

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD
*SOUTH DAKOTA SUPPLEMENTS ITALICIZED***

UPLAND WILDLIFE HABITAT MANAGEMENT

**(ac.)
CODE 645**

DEFINITION

Creating, restoring, maintaining, or enhancing areas for food, cover, and water for upland wildlife and species which use upland habitat for a portion of their life cycle.

PURPOSE

Provide a variety of food for the desired kinds of wildlife species;

Provide a variety of cover types for the desired kinds of wildlife species, examples include nesting, fawning, loafing, resting, escape, travel lanes, and thermal;

Arrange habitat elements in proper amounts and locations to benefit desired species.

Manage the wildlife habitat to achieve a viable wildlife population within the species home range.

CONDITIONS WHERE PRACTICE APPLIES

On all landscapes that are suitable for the kinds of wildlife habitat that are needed within the range of the desired species or the natural community under consideration.

CRITERIA

General Criteria Applicable to all Purposes

Identify species management goals and objectives. Objectives may be:

To provide for the habitat requirements of specific species.

To provide for diverse habitats of a certain quality.

For the desired species, identify the types, amount, and distribution of habitat elements and the management actions necessary to achieve the management objectives.

The landowner shall obtain all necessary local, state, and federal permits that apply.

Habitat development and management necessary, to achieve the purpose(s), shall be based on a wildlife habitat appraisal or suitable habitat evaluation. The appraisal or evaluation procedure shall be used to determine a habitat suitability for either individual fields, home range areas, habitat type or natural community as well as to provide an overall evaluation for the entire property or operating unit.

Habitat Appraisal or Habitat Evaluation:

Wildlife habitat evaluations may be done using any of the following:

USFWS Habitat Evaluation Procedure Models (HEP);

Natural Resources Conservation Service (NRCS) or other formally developed species specific models;

NRCS state developed wildlife habitat appraisal guide; or

Minimum requirements for species included in Table 1.

Models, more comprehensive habitat information and habitat requirements for species not included in Table 1 are available through the state biologist.

The evaluation will result in a quality rating or habitat suitability index (hsi). This will consider the type, amount, and distribution of habitat elements required. The quality rating or hsi will be compared to the quality criteria in Section III of the *South Dakota Technical Guide (SDTG)*.

If the evaluation indicates a level below the acceptable quality, alternatives will be recommended that will result in the necessary changes in habitat elements or their management to bring the rating up to the minimal acceptable or above.

Conservation practice standards are reviewed periodically and updated if needed. The current version of this standard is posted on our website at www.sd.nrcs.usda.gov or may be obtained at your local Natural Resources Conservation Service.

If the evaluation is at the minimum or above, alternatives will be recommended that will result in the necessary management to preserve, maintain or improve the existing habitat in its present state or toward optimum conditions.

Habitat Elements

The following habitat elements will be considered when assessing wildlife habitat. Not all may apply to every habitat type.

Food

Type
Amount

Cover

Type
Amount

Water

quality
quantity
accessibility
seasonal availability

Interspersion and Distance to

crops
grasses and or legumes
shrubs
trees
water
openings

Migration

routes
season of use
corridors

Criteria for Providing Habitat Requirements

Provide minimum habitat requirements for one or more of the species or species groups listed in Table 1, or in accordance with a species habitat model or habitat requirements.

As indicated by the wildlife habitat evaluation, certain habitat elements may be weak or missing. For the desired species, identify the types, amount, and distribution of habitat elements and management actions necessary to achieve the management objectives.

The amount and kinds of habitat elements planned, their location, and management shall be identified in a management plan.

Criteria for Development and Management of Wildlife Habitat:

Tall, dense herbaceous upland cover is an important habitat component for many species in South Dakota, particularly for dense nesting cover and tall dense herbaceous winter cover.

Management to achieve such cover consists of a three-to-five year period of no utilization other than by wildlife. Every three-to-five years, the cover is disturbed using prescribed burning, clipping and removing the vegetation, or grazing. This disturbance will be designed to mimic the natural cycle of climatic and ecosystem disturbance to native herbaceous cover.

If native grasslands are not present in adequate quality or quantity, tall, dense herbaceous cover can be established or developed using range seeding, Restoration and Management of Declining Habitats (643), Riparian Herbaceous Cover (390), or the species mixes provided in Table 2. Table 2 is a list of seed mixes that will provide stands of herbaceous cover for dense nesting cover and/or tall, dense herbaceous winter cover if managed for wildlife. Seedbed preparation, seeding dates, techniques, weed control, cover crops, and management during establishment will be according to the standard Range Seeding (550).

