

KEY TO SHRUBLAND COMMUNITY TYPES OF THE INTERMOUNTAIN REGION

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Introduction

This key will eventually include all documented shrubland community types in the Intermountain Region. The current version applies to documented semi-desert and shrub-steppe sagebrush community types.

Methods

This key was developed using published vegetation classifications, plant associations listed on NatureServe Explorer, and data from 8196 shrubland vegetation plots in Idaho, Nevada, Utah, Wyoming, Colorado, and California. 4022 of those plots are in sagebrush communities. This dataset was used to validate anecdotal community types and develop quantitative keys to sagebrush community types.

The main key identifies upland shrub community type groups based on ecological functional groups and species indicator values along moisture and temperature gradients. The order of the key is based on functional groups. These groups are indicated by headings throughout the key. Where a group key has been developed, the main key provides its page number.

The sagebrush group keys are typically organized from high to low moisture communities and from late seral to early seral herbaceous species. In some cases, associated shrub species are addressed first in the key. Each group key is usually followed by two tables; the first lists the average cover by life form for each community type. The second provides their elevation ranges and distributions by state and indicates the capability of each type to meet sage grouse habitat cover requirements for sagebrush, perennial grasses (7 inches or taller), and forbs. The Cover by Life Form table may be absent where plot data is lacking. The second table is only partial for silver sagebrushes.

Instructions for Using the Keys

1. The cover values in the key are absolute canopy cover – the percentage of the plot or sample area encompassed by the perimeter of the canopies of each plant of that species. Openings or gaps within the canopy perimeter are included.
2. Before using the key a stand or plot should be sampled in a manner that compiles a list of all the species present and determines the percent canopy cover of each.
3. The keys are based on indicator value, not dominance. So, the most abundant shrub does not always indicate the group. For example, in the main key 5 percent cover of snowfield sagebrush assigns a plot or stand to the snowfield sagebrush group even if mountain big sagebrush cover is more than 5 percent.
4. Work through the main key couplets in order. This is very important when sampling areas where transition from one functional group to another occurs, such as the ecotone between mountain shrublands and sagebrush communities.
5. Work through the group key couplets in order. The group keys are designed to distinguish communities having the capability to provide sage grouse habitat in late to mid seral conditions from communities lacking that site potential.

KEY TO SHRUBLAND COMMUNITY TYPES OF THE INTERMOUNTAIN REGION

Tall Mountain Shrub Communities			
1a	<i>Acer glabrum</i> (Rocky Mountain maple) ≥ 10% cover.....	ACGL Group	
1b	<i>Acer glabrum</i> < 10% cover.....	2	
2a	<i>Amelanchier alnifolia</i> (Saskatoon serviceberry) ≥ 10% cover.....	AMAL2 Group	
2b	<i>Amelanchier alnifolia</i> < 10% cover.....	3	
3a	<i>Prunus virginiana</i> (chokecherry) ≥ 10% cover.....	PRVI Group	
3b	<i>Prunus virginiana</i> < 10% cover.....	4	
4a	<i>Prunus emarginata</i> (bitter cherry) ≥ 10% cover.....	PREM Group	
4b	<i>Prunus emarginata</i> < 10% cover.....	5	
5a	<i>Amelanchier utahensis</i> (Utah serviceberry) ≥ 10% cover.....	AMUT Group	
5b	<i>Amelanchier utahensis</i> < 10% cover.....	6	
6a	<i>Amelanchier pallida</i> (pale serviceberry) ≥ 10% cover.....	AMPA2 Group	
6b	<i>Amelanchier pallida</i> < 10% cover.....	7	
7a	<i>Celtis laevigata</i> (hackberry) ≥ 10% cover.....	CELA Group	
7b	<i>Celtis laevigata</i> < 10% cover.....	8	
Mesic Mountain Shrub Communities			
8a	<i>Ribes montigenum</i> (gooseberry currant) ≥ 10% cover.....	RIMO2 Group	
8b	<i>Ribes montigenum</i> < 10% cover.....	9	
9a	<i>Sambucus racemosa</i> (red elderberry) ≥ 5% cover.....	SARA2 Group	
9b	<i>Sambucus racemosa</i> < 5% cover.....	10	
10a	Mountain shrubs – <i>Acer glabrum</i> , <i>Amelanchier</i> spp., <i>Prunus emarginata</i> , <i>P. virginiana</i> , <i>Celtis laevigata</i> , <i>Holodiscus discolor</i> (oceanspray), <i>Physocarpus malvaceus</i> (ninebark), <i>Symphoricarpos</i> spp. (snowberry), <i>Ribes cereum</i> (wax currant), and <i>Mahonia repens</i> (creeping barberry) total ≥ 25% cover together or individually	SYOR2 Group	
10b	Mountain shrubs total < 25% cover	11	
Transitional Riparian Shrub Communities			
11a	<i>Rosa woodsii</i> (Woods' rose) ≥ 20% cover.....	ROWO Group	
11b	<i>Rosa woodsii</i> < 20% cover.....	12	
12a	<i>Dasiphora fruticosa</i> (shrubby cinquefoil) ≥ 5% cover.....	DAFR6 Group	
12b	<i>Dasiphora fruticosa</i> < 5% cover.....	13	
13a	<i>Artemisia cana</i> ssp. <i>viscidula</i> (mountain silver sagebrush) ≥ 10% cover.....	ARCAV2 Group	p.7
13b	<i>Artemisia cana</i> ssp. <i>viscidula</i> < 10% cover.....	14	
14a	<i>Artemisia cana</i> ssp. <i>bolanderi</i> (Bolander silver sagebrush) ≥ 10% cover.....	ARCAB3 Group	p.38
14b	<i>Artemisia cana</i> ssp. <i>bolanderi</i> < 10% cover.....	15	
Xeric Mountain Shrub Communities			
15a	<i>Rhus trilobata</i> (skunkbush sumac) ≥ 10% cover.....	RHTR Group	
15b	<i>Rhus trilobata</i> < 10% cover.....	16	

16a	<i>Cercocarpus montanus</i> (birchleaf mountain mahogany) ≥ 5% cover.....	CEMO2 Group
16b	<i>Cercocarpus montanus</i> < 5% cover.....	17
17a	<i>Arctostaphylos patula</i> (Greenleaf manzanita) ≥ 5% cover.....	ARPA6 Group
17b	<i>Arctostaphylos patula</i> < 5% cover.....	18
18a	<i>Ceanothus greggii</i> (desert ceanothus) ≥ 20% cover.....	CEGR Group
18b	<i>Ceanothus greggii</i> < 20% cover.....	19
Salt Desert Shrub Communities		
19a	<i>Sarcobatus vermiculatus</i> (greasewood) ≥ 5% cover.....	SAVE4 Group
19b	<i>Sarcobatus vermiculatus</i> < 5% cover.....	20
20a	<i>Sarcobatus baileyi</i> (Bailey's greasewood) ≥ 5% cover.....	SABA14 Group
20b	<i>Sarcobatus baileyi</i> < 5% cover.....	21
21a	<i>Grayia spinosa</i> (spiny hopsage) ≥ 5% cover.....	GRSP Group
21b	<i>Grayia spinosa</i> < 5% cover.....	22
22a	<i>Atriplex confertifolia</i> (shadscale) ≥ 5% cover.....	ATCO Group
22b	<i>Atriplex confertifolia</i> < 5% cover.....	23
23a	<i>Atriplex canescens</i> (fourwing saltbush) ≥ 5% cover.....	ATCA2 Group
23b	<i>Atriplex canescens</i> < 5% cover.....	24
24a	<i>Atriplex gardneri</i> (Gardner's saltbush) ≥ 5% cover.....	ATGA Group
24b	<i>Atriplex gardneri</i> < 5% cover.....	25
25a	<i>Krascheninnikovia lanata</i> (winterfat) ≥ 5% cover.....	KRLA2 Group
25b	<i>Krascheninnikovia lanata</i> < 5% cover.....	26
26a	<i>Picrothamnus desertorum</i> (bud sagebrush) ≥ 5% cover.....	PIDE4 Group
26b	<i>Picrothamnus desertorum</i> < 5% cover.....	27
Dry Desert Shrub Communities		
27a	<i>Quercus havardii</i> (Harvard oak) ≥ 5% cover.....	QUHA3 c.t.
27b	<i>Quercus havardii</i> < 5% cover.....	28
28a	<i>Fallugia paradoxa</i> (Apache plume) ≥ 5% cover.....	FAPA c.t.
28b	<i>Fallugia paradoxa</i> < 5% cover.....	29
29a	<i>Coleogyne ramosissima</i> (blackbrush) ≥ 5% cover.....	CORA Group
29b	<i>Coleogyne ramosissima</i> < 5% cover.....	30
30a	<i>Purshia stansburiana</i> (cliffrose) ≥ 5% cover.....	PUST Group
30b	<i>Purshia stansburiana</i> < 5% cover.....	31
31a	<i>Artemisia filifolia</i> (sand sagebrush) ≥ 10% cover.....	ARFI2 Group
31b	<i>Artemisia filifolia</i> < 10% cover.....	32
32a	<i>Artemisia bigelovii</i> (Bigelow sagebrush) ≥ 5% cover.....	ARBI3 Group
32b	<i>Artemisia bigelovii</i> < 5% cover.....	33
33a	<i>Ephedra torreyana</i> (Torrey's jointfir) ≥ 10% cover.....	EPTO c.t.
33b	<i>Ephedra torreyana</i> < 10% cover.....	34
34a	<i>Ephedra viridis</i> (Mormon tea) ≥ 10% cover.....	EPVI Group
34b	<i>Ephedra viridis</i> < 10% cover.....	35

35a	<i>Peraphyllum ramosissimum</i> (wild crab apple) ≥ 10% cover.....	PERA4 c.t.	
35b	<i>Peraphyllum ramosissimum</i> < 10% cover.....	36	
36a	<i>Eriogonum fasciculatum</i> (Eastern Mojave buckwheat) ≥ 10% cover.....	ERFA2 c.t.	
36b	<i>Eriogonum fasciculatum</i> < 10% cover.....	37	
37a	<i>Poliomintha incana</i> (frosted mint) ≥ 10% cover.....	POIN3 c.t.	
37b	<i>Poliomintha incana</i> < 10% cover.....	38	
38a	<i>Zuckia brandegeei</i> (siltbush) ≥ 10% cover.....	ZUBR c.t.	
38b	<i>Zuckia brandegeei</i> < 10% cover.....	39	
39a	<i>Prunus fasciculata</i> (desert almond) ≥ 10% cover.....	PRFA c.t.	
39b	<i>Prunus fasciculata</i> < 10% cover.....	40	
<u>Dwarf Sagebrush Communities</u>			
40a	Any subspecies or hybrid of <i>Artemisia tridentata</i> (big sagebrush) ≥ 10% cover....	53	
40b	<i>Artemisia tridentata</i> < 10% cover.....	41	
41a	<i>Artemisia frigida</i> ≥ 5% cover.....	ARFR4 Group	p.34
41b	<i>Artemisia frigida</i> < 5% cover.....	42	
42a	<i>Artemisia arbuscula</i> ssp. <i>thermopola</i> (clefleaf low sagebrush) ≥ 5% cover.....	ARART Group	p.33
42b	<i>Artemisia arbuscula</i> ssp. <i>thermopola</i> < 5% cover.....	43	
43a	<i>Artemisia arbuscula</i> ssp. <i>longiloba</i> (early sagebrush) ≥ 5% cover.....	ARARL Group	p.31
43b	<i>Artemisia arbuscula</i> ssp. <i>longiloba</i> < 5% cover.....	44	
44a	<i>Artemisia arbuscula</i> ssp. <i>longicaulis</i> (Lahontan sagebrush) ≥ 5% cover.....	ARARL3 Group	p.39
44b	<i>Artemisia arbuscula</i> ssp. <i>longicaulis</i> < 5% cover.....	45	
45a	<i>Artemisia arbuscula</i> ssp. <i>arbuscula</i> (low sagebrush) ≥ 5% cover.....	46	
45b	<i>Artemisia arbuscula</i> ssp. <i>arbuscula</i> < 5% cover.....	47	
46a	<i>Artemisia nova</i> more abundant than <i>A. arbuscula</i> ssp. <i>arbuscula</i>	ARNO4 Group	p.26
46b	<i>Artemisia nova</i> absent or less abundant than <i>A. arbuscula</i> ssp. <i>arbuscula</i>	ARARA Group	p.29
47a	<i>Artemisia nova</i> (black sagebrush) ≥ 5% cover.....	ARNO4 Group	p.26
47b	<i>Artemisia nova</i> < 5% cover.....	48	
48a	<i>Artemisia rigida</i> (stiff sagebrush) ≥ 5% cover.....	ARRI2 Group	p.35
48b	<i>Artemisia rigida</i> < 5% cover.....	49	
49a	<i>Artemisia papposa</i> (Owyhee sagebrush) ≥ 5% cover.....	ARPA16 Group	p.40
49b	<i>Artemisia papposa</i> < 5% cover.....	50	
50a	<i>Artemisia pygmaea</i> (pygmy sagebrush) ≥ 5% cover.....	ARPY2 Group	p.40
50b	<i>Artemisia pygmaea</i> < 5% cover.....	51	
51a	<i>Ericameria suffruticosa</i> ≥ 5% cover.....	ERSU13 Group	
51b	<i>Ericameria suffruticosa</i> < 5% cover.....	52	
52a	<i>Eriogonum sphaerocephalum</i> ≥ 5% cover.....	ERSP7 c.t.	
52b	<i>Eriogonum sphaerocephalum</i> < 5% cover.....	53	
<u>Big Sagebrush Communities</u>			
53a	<i>Artemisia spiciformis</i> (snowfield sagebrush) ≥ 5% cover.....	54	
53b	<i>Artemisia spiciformis</i> < 5% cover.....	55	

