

GUIDELINES FOR WILDLIFE FOOD PLOT ESTABLISHMENT IN COLORADO

General Information: Good wildlife habitat must provide cover, water, and food for the desired wildlife species. All three of these habitat elements must be present to maintain wildlife populations. If one of these elements is missing, that element becomes a limiting factor for the wildlife population. Wildlife Species Models may be used to identify limiting factors. If food is identified as a limiting factor, food plots may be used to improve the habitat and decrease or eliminate the limiting factor for some wildlife species. Palatability and usable energy of food plot plantings vary from one wildlife species to another and from one plant species to another. Therefore, food plot seed mixes should be targeted toward the desired wildlife species. For many wildlife species, the winter months are the most critical time for food plot availability.

Acreage and Dimensional Limitations: It is generally better to have several small food plots scattered throughout good cover than to have one large plot adjacent to cover. For example, six ½ acre plots evenly scattered throughout a 100 acre field are better than one three acre plot. The minimum size for a food plot is ¼ acre and maximum size is 5% of the field. The food plot must be located within ¼ mile of winter cover suitable for the target species. The recommended minimum width for a food plot is 60 feet. Narrower food plots may be acceptable provided there is adequate cover adjacent to the site. Consult with the NRCS Area or State Biologist for approval when planning food plots less than 60 feet wide.

Other Limitations: Fields heavily infested (20-30% or more of the field) with noxious weeds such as field bindweed or Canada thistle are not suitable for food plot establishment without herbicide treatment and/or a fallow period prior to planting. Also, severely eroded soils or surface soils with excess free lime (which shows effervescence) are not suitable for food plot establishment.

General Seeding Recommendations: The seeding rates listed below, with the exception of the Colorado Division of Wildlife pheasant and quail mix, are for drilled, single species food plots. You may, however, plant seed mixtures to improve food plot use for multiple wildlife species. If you plant a mixture, reduce the seeding rates accordingly. Food plot seedings other than those listed may be used if the NRCS Area or State Biologist approves the mix and seeding rate. Also, be sure to check program-specific guidelines for additional food plot restrictions.

For additional guidance, refer to Colorado NRCS Conservation Practice Standard 550, Range Seeding, Seedbed Preparation, or Colorado NRCS Conservation Practice Standard 340, Cover and Green Manure Crop, Seedbed Preparation and Establishment.

Upland Birds, Annual Food Plots:

food crop	non-irrigated seeding rates (lbs./acre)	non-irrigated seeds/acre (approximate)	irrigated seeding rates (lbs./acre)
corn	10	12,000	18
barley, spring	30	390,000	60
barley, winter	15	195,000	30
foxtail millet	4	880,000	8
pearl millet, grain	4	318,000	8
proso millet	6	480,000	12
oats	20	280,000	40
rye, winter	20	360,000	40
sunflower	3	15,000	4
sorghum, grain (milo)	4	60,000	8
sorghum, forage	4	60,000	8
triticale	30	540,000	60
wheat, spring or winter	25	375,000	50

Upland Birds and Big Game, Perennial Food Plots:

Bobwhite quail, grouse, turkey, deer*, and elk will use perennial legume species food plots in addition to or in lieu of annual species food plots. Check with an NRCS Biologist for recommended legume varieties for your area. Suggested single species, drilled seeding rates for perennial food plots include:

Seeding Rates:

food crop	non-irrigated seeding rates (lbs./acre)	irrigated seeding rates (lbs./acre)
alfalfa	4	8
birdsfoot trefoil	4	8
cicer milkvetch	7	14
alsike clover	2	4
red clover	3	6
white clover	2	4
yellow sweet clover	3	6
small burnet	20	40
pod sainfoin	25	50

* For mule deer food plots, add shrubs to the seed mixture such as basin big or black sage, 0.1 lbs. PLS/acre; or winterfat or fourwing saltbush, 0.5 lbs. PLS/acre.

Waterfowl and Wetland Species, Annual Food Plots:

food crop	seeding rate (lbs./acre)
Japanese millet	20-25
buckwheat	40-60
corn	10-12
wheat	40-60
barley	40-60
rye	40-60
oats	40-60
sorghum, grain (milo)	10-12
proso millet	10-20
field peas	25-30

Waterfowl and Wetland Species, Perennial Food Plots:

Species such as smartweed, pondweed, dock, barnyardgrass, duckweed, and Sesbania swamp peas may be used on wet sites. Waterfowl food plots must be located within ¼ mile of a wetland with suitable cover: e.g. cattails, bulrush, grasses, etc.

Pheasant and Quail Upland Annual Food Plots:

The following table shows a specific Colorado Division of Wildlife (CDOW) drilled seed mix recommendation for pheasant and quail. Sorghums should comprise at least 75% of the total mix. Maximum percentages of the other grains by weight include proso millet (10%), pearl millet (25%), corn (25%), and sunflower (10%). The seeding rates included in this CDOW mix are 2 times the recommended agronomic seeding rates.

Seeding Rates:

food crop	non-irrigated seeding rate (lbs./acre)	irrigated seeding rate (lbs./acre)
50% forage sorghum	4.0-6.0	6.0-8.0
25% grain sorghum	1.0-2.0	2.0-4.0
10% proso millet	1.2-2.0	2.0-4.0
10% corn	1.6-2.4	2.4-3.6
5% sunflower	0.4-0.6	0.6-1.0

References:

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