Woody cover establishment will be according to Hedgerow Planting (422), Tree Planting (612), or Windbreak/Shelterbelt Requirements (380).

For grasslands, vegetative manipulations to restore plant and/or animal diversity shall be accomplished by prescribed burning or mechanical, biological or chemical methods, or a combination of the four.

Where feasible prescribed burning shall be used instead of mowing to manage grasslands.

Livestock grazing or haying shall be conducted to maintain or improve vegetation structure and composition so as to improve the desired wildlife habitat.

Management measures shall be provided to control invasive species and noxious weeds.

To protect forbs and legumes that benefit native pollinators and other wildlife and provide insect food sources for grassland nesting birds, spraying or other control of noxious weeds shall be done on a "spot" basis.

CONSIDERATIONS

Encourage that management of wildlife cover be scheduled under a rotational plan, so that only a portion of the area is managed in a given year. This will assure that some of the habitat is still available each season.

Wildlife population control (hunting to reduce numbers) which is the responsibility of state and federal wildlife agencies and the landowner may be necessary to protect and maintain certain habitats.

Consider that manipulations of habitat may impact more than the desired kinds of wildlife. These possible effects shall be evaluated and taken into consideration during the planning process.

Consider effects of management on non-target fish, wildlife species, and threatened and endangered species.

This practice may be used to promote the conservation of declining species, including threatened and endangered species.

The use of native plant materials should be encouraged.

Consider effects of movement of dissolved substances on groundwater and on downstream surface waters.

Consider effects of hazardous materials expected or known to occur on the site on wildlife or human use related to wildlife.

Consider effects of management actions on compliance with state and federal hunting regulations (e.g., baiting).

Consider the impact of elevated wildlife uses on adjacent lands (e.g., crop depredation).

Consider the effect of volume and rates of runoff, infiltration, evaporation, and transpiration on the water budget.

Consider effects on movement of sediment, and soluble and sediment attached substances carried by runoff and/or wind.

Consider the problems of habitat fragmentation when using this practice, *and* create large blocks of habitat verses increased edge which *may* lead to predation and parasitism by some species such as cowbirds.

Consider habitat linkages and habitat corridors when developing upland wildlife habitat.

PLANS AND SPECIFICATIONS

Plans and specifications for this practice shall be prepared for each site. Plans and specifications shall be recorded using approved specifications sheets, job sheets, technical notes, or narrative documentation in the conservation plan, or other acceptable documentation.

Document how habitat needs will be provided for the desired target wildlife species: required depth of water during the growing seasons; types and sizes of structures required; desired plant species and the means of establishing and maintaining them. Specific information may be provided using appropriate job sheets or written documentation in the conservation plan.

OPERATION AND MAINTENANCE

The purpose of operation, maintenance, and management is to insure that the practice functions as intended over time.

A plan for operation and maintenance of upland wildlife habitat at a minimum shall include monitoring and management of structural and vegetative measures.

Timing of haying and livestock grazing will avoid periods when upland wildlife are nesting, fawning, etc., and will allow the establishment, development, and management of upland vegetation for the intended purpose.

Biological control of undesirable plant species and pests (e.g., using predator or parasitic species) shall be implemented where available and feasible.