54a	Mountain shrubs – <i>Acer glabrum</i> , <i>Amelanchier</i> spp., <i>Prunus emarginata</i> , <i>P. virginiana</i> , <i>Celtis laevigata</i> , <i>Holodiscus discolor</i> (oceanspray), <i>Physocarpus malvaceus</i> (ninebark), <i>Symphoricarpos</i> spp. (snowberry), <i>Ribes cereum</i> (wax currant), and <i>Mahonia repens</i> (creeping barberry) total ≥ 5% cover together or individually	ARSP8-SYOR2 Grp.	p.8
54b	Mountain shrubs total < 5% cover.....	ARSP8 Group	p.9
55a	<i>Artemisia tripartita</i> ssp. <i>tripartita</i> (threetip sagebrush) ≥ 10% cover.....	ARTRT2 Group	p.10
55b	<i>Artemisia tripartita</i> ssp. <i>tripartita</i> < 10% cover.....	56	
56a	<i>Artemisia tridentata</i> ssp. <i>vaseyana</i> (mountain big sagebrush) ≥ 5% cover.....	57	
56b	<i>Artemisia tridentata</i> ssp. <i>vaseyana</i> < 5% cover.....	59	
57a	Mountain shrubs – <i>Acer glabrum</i> , <i>Amelanchier</i> spp., <i>Prunus emarginata</i> , <i>P. virginiana</i> , <i>Celtis laevigata</i> , <i>Holodiscus discolor</i> (oceanspray), <i>Physocarpus malvaceus</i> (ninebark), <i>Symphoricarpos</i> spp. (snowberry), <i>Ribes cereum</i> (wax currant), and <i>Mahonia repens</i> (creeping barberry) total ≥ 5% cover together or individually	ARTRV-SYOR2 Grp.	p.11
57b	Mountain shrubs total < 5% cover.....	58	
58a	<i>Purshia tridentata</i> (bitterbrush) ≥ 5% cover.....	ARTRV-PUTR2 Grp.	p.17
58b	<i>Purshia tridentata</i> < 5% cover.....	ARTRV Group	p.13
59a	<i>Artemisia tridentata</i> ssp. <i>tridentata</i> (basin big sagebrush) ≥ 5% cover.....	ARTRT Group	p.23
59b	<i>Artemisia tridentata</i> ssp. <i>tridentata</i> < 5% cover.....	60	
60a	<i>Artemisia tridentata</i> ssp. <i>xericensis</i> (basin X mountain hybrid) ≥ 5% cover.....	ARTRX Group	p.37
60b	<i>Artemisia tridentata</i> ssp. <i>xericensis</i> < 5% cover.....	61	
61a	<i>Artemisia tridentata</i> ssp. <i>x bonnevillensis</i> (Bonneville big sagebrush) ≥ 5% cover..	ARTRB3 Group	p.36
61b	<i>Artemisia tridentata</i> ssp. <i>x bonnevillensis</i> < 5% cover.....	62	
62a	<i>Artemisia tridentata</i> ssp. <i>wyomingensis</i> (Wyoming big sagebrush) ≥ 5% cover....	ARTRW8 Group	p.19
62b	<i>Artemisia tridentata</i> ssp. <i>wyomingensis</i> < 5% cover.....	63	
<u>Communities with mountain shrubs and sparse sagebrush cover</u>			
63a	<i>Cercocarpus intricatus</i> (littleleaf mountain mahogany) ≥ 10% cover.....	CEIN7 c.t	
63b	<i>Cercocarpus intricatus</i> < 10% cover.....	64	
64a	Mountain shrubs – <i>Acer glabrum</i> , <i>Amelanchier</i> spp., <i>Prunus emarginata</i> , <i>P. virginiana</i> , <i>Celtis laevigata</i> , <i>Holodiscus discolor</i> (oceanspray), <i>Physocarpus malvaceus</i> (ninebark), <i>Symphoricarpos</i> spp. (snowberry), <i>Ribes cereum</i> (wax currant), and <i>Mahonia repens</i> (creeping barberry) total ≥ 5% cover together or individually	65	
64b	Mountain shrubs total < 5% cover.....	68	
65a	<i>Artemisia spiciformis</i> (snowfield sagebrush) ≥ 1% cover.....	ARSP8-SYOR2	p.8
65b	<i>Artemisia spiciformis</i> < 1% cover.....	66	
66a	<i>Artemisia tridentata</i> ssp. <i>vaseyana</i> (mountain big sagebrush) ≥ 1% cover.....	ARTRV-SYOR2	p.11
66b	<i>Artemisia tridentata</i> ssp. <i>vaseyana</i> < 1% cover.....	67	
67a	<i>Artemisia arbuscula</i> ssp. <i>longiloba</i> (early sagebrush) ≥ 10% cover.....	ARARL Group	p.31
67b	<i>Artemisia arbuscula</i> ssp. <i>longiloba</i> < 10% cover.....	SYOR2 Group	
<u>Bitterbrush Communities</u>			
68a	<i>Purshia tridentata</i> (bitterbrush) ≥ 5% cover.....	69	
68b	<i>Purshia tridentata</i> < 5% cover.....	70	

69a	<i>Artemisia tridentata</i> ssp. <i>vaseyana</i> (mountain big sagebrush) ≥ 1% cover.....	ARTRV-PUTR2 Grp.	p.17
69b	<i>Artemisia tridentata</i> ssp. <i>vaseyana</i> < 1% cover.....	PUTR2 Group	
<u>Disturbed or Degraded Communities</u>			
70a	<i>Artemisia cana</i> ssp. <i>viscidula</i> (mountain silver sagebrush) ≥ 5% cover.....	ARCAV2 Group	p.7
70b	<i>Artemisia cana</i> ssp. <i>viscidula</i> < 5% cover.....	71	
71a	<i>Ceanothus velutinus</i> (snowbrush ceanothus) ≥ 20% cover.....	CEVE c.t.	
71b	<i>Ceanothus velutinus</i> < 5% cover.....	72	
72a	<i>Artemisia spiciformis</i> (snowfield sagebrush) ≥ 1% cover.....	ARSP8 Group	p.9
72b	<i>Artemisia spiciformis</i> < 1% cover.....	73	
73a	<i>Artemisia tridentata</i> ssp. <i>vaseyana</i> (mountain big sagebrush) ≥ 1% cover.....	ARTRV Group	p.13
73b	<i>Artemisia tridentata</i> ssp. <i>vaseyana</i> < 1% cover.....	74	
74a	<i>Artemisia tridentata</i> ssp. <i>tridentata</i> (basin big sagebrush) ≥ 1% cover.....	ARTRT Group	p.23
74b	<i>Artemisia tridentata</i> ssp. <i>tridentata</i> < 1% cover.....	75	
75a	<i>Artemisia tridentata</i> ssp. <i>wyomingensis</i> (Wyoming big sagebrush) ≥ 5% cover....	ARTRW8 Group	p.19
75b	<i>Artemisia tridentata</i> ssp. <i>wyomingensis</i> < 5% cover.....	76	
76a	<i>Artemisia frigida</i> ≥ 1% cover.....	ARFR4 Group	p.34
76b	<i>Artemisia frigida</i> < 1% cover.....	77	
77a	<i>Tetradymia canescens</i> (spineless horsebrush) ≥ 5% cover.....	TECA2 Group	
77b	<i>Tetradymia canescens</i> < 5% cover.....	78	
78a	<i>Chrysothamnus viscidiflorus</i> (yellow rabbitbrush) ≥ 5% cover.....	CHVI8 Group	
78b	<i>Chrysothamnus viscidiflorus</i> < 5% cover.....	79	
79a	<i>Ericameria nauseosa</i> (rubber rabbitbrush) ≥ 5% cover.....	ERNA10 Group	
79b	<i>Ericameria nauseosa</i> < 5% cover.....	80	
80a	<i>Gutierrezia sarothrae</i> (broom snakeweed) ≥ 5% cover.....	GUSA2 Group	
80b	<i>Gutierrezia sarothrae</i> < 5% cover.....	Unclassified¹	

1. Determine the group by comparing the stand to adjacent or nearby undisturbed stands on similar landforms and slope positions.

***Artemisia cana* ssp. *viscidula* Group**
mountain silver sagebrush

1a	<i>Deschampsia cespitosa</i> (tufted hairgrass) present.....	ARCAV2/DECE c.t.
1b	<i>Deschampsia cespitosa</i> absent.....	2
2a	<i>Juncus arcticus</i> ssp. <i>littoralis</i> (mountain or Baltic rush) ≥ 10% cover.....	ARCAV2/JUARL c.t.
2b	<i>Juncus arcticus</i> ssp. <i>littoralis</i> < 10% cover.....	3
3a	Graminoids are predominantly moist to wet meadow species – e.g. <i>Carex</i> (sedges), <i>Juncus</i> (rushes), <i>Danthonia</i> (oatgrass), <i>Hordeum brachyantherum</i> (meadow barley).....	ARCAV2 Meadow
3b	Graminoids are not predominantly moist to wet meadow species.....	4
4a	Graminoid layer dominated by <i>Poa pratensis</i> (Kentucky bluegrass) or other seeded species such as timothy and smooth brome.....	ARCAV2/POPR c.t.
4b	Graminoid layer not dominated by seeded species.....	5
5a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 5% cover.....	ARCAV2/FEID c.t.
5b	<i>Festuca idahoensis</i> < 5% cover.....	ARCAV2/Dry Graminoid

Silver sagebrush is not used by sage grouse for nesting habitat. These community types may be used for brood rearing habitat where they are within 100m of mountain or Wyoming big sagebrush cover. All can provide adequate cover of perennial grasses and forbs.

In most of the Intermountain Region, mountain silver sagebrush occupies drier riparian sites and areas transitional to uplands. In southern Utah there are large expanses of silver sagebrush on upland sites.

Distribution

	n	Elevation	States
ARCAV2 Meadow	18	5680 - 9280	CA ID NV
ARCAV2/DECE	25	6345 - 9160	ID NV UT WY
ARCAV2/Dry Graminoid	30	5400 - 10236	CA ID MT NV UT WY
ARCAV2/FEID	32	5800 - 10700	ID MT NV UT WY
ARCAV2/JUARL	20	5390 - 9400	CA ID NV UT WY
ARCAV2/POPR	23	5950 - 9410	CA ID NV UT WY

**Artemisia spiciformis – Symphoricarpos oreophilus Group
snowfield sagebrush – mountain snowberry**

1a	<i>Carex geyeri</i> (elk sedge) ≥ 1% cover.....	ARSP8-SYOR2/CAGE2 c.t.
1b	<i>Carex geyeri</i> < 1% cover.....	2
2a	<i>Bromus marginatus</i> (mountain brome) ≥ 1% cover.....	ARSP8-SYOR2/BRMA4 c.t.
2b	<i>Bromus marginatus</i> < 1% cover.....	3
3a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 5% cover.....	ARSP8-SYOR2/PSSP6 c.t.
3b	<i>Pseudoroegneria spicata</i> < 5% cover.....	4
4a	<i>Poa pratensis</i> (Kentucky bluegrass) ≥ 5% cover.....	ARSP8-SYOR2/POPR c.t.
4b	<i>Poa pratensis</i> < 5% cover.....	5
5a	<i>Poa compressa</i> (Canada bluegrass) ≥ 5% cover.....	ARSP8-SYOR2/POPR c.t.
5b	<i>Poa compressa</i> < 5% cover.....	Unclassified

Distribution

Capability of meeting sage grouse habitat guidelines

	n	Elevation	States	Breeding/Nesting			Brood Rearing			
				Sage	Grass	Forb	Sage	Grass	Forb	
Late to Mid-Seral:										
ARSP8-SYOR2/BRMA4	5	6900 - 9220	ID UT WY	Y	Y	Y	Y	Y	Y	
ARSP8-SYOR2/CAGE2	10	6500 - 8000	ID WY	Y	Y	Y	Y	Y	Y	
Mid to Early-Seral:										
ARSP8-SYOR2/PSSP6	1	7320 - 7320	WY	Y	Y	Y	Y	Y	Y	
Seeded Early Seral:										
ARSP8-SYOR2/POPR	3	5940 - 7150	ID WY	Y	Y	Y	Y	Y	Y	
				Y = Yes	? = Not always			N = No		

**Artemisia spiciformis Group
snowfield sagebrush**

1a	<i>Carex geyeri</i> (elk sedge) ≥ 1% cover.....	ARSP8/CAGE2 c.t.
1b	<i>Carex geyeri</i> < 1% cover.....	2
2a	<i>Bromus marginatus</i> (mountain brome) ≥ 1% cover.....	ARSP8/BRMA4 c.t.
2b	<i>Bromus marginatus</i> < 1% cover.....	3
3a	<i>Trisetum spicatum</i> (spike trisetum), <i>Geranium viscosissimum</i> (sticky geranium), <i>Carex raynoldsii</i> (Raynold's sedge, and <i>Melica spectabilis</i> (purple oniongrass) total ≥ 5% cover together or individually.....	ARSP8/TRSP2 c.t.
3b	<i>Trisetum spicatum</i> , <i>Geranium viscosissimum</i> , <i>Carex raynoldsii</i> , and <i>Melica spectabilis</i> total < 5% cover.....	4
4a	<i>Elymus trachycaulus</i> (slender wheatgrass) and <i>Festuca idahoensis</i> (Idaho fescue) total ≥ 5% cover together or individually.....	ARSP8/ELTR7 c.t.
4b	<i>Elymus trachycaulus</i> and <i>Festuca idahoensis</i> total < 5% cover.....	5
5a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 10% cover.....	ARSP8/PSSP6 c.t.
5b	<i>Pseudoroegneria spicata</i> < 10% cover.....	6
6a	<i>Achnatherum lettermanii</i> (Letterman's needlegrass) ≥ 5% cover.....	ARSP8/ACLE9 c.t.
6b	<i>Achnatherum lettermanii</i> < 5% cover.....	7
7a	<i>Bromus inermis</i> (smooth brome) ≥ 10% cover.....	ARSP8/BRIN2 c.t.
7b	<i>Bromus inermis</i> < 10% cover.....	8
8a	<i>Bromus tectorum</i> (cheatgrass) ≥ 10% cover.....	ARSP8/BRTE c.t.
8b	<i>Bromus tectorum</i> < 10% cover.....	9
9a	Total herbaceous cover < 20% or total grass cover < 10%.....	ARSP8/Sparse c.t.
9b	Total herbaceous cover ≥ 20% and total grass cover ≥ 10%.....	Unclassified

