred.
- Food plots should not exacerbate soil erosion concerns. Reduced tillage, contour planting, and/or increased seeding rates may be needed.
- Food plots can provide pollinator forage and nest sites. Refer to Biology Technical Note 1 for more information on planning for pollinators.
- Food plots can be provided by simply leaving un-harvested grain strips along field edges, preferably adjacent to other cover types.
- Locate food plots within 1/4 mile of quality winter cover such as woodland, sagebrush steppe, riparian areas, and wetlands.
- Do not locate food plots where they could pose a danger to wildlife or people (such as near busy roads) or otherwise conflict with neighboring land uses.
- To minimize snow accumulation, food plots should be located on the downwind side of permanent winter cover.
- Where permanent cover is not available, include a snow-catch area in the plan design.

See attached *Examples of Annual Food Plot Designs*, which assume prevailing wind direction is from the northwest.

- Request technical assistance from an NRCS or partner biologist.

SPECIFICATIONS

Site-specific requirements will be listed on ID-CPA-25, Seeding/Planting Plan Specification. Specifications are prepared in accordance with the FOTG Standard 645-*Upland Wildlife Habitat Management*.

- Fall plantings are preferred and will occur early enough to allow establishment before frost. Spring plantings when necessary will occur as early as the soil can be worked.
- Re-planting of annual food plots should be rotated every year. Re-plant only 1/3 of the food plot each year. Allow the natural succession of forbs to occur on the remaining 2/3 of the food plot.
- Annual food plots will be left standing throughout the winter and spring until replanted.
- Annual food plot species will be chosen from and seeded according to the tables below.

Annuals	Seeding Rate (PLS/acre)	Seeding Depth (inches)
Barley	40	3/4 - 2
Buckwheat	30	1 - 2
Canola	6	1/4 - 1/2
Corn	15	1 - 2
Millet	15	1/2 - 1
Sorghum (Milo)	10	1 - 2
Oats	40	1
Peas	60	1 - 2
Sunflower	4	1 - 2
Triticale	50	1 - 2
Wheat	50	1 - 2

- Perennial food plot species should be chosen from Plant Materials Technical Notes 2A, 2B, and/or 24 (species described as having wildlife food value) and seeded at approximately 75% of the PLS rate listed.

FERTILIZER CONSIDERATIONS

Annual Food Plots

- To determine the need for commercial fertilizer, a soil test from the current planting year or during the previous two years is recommended.
- Needed nutrients shall be applied according to the Nutrient Management (590) standard.

Perennial Food Plots

- Under normal circumstances, the recommended perennial species do not need to be fertilized.

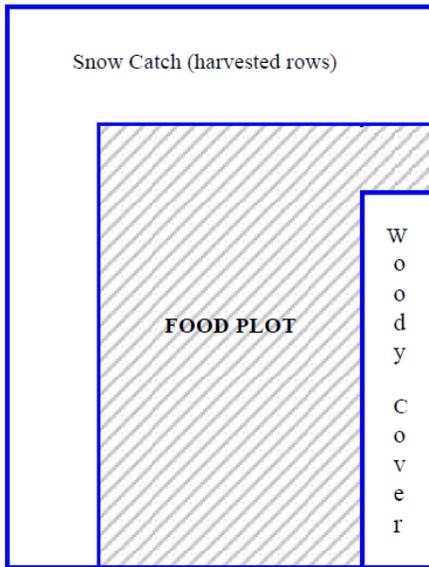
- Before seeding, inoculate legume seed with the appropriate inoculant for the species. Pre-inoculated seed may be used, but shall be re-inoculated if used beyond dates specified on the inoculant tag.