TABLE 1. MINIMUM HABITAT REQUIREMENTS FOR SELECTED WILDLIFE SPECIES IN SOUTH DAKOTA

SPECIES	HOME RANGE	HABITAT NEED	HABITAT CHARACTERISTICS AND EXPLANATIONS	QUANTITY OR MANAGEMENT
Upland ground nesting waterfowl, such as Mallard, (<i>Anas platyrhynchos</i>), Gadwall, (<i>A. strepera</i>), Northern pintail, (<i>A. acuta</i>), Northern shoveler, (<i>A. clypeata</i>), Blue-winged teal, (<i>A. discors</i>), American widgeon, (<i>A. americana</i>), etc.	Using a seasonal, semi-permanent, or permanent waterbody as the center point, pair cover, nesting cover, and brood cover will be provided within a one-half mile of the wetland edge.	Nesting Cover	Nesting cover consists of herbaceous cover that will provide new growth and/or standing residue with a visual obstruction reading of at least 8 inches from mid-April through July 15.	A minimum of five units of nesting cover per square mile will be provided. There will be at least one unit of nesting cover for every acre of seasonal, semi-permanent, or permanent wetland habitat. See Table 3 for nesting cover unit equivalents.
		Pair habitat	Temporary or seasonal wetlands will be located within one-half mile of nesting cover.	See the practice "Wetland Wildlife Habitat Management" (644).
		Brood Habitat	A semi-permanent or permanent wetland or another semi-permanent or permanent water body will be located within one mile of the nesting cover.	See the practice "Wetland Wildlife Habitat Management" (644). Dugouts without dense surrounding emergent wetland vegetation should not be considered as brood habitat.
		Food	Food will be satisfied by providing the required wetlands.	Avoid use of herbicides or insecticides that could impact the food web of the wetlands in the area managed.
Ring-necked pheasant, <i>Phasianus colchicus</i>	Use winter storm cover as the center point of the home range. The average home range for pheasants includes an area with a radius of one mile. All other life requisites must be provided within that area.	Nesting cover	Nesting cover consists of herbaceous cover that will provide new growth and/or standing residue with a visual obstruction reading of at least 8 inches from mid-April through July 15.	A minimum of 20 units of nesting cover per square mile will be provided. At least five units of nesting cover will be provided in a single block. See Table 3 for nesting cover unit equivalents. Nesting cover will be within one mile of winter storm cover.

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SPECIES	HOME RANGE	HABITAT NEED	HABITAT CHARACTERISTICS AND EXPLANATIONS	QUANTITY OR MANAGEMENT
<i>Ring-necked Pheasants</i> (continued)		<i>Winter cover – roosting, storm, and loafing</i>	<i>Roosting cover provided by tall, dense herbaceous plant residues with a visual obstruction reading of at least 10 inches in the fall. Wetlands with heavy, persistent emergent cover (cattails, river bulrush, etc.) provide excellent cover conditions, as do stands of tall, warm-season grasses, such as switchgrass.</i>	<i>At least 10 acres of roosting cover per section are required.</i>
			<i>Winter storm cover is provided by dense windbreaks and large areas of heavy wetland cover. Windbreaks will have at least six rows West River and at least eight rows East River with conifers in the first two rows. Twin-row-high-density designs for winter storm cover will have at least four sets. Wetlands at least 10 acres in size with a dense stand of cattails or river bulrush (Larger is better).</i>	<i>At least one area of winter storm cover will be available within the home range.</i>
			<i>Loafing cover is an area of shrubby cover with 30-60 percent canopy cover. It may be a small clump planting or be included as a part of a large windbreak.</i>	<i>At least one area of loafing cover, at least 0.1 acres in size, will be provided per section.</i>
		<i>Food - winter</i>	<i>Winter food consists of weed seeds, waste grains, and planted food plots. The foods that provide highest food value include corn, sorghum, millet, and tame sunflowers.</i>	<i>Winter food will be provided within one-quarter mile of winter cover. Plant a food plot using one or more of the grains listed above or use tillage systems that leave waste grain on the soil surface over winter. (Note: Waste grain is not readily available with heavy snow or ice.)</i>
		<i>Food - summer</i>	<i>Food for nesting hens and young, up to 12 weeks of age, consists primarily of insects. Therefore, use of insecticides should be discouraged on or adjacent to nesting cover.</i>	<i>Avoid or minimize use of insecticides or herbicides that interfere with the food web in the area being managed.</i>
		<i>General</i>	<i>Pheasants are generally most successful in areas with 50 to 70 percent of the land under cultivation, 15 percent relatively undisturbed grassy cover and 15 percent tall woody cover.</i>	
<i>Sharp-tailed grouse, Tympanuchus phasianellus</i>	<i>The average home range for sharp-tailed grouse is an area around the lek (dancing ground) with a radius of about one mile.</i>	<i>Nesting cover</i>	<i>Nesting cover consists of herbaceous cover with a visual obstruction reading of at least 8 inches in blocks at least 60 acres in size. Studies suggest that grazing systems that allow for one year of rest on at least one pasture each year are most productive of grouse.</i>	<i>Provide at least 320 acres of nesting cover per section in blocks at least 60 acres in size.</i>