Distribution **Capability of meeting sage grouse habitat guidelines**

	n	Elevation	States	Breeding/Nesting			Brood Rearing		
				Sage	Grass	Forb	Sage	Grass	Forb
Late to Mid-Seral:									
ARSP8/BRMA4	6	6411 - 9192	ID UT WY	Y	Y	Y	Y	Y	Y
ARSP8/CAGE2	4	6900 - 8600	WY	Y	Y	Y	Y	Y	Y
ARSP8/ELTR7	16	6400 - 9820	ID UT WY	Y	Y	Y	Y	Y	Y
ARSP8/TRSP2	13	7050 - 9480	WY	Y	Y	Y	Y	Y	Y
Mid to Early-Seral:									
ARSP8/ACLE9	4	8792 - 9795	UT	Y	Y	Y	Y	Y	Y
ARSP8/PSSP6	1	8660 - 8660	ID	Y	Y	Y	Y	Y	Y
Early-Seral:									
ARSP8/BRTE	1	6460 - 6460	ID	Y	Y	Y	Y	Y	Y
ARSP8/Sparse	6	6800 - 10300	UT WY	Y	Y	Y	Y	Y	Y
Seeded Early-Seral:									
ARSP8/BRIN2	---	----	UT	Y	Y	Y	Y	Y	Y

Y = Yes ? = Not always N = No

**Artemisia tripartita ssp. tripartita Group
threetip sagebrush**

1a	<i>Leymus cinereus</i> (basin wildrye) ≥ 10% cover.....	ARTRT2/LECI4 c.t.
1b	<i>Leymus cinereus</i> < 10% cover.....	2
2a	<i>Bromus marginatus</i> (mountain brome) ≥ 5% cover.....	ARTRT2/BRMA4 c.t.
2b	<i>Bromus marginatus</i> < 5% cover.....	3
3a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 5% cover.....	ARTRT2/FEID c.t.
3b	<i>Festuca idahoensis</i> < 5% cover.....	4
4a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 5% cover.....	ARTRT2/PSSP6 c.t.
4b	<i>Pseudoroegneria spicata</i> < 5% cover.....	5
5a	<i>Poa secunda</i> ssp. <i>secunda</i> (Sandberg bluegrass) ≥ 5% cover	ARTRT2/POSES6 c.t.
5b	<i>Poa secunda</i> ssp. <i>secunda</i> < 5% cover.....	6
6a	<i>Poa pratensis</i> (Kentucky bluegrass) ≥ 10% cover.....	ARTRT2/POPR c.t.
6b	<i>Poa pratensis</i> < 10% cover.....	7
7a	<i>Bromus tectorum</i> (cheatgrass) ≥ 5% cover.....	ARTRT2/BRTE c.t.
7b	<i>Bromus tectorum</i> < 5% cover.....	8
8a	Total herbaceous cover < 20% or total grass cover < 10%.....	ARTRT2/Sparse c.t.
8b	Total herbaceous cover ≥ 20% and total grass cover ≥ 10%.....	Unclassified

Distribution

Capability of meeting sage grouse habitat guidelines

	n	Elevation	States	Breeding/Nesting			Brood Rearing		
				Sage	Grass	Forb	Sage	Grass	Forb
Late to Mid-Seral:									
ARTRT2/BRMA4	1	8570	UT	Y	Y	Y	Y	Y	Y
ARTRT2/FEID	13	5110 - 7720	ID MT	Y	Y	Y	Y	Y	Y
ARTRT2/LECI4	---	----	ID	Y	Y	Y	Y	Y	Y
ARTRT2/PSSP6	13	4772 - 8893	ID WY	Y	Y	Y	Y	Y	Y
Early Seral:									
ARTRT2/BRTE	3	5126 - 6268	ID UT	Y	Y	Y	Y	Y	Y
ARTRT2/POSES6	2	4939 - 5651	ID	Y	Y	Y	Y	Y	Y
ARTRT2/Sparse	5	4365 - 6900	ID WY	Y	N	Y	Y	Y	Y
Seeded Early Seral:									
ARTRT2/POPR	1	5480	ID	Y	Y	Y	Y	Y	Y

Y = Yes ? = Not always N = No

***Artemisia tridentata* ssp. *vaseyana* – *Symphoricarpos oreophilus* Group**
mountain big sagebrush – mountain snowberry

1a	<i>Leymus cinereus</i> (basin wildrye) ≥ 10% cover.....	ARTRV-SYOR2/LECI4 c.t.
1b	<i>Leymus cinereus</i> < 10% cover.....	2
2a	<i>Carex geyeri</i> (elk sedge) ≥ 1% cover.....	ARTRV-SYOR2/CAGE2 c.t.
2b	<i>Carex geyeri</i> < 1% cover.....	3
3a	<i>Bromus marginatus</i> (mountain brome) ≥ 1% cover.....	ARTRV-SYOR2/BRMA4 c.t.
3b	<i>Bromus marginatus</i> < 1% cover.....	4
4a	<i>Elymus trachycaulus</i> (slender wheatgrass) ≥ 5% cover.....	ARTRV-SYOR2/ELTR7 c.t.
4b	<i>Elymus trachycaulus</i> < 5% cover.....	5
5a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 5% cover.....	ARTRV-SYOR2/FEID c.t.
5b	<i>Festuca idahoensis</i> < 5% cover.....	6
6a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 5% cover.....	ARTRV-SYOR2/PSSP6 c.t.
6b	<i>Pseudoroegneria spicata</i> < 5% cover.....	7
7a	<i>Leymus salinus</i> (saline wildrye) ≥ 5% cover.....	ARTRV-SYOR2/LESA4 c.t.
7b	<i>Leymus salinus</i> < 5% cover.....	8
8a	<i>Hesperostipa comata</i> (needle and thread) ≥ 5% cover.....	ARTRV-SYOR2/HECO26 c.t.
8b	<i>Hesperostipa comata</i> < 5% cover.....	9
9a	<i>Elymus lanceolatus</i> (thickspike wheatgrass) ≥ 5% cover.....	ARTRV-SYOR2/ELLA3 c.t.
9b	<i>Elymus lanceolatus</i> < 5% cover.....	10
10a	<i>Achnatherum lettermanii</i> (Letterman's needlegrass) ≥ 5% cover.....	ARTRV-SYOR2/ACLE9 c.t.
10b	<i>Achnatherum lettermanii</i> < 5% cover.....	11
11a	<i>Poa secunda</i> ssp. <i>juncifolia</i> (Nevada bluegrass) ≥ 5% cover.....	ARTRV-SYOR2/POSEJ c.t.
11b	<i>Poa secunda</i> ssp. <i>juncifolia</i> < 5% cover.....	12
12a	<i>Poa fendleriana</i> (muttongrass) ≥ 5% cover.....	ARTRV-SYOR2/POFE c.t.
12b	<i>Poa fendleriana</i> < 5% cover.....	13
13a	<i>Pascopyrum smithii</i> (western wheatgrass) ≥ 5% cover.....	ARTRV-SYOR2/PASM c.t.
13b	<i>Pascopyrum smithii</i> < 5% cover.....	14
14a	<i>Poa secunda</i> ssp. <i>secunda</i> (Sandberg bluegrass) ≥ 5% cover.....	ARTRV-SYOR2/POSES6 c.t.
14b	<i>Poa secunda</i> ssp. <i>secunda</i> < 5% cover.....	15
15a	Tall forbs – <i>Balsamorhiza sagittata</i> (arrowleaf balsamroot), <i>Helianthella uniflora</i> (oneflower helianthella), <i>Geranium viscosissimum</i> (sticky geranium), <i>Agastache urticifolia</i> (nettleleaf horsemint), <i>Delphinium occidentale</i> (tall larkspur) and/or <i>Ligusticum filicinum</i> (fernleaf licorice-root) – total ≥ 10% cover together or individually.....	ARTRV-SYOR2/BASA3 c.t.
15b	Tall forbs total < 10% cover.....	16
16a	<i>Poa pratensis</i> (Kentucky bluegrass) ≥ 5% cover.....	ARTRV-SYOR2/POPR c.t.
16b	<i>Poa pratensis</i> < 5% cover.....	17

17a	<i>Bromus inermis</i> (smooth brome) ≥ 5% cover.....	ARTRV-SYOR2/BRIN2 c.t.
17b	<i>Bromus inermis</i> < 5% cover.....	18
18a	<i>Agropyron cristatum</i> (crested wheatgrass) ≥ 5% cover.....	ARTRV-SYOR2/AGCR c.t.
18b	<i>Agropyron cristatum</i> < 5% cover.....	19
19a	<i>Thinopyrum intermedium</i> (intermediate wheatgrass) ≥ 5% cover.....	ARTRV-SYOR2/THIN6 c.t.
19b	<i>Thinopyrum intermedium</i> < 5% cover.....	20
20a	<i>Poa bulbosa</i> (bulbous bluegrass) ≥ 5% cover.....	ARTRV-SYOR2/POBU c.t.
20b	<i>Poa bulbosa</i> < 5% cover.....	21
21a	<i>Bromus tectorum</i> (cheatgrass) ≥ 5% cover.....	ARTRV-SYOR2/BRTE c.t.
21b	<i>Bromus tectorum</i> < 5% cover.....	22
22a	Total herbaceous cover < 20% or total grass cover < 10%.....	ARTRV-SYOR2/Sparse c.t.
22b	Total herbaceous cover ≥ 20% and total grass cover ≥ 10%.....	Unclassified

All the ARTRV-SYOR2 communities with native understories are capable of meeting sage grouse habitat guidelines. Cheatgrass understories also occur on sites capable of meeting habitat guidelines. Sites seeded to crested wheatgrass, smooth brome, or bulbous bluegrass lack forb cover and sagebrush cover is often low.

Distribution **Capability of meeting sage grouse habitat guidelines**

	n	Elevation	States	Breeding/Nesting			Brood Rearing		
				Sage	Grass	Forb	Sage	Grass	Forb
Late to Mid-Seral:									
ARTRV-SYOR2/BRMA4	84	5250 - 9720	ID NV UT WY	Y	Y	Y	Y	Y	Y
ARTRV-SYOR2/CAGE2	19	5380 - 8820	ID WY	Y	Y	Y	Y	Y	Y
ARTRV-SYOR2/ELTR7	17	5920 - 9800	ID NV UT WY	Y	Y	Y	Y	Y	Y
ARTRV-SYOR2/FEID	42	4600 - 9020	ID NV UT WY	Y	Y	Y	Y	Y	Y
ARTRV-SYOR2/HECO26	13	6655 - 9380	CO ID UT WY	Y	Y	Y	Y	Y	Y
ARTRV-SYOR2/LECI4	16	5820 - 8723	ID NV WY	Y	Y	Y	Y	Y	Y
ARTRV-SYOR2/LESA4	6	7850 - 8900	UT	Y	Y	Y	Y	Y	Y
ARTRV-SYOR2/PSSP6	73	3850 - 9140	CO ID UT WY	Y	Y	Y	Y	Y	Y
Mid to Early-Seral:									
ARTRV-SYOR2/ACLE9	10	6700 - 10500	CO UT	Y	Y	Y	Y	Y	Y
ARTRV-SYOR2/BASA3	8	7000 - 9366	WY	Y	Y	Y	Y	Y	Y
ARTRV-SYOR2/ELLA3	10	6500 - 8160	UT WY	Y	Y	Y	Y	Y	Y
ARTRV-SYOR2/PASM	2	7022 - 7760	WY	Y	Y	Y	Y	Y	Y
ARTRV-SYOR2/POFE	15	6389 - 9950	CO UT WY	Y	Y	Y	Y	Y	Y
ARTRV-SYOR2/POSEJ	2	6480 - 8580	ID NV	Y	Y	Y	Y	Y	Y
Early Seral:									
ARTRV-SYOR2/BRTE	5	6500 - 7700	NV UT	Y	Y	Y	Y	Y	Y
ARTRV-SYOR2/POSES6	3	7350 - 8150	CO NV UT	Y	Y	Y	Y	Y	Y
ARTRV-SYOR2/Sparse	12	6819 - 9500	ID UT WY	Y	Y	Y	Y	Y	Y
Seeded Early Seral:									
ARTRV-SYOR2/AGCR	3	7340 - 7800	UT	?	Y	N	?	Y	Y
ARTRV-SYOR2/BRIN2	3	6600 - 7300	ID UT	?	Y	N	?	Y	Y
ARTRV-SYOR2/POBU	1	6728	NV	?	Y	N	Y	Y	Y
ARTRV-SYOR2/POPR	21	5320 - 9500	ID UT WY	Y	Y	Y	Y	Y	Y
ARTRV-SYOR2/THIN6	---	-----	---	Y	Y	Y	Y	Y	Y

