

Precip. Zone 7-15"
Federal Properties
Sandy/Loamy Soils/Alkali Soils

Forbs
Choose a min. of 4 different forbs.
Total not to exceed 20% of
entire composition.

Bunchgrasses
Choose min. of 2 grass from this
list. Combined grasses not to
exceed 60% of entire composition.

Rhizomious Grasses
Choose a min. of 1 grass from this
list. Combined grasses not to
exceed 60% of entire composition.

Shrubs
Choose a min. of 2 different
species. Not to exceed 20%
of entire composition.

| Common Name Scientific Name | Seed Rates | Common Name Scientific Name | Seed Rates | Common Name Scientific Name | Seed Rates | Common Name Scientific Name | Seed Rates | Common Name Scientific Name | Seed Rates |
|--|------------|---|------------|--|------------|---|------------|--|------------|
| White Sand Verbena <i>Abronia mellifera</i> | .9 | Tailcup lupine(T) <i>Lupinus ssp.</i> | 2.4 | Indian Ricegrass(A) <i>Oryzopsis hymenoides/</i> | 1.3 | Slender wheatgrass(A) <i>Elymus trachycaulus</i> | 1.1 | Winterfat(A) <i>Krascheninnikovia</i> | 1.5 |
| Native Yarrow <i>Achillea millefolium</i> | .03 | Silvery/Silverleaf Lupine(T) <i>Canby's buscuitroot</i> | .4 | <i>Achnatherum hymenoides</i> | | Streambank wheatgrass(A) <i>Elymus lanceolatus</i> | 1.1 | Gardener's Saltbush(A) <i>Atriplex gardneri</i> | .8 |
| Agoseris <i>Agoseris glauca</i> | .1 | <i>Lomatium ssp.</i> | .1 | Needleandthreadgrass <i>Hesperostipa comata ssp.</i> | 1.5 | Western Wheatgrass(A) <i>Pascopyrum smithii</i> | 1.6 | Four-wing Saltbush(A) <i>Atriplex canescens</i> | 1.7 |
| Wild Onion <i>Allium paniculatum</i> | .4 | Wyeth biscuitroot <i>Prairie Aster</i> | .1 | Bluebunch Wheatgrass(A) <i>Pseudoroegneria</i> | 1.3 | Thickspike Wheatgrass(A) <i>Spicata ssp.</i> | 1.1 | Wy. Big sagebrush(A) <i>Artemisia tridentata</i> | .6 |
| Pacific/Western Aster <i>Aster ssp.</i> | .03 | Prairie dandelion <i>Microseris troximoides</i> | .1 | Mutton Bluegrass <i>Bottlebrush Squirreltail(A)</i> | .2 | Sand bluestem <i>Andropogon hallii</i> | 1.5 | <i>wyomingensis ssp.</i> | |
| Blueleaf Aster <i>Oenothera ssp.</i> | .1 | Hooker's evening-primrose <i>Oenothera ssp.</i> | .1 | Bottlebrush Squirreltail(A) <i>Elymus elymoides</i> | .9 | | | Basin big sagebrush(A) <i>Low sage(A)</i> | .6 |
| New England aster <i>Purple Milkvetch(T)</i> | .1 | Pale evening-primrose(A) <i>Owl's clover(A)</i> | .1 | Prairie Junegrass <i>Koeleria macrantha</i> | .1 | | | bud sagebrush(A) <i>rabbitbrush(A)</i> | 1 |
| Purple Milkvetch(T) <i>Astragalus ssp.</i> | .4 | Sweet Anise <i>Orthocarpus luteus/tolmiei</i> | .02 | Sand dropseed <i>Sporobolus cryptandrus</i> | .1 | | | <i>Chrysothamnus</i> | .1 |
| Painted Milkvetch <i>Bastard Draba Milkvetch(T)</i> | .2 | Osromhiza occidentalis <i>Woolly groundsel(A)</i> | 1.4 | basin wildrye(A) <i>Leymus cinereus</i> | .1 | | | <i>nauseosus albicaulis/</i> | .12 |
| Bastard Draba Milkvetch(T) <i>Payson's Milkvetch(T)</i> | .3 | <i>Packera cana</i> | .1 | Nuttall's Alkaligrass(A) <i>puccinellia nuttalliana</i> | 1.4 | | | <i>hololeucus</i> | |
| Cutleaf Balsamroot <i>Balsamorhiza ssp.</i> | .8 | Broadbeard beardtongue <i>Penstemon angustifolius</i> | .1 | Alkali Sacaton(A) <i>Sporobolus airoides</i> | .06 | | | Silver buffaloberry <i>Shepherdia argentea</i> | 2.8 |
| Arrowleaf Balsamroot <i>Sego Lily</i> | .8 | Nutt <i>Firecracker Penstemon</i> | .1 | Sandberg bluegrass(A) <i>Poa secunda ssp.</i> | .1 | | | Skunkbush sumac <i>Rhus trilobata Nutt</i> | 3.3 |
| Calochortus nuttallii <i>Early Indian Paintbrush</i> | 1 | Palmer Penstemon <i>Pincushion Beardtongue</i> | .1 | Canby bluegrass(A) | .2 | | | Current <i>Ribes aureum</i> | .4 |
| Rocky Mtn. beeping <i>Cleome serrulata</i> | .02 | Great Basin/Smooth Penstemon <i>Rocky Mtn. Penstemon</i> | .06 | | | | | Western snowberry <i>Symphoricarpos</i> | 1.2 |
| Tapertip hawkbeard <i>Crepis acuminata Nutt</i> | .7 | Carpet phlox(A) <i>Phlox ssp.</i> | .2 | | | | | Antelope bottlebrush <i>Purshia tridentata</i> | 5 |
| White Prairie Clover <i>Dalea candidum ssp.</i> | .1 | Longleaf phlox <i>American bistort</i> | .2 | | | | | Spiny hopsage(A) <i>Grayia spinosa</i> | .52 |
| Violet Prairie Clover <i>Purple coneflower</i> | .2 | Polygonum bistortoides <i>red glasswort(A)</i> | .4 | | | | | granite prickly phlox(A) <i>Leptodactylon pungens</i> | .7 |
| Echinacea purpurea <i>Wyeth Buckwheat</i> | .4 | Salicornia rubra <i>upright prairie coneflower</i> | .2 | | | | | | |
| Sulfur Buckwheat <i>Blanketflower</i> | .4 | <i>Ratibida columnifera</i> | .1 | | | | | | |
| Blanketflower <i>Gaillardia aristata</i> | .3 | Scarlet globemallow(A) <i>Sphaeralcea ssp.</i> | .1 | | | | | | |
| Northern sweetvetch <i>Hedysarum boreale</i> | .2 | gooseberry globemallow <i>Munro globemallow(A)</i> | .1 | | | | | | |
| Ballhead Waterleaf <i>Hydrophyllum capitatum</i> | .1 | Seepweed(A) <i>Suaeda calceoliformis</i> | .1 | | | | | | |
| Lewis Blue Flax <i>Linum lewisii</i> | .2 | Small Burnet(NN) <i>Sangvisorba minor</i> | .2 | | | | | | |
| Golden Banner <i>Thermopsis montana</i> | .1 | Blue Flax(NN) <i>Lunum lewisii ssp.</i> | 15lbs/acre | | | | | | |
| Hollyleaf Clover(A) <i>Trifolium ssp.</i> | .1 | Scarlet Flax(NN) <i>Sanfoin(NN)</i> | 3lbs/acre | | | | | | |
| Cows Clover(A) <i>Mule-ears</i> | .1 | Onobrychis vicifolia <i>Strawberry Clover(NN)</i> | 7lbs/acre | | | | | | |
| Wyethia amplexicaulis <i>American Vetch</i> | 1.5 | <i>Trifolium ssp.</i> | 35lbs/acre | | | | | | |
| Vicia americana <i>Violets</i> | 1.3 | | 5lbs/acre | | | | | | |
| Viola | .1 | | | | | | | | |