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SPECIES	HOME RANGE	HABITAT NEED	HABITAT CHARACTERISTICS AND EXPLANATIONS	QUANTITY OR MANAGEMENT
<i>Sharp-tailed grouse</i> (continued)		<i>Brood cover</i>	<i>Broods require shade that can be provided either by dense grass stands at least 9 inches tall, or by shrubby cover on up to 40 percent of the area.</i>	<i>At least five percent of the managed area will provide brood cover.</i>
		<i>Food - summer</i>	<i>Insects are an important part of the diet for nesting hens and young grouse.</i>	<i>Limit use of insecticides on the area under management for grouse.</i>
		<i>Food - winter</i>	<i>Winter food may be a limiting factor in some years. Sharptails will migrate to areas with winter food available. Species important to sharptails include buffaloberry, snowberry, rose, hawthorne, Russian-olive, chokecherry, sagebrush, currant, cottonwood, aspen, plum, sumac, oak, willow, cedars, and junipers.</i>	<i>Provide shrubby areas with important perennial food species, or plant a food plot at least 0.5 acre in size with one or more of the following grains: corn, grain sorghum, buckwheat, barley, oats, wheat, millet</i>
		<i>Winter cover</i>	<i>Tall coarse, dense herbaceous vegetation, such as switchgrass.</i>	<i>Provide at least one five-acre block per section.</i>
<i>Greater prairie chicken, Tympanuchus cupido</i>	<i>All life requisites will be provided within a radius of two miles</i>	<i>Summer cover</i>	<i>Herbaceous cover with a visual obstruction reading of at least 8 inches, and 40 percent canopy cover. Studies suggest that grazing systems that allow for one year of rest on at least one pasture each year are most productive of prairie chickens.</i>	<i>Provide at least 320 acres of nesting cover per section in blocks at least 60 acres in size.</i>
		<i>Winter cover</i>	<i>Tall dense herbaceous cover, such as switchgrass, with a visual obstruction reading of 10 inches or more.</i>	<i>Provide at least one five-acre block per section.</i>
		<i>Food - summer</i>	<i>Insects are an important part of the diet for nesting hens and young prairie chickens.</i>	<i>Limit use of insecticides on the area under management for prairie chickens.</i>
		<i>Food - winter</i>	<i>Winter food may be a limiting factor in some years. Prairie chickens will migrate to areas with winter food available. Winter foods include: Food plots of the following annual plants should be at least 0.5 acre in size: corn, grain sorghum, buckwheat, barley, oats, wheat, and millets.</i>	<i>Provide a winter food source within 0.5 mile of blocks of winter cover.</i>
<i>Wild turkey, Meleagris gallopavo</i>	<i>Two square miles</i>	<i>Cover</i>	<i>Habitat should include at least 20 percent forest cover mixed with grassland and cropland, as long as roost trees are available.</i>	<i>Maintain forested areas and cottonwood and greenash corridor forests with trees of all age classes. Old, tall trees are necessary for roosting.</i>
		<i>Nest cover</i>	<i>Tall herbaceous cover with a visual obstruction reading of at least eight inches: shrubby cover, brush piles, and fallen limbs or trees.</i>	<i>Avoid heavy grazing in woody cover, especially from March to July.</i>
		<i>Brood Cover</i>	<i>The forest and herbaceous cover interface provides brood cover if it has dense grass stands at least nine inches tall or shrubby cover on up to 40 percent of the area.</i>	<i>Provide 30 acres per section of herbaceous cover within 150 feet of forest/woody cover.</i>
		<i>Water</i>	<i>Consumed daily.</i>	<i>Available within one mile of roost sites.</i>
		<i>Food</i>	<i>Seeds, forbs, green grasses, fruits, flowers, and insects. Food plots of corn, sorghum or sunflowers should be at least five acres in size.</i>	<i>Avoid use of insecticides during nesting and summer. Provide a source of winter food.</i>