Y = Yes ? = Not always N = No

***Artemisia tridentata* ssp. *vaseyana* Group**
mountain big sagebrush

1a	<i>Calamagrostis rubescens</i> (pinegrass) ≥ 10% cover.....	ARTRV/CARU c.t.
1b	<i>Calamagrostis rubescens</i> < 10% cover.....	2
2a	<i>Leymus cinereus</i> (basin wildrye) ≥ 5% cover.....	ARTRV/LECI4 c.t.
2b	<i>Leymus cinereus</i> < 5% cover.....	3
3a	<i>Carex geyeri</i> (elk sedge) ≥ 1% cover.....	ARTRV/CAGE2 c.t.
3b	<i>Carex geyeri</i> < 1% cover.....	4
4a	<i>Bromus marginatus</i> (mountain brome) ≥ 1% cover.....	ARTRV/BRMA4 c.t.
4b	<i>Bromus marginatus</i> < 1% cover.....	5
5a	<i>Trisetum spicatum</i> (spike trisetum), <i>Geranium viscosissimum</i> (sticky geranium), <i>Carex raynoldsii</i> (Raynold's sedge, and <i>Melica spectabilis</i> (purple oniongrass) total ≥ 5% cover together or individually.....	ARTRV/TRSP2 c.t.
5b	<i>Trisetum spicatum</i> , <i>Geranium viscosissimum</i> , <i>Carex raynoldsii</i> , and <i>Melica spectabilis</i> total < 5% cover.....	6
6a	<i>Achnatherum richardsonii</i> (Richardson's needlegrass) ≥ 5% cover.....	ARTRV/ACRI8 c.t.
6b	<i>Achnatherum richardsonii</i> < 5% cover.....	7
7a	<i>Leucopoa kingii</i> (spike fescue) ≥ 5% cover.....	ARTRV/LEKI2 c.t.
7b	<i>Leucopoa kingie</i> < 5% cover.....	8
8a	<i>Elymus trachycaulus</i> (slender wheatgrass) ≥ 5% cover.....	ARTRV/ELTR7 c.t.
8b	<i>Elymus trachycaulus</i> < 5% cover.....	9
9a	<i>Festuca campestris</i> (rough fescue) ≥ 5% cover.....	ARTRV/FECA4 c.t.
9b	<i>Festuca campestris</i> < 5% cover.....	10
10a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 5% cover.....	ARTRV/FEID c.t.
10b	<i>Festuca idahoensis</i> < 5% cover.....	11
11a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 5% cover.....	ARTRV/PSSP6 c.t.
11b	<i>Pseudoroegneria spicata</i> < 5% cover.....	12
12a	<i>Leymus salinus</i> (saline wildrye) ≥ 5% cover.....	ARTRV/LESA4 c.t.
12b	<i>Leymus salinus</i> < 5% cover.....	13
13a	<i>Hesperostipa comata</i> (needle and thread) ≥ 5% cover.....	ARTRV/HECO26 c.t.
13b	<i>Hesperostipa comata</i> < 5% cover.....	14
14a	<i>Elymus lanceolatus</i> (thickspike wheatgrass) ≥ 5% cover.....	ARTRV/ELLA3 c.t.
14b	<i>Elymus lanceolatus</i> < 5% cover.....	15
15a	<i>Achnatherum nelsonii</i> (Columbia needlegrass) ≥ 5% cover.....	ARTRV/ACNE9 c.t.
15b	<i>Achnatherum nelsonii</i> < 5% cover.....	16
16a	<i>Achnatherum lettermanii</i> (Letterman's needlegrass) ≥ 5% cover.....	ARTRV/ACLE9 c.t.
16b	<i>Achnatherum lettermanii</i> < 5% cover.....	17
17a	<i>Pascopyrum smithii</i> (western wheatgrass) ≥ 5% cover.....	ARTRV/PASM c.t.
17b	<i>Pascopyrum smithii</i> < 5% cover.....	18

18a	<i>Poa secunda</i> ssp. <i>juncifolia</i> (Nevada bluegrass) ≥ 5% cover.....	ARTRV/POSEJ c.t.
18b	<i>Poa secunda</i> ssp. <i>juncifolia</i> < 5% cover.....	19
19a	<i>Poa fendleriana</i> (muttongrass) ≥ 5% cover.....	ARTRV/POFE c.t.
19b	<i>Poa fendleriana</i> < 5% cover.....	20
20a	<i>Koeleria macrantha</i> (prairie Junegrass) ≥ 5% cover.....	ARTRV/KOMA c.t.
20b	<i>Koeleria macrantha</i> < 5% cover.....	21
21a	Tall forbs – <i>Balsamorhiza sagittata</i> (arrowleaf balsamroot), <i>Helianthella uniflora</i> (oneflower helianthella), <i>Geranium viscosissimum</i> (sticky geranium), <i>Agastache urticifolia</i> (nettleleaf horsemint), <i>Delphinium occidentale</i> (tall larkspur) and/or <i>Ligusticum filicinum</i> (fernleaf licorice-root) – total ≥ 10% cover together or individually.....	ARTRV/BASA3 c.t.
21b	Tall forbs total < 10% cover.....	22
22a	<i>Elymus elymoides</i> (squirreltail) ≥ 5% cover.....	ARTRV/ELEL5 c.t.
22b	<i>Elymus elymoides</i> < 5% cover.....	23
23a	<i>Chamaebatiaria millefolium</i> (desert sweet) ≥ 1% cover.....	ARTRV-CHMI2 c.t.
23b	<i>Chamaebatiaria millefolium</i> < 1% cover.....	24
24a	<i>Poa pratensis</i> (Kentucky bluegrass) ≥ 5% cover.....	ARTRV/POPR c.t.
24b	<i>Poa pratensis</i> < 5% cover.....	25
25a	<i>Bromus inermis</i> (smooth brome) ≥ 5% cover.....	ARTRV/BRIN2 c.t.
25b	<i>Bromus inermis</i> < 5% cover.....	26
26a	<i>Agropyron cristatum</i> (crested wheatgrass) ≥ 5% cover.....	ARTRV/AGCR c.t.
26b	<i>Agropyron cristatum</i> < 5% cover.....	27
27a	<i>Thinopyrum intermedium</i> (intermediate wheatgrass) ≥ 5% cover.....	ARTRV/THIN6 c.t.
27b	<i>Thinopyrum intermedium</i> < 5% cover.....	28
28a	<i>Agropyron desertorum</i> (desert wheatgrass) ≥ 5% cover.....	ARTRV/AGDE2 c.t.
28b	<i>Agropyron desertorum</i> < 5% cover.....	29
29a	<i>Psathyrostachys juncea</i> (Russian wildrye) ≥ 5% cover.....	ARTRV/PSJU3 c.t.
29b	<i>Psathyrostachys juncea</i> < 5% cover.....	30
30a	<i>Poa bulbosa</i> (bulbous bluegrass) ≥ 5% cover.....	ARTRV/POBU c.t.
30b	<i>Poa bulbosa</i> < 5% cover.....	31
31a	<i>Festuca rubra</i> (red fescue) ≥ 5% cover.....	ARTRV/FERU2 c.t.
31b	<i>Festuca rubra</i> < 5% cover.....	32
32a	<i>Leucopoa kingii</i> (spike fescue) ≥ 1% cover.....	ARTRV/LEKI2 c.t.
32b	<i>Leucopoa kingie</i> < 1% cover.....	33
33a	<i>Elymus trachycaulus</i> (slender wheatgrass) ≥ 1% cover.....	ARTRV/ELTR7 c.t.
33b	<i>Elymus trachycaulus</i> < 1% cover.....	34
34a	<i>Festuca campestris</i> (rough fescue) ≥ 1% cover.....	ARTRV/FECA4 c.t.
34b	<i>Festuca campestris</i> < 1% cover.....	35
35a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 1% cover.....	ARTRV/FEID c.t.
35b	<i>Festuca idahoensis</i> < 1% cover.....	36

36a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 1% cover.....	ARTRV/PSSP6 c.t.
36b	<i>Pseudoroegneria spicata</i> < 1% cover.....	37
37a	<i>Leymus salinus</i> (saline wildrye) ≥ 1% cover.....	ARTRV/LESA4 c.t.
37b	<i>Leymus salinus</i> < 1% cover.....	38
38a	<i>Hesperostipa comata</i> (needle and thread) ≥ 1% cover.....	ARTRV/HECO26 c.t.
38b	<i>Hesperostipa comata</i> < 1% cover.....	39
39a	<i>Elymus lanceolatus</i> (thickspike wheatgrass) ≥ 1% cover.....	ARTRV/ELLA3 c.t.
39b	<i>Elymus lanceolatus</i> < 1% cover.....	40
40a	<i>Achnatherum lettermanii</i> (Letterman's needlegrass) ≥ 1% cover.....	ARTRV/ACLE9 c.t.
40b	<i>Achnatherum lettermanii</i> < 1% cover.....	41
41a	<i>Pascopyrum smithii</i> (western wheatgrass) ≥ 1% cover.....	ARTRV/PASM c.t.
41b	<i>Pascopyrum smithii</i> < 1% cover.....	42
42a	<i>Poa secunda</i> ssp. <i>juncifolia</i> (Nevada bluegrass) ≥ 1% cover.....	ARTRV/POSEJ c.t.
42b	<i>Poa secunda</i> ssp. <i>juncifolia</i> < 1% cover.....	43
43a	<i>Poa fendleriana</i> (muttongrass) ≥ 1% cover.....	ARTRV/POFE c.t.
43b	<i>Poa fendleriana</i> < 1% cover.....	44
44a	<i>Koeleria macrantha</i> (prairie Junegrass) ≥ 1% cover.....	ARTRV/KOMA c.t.
44b	<i>Koeleria macrantha</i> < 1% cover.....	45
45a	Tall forbs – <i>Balsamorhiza sagittata</i> (arrowleaf balsamroot), <i>Helianthella uniflora</i> (oneflower helianthella), <i>Geranium viscosissimum</i> (sticky geranium), <i>Agastache urticifolia</i> (nettleleaf horsemint), <i>Delphinium occidentale</i> (tall larkspur) and/or <i>Ligusticum filicinum</i> (fernleaf licorice-root) – total ≥ 5% cover together or individually.....	ARTRV/BASA3 c.t.
45b	Tall forbs total < 5% cover.....	46
46a	<i>Poa secunda</i> ssp. <i>secunda</i> (Sandberg bluegrass) ≥ 5% cover	ARTRV/POSES6 c.t.
46b	<i>Poa secunda</i> ssp. <i>secunda</i> < 5% cover.....	47
47a	<i>Bouteloua gracilis</i> (blue grama) ≥ 5% cover.....	ARTRV/BOGR2 c.t.
47b	<i>Bouteloua gracilis</i> < 5% cover.....	48
48a	<i>Bromus tectorum</i> (cheatgrass) ≥ 5% cover.....	ARTRV/BRTE c.t.
48b	<i>Bromus tectorum</i> < 5% cover.....	49
49a	<i>Bromus arvensis</i> (field brome, aka Japanese brome) ≥ 5% cover.....	ARTRV/BRTE c.t.
49b	<i>Bromus arvensis</i> < 5% cover.....	50
50a	<i>Chondrilla juncea</i> (rush skeletonweed) ≥ 10% cover.....	ARTRV/CHJU c.t.
50b	<i>Chondrilla juncea</i> < 10% cover.....	51
51a	Total herbaceous cover < 20% or total grass cover < 10%.....	ARTRV/Sparse c.t.
51b	Total herbaceous cover ≥ 20% and total grass cover ≥ 10%.....	Unclassified

Distribution

Capability of meeting sage grouse habitat guidelines

	Elevation	States	Breeding/Nesting			Brood Rearing		
			Sage	Grass	Forb	Sage	Grass	Forb
<u>Seral to Forest:</u>								
ARTRV/CARU	6420 - 9075	ID WY	Y	Y	Y	Y	Y	Y
<u>Late to Mid-Seral:</u>								
ARTRV/ACRI8	7800 - 8230	WY	Y	Y	Y	Y	Y	Y
ARTRV/BRMA4	5120 - 9900	ID UT WY	Y	Y	Y	Y	Y	Y
ARTRV/CAGE2	5260 - 9169	ID UT WY	Y	Y	Y	Y	Y	Y
ARTRV-CHMI2	4854 - 5425	ID	N	N	N	N	N	N
ARTRV/ELTR7	5930 - 10009	ID NV UT WY	Y	Y	Y	Y	Y	Y
ARTRV/FECA4	3679 - 3719	MT	Y	Y	Y	Y	Y	Y
ARTRV/FEID	9984	CO ID MT NV UT WY	Y	Y	Y	Y	Y	Y
ARTRV/HECO26	4778 - 9442	CO ID UT WY	Y	Y	Y	Y	Y	Y
ARTRV/LECI4	4845 - 8260	CA CO ID NV UT WY	Y	Y	Y	Y	Y	Y
ARTRV/LEKI2	7600 - 9750	ID UT WY	Y	Y	Y	Y	Y	Y
ARTRV/LESA4	6800 - 10400	UT	Y	Y	Y	Y	Y	Y
ARTRV/PSSP6	3680 - 9550	CO ID UT WY	Y	Y	Y	Y	Y	Y
ARTRV/TRSP2	6128 - 9720	ID UT WY	Y	Y	Y	Y	Y	Y
<u>Mid to Early-Seral:</u>								
ARTRV/ACLE9	7000 - 10100	CO ID NV UT WY	Y	Y	Y	Y	Y	Y
ARTRV/ACNE9	6770 - 9720	ID NV UT WY	Y	Y	Y	Y	Y	Y
ARTRV/BOGR2	5888 - 8561	NV UT	Y	N	Y	Y	Y	Y
ARTRV/ELLA3	6800 - 8700	UT WY	Y	Y	Y	Y	Y	Y
ARTRV/KOMA	2630 - 8221	CO WY	Y	Y	Y	Y	Y	Y
ARTRV/PASM	6190 - 8750	CO ID UT	Y	Y	Y	Y	Y	Y
ARTRV/POFE	6399 - 9468	CO NV UT WY	Y	Y	Y	Y	Y	Y
ARTRV/POSESJ	6025 - 9420	NV UT WY	Y	Y	Y	Y	Y	Y
ARTRV/BASA3	6033 - 9200	ID NV UT WY	Y	?	Y	Y	Y	Y
<u>Early Seral:</u>								
ARTRV/BRTE	4146 - 7800	ID UT	Y	Y	Y	Y	Y	Y
ARTRV/CHJU	2920 - 2920	ID	Y	Y	Y	Y	Y	Y
ARTRV/ELEL5	4650 - 9100	ID NV UT WY	Y	Y	Y	Y	Y	Y
ARTRV/POSES6	4650 - 9292	CO ID NV UT WY	Y	Y	Y	Y	Y	Y
ARTRV/Sparse	9250	ID NV UT WY	Y	?	Y	Y	?	Y
<u>Seeded Early Seral:</u>								
ARTRV/AGCR	5800 - 8173	ID UT	Y	Y	Y	Y	Y	Y
ARTRV/AGDE2	5900	NV	Y	Y	Y	Y	Y	Y
ARTRV/BRIN2	5850 - 9500	ID UT WY	Y	Y	Y	Y	Y	Y
ARTRV/FERU2	7064 - 9390	WY	Y	Y	Y	Y	Y	Y
ARTRV/POBU	4760 - 7500	ID UT	Y	Y	Y	Y	Y	Y
ARTRV/POPR	9999	ID UT WY	Y	Y	Y	Y	Y	Y
ARTRV/PSJU3	6740	UT	Y	Y	Y	Y	Y	Y
ARTRV/THIN6	3800 - 7840	ID UT	Y	Y	Y	Y	Y	Y