Plant only in Zone 11-15"
(A) Will grow in Alkaline soils
(T) May be toxic to livestock & wildlife if other species are not available – plant in very small quantities.
(NN) Non-Native. Private & State lands only(Prohibited Federal lands) Seed rates are for a 100% stand.

Seed distributors can offer guidance on seeding depths, best times to seed and techniques.

LOCAL SAGE GROUSE WORKING GROUP SEED MIX



SEEDING RATES:
Drilling seed – 1x rate to equal 100% seed volume
Broadcast seed – 2x rate to equal 200% seed volume.

Seed mixture recommendation is based on 20 seeds/square ft. at a 100% seed mix composition. If extreme conditions such as lack of topsoil, steep slopes, poor soils, etc. exist increase total mixture to 40-60 seeds/square ft.

COVER CROPS

Cover crops can reduce weed problems, stabilize soil, help increase moisture, and protect small seedlings as they are germinating and growing. They can be used before desired planting is initiated or mixed with the seed mix. However, it should be stressed that a reduced seeding rate is vital to reduce competition of resources. For example, if a planting of native forbs and grasses were to occur in the fall, a cover crop could be planted the previous fall or spring. The cover crop could then be drilled over in the fall with the desired seed mix. Another option would be to place the cover crop seed in a separate box, or mix with similar size seed and plant together. If a non-native/cereal cover crop is to be used on federal lands, it should be a sterile variety.

Types of Cover Crops that may be used on Federal Lands:

Sterile Triticale, rye, barley, wheat 8-10 lbs/acre*
Slender wheatgrass (native) 2-3 lbs/acre

*If planting independently, plant 1.5-3 inches deep

Private Lands:

Any of the varieties acceptable on Federal lands
Woolly Pod Vetch *Vicia dasycarpa* 8-15lbs/acre
Hairy Vetch *Vicia villosa* 8-15 lbs/acre

Attached is a seed and plant vendor's list for a small part of the Intermountain West. Users of this list should note that this is only a partial listing of conservation plant and seed sources (retailers, wholesalers, nurseries and private growers). This list does not constitute an endorsement of the included vendors, nor does it guarantee the reliability or quality of products.

Available Seed Sources

Dean Anderson
2527 Hwy. 215
Pine Bluffs, WY 82082

Clouds Seed Co.
P.O. Box 937
Sheridan, WY 82801

Etheridge Seed Farms
2028 Lane 11
Powell, WY 82435
(307) 754-2366

Yoder Grain & Lumber Co.
Torrington, WY 82240
(307) 532-2355

Granite Seed
1697 West 2100 North
Lehi, UT. 84043
(801) 768-4422

(Require the seed to be free of noxious weeds and weedy bromes.)

See the National Plants Database at
<http://plants.usda.gov/>

Parko Farms
Star Route, Box 162A
Powell, WY 82435
(307) 754-3080

Spiering Farms
1170 Road 19
Powell, WY 82435
(307) 754-4349

Wind River Seed Co.
3075 Lane 51 ½
Manderson, WY 82432
(307) 568-3361
Fax: (307) 568-3364
www.windriverseed.com



Photo by John Dahlke/Wyoming Wildlife Consultants, LLC

Beneficial Seed Matrix for Sage Grouse, Mule Deer, Antelope and Associated Sage Steppe Species

Published by: BLM, NRCS, Wyoming
Dept. of Game & Fish,
The Upper Green River Basin Local
Sage Grouse Working Group