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SPECIES	HOME RANGE	HABITAT NEED	HABITAT CHARACTERISTICS AND EXPLANATIONS	QUANTITY OR MANAGEMENT
Northern quail, <i>Colinus virginianus</i>	One square mile, One-quarter mile in summer	General	High interspersed of grass(30-40 percent) crop (40-60 percent), brush (5-20 percent), and trees (5-40 percent).	Provide cover with the appropriate composition of cover types.
		Nest	Herbaceous cover with woody cover present or nearby, with a visual obstruction reading of six inches or more. Orchards, brushy fence rows, windbreaks, forest or wood lot edges, roadsides, odd areas, etc., are potential nesting areas.	Avoid disturbance of nesting areas from April through June.
		Winter	Dense brush and tree cover	Provide scattered areas of dense woody cover with herbaceous or shrubby ground cover.
		Food – summer	Insects are important during nesting and for young birds.	Avoid use of insecticides.
		Food – winter	Seeds.	Maintain waste grain, food plots, or natural seed sources adjacent to winter cover.
Gray partridge, <i>Perdix perdix</i>	One-half mile radius	Nest	Idle areas and field edges dominated by grasses with a visual obstruction reading of at least six inches.	Provide at least 30 acres per section.
		Winter	Grassy cover as required for nesting , brushy fence rows, or other brushy cover.	Provide at least 30 acres per section.
		Food – winter	Small grains and weed seeds are the primary foods of adults.	
		Food-Spring, summer, and fall	The diet of partridge broods during the first six weeks includes insects, especially grasshoppers, ants, and ant eggs. Forbs, green plant parts, and insects are eaten by adult birds during spring, summer, and fall.	Avoid use of insecticides.
Pronghorn antelope, <i>Antilocapra americana</i>	5–10 square miles	Fall and winter food	Browse from shrubby cover 6 to 20 inches tall with 5 to 45 percent ground cover. Important species include sagebrush, snowberry, rabbitbrush, saltbrush, and sumac.	Provide winter food areas with at least two shrub species
		Food - summer	Forbs are used year round and are the primary food in spring and summer. Important species include: dandelion, prickley lettuce, sageworts, salsify, asters, scurfpea, prairie clover, dotted gayfeather, milkvetch, sunflowers, and alfalfa.	Provide for at least five percent forb canopy cover with at least four of the preferred forb species listed above.
		Water		A source of water will be available at least every three miles.

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<i>Deer: White-tailed deer, Odocoileus virginianus, and Mule deer, Odocoileus hemionus</i>	<i>One-to-three square miles depending on habitat quality</i>	<i>Food</i>	<i>Browse is used year round. Important species include: chokecherry, bur oak, snowberry, pine, rose, hawthorne, dogwood, sumac, plum, big sagebrush, buffaloberry, rabbitbrush, aspen, ash, juniper, grape, mountain mahogany, and bearberry. Forbs are used year round but are most important in summer. Agricultural crops are heavily used as available. Food plots of corn and sorghum are recommended.</i>	<i>Provide a diversity of shrubby cover less than five feet in height. Encourage abundant fruit and nut producing species. Provide a high diversity of forbs, with at least 20 percent ground cover by forbs.</i>
		<i>Cover – general</i>	<i>Woody cover and grasslands in a variety of successional stages. Woody cover will include both shrubs and trees.</i>	
		<i>Winter cover</i>	<i>Landscapes with rolling to steep terrain, large wetlands, or creek bottoms with tall herbaceous cover, dense shrubs, and evergreens provide good winter cover</i>	<i>Provide a suitable wintering area within the management area.</i>
		<i>Fawning cover</i>	<i>Woody and tall herbaceous cover are used for fawning with visual obstruction ratings of eight inches or more.</i>	<i>Provide suitable fawning areas within the management area.</i>

TABLE 2. DENSE NESTING COVER (DNC) MIXES FOR UPLAND NESTING WILDLIFE, TALL DENSE WINTER COVER AND GENERAL PURPOSE HERBACEOUS COVER FOR AREAS MANAGED PRIMARILY FOR WILDLIFE.