Y = Yes ? = Not always N = No

***Artemisia tridentata* ssp. *vaseyana* – *Purshia tridentata* Group**
mountain big sagebrush - bitterbrush

1a	<i>Elymus trachycaulus</i> (slender wheatgrass) ≥ 5% cover.....	ARTRV-PUTR2/ELTR7 c.t.
1b	<i>Elymus trachycaulus</i> < 5% cover.....	2
2a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 5% cover.....	ARTRV-PUTR2/FEID c.t.
2b	<i>Festuca idahoensis</i> < 5% cover.....	3
3a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 5% cover.....	ARTRV-PUTR2/PSSP6 c.t.
3b	<i>Pseudoroegneria spicata</i> < 5% cover.....	4
4a	<i>Achnatherum nelsonii</i> (Columbia needlegrass) ≥ 5% cover.....	ARTRV-PUTR2/ACNE9 c.t.
4b	<i>Achnatherum nelsonii</i> < 5% cover.....	5
5a	<i>Hesperostipa comata</i> (needle and thread) ≥ 5% cover.....	ARTRV-PUTR2/HECO26 c.t.
5b	<i>Hesperostipa comata</i> < 5% cover.....	6
6a	<i>Balsamorhiza sagittata</i> (arrowleaf balsamroot) ≥ 5% cover.....	ARTRV-PUTR2/BASA3 c.t.
6b	<i>Balsamorhiza sagittata</i> < 5% cover.....	7
7a	<i>Achnatherum lettermanii</i> (Letterman's needlegrass) ≥ 5% cover.....	ARTRV-PUTR2/ACLE9 c.t.
7b	<i>Achnatherum lettermanii</i> < 5% cover.....	8
8a	<i>Poa fendleriana</i> (muttongrass) ≥ 5% cover.....	ARTRV-PUTR2/POFE c.t.
8b	<i>Poa fendleriana</i> < 5% cover.....	9
9a	<i>Poa secunda</i> ssp. <i>secunda</i> (Sandberg bluegrass) ≥ 5% cover.....	ARTRV-PUTR2/POSES6 c.t.
9b	<i>Poa secunda</i> ssp. <i>secunda</i> < 5% cover.....	10
10a	<i>Poa pratensis</i> (Kentucky bluegrass) ≥ 10% cover.....	ARTRV-PUTR2/POPR c.t.
10b	<i>Poa pratensis</i> < 10% cover.....	11
11a	<i>Bromus inermis</i> (smooth brome) ≥ 5% cover.....	ARTRV-PUTR2/BRIN2 c.t.
11b	<i>Bromus inermis</i> < 5% cover.....	12
12a	<i>Agropyron cristatum</i> (crested wheatgrass) ≥ 5% cover.....	ARTRV-PUTR2/AGCR c.t.
12b	<i>Agropyron cristatum</i> < 5% cover.....	13
13a	<i>Thinopyrum intermedium</i> (intermediate wheatgrass) ≥ 5% cover.....	ARTRV-PUTR2/THIN6 c.t.
13b	<i>Thinopyrum intermedium</i> < 5% cover.....	14
14a	<i>Agropyron desertorum</i> (desert wheatgrass) ≥ 5% cover.....	ARTRV-PUTR2/AGDE2 c.t.
14b	<i>Agropyron desertorum</i> < 5% cover.....	15
15a	<i>Psathyrostachys juncea</i> (Russian wildrye) ≥ 5% cover.....	ARTRV-PUTR2/PSJU3 c.t.
15b	<i>Psathyrostachys juncea</i> < 5% cover.....	16
16a	<i>Poa bulbosa</i> (bulbous bluegrass) ≥ 10% cover.....	ARTRV-PUTR2/POBU c.t.
16b	<i>Poa bulbosa</i> < 10% cover.....	17
17a	<i>Bromus tectorum</i> (cheatgrass) ≥ 5% cover.....	ARTRV-PUTR2/BRTE c.t.
17b	<i>Bromus tectorum</i> < 5% cover.....	18
	Total herbaceous cover < 20% or total grass cover < 10%.....	ARTRV-PUTR2/Sparse c.t.
	Total herbaceous cover ≥ 20% and total grass cover ≥ 10%.....	Unclassified

Distribution

Capability of meeting sage grouse habitat guidelines

	n	Elevation	States	Breeding/Nesting			Brood Rearing		
				Sage	Grass	Forb	Sage	Grass	Forb
Late to Mid-Seral:									
ARTRV-PUTR2/ELTR7	1	6256	WY	Y	Y	Y	Y	Y	Y
ARTRV-PUTR2/FEID	51	8650	ID WY	Y	Y	Y	Y	Y	Y
ARTRV-PUTR2/HECO26	11	6020 - 8848	CO ID UT	Y	Y	Y	Y	Y	Y
ARTRV-PUTR2/PSSP6	66	4080 - 8480	CO ID UT WY	Y	Y	Y	Y	Y	Y
Mid to Early-Seral:									
ARTRV-PUTR2/ACLE9	3	8011 - 8600	UT	Y	Y	Y	Y	Y	Y
ARTRV-PUTR2/ACNE9	2	6908	ID WY	Y	Y	Y	Y	Y	Y
ARTRV-PUTR2/BASA3	5	4760 - 7322	ID WY	Y	?	Y	Y	Y	Y
ARTRV-PUTR2/POFE	6	7900 - 8880	UT	Y	Y	Y	Y	Y	Y
Early Seral:									
ARTRV-PUTR2/BRTE	4	4847 - 5800	ID UT	Y	Y	Y	Y	Y	Y
ARTRV-PUTR2/POSES6	9	4765 - 7900	ID UT	Y	Y	Y	Y	Y	Y
ARTRV-PUTR2/Sparse	17	4960 - 8400	CO ID UT	Y	?	Y	Y	Y	Y
Seeded Early Seral:									
ARTRV-PUTR2/AGCR	3	7421 - 7579	UT	Y	Y	Y	Y	Y	Y
ARTRV-PUTR2/AGDE2	---	-----	---	Y	Y	Y	Y	Y	Y
ARTRV-PUTR2/BRIN2	4	6500 - 6700	UT WY	Y	Y	Y	Y	Y	Y
ARTRV-PUTR2/POBU	2	5100 - 7100	UT	Y	Y	Y	Y	Y	Y
ARTRV-PUTR2/POPR	6	6010 - 6800	ID UT WY	Y	Y	Y	Y	Y	Y
ARTRV-PUTR2/PSJU3	---	-----	---	Y	Y	Y	Y	Y	Y
ARTRV-PUTR2/THIN6	1	4880 - 4880	UT	Y	Y	?	Y	Y	?

Y = Yes ? = Not always N = No

***Artemisia tridentata* ssp. *wyomingensis* Group**
Wyoming big sagebrush

1a	Salt desert shrubs (see page 2) total \geq 5% cover.....	2
1b	Salt desert shrubs total < 5% cover.....	5
2a	<i>Grayia spinosa</i> (spiny hopsage) is the most abundant desert shrub.....	ARTRW8-GRSP c.t.
2b	<i>Grayia spinosa</i> is not the most abundant desert shrub.....	3
3a	<i>Sarcobatus vermiculatus</i> (greasewood) is the most abundant desert shrub..	ARTRW8-SAVE4 c.t.
3b	<i>Sarcobatus vermiculatus</i> is not the most abundant desert shrub.....	4
4a	<i>Atriplex confertifolia</i> (shadscale) is the most abundant desert shrub.....	ARTRW8-ATCO c.t.
4b	<i>Atriplex confertifolia</i> is not the most abundant desert shrub.....	UNCLASSIFIED
5a	Dry desert shrubs (see page 3) total \geq 5% cover.....	6
5b	Dry desert shrubs total < 5% cover.....	9
6a	<i>Coleogyne ramosissima</i> (blackbrush) is the most abundant desert shrub.....	ARTRW8-CORA c.t.
6b	<i>Coleogyne ramosissima</i> is not the most abundant desert shrub.....	7
7a	<i>Purshia stansburiana</i> (Stansbury cliffrose) is the most abundant desert shrub.....	ARTRW8-PUST c.t.
7b	<i>Purshia stansburiana</i> is not the most abundant desert shrub.....	8
8a	<i>Ephedra viridis</i> (Mormon tea) is the most abundant desert shrub.....	ARTRW8/EPVI c.t.
8b	<i>Ephedra viridis</i> is not the most abundant desert shrub.....	UNCLASSIFIED
9a	<i>Festuca idahoensis</i> (Idaho fescue) \geq 5% cover.....	ARTRW8/FEID c.t.
9b	<i>Festuca idahoensis</i> < 5% cover.....	10
10a	<i>Leymus cinereus</i> (basin wildrye) \geq 5% cover.....	ARTRW8/LECI4 c.t.
10b	<i>Leymus cinereus</i> < 5% cover.....	11
11a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) \geq 5% cover.....	ARTRW8/PSSP6 c.t.
11b	<i>Pseudoroegneria spicata</i> < 5% cover.....	12
12a	<i>Leymus salinus</i> (saline wildrye) \geq 5% cover.....	ARTRW8/LESA4 c.t.
12b	<i>Leymus salinus</i> < 5% cover.....	13
13a	<i>Hesperostipa comata</i> (needle and thread) \geq 5% cover.....	ARTRW8/HECO26 c.t.
13b	<i>Hesperostipa comata</i> < 5% cover.....	14
14a	<i>Balsamorhiza sagittata</i> (arrowleaf balsamroot) \geq 5% cover.....	ARTRW8/BASA3 c.t.
14b	<i>Balsamorhiza sagittata</i> < 5% cover.....	15
15a	<i>Achnatherum thurberianum</i> (Thurber's needlegrass) \geq 5% cover.....	ARTRW8/ACTH7 c.t.
15b	<i>Achnatherum thurberianum</i> < 5% cover.....	16
16a	<i>Achnatherum hymenoides</i> (Indian ricegrass) \geq 5% cover.....	ARTRW8/ACHY c.t.
16b	<i>Achnatherum hymenoides</i> < 5% cover.....	17
17a	<i>Elymus lanceolatus</i> (thickspike wheatgrass) \geq 5% cover.....	ARTRW8/ELLA3 c.t.
17b	<i>Elymus lanceolatus</i> < 5% cover.....	18

18a	<i>Achnatherum lettermanii</i> (Letterman's needlegrass) ≥ 5% cover.....	ARTRW8/ACLE9 c.t.
18b	<i>Achnatherum lettermanii</i> < 5% cover.....	19
19a	<i>Pascopyrum smithii</i> (western wheatgrass) ≥ 5% cover.....	ARTRW8/PASM c.t.
19b	<i>Pascopyrum smithii</i> < 5% cover.....	20
20a	<i>Poa fendleriana</i> (muttongrass) ≥ 5% cover.....	ARTRW8/POFE c.t.
20b	<i>Poa fendleriana</i> < 5% cover.....	21
21a	<i>Elymus elymoides</i> (squirreltail) ≥ 5% cover.....	ARTRW8/ELEL5 c.t.
21b	<i>Elymus elymoides</i> < 5% cover.....	22
22a	<i>Poa pratensis</i> (Kentucky bluegrass) ≥ 5% cover.....	ARTRW8/POPR c.t.
22b	<i>Poa pratensis</i> < 5% cover.....	23
23a	<i>Bromus inermis</i> (smooth brome) ≥ 5% cover.....	ARTRW8/BRIN2 c.t.
23b	<i>Bromus inermis</i> < 5% cover.....	24
24a	<i>Agropyron cristatum</i> (crested wheatgrass) ≥ 5% cover.....	ARTRW8/AGCR c.t.
24b	<i>Agropyron cristatum</i> < 5% cover.....	25
25a	<i>Thinopyrum intermedium</i> (intermediate wheatgrass) ≥ 5% cover.....	ARTRW8/THIN6 c.t.
25b	<i>Thinopyrum intermedium</i> < 5% cover.....	26
26a	<i>Agropyron desertorum</i> (desert wheatgrass) ≥ 5% cover.....	ARTRW8/AGDE2 c.t.
26b	<i>Agropyron desertorum</i> < 5% cover.....	27
27a	<i>Psathyrostachys juncea</i> (Russian wildrye) ≥ 5% cover.....	ARTRW8/PSJU3 c.t.
27b	<i>Psathyrostachys juncea</i> < 5% cover.....	28
28a	<i>Poa bulbosa</i> (bulbous bluegrass) ≥ 10% cover.....	ARTRW8/POBU c.t.
28b	<i>Poa bulbosa</i> < 10% cover.....	29
29a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 1% cover.....	ARTRW8/FEID c.t.
29b	<i>Festuca idahoensis</i> < 1% cover.....	30
30a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 1% cover.....	ARTRW8/PSSP6 c.t.
30b	<i>Pseudoroegneria spicata</i> < 1% cover.....	31
31a	<i>Leymus salinus</i> (saline wildrye) ≥ 1% cover.....	ARTRW8/LESA4 c.t.
31b	<i>Leymus salinus</i> < 1% cover.....	32
32a	<i>Hesperostipa comata</i> (needle and thread) ≥ 1% cover.....	ARTRW8/HECO26 c.t.
32b	<i>Hesperostipa comata</i> < 1% cover.....	33
33a	<i>Achnatherum thurberianum</i> (Thurber's needlegrass) ≥ 1% cover.....	ARTRW8/ACTH7 c.t.
33b	<i>Achnatherum thurberianum</i> < 1% cover.....	34
34a	<i>Achnatherum hymenoides</i> (Indian ricegrass) ≥ 1% cover.....	ARTRW8/ACHY c.t.
34b	<i>Achnatherum hymenoides</i> < 1% cover.....	35
35a	<i>Elymus lanceolatus</i> (thickspike wheatgrass) ≥ 1% cover.....	ARTRW8/ELLA3 c.t.
35b	<i>Elymus lanceolatus</i> < 1% cover.....	36
36a	<i>Achnatherum lettermanii</i> (Letterman's needlegrass) ≥ 1% cover.....	ARTRW8/ACLE9 c.t.
36b	<i>Achnatherum lettermanii</i> < 1% cover.....	37