OPERATION AND MAINTENANCE

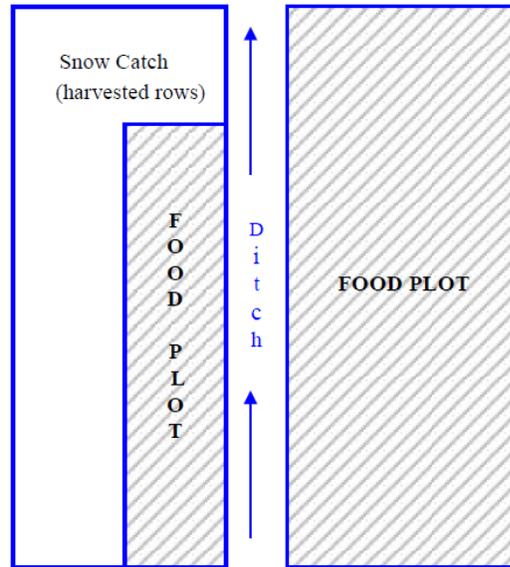
1. General weed control is not required as the presence of some forbs (e.g., pigweed, knotweed, and dandelions) actually benefit wildlife by providing higher protein and greater number of seeds than domestic grains.
2. Protect the acres from unplanned haying and grazing. Wildlife-friendly fences may need to be constructed and maintained to exclude livestock.
3. Noxious weeds, such as musk thistle, Russian knapweed, and Dyer's woad, must be controlled in accordance with state and local noxious weed laws. Additional information can be found in the 2008 Idaho's Noxious Weed guide: [www.idahoweedawareness.net] or visit the Idaho State Department of Agriculture's website: <http://www.agri.state.id.us/Categories/PlantsInsects/NoxiousWeeds/indexnoxweedmain.php>
4. All herbicide label requirements and applicable state and federal regulations will be followed.
5. Spraying or other control of invasive species and noxious plants will be done on a "spot" basis to protect forbs and legumes that benefit native pollinators and other wildlife.
6. On perennial food plots, management practices and activities will not disturb cover during the primary nesting period for grassland species of **April 1 through August 1**. Mowing and spot spraying, however, may be needed during the plant establishment period to control weeds.
7. Manage perennial vegetation every 3-5 years after adequate establishment. Management may include one or more of the following options: (1) mowing with residue removed or spread evenly across the field, (2) light disking, or (3) re-establishment. Management activities, which substantially disturb the vegetative cover, should take place prior to April 1, or after August 1.

EXAMPLES OF ANNUAL FOOD PLOT DESIGNS

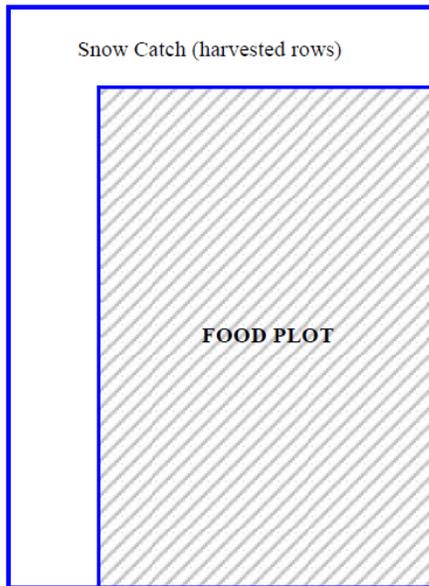
(The diagrams are designed to provide prevailing wind protection; the top of each diagram faces North.)



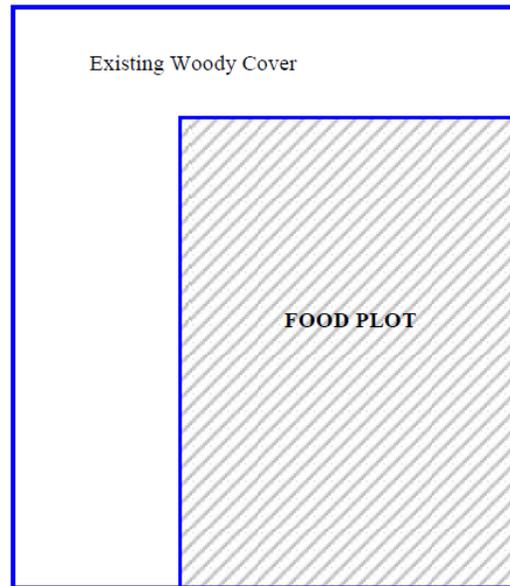
A. Food plot designed to protect existing winter (woody) cover.



B. Food plots designed to enhance ditch, or stream.



C. Food plot designed to function alone.



D. Food plot designed to utilize existing woody cover as protection from prevailing winds.