EASTERN AND EAST CENTRAL TECHNICAL GUIDE AREAS AND MLRA-62

Mix Label	Species in Mix	Seeding Rate PLS Lbs/Acre	Suitable for the following Pasture Groups	Approved for use as	
				DNC	Winter Cover
A	<i>Big bluestem</i> <i>Indiangrass</i> <i>Switchgrass</i> <i>Green needlegrass</i>	2 2 1 2	<i>A, E, F, G, H, K</i>	<i>No</i>	<i>Yes</i>
B	<i>Tall wheatgrass</i> <i>Intermediate or Pubescent wheatgrass</i> <i>Alfalfa</i> <i>Sweetclover (optional)</i>	5 5 2 0.5	<i>A, C, D1, E, F, G, H, I, J, K</i>	<i>Yes</i>	<i>Yes</i>
C	<i>Intermediate or pubescent wheatgrass</i> <i>Alfalfa</i> <i>Sweetclover (optional)</i>	8 3 0.5	<i>A, C, D1, D2, E, F, G, H, I, K</i>	<i>Yes</i>	<i>Yes</i>
D	<i>Switchgrass</i> <i>Alfalfa</i>	2.5 2	<i>A, E, F, H, I, K</i>	<i>Yes</i>	<i>Yes</i>
F	<i>Switchgrass</i> <i>Green needlegrass</i>	2.5 2	<i>A, E, F, H, I, K</i>	<i>No</i>	<i>Yes</i>
G	<i>Big bluestem</i> <i>Indiangrass</i> <i>Switchgrass</i>	2.5 2.5 1.5	<i>A, E, F, G, H, K</i>	<i>No</i>	<i>Yes</i>
H	<i>Green needlegrass</i> <i>Western wheatgrass</i>	3.5 6	<i>A, C, D1, E, F, G, H, I, K</i>	<i>Yes</i>	<i>No</i>
I	<i>Sideoats grama</i> <i>Western wheatgrass</i> <i>Alfalfa</i>	3 4 2	<i>A, C, D1, E, F, G, H, I, K</i>	<i>Yes</i>	<i>No</i>
J	<i>Tall wheatgrass</i> <i>Western wheatgrass</i>	11 4	<i>C, J</i>	<i>Yes</i>	<i>Yes</i>
K	<i>Tall wheatgrass</i>	16	<i>J</i>	<i>Yes</i>	<i>No</i>
L	<i>Western wheatgrass</i> <i>Green needlegrass</i> <i>Sideoats grama</i> <i>Alfalfa</i>	5 1 1 2	<i>A, C, D1, D2, E, F, G, H, I, K</i>	<i>Yes</i>	<i>No</i>
M	<i>Western wheatgrass</i> <i>Green needlegrass</i> <i>Alfalfa</i>	6 1.5 2	<i>A, C, D1, D2, E, F, G, H, I, K</i>	<i>Yes</i>	<i>No</i>
N	<i>Switchgrass</i>	3.5	<i>A, E, F, H, I, J, K</i>	<i>No</i>	<i>Yes</i>

Table 2 Continued. Dense nesting cover (DNC) mixes for upland nesting wildlife, tall dense winter cover and general purpose herbaceous cover for areas managed primarily for wildlife.

WEST AND WEST CENTRAL TECHNICAL GUIDE AREAS AND MLRA-61

Mix label	Species in Mix	Seeding Rate PLS Lbs./Acre	Suitable for the following Pasture Groups	Approved for use as	
				DNC	Winter Cover
A	Pubescent or intermediate wheatgrass Alfalfa	7 2.5	A, C, D1, E, F, G, H, I, K	Yes	Yes
B	Western wheatgrass Pubescent or intermediate wheatgrass Alfalfa Sweetclover (optional)	3 4 2 0.5	A, C, D1, E, F, G, H, I, K	Yes	Yes
C	Western wheatgrass Green needlegrass	5 3	A, C, D1, E, F, G, H, I, K	Yes	No
D	Western wheatgrass Green needlegrass Sideoats grama	3.5 1.5 2.5	A, C, D1, E, F, G, H, I, K	Yes	No
E	Western wheatgrass Green needlegrass Alfalfa	5 1.5 1.5	A, C, D1, E, F, G, H, I, K	Yes	No
F	Western wheatgrass Green needlegrass Sideoats grama Alfalfa	2.5 1 2.5 1	A, C, D1, E, F, G, H, I, K	Yes	No
G	Tall wheatgrass Western wheatgrass	8 4	J	Yes	Yes

**TABLE 3. NESTING COVER UNIT EQUIVALENTS FOR UPLAND NESTING WATERFOWL AND PHEASANTS
ONE UNIT OF NESTING COVER IS OBTAINED BY PROVIDING ANY ONE OF THE FOLLOWING OPTIONS:**

Number of acres per unit	Kind of herbaceous cover
1	Managed dense nesting cover. See Table 2 for a list of seed mixes that will qualify for dense nesting cover if managed for wildlife only.
3-4	hay with first cut after July 15 and last cut before August 15
10	winter wheat or rye
12	spring planted small grain
6	pasture or range grazed after July 15 with prescribed grazing
15	pasture or range grazed before July 15 with prescribed grazing
3-4	Roadsides or railroad ROW cut after July 15 and last cut before August 15
2-3	Unmanaged herbaceous cover (land left idle more than five years)