37a	<i>Poa fendleriana</i> (muttongrass) ≥ 1% cover.....	ARTRW8/POFE c.t.
37b	<i>Poa fendleriana</i> < 1% cover.....	38
38a	<i>Pascopyrum smithii</i> (western wheatgrass) ≥ 1% cover.....	ARTRW8/PASM c.t.
38b	<i>Pascopyrum smithii</i> < 1% cover.....	39
39a	<i>Elymus elymoides</i> (squirreltail) ≥ 1% cover.....	ARTRW8/ELEL5 c.t.
39b	<i>Elymus elymoides</i> < 1% cover.....	40
40a	<i>Poa secunda</i> ssp. <i>secunda</i> (Sandberg bluegrass) ≥ 5% cover	ARTRW8/POSES6 c.t.
40b	<i>Poa secunda</i> ssp. <i>secunda</i> < 5% cover.....	41
41a	<i>Pleuraphis jamesii</i> (James' galleta) ≥ 5% cover.....	ARTRW8/PLJA c.t.
41b	<i>Pleuraphis jamesii</i> < 5% cover.....	42
42a	<i>Bouteloua gracilis</i> (blue grama) ≥ 5% cover.....	ARTRW8/BOGR2 c.t.
42b	<i>Bouteloua gracilis</i> < 5% cover.....	43
43a	<i>Poa secunda</i> ssp. <i>secunda</i> (Sandberg bluegrass) ≥ 1% cover	ARTRW8/POSES6 c.t.
43b	<i>Poa secunda</i> ssp. <i>secunda</i> < 1% cover.....	44
44a	<i>Pleuraphis jamesii</i> (James' galleta) ≥ 1% cover.....	ARTRW8/PLJA c.t.
44b	<i>Pleuraphis jamesii</i> < 1% cover.....	45
45a	<i>Bouteloua gracilis</i> (blue grama) ≥ 1% cover.....	ARTRW8/BOGR2 c.t.
45b	<i>Bouteloua gracilis</i> < 1% cover.....	46
46a	<i>Bromus tectorum</i> (cheatgrass) ≥ 1% cover.....	ARTRW8/BRTE c.t.
46b	<i>Bromus tectorum</i> < 1% cover.....	47
47a	<i>Grayia spinosa</i> (spiny hopsage) ≥ 1% cover.....	ARTRW8-GRSP c.t.
47b	<i>Grayia spinosa</i> < 1% cover.....	48
48a	<i>Sarcobatus vermiculatus</i> (greasewood) ≥ 1% cover.....	ARTRW8-SAVE4 c.t.
48b	<i>Sarcobatus vermiculatus</i> < 1% cover.....	49
49a	<i>Atriplex confertifolia</i> (shadscale) ≥ 1% cover.....	ARTRW8-ATCO c.t.
49b	<i>Atriplex confertifolia</i> < 1% cover.....	50
50a	<i>Coleogyne ramosissima</i> (blackbrush) ≥ 1% cover.....	ARTRW8-CORA c.t.
50b	<i>Coleogyne ramosissima</i> < 1% cover.....	51
51a	<i>Purshia stansburiana</i> (Stansbury cliffrose) ≥ 1% cover.....	ARTRW8-PUST c.t.
51b	<i>Purshia stansburiana</i> < 1% cover.....	52
52a	<i>Ephedra viridis</i> (Mormon tea) ≥ 1% cover.....	ARTRW8/EPVI c.t.
52b	<i>Ephedra viridis</i> < 1% cover.....	53
53a	Graminoids totals < 5% cover.....	ARTRW8/Sparse c.t.
53b	Graminoids totals ≥ 5% cover.....	Unclassified

Distribution

Capability of meeting sage grouse habitat guidelines

	n	Elevation	States	Breeding/Nesting			Brood Rearing		
				Sage	Grass	Forb	Sage	Grass	Forb
<u>Late to Mid-Seral:</u>									
ARTRW8/ACHY	19	4346 - 8200	CO ID NV UT WY	Y	Y	?	Y	Y	?
ARTRW8/ACTH7	2	6670 - 6800	NV	Y	Y	Y	Y	Y	Y
ARTRW8/BOGR2	11	6500 - 8400	UT	Y	N	N	Y	Y	Y
ARTRW8/FEID	8	4851 - 6300	ID	Y	Y	Y	Y	Y	Y
ARTRW8/HECO26	108	4355 - 7757	CO ID NV UT	Y	Y	?	Y	Y	Y
ARTRW8/LECI4	3	4782 - 7061	ID WY	Y	Y	Y	Y	Y	Y
ARTRW8/LESA4	5	5678 - 6900	CO UT	Y	Y	N	Y	Y	Y
ARTRW8/PASM	9	4880 - 7478	CO ID UT	Y	Y	N	Y	Y	?
ARTRW8/PLJA	12	4704 - 6200	CO NV UT	Y	N	Y	Y	N	Y
ARTRW8/POSES6	49	4355 - 6890	ID NV UT WY	Y	N	N	Y	N	Y
ARTRW8/PSPP6	69	4260 - 7659	CO ID MT NV UT WY	Y	Y	Y	Y	Y	Y
<u>Mid to Early-Seral:</u>									
ARTRW8/ACLE9	2	7280 - 7747	CO WY	Y	Y	Y	Y	Y	Y
ARTRW8/BASA3	2	7600 - 7610	CO UT	Y	Y	Y	Y	Y	Y
ARTRW8/ELEL5	50	3726 - 8200	CO ID NV UT WY	Y	Y	Y	Y	Y	Y
ARTRW8/ELLA3	7	5776 - 7220	CO UT WY	Y	Y	Y	Y	Y	Y
ARTRW8/POFE	22	5340 - 7797	CO UT	Y	Y	?	Y	Y	Y
<u>Early Seral:</u>									
ARTRW8/BRTE	30	4023 - 6858	CO ID UT	Y	Y	Y	Y	Y	Y
ARTRW8/Sparse	31	4441 - 7872	CO ID NV UT	Y	?	?	Y	?	?
<u>Seeded Early Seral:</u>									
ARTRW8/AGCR	24	5400 - 8033	UT	Y	Y	?	Y	Y	Y
ARTRW8/AGDE2	----	-----	---	Y	Y	Y	Y	Y	Y
ARTRW8/BRIN2	----	-----		Y	Y	Y	Y	Y	Y
ARTRW8/POBU	----	-----	ID	Y	Y	Y	Y	Y	Y
ARTRW8/POPR	1	7577	UT	Y	Y	Y	Y	Y	Y
ARTRW8/PSJU3	1	8080	UT	Y	Y	?	Y	Y	?
ARTRW8/THIN6		-----		Y	Y	Y	Y	Y	Y
<u>Salt Desert Shrub:</u>									
ARTRW8-ATCO	5	5379 - 6600	UT	N	N	N	?	?	?
ARTRW8-GRSP	4	5740	CO UT	Y	?	N	Y	?	?
ARTRW8-SAVE4	6	4746 - 6500	CO UT	Y	?	N	Y	?	?
<u>Dry Desert Shrub:</u>									
ARTRW8-CORA	7	4179 - 6376	NV UT	Y	?	?	Y	Y	Y
ARTRW8-EPVI	6	4897 - 6117	CO NV	Y	?	N	Y	N	N
ARTRW8-PUST	1	5700	UT	Y	?	N	Y	N	N

Y = Yes ? = Not always N = No

**Artemisia tridentata ssp. tridentata Group
basin big sagebrush**

1a	<i>Juncus arcticus</i> ssp. <i>littoralis</i> (mountain or Baltic rush) ≥ 10% cover.....	ARTRT/JUARL c.t.
1b	<i>Juncus arcticus</i> ssp. <i>littoralis</i> < 10% cover.....	2
2a	<i>Carex douglasii</i> (Douglas' sedge) ≥ 5% cover.....	ARTRT/CADO2 c.t.
2b	<i>Carex douglasii</i> < 5% cover.....	3
3a	<i>Iris missouriensis</i> (Rocky Mountain iris) ≥ 20% cover.....	ARTRT/IRMI c.t.
3b	<i>Iris missouriensis</i> < 20% cover.....	4
4a	<i>Leymus cinereus</i> (basin wildrye) ≥ 5% cover.....	ARTRT/LECI4 c.t.
4b	<i>Leymus cinereus</i> < 5% cover.....	5
5a	<i>Muhlenbergia richardsonis</i> (mat muhly) ≥ 5% cover.....	ARTRT/MURI c.t.
5b	<i>Muhlenbergia richardsonis</i> < 5% cover.....	6
6a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 1% cover.....	ARTRT/FEID c.t.
6b	<i>Festuca idahoensis</i> < 1% cover.....	7
7a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 1% cover.....	ARTRT/PSSP6 c.t.
7b	<i>Pseudoroegneria spicata</i> < 1% cover.....	8
8a	<i>Sporobolus airoides</i> (alkali sacaton) ≥ 5% cover.....	ARTRT/SPAI c.t.
8b	<i>Sporobolus airoides</i> < 5% cover.....	9
9a	<i>Poa secunda</i> ssp. <i>juncifolia</i> (Nevada bluegrass) ≥ 5% cover.....	ARTRT/POSEJ c.t.
9b	<i>Poa secunda</i> ssp. <i>juncifolia</i> < 5% cover.....	10
10a	<i>Hesperostipa comata</i> (needle and thread) ≥ 5% cover.....	ARTRT/HECO26 c.t.
10b	<i>Hesperostipa comata</i> < 5% cover.....	11
11a	<i>Elymus lanceolatus</i> (thickspike wheatgrass) ≥ 5% cover.....	ARTRT/ELLA3 c.t.
11b	<i>Elymus lanceolatus</i> < 5% cover.....	12
12a	<i>Achnatherum hymenoides</i> (Indian ricegrass) ≥ 5% cover.....	ARTRT/ACHY c.t.
12b	<i>Achnatherum hymenoides</i> < 5% cover.....	13
13a	<i>Poa fendleriana</i> (muttongrass) ≥ 5% cover.....	ARTRT/POFE c.t.
13b	<i>Poa fendleriana</i> < 5% cover.....	14
14a	<i>Elymus elymoides</i> (squirreltail) ≥ 5% cover.....	ARTRT/ELEL5 c.t.
14b	<i>Elymus elymoides</i> < 5% cover.....	15
15a	<i>Achnatherum speciosum</i> (desert needlegrass) ≥ 5% cover.....	ARTRT/ACSP12 c.t.
15b	<i>Achnatherum speciosum</i> < 5% cover.....	16
16a	<i>Poa pratensis</i> (Kentucky bluegrass) ≥ 5% cover.....	ARTRT/POPR c.t.
16b	<i>Poa pratensis</i> < 5% cover.....	17
17a	<i>Bromus inermis</i> (smooth brome) ≥ 10% cover.....	ARTRT/BRIN2 c.t.
17b	<i>Bromus inermis</i> < 10% cover.....	18

18a	<i>Agropyron cristatum</i> (crested wheatgrass) ≥ 10% cover.....	ARTRT/AGCR c.t.
18b	<i>Agropyron cristatum</i> < 10% cover.....	19
19a	<i>Thinopyrum intermedium</i> (intermediate wheatgrass) ≥ 5% cover.....	ARTRT/THIN6 c.t.
19b	<i>Thinopyrum intermedium</i> < 5% cover.....	20
20a	<i>Agropyron desertorum</i> (desert wheatgrass) ≥ 5% cover.....	ARTRT/AGDE2 c.t.
20b	<i>Agropyron desertorum</i> < 5% cover.....	21
21a	<i>Psathyrostachys juncea</i> (Russian wildrye) ≥ 5% cover.....	ARTRT/PSJU3 c.t.
21b	<i>Psathyrostachys juncea</i> < 5% cover.....	22
22a	<i>Poa bulbosa</i> (bulbous bluegrass) ≥ 10% cover.....	ARTRT/POBU c.t.
22b	<i>Poa bulbosa</i> < 10% cover.....	23
23a	<i>Juncus arcticus</i> ssp. <i>littoralis</i> (mountain or Baltic rush) present.....	ARTRT/JUARL c.t.
23b	<i>Juncus arcticus</i> ssp. <i>littoralis</i> absent.....	24
24a	<i>Leymus cinereus</i> (basin wildrye) ≥ 1% cover.....	ARTRT/LECI4 c.t.
24b	<i>Leymus cinereus</i> < 1% cover.....	25
25a	<i>Hesperostipa comata</i> (needle and thread) ≥ 1% cover.....	ARTRT/HECO26 c.t.
25b	<i>Hesperostipa comata</i> < 1% cover.....	26
26a	<i>Elymus lanceolatus</i> (thickspike wheatgrass) ≥ 1% cover.....	ARTRT/ELLA3 c.t.
26b	<i>Elymus lanceolatus</i> < 1% cover.....	27
27a	<i>Achnatherum hymenoides</i> (Indian ricegrass) ≥ 1% cover.....	ARTRT/ACHY c.t.
27b	<i>Achnatherum hymenoides</i> < 1% cover.....	28
28a	<i>Poa fendleriana</i> (muttongrass) ≥ 1% cover.....	ARTRT/POFE c.t.
28b	<i>Poa fendleriana</i> < 1% cover.....	29
29a	<i>Elymus elymoides</i> (squirreltail) ≥ 1% cover.....	ARTRT/ELEL5 c.t.
29b	<i>Elymus elymoides</i> < 1% cover.....	30
30a	<i>Poa secunda</i> ssp. <i>secunda</i> (Sandberg bluegrass) ≥ 5% cover	ARTRT/POSES6 c.t.
30b	<i>Poa secunda</i> ssp. <i>secunda</i> < 5% cover.....	31
31a	<i>Pleuraphis jamesii</i> (James' galleta) ≥ 5% cover.....	ARTRT/PLJA c.t.
31b	<i>Pleuraphis jamesii</i> < 5% cover.....	32
32a	<i>Poa secunda</i> ssp. <i>secunda</i> (Sandberg bluegrass) ≥ 1% cover	ARTRT/POSES6 c.t.
32b	<i>Poa secunda</i> ssp. <i>secunda</i> < 1% cover.....	33
33a	<i>Pleuraphis jamesii</i> (James' galleta) ≥ 1% cover.....	ARTRT/PLJA c.t.
33b	<i>Pleuraphis jamesii</i> < 1% cover.....	34
34a	<i>Bromus rubens</i> (red brome) ≥ 5% cover.....	ARTRT/BRRU2 c.t.
34b	<i>Bromus rubens</i> < 5% cover.....	35
35a	<i>Halogeton glomeratus</i> (saltlover)) ≥ 5% cover.....	ARTRT/HAGL c.t.
35b	<i>Halogeton glomeratus</i> < 5% cover.....	36
36a	<i>Bromus tectorum</i> (cheatgrass) ≥ 1% cover.....	ARTRT/BRTE c.t.
36b	<i>Bromus tectorum</i> < 1% cover.....	37

37a	Total herbaceous cover < 20% or total grass cover < 5%.....	ARTRT/Sparse c.t.
37b	Total herbaceous cover ≥ 20% and total grass cover ≥ 5%.....	Unclassified

Distribution	Capability of meeting sage grouse habitat guidelines								
	n	Elevation	States	Breeding/Nesting			Brood Rearing		
				Sage	Grass	Forb	Sage	Grass	Forb
Late to Mid-Seral:									
ARTRT/ACHY	7	4349 - 6560	NV UT	Y	Y	Y	Y	Y	Y
ARTRT/ACSP12	1	5363	NV	Y	Y	N	Y	Y	N
ARTRT/FEID	6	5402 - 8286	ID WY	Y	Y	Y	Y	Y	Y
ARTRT/HECO26	10	4782 - 7480	CO NV UT WY	Y	Y	Y	Y	Y	Y
ARTRT/LECI4	11	5028 - 8320	CO ID NV UT WY	Y	Y	Y	Y	Y	Y
ARTRT/MURI	1	7760	NV	Y	Y	?	Y	Y	Y
ARTRT/PLJA	1	5904	UT	Y	N	N	Y	N	N
ARTRT/PSSP6	15	5260 - 8770	ID NV UT WY	Y	Y	Y	Y	Y	Y
ARTRT/SPAI	3	4677 - 4959	CO UT	Y	Y	N	Y	Y	Y
Mid to Early-Seral:									
ARTRT/CADO2	6	4020 - 7880	NV	Y	Y	Y	Y	Y	Y
ARTRT/ELEL5	8	6600 - 8140	NV UT WY	Y	Y	Y	Y	Y	Y
ARTRT/ELLA3	10	6590 - 8040	NV UT WY	Y	Y	Y	Y	Y	Y
ARTRT/IRMI	1	7560	NV	Y	Y	Y	Y	Y	Y
ARTRT/JUARL	8	6404 - 7380	ID NV	Y	Y	Y	Y	Y	Y
ARTRT/POFE	2	7439 - 7600	UT	Y	Y	Y	Y	Y	Y
ARTRT/POSEJ	3	5560 - 7680	ID NV	Y	Y	Y	Y	Y	Y
ARTRT/POSES6	8	4693 - 7250	ID NV WY	Y	N	?	Y	N	Y
Early Seral:									
ARTRT/BRRU2	1	3900	NV	Y	Y	Y	Y	Y	Y
ARTRT/BRTE	19	4795 - 6527	CO ID NV UT	Y	Y	Y	Y	Y	Y
ARTRT/HAGL	1	6560	NV	Y	?	?	Y	?	?
ARTRT/Sparse	14	4461 - 7873	ID NV UT	Y	?	?	Y	?	?
Seeded Early Seral:									
ARTRT/AGCR	5	5631 - 7353	UT	Y	Y	Y	Y	Y	Y
ARTRT/AGDE2	---	-----	---	Y	Y	Y	Y	Y	Y
ARTRT/BRIN2	---	----	---	Y	Y	Y	Y	Y	Y
ARTRT/POBU	---	-----	---	Y	Y	Y	Y	Y	Y
ARTRT/POPR	4	5390 - 6645	ID UT	Y	Y	Y	Y	Y	Y
ARTRT/PSJU3	---	-----	---	Y	Y	Y	Y	Y	Y
ARTRT/THIN6	1	4820	UT	Y	Y	Y	Y	Y	Y

Y = Yes ? = Not always N = No

**Artemisia nova Group
black sagebrush**

1a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 5% cover.....	ARNO4/FEID c.t.
1b	<i>Festuca idahoensis</i> < 5% cover.....	2
2a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 5% cover.....	ARNO4/PSSP6 c.t.
2b	<i>Pseudoroegneria spicata</i> < 5% cover.....	3
3a	<i>Leymus salinus</i> (saline wildrye) ≥ 5% cover.....	ARNO4/LESA4 c.t.
3b	<i>Leymus salinus</i> < 5% cover.....	4
4a	<i>Hesperostipa comata</i> (needle and thread) ≥ 5% cover.....	ARNO4/HECO26 c.t.
4b	<i>Hesperostipa comata</i> < 5% cover.....	5
5a	<i>Balsamorhiza sagittata</i> (arrowleaf balsamroot) ≥ 5% cover.....	ARNO4/BASA3 c.t.
5b	<i>Balsamorhiza sagittata</i> < 5% cover.....	6
6a	<i>Achnatherum hymenoides</i> (Indian ricegrass) ≥ 5% cover.....	ARNO4/ACHY c.t.
6b	<i>Achnatherum hymenoides</i> < 5% cover.....	7
7a	<i>Elymus lanceolatus</i> (thickspike wheatgrass) ≥ 5% cover.....	ARNO4/ELLA3 c.t.
7b	<i>Elymus lanceolatus</i> < 5% cover.....	8
8a	<i>Achnatherum lettermanii</i> (Letterman's needlegrass) ≥ 5% cover.....	ARNO4/ACLE9 c.t.
8b	<i>Achnatherum lettermanii</i> < 5% cover.....	9
9a	<i>Poa fendleriana</i> (muttongrass) ≥ 5% cover.....	ARNO4/POFE c.t.
9b	<i>Poa fendleriana</i> < 5% cover.....	10
10a	<i>Koeleria macrantha</i> (prairie Junegrass) ≥ 5% cover.....	ARNO4/KOMA c.t.
10b	<i>Koeleria macrantha</i> < 5% cover.....	11
11a	<i>Elymus elymoides</i> (squirreltail) ≥ 5% cover.....	ARNO4/ELEL5 c.t.
11b	<i>Elymus elymoides</i> < 5% cover.....	12
12a	<i>Bromus inermis</i> (smooth brome) ≥ 5% cover.....	ARNO4/BRIN2 c.t.
12b	<i>Bromus inermis</i> < 5% cover.....	13
13a	<i>Agropyron cristatum</i> (crested wheatgrass) ≥ 5% cover.....	ARNO4/AGCR c.t.
13b	<i>Agropyron cristatum</i> < 5% cover.....	14
14a	<i>Thinopyrum intermedium</i> (intermediate wheatgrass) ≥ 5% cover.....	ARNO4/THIN6 c.t.
14b	<i>Thinopyrum intermedium</i> < 5% cover.....	15
15a	<i>Agropyron desertorum</i> (desert wheatgrass) ≥ 5% cover.....	ARNO4/AGDE2 c.t.
15b	<i>Agropyron desertorum</i> < 5% cover.....	16
16a	<i>Psathyrostachys juncea</i> (Russian wildrye) ≥ 5% cover.....	ARNO4/PSJU3 c.t.
16b	<i>Psathyrostachys juncea</i> < 5% cover.....	17
17a	<i>Poa bulbosa</i> (bulbous bluegrass) ≥ 5% cover.....	ARNO4/POBU c.t.
17b	<i>Poa bulbosa</i> < 5% cover.....	18
18a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 1% cover.....	ARNO4/PSSP6 c.t.
18b	<i>Pseudoroegneria spicata</i> < 1% cover.....	19

19a	<i>Leymus salinus</i> (saline wildrye) ≥ 1% cover.....	ARNO4/LESA4 c.t.
19b	<i>Leymus salinus</i> < 1% cover.....	20
20a	<i>Hesperostipa comata</i> (needle and thread) ≥ 1% cover.....	ARNO4/HECO26 c.t.
20b	<i>Hesperostipa comata</i> < 1% cover.....	21
21a	<i>Achnatherum hymenoides</i> (Indian ricegrass) ≥ 1% cover.....	ARNO4/ACHY c.t.
21b	<i>Achnatherum hymenoides</i> < 1% cover.....	22
22a	<i>Elymus lanceolatus</i> (thickspike wheatgrass) ≥ 1% cover.....	ARNO4/ELLA3 c.t.
22b	<i>Elymus lanceolatus</i> < 1% cover.....	23
23a	<i>Achnatherum lettermanii</i> (Letterman's needlegrass) ≥ 1% cover.....	ARNO4/ACLE9 c.t.
23b	<i>Achnatherum lettermanii</i> < 5% cover.....	24
24a	<i>Poa fendleriana</i> (muttongrass) ≥ 1% cover.....	ARNO4/POFE c.t.
24b	<i>Poa fendleriana</i> < 5% cover.....	25
25a	<i>Koeleria macrantha</i> (prairie Junegrass) ≥ 1% cover.....	ARNO4/KOMA c.t.
25b	<i>Koeleria macrantha</i> < 1% cover.....	26
26a	<i>Elymus elymoides</i> (squirreltail) ≥ 1% cover.....	ARNO4/ELEL5 c.t.
26b	<i>Elymus elymoides</i> < 1% cover.....	27
27a	<i>Poa secunda</i> ssp. <i>secunda</i> (Sandberg bluegrass) ≥ 5% cover	ARNO4/POSES6 c.t.
27b	<i>Poa secunda</i> ssp. <i>secunda</i> < 5% cover.....	28
28a	<i>Pleuraphis jamesii</i> (James' galleta) ≥ 5% cover.....	ARNO4/PLJA c.t.
28b	<i>Pleuraphis jamesii</i> < 5% cover.....	29
29a	<i>Bouteloua gracilis</i> (blue grama) ≥ 5% cover.....	ARNO4/BOGR2 c.t.
29b	<i>Bouteloua gracilis</i> < 5% cover.....	30
30a	<i>Poa secunda</i> ssp. <i>secunda</i> (Sandberg bluegrass) ≥ 1% cover	ARNO4/POSES6 c.t.
30b	<i>Poa secunda</i> ssp. <i>secunda</i> < 5% cover.....	31
31a	<i>Pleuraphis jamesii</i> (James' galleta) ≥ 1% cover.....	ARNO4/PLJA c.t.
31b	<i>Pleuraphis jamesii</i> < 1% cover.....	32
32a	<i>Bouteloua gracilis</i> (blue grama) ≥ 1% cover.....	ARNO4/BOGR2 c.t.
32b	<i>Bouteloua gracilis</i> < 1% cover.....	33
33a	<i>Bromus tectorum</i> (cheatgrass) ≥ 1% cover.....	ARNO4/BRTE c.t.
33b	<i>Bromus tectorum</i> < 1% cover.....	34
34a	Total grass cover < 5%.....	ARNO4/Sparse c.t.
34b	Total grass cover ≥ 5%.....	Unclassified

Distribution

Capability of meeting sage grouse habitat guidelines

	n	Elevation	States	Breeding/Nesting			Brood Rearing		
				Sage	Grass	Forb	Sage	Grass	Forb
<u>Late to Mid-Seral:</u>									
ARNO4/ACHY	6	5300 - 7675	CO UT	Y	Y	?	Y	Y	Y
ARNO4/BOGR2	4	6150 - 8000	CO UT	Y	N	N	Y	N	N
ARNO4/FEID	1	9900	UT	Y	Y	Y	Y	Y	Y
ARNO4/HECO26	30	5047 - 8756	CO ID NV UT	Y	Y	Y	Y	Y	Y
ARNO4/LESA4	13	6481 - 9147	CO UT	Y	Y	Y	Y	Y	Y
ARNO4/PLJA	2	5707	UT	Y	N	N	Y	N	N
ARNO4/POSES6	7	6320 - 8100	ID UT	Y	N	N	Y	N	N
ARNO4/PSSP6	57	5300 - 8960	CO ID UT	Y	Y	Y	Y	Y	Y
<u>Mid to Early-Seral:</u>									
ARNO4/ACLE9	7	7800 - 9440	UT	Y	Y	Y	Y	Y	Y
ARNO4/BASA3	1	7200	WY	Y	Y	Y	Y	Y	Y
ARNO4/ELEL5	6	5330 - 7708	NV UT	Y	Y	Y	Y	Y	Y
ARNO4/ELLA3	4	7800 - 8163	CO UT	Y	Y	Y	Y	Y	Y
ARNO4/KOMA	12	6668 - 8635	ID UT	Y	Y	Y	Y	Y	Y
ARNO4/POFE	22	4022 - 9505	UT	Y	Y	Y	Y	Y	Y
<u>Early Seral:</u>									
ARNO4/BRTE	1	5620	UT	Y	Y	Y	Y	Y	Y
ARNO4/Sparse	7	5379 - 9115	CO ID NV UT	Y	Y	Y	Y	Y	Y
<u>Seeded Early Seral:</u>									
ARNO4/AGCR	7	6200 - 7979	ID UT	Y	Y	Y	Y	Y	Y
ARNO4/AGDE2	---	-----	---	Y	Y	Y	Y	Y	Y
ARNO4/BRIN2	1	7999	UT	Y	Y	Y	Y	Y	Y
ARNO4/POBU	---	----	---	Y	Y	Y	Y	Y	Y
ARNO4/PSJU3	---	-----	---	Y	Y	Y	Y	Y	Y
ARNO4/THIN6	1	7872	UT	Y	Y	Y	Y	Y	Y

Y = Yes ? = Not always N = No

Artemisia arbuscula ssp. arbuscula Group
low sagebrush

1a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 5% cover.....	ARARA/FEID c.t.
1b	<i>Festuca idahoensis</i> < 5% cover.....	2
2a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 5% cover.....	ARARA/PSSP6 c.t.
2b	<i>Pseudoroegneria spicata</i> < 5% cover.....	3
3a	<i>Hesperostipa comata</i> (needle and thread) ≥ 5% cover.....	ARARA/HECO26 c.t.
3b	<i>Hesperostipa comata</i> < 5% cover.....	4
4a	<i>Balsamorhiza sagittata</i> (arrowleaf balsamroot) ≥ 5% cover.....	ARARA/BASA3 c.t.
4b	<i>Balsamorhiza sagittata</i> < 5% cover.....	5
5a	<i>Koeleria macrantha</i> (prairie Junegrass) ≥ 5% cover.....	ARARA/KOMA c.t.
5b	<i>Koeleria macrantha</i> < 5% cover.....	6
6a	<i>Achnatherum thurberianum</i> (Thurber's needlegrass) ≥ 5% cover.....	ARARA/ACTH7 c.t.
6b	<i>Achnatherum thurberianum</i> < 5% cover.....	7
7a	<i>Elymus elymoides</i> (squirreltail) ≥ 5% cover.....	ARARA/ELEL5 c.t.
7b	<i>Elymus elymoides</i> < 5% cover.....	8
8a	<i>Poa bulbosa</i> (bulbous bluegrass) ≥ 5% cover.....	ARARA/POBU c.t.
8b	<i>Poa bulbosa</i> < 5% cover.....	9
9a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 1% cover.....	ARARA/FEID c.t.
9b	<i>Festuca idahoensis</i> < 1% cover.....	12
10a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 1% cover.....	ARARA/PSSP6 c.t.
10b	<i>Pseudoroegneria spicata</i> < 1% cover.....	13
11a	<i>Hesperostipa comata</i> (needle and thread) ≥ 1% cover.....	ARARA/HECO26 c.t.
11b	<i>Hesperostipa comata</i> < 1% cover.....	14
12a	<i>Koeleria macrantha</i> (prairie Junegrass) ≥ 1% cover.....	ARARA/KOMA c.t.
12b	<i>Koeleria macrantha</i> < 1% cover.....	15
13a	<i>Achnatherum thurberianum</i> (Thurber's needlegrass) ≥ 1% cover.....	ARARA/ACTH7 c.t.
13b	<i>Achnatherum thurberianum</i> < 1% cover.....	16
14a	<i>Elymus elymoides</i> (squirreltail) ≥ 1% cover.....	ARARA/ELEL5 c.t.
14b	<i>Elymus elymoides</i> < 1% cover.....	17
15a	<i>Poa secunda</i> ssp. <i>secunda</i> (Sandberg bluegrass) ≥ 1% cover	ARARA/POSES6 c.t.
15b	<i>Poa secunda</i> ssp. <i>secunda</i> < 1% cover.....	18
16a	<i>Bromus tectorum</i> (cheatgrass) ≥ 5% cover.....	ARARA/BRTE c.t.
16b	<i>Bromus tectorum</i> < 5% cover.....	11
17a	Total grass cover < 10%.....	ARARA/Sparse c.t.
17b	Total grass cover ≥ 10%.....	Unclassified

Distribution**Capability of meeting sage grouse habitat guidelines**

	n	Elevation	States	Breeding/Nesting			Brood Rearing		
				Sage	Grass	Forb	Sage	Grass	Forb
<u>Late to Mid-Seral:</u>									
ARARA/ACTH7	---	----	-----	Y	Y	?	Y	Y	Y
ARARA/FEID	29	5202 - 9120	ID NV	Y	Y	Y	Y	Y	Y
ARARA/HECO26	5	5556 - 6806	ID NV	Y	Y	Y	Y	Y	Y
ARARA/POSES6	10	6353 - 7406	ID NV	Y	N	Y	Y	N	Y
ARARA/PSSP6	28	5780 - 8680	ID	Y	Y	Y	Y	Y	Y
<u>Mid to Early-Seral:</u>									
ARARA/BASA3	---	----	-----	Y	Y	Y	Y	Y	Y
ARARA/ELEL5	13	5800 - 9640	ID NV	Y	Y	Y	Y	Y	Y
ARARA/KOMA	3	6622 - 9200	ID NV	Y	Y	Y	Y	Y	Y
<u>Early Seral:</u>									
ARARA/BRTE	1	5238	ID	Y	Y	Y	Y	Y	Y
ARARA/Sparse	3	6560 - 9022	NV WY	Y	Y	Y	Y	Y	Y
<u>Seeded Early Seral:</u>									
ARARA/POBU	1	5680	ID	Y	Y	Y	Y	Y	Y

Y = Yes ? = Not always N = No

***Artemisia arbuscula* ssp. *longiloba* Group**
early sagebrush

1a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 5% cover.....	ARARL/FEID c.t.
1b	<i>Festuca idahoensis</i> < 5% cover.....	2
2a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 5% cover.....	ARARL/PSSP6 c.t.
2b	<i>Pseudoroegneria spicata</i> < 5% cover.....	3
3a	<i>Elymus lanceolatus</i> (thickspike wheatgrass) ≥ 5% cover.....	ARARL/ELLA3 c.t.
3b	<i>Elymus lanceolatus</i> < 5% cover.....	4
4a	<i>Achnatherum lettermanii</i> (Letterman's needlegrass) ≥ 5% cover.....	ARARL/ACLE9 c.t.
4b	<i>Achnatherum lettermanii</i> < 5% cover.....	5
5a	<i>Poa fendleriana</i> (muttongrass) ≥ 5% cover.....	ARARL/POFE c.t.
5b	<i>Poa fendleriana</i> < 5% cover.....	6
6a	<i>Koeleria macrantha</i> (prairie Junegrass) ≥ 5% cover.....	ARARL/KOMA c.t.
6b	<i>Koeleria macrantha</i> < 5% cover.....	7
7a	<i>Achnatherum pinetorum</i> (pine needlegrass) ≥ 5% cover.....	ARARL/ACPI2 c.t.
7b	<i>Achnatherum pinetorum</i> < 5% cover.....	8
8a	<i>Elymus elymoides</i> (squirreltail) ≥ 5% cover.....	ARARL/ELEL5 c.t.
8b	<i>Elymus elymoides</i> < 5% cover.....	9
9a	<i>Poa bulbosa</i> (bulbous bluegrass) ≥ 5% cover.....	ARARL/POBU c.t.
9b	<i>Poa bulbosa</i> < 5% cover.....	10
10a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 1% cover.....	ARARL/FEID c.t.
10b	<i>Festuca idahoensis</i> < 1% cover.....	11
11a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 1% cover.....	ARARL/PSSP6 c.t.
11b	<i>Pseudoroegneria spicata</i> < 1% cover.....	12
12a	<i>Elymus lanceolatus</i> (thickspike wheatgrass) ≥ 1% cover.....	ARARL/ELLA3 c.t.
12b	<i>Elymus lanceolatus</i> < 1% cover.....	13
13a	<i>Poa fendleriana</i> (muttongrass) ≥ 1% cover.....	ARARL/POFE c.t.
13b	<i>Poa fendleriana</i> < 1% cover.....	14
14a	<i>Koeleria macrantha</i> (prairie Junegrass) ≥ 1% cover.....	ARARL/KOMA c.t.
14b	<i>Koeleria macrantha</i> < 1% cover.....	15
15a	<i>Elymus elymoides</i> (squirreltail) ≥ 1% cover.....	ARARA/ELEL5 c.t.
15b	<i>Elymus elymoides</i> < 1% cover.....	16
16a	<i>Poa secunda</i> ssp. <i>secunda</i> (Sandberg bluegrass) ≥ 1% cover	ARARL/POSES6 c.t.
16b	<i>Poa secunda</i> ssp. <i>secunda</i> < 1% cover.....	17
17a	<i>Bromus tectorum</i> (cheatgrass) ≥ 5% cover.....	ARARL/BRTE c.t.
17b	<i>Bromus tectorum</i> < 5% cover.....	18
18a	Total grass cover < 10%.....	ARARL/Sparse c.t.
18b	Total grass cover ≥ 10%.....	Unclassified

Distribution**Capability of meeting sage grouse habitat guidelines**

	n	Elevation	States	Breeding/Nesting			Brood Rearing		
				Sage	Grass	Forb	Sage	Grass	Forb
<u>Late to Mid-Seral:</u>									
ARARL/ACPI2	1	6040	ID	Y	Y	Y	Y	Y	Y
ARARL/ELLA3	15	5241 - 7983	CO UT WY	Y	Y	Y	Y	Y	Y
ARARL/FEID	17	5172 - 9045	ID WY	Y	Y	Y	Y	Y	Y
ARARL/POSES6	4	6717 - 7416	WY	Y	N	?	Y	N	?
ARARL/PSSP6	4	6891 - 7820	WY	Y	Y	Y	Y	Y	Y
<u>Mid to Early-Seral:</u>									
ARARL/ACLE9	---	----	---	Y	Y	Y	Y	Y	Y
ARARL/ELEL5	1	4555	ID	Y	Y	Y	Y	Y	Y
ARARL/KOMA	3	6799 - 8344	WY	Y	Y	Y	Y	Y	Y
ARARL/POFE	3	6822 - 7931	WY	Y	Y	Y	Y	Y	Y
<u>Early Seral:</u>									
ARARL/BRTE	---	----	---	Y	Y	Y	Y	Y	Y
ARARL/Sparse	1	7786	WY	Y	?	?	Y	?	?
<u>Seeded Early Seral:</u>									
ARARL/POBU	1	6677	ID	Y	Y	Y	Y	Y	Y

Y = Yes ? = Not always N = No

**Artemisia arbuscula ssp. thermopola Group
cleftleaf low sagebrush**

1a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 5% cover.....	ARART/FEID c.t.
1b	<i>Festuca idahoensis</i> < 5% cover.....	2
2a	<i>Achnatherum lettermanii</i> (Letterman's needlegrass) ≥ 5% cover.....	ARART/ACLE9 c.t.
2b	<i>Achnatherum lettermanii</i> < 5% cover.....	3
3a	<i>Poa secunda</i> ssp. <i>secunda</i> (Sandberg bluegrass) ≥ 5% cover	ARART/POSES6 c.t.
3b	<i>Poa secunda</i> ssp. <i>secunda</i> < 5% cover.....	4
4a	Total grass cover < 10%.....	ARART/Sparse c.t.
4b	Total grass cover ≥ 10%.....	Unclassified

Distribution

Capability of meeting sage grouse habitat guidelines

	n	Elevation	States	Breeding/Nesting			Brood Rearing			
				Sage	Grass	Forb	Sage	Grass	Forb	
Late to Mid-Seral:										
ARART/FEID	2	5580 - 6820	ID	Y	Y	Y	Y	Y	Y	
Mid to Early-Seral:										
ARART/ACLE9	1	6390	ID	Y	Y	Y	Y	Y	Y	
ARART/POSES6	1	5650	ID	Y	Y	Y	Y	Y	Y	
Early-Seral:										
ARART/Sparse	1	6283	ID	Y	Y	Y	Y	Y	Y	
				Y = Yes	? = Not always			N = No		

**Artemisia frigida Group
fringed sagebrush**

1a	<i>Juncus arcticus</i> ssp. <i>littoralis</i> (mountain or Baltic rush) ≥ 10% cover.....	ARFR4/JUARL c.t.
1b	<i>Juncus arcticus</i> ssp. <i>littoralis</i> < 10% cover.....	2
2a	<i>Festuca campestris</i> (rough fescue) ≥ 5% cover.....	ARFR4/FECA4 c.t.
2b	<i>Festuca campestris</i> < 5% cover.....	3
3a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 5% cover.....	ARFR4/FEID c.t.
3b	<i>Festuca idahoensis</i> < 5% cover.....	4
4a	<i>Nassella viridula</i> (green needlegrass) ≥ 5% cover.....	ARFR4/NAVI4 c.t.
4b	<i>Nassella viridula</i> < 5% cover.....	5
5a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 5% cover.....	ARFR4/PSSP6 c.t.
5b	<i>Pseudoroegneria spicata</i> < 5% cover.....	6
6a	<i>Hesperostipa comata</i> (needle and thread) ≥ 5% cover.....	ARFR4/HECO26 c.t.
6b	<i>Hesperostipa comata</i> < 5% cover.....	7
7a	<i>Koeleria macrantha</i> (prairie Junegrass) ≥ 5% cover.....	ARFR4/KOMA c.t.
7b	<i>Koeleria macrantha</i> < 5% cover.....	8
8a	<i>Poa fendleriana</i> (muttongrass) ≥ 5% cover.....	ARFR4/POFE c.t.
8b	<i>Poa fendleriana</i> < 5% cover.....	9
9a	<i>Carex vallicola</i> (valley sedge) ≥ 5% cover.....	ARFR4/CAVA3 c.t.
9b	<i>Carex vallicola</i> < 5% cover.....	10
10a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 1% cover.....	ARFR4/PSSP6 c.t.
10b	<i>Pseudoroegneria spicata</i> < 1% cover.....	11
11a	<i>Hesperostipa comata</i> (needle and thread) ≥ 1% cover.....	ARFR4/HECO26 c.t.
11b	<i>Hesperostipa comata</i> < 1% cover.....	12
12a	<i>Koeleria macrantha</i> (prairie Junegrass) ≥ 1% cover.....	ARFR4/KOMA c.t.
12b	<i>Koeleria macrantha</i> < 1% cover.....	13
13a	<i>Poa fendleriana</i> (muttongrass) ≥ 1% cover.....	ARFR4/POFE c.t.
13b	<i>Poa fendleriana</i> < 1% cover.....	14
14a	<i>Poa secunda</i> ssp. <i>secunda</i> (Sandberg bluegrass) ≥ 5% cover.....	ARFR4/POSES6 c.t.
14b	<i>Poa secunda</i> ssp. <i>secunda</i> < 5% cover.....	15
15a	<i>Bouteloua gracilis</i> (blue grama) ≥ 5% cover.....	ARFR4/BOGR2 c.t.
15b	<i>Bouteloua gracilis</i> < 5% cover.....	Unclassified

Distribution **Capability of meeting sage grouse habitat guidelines**

	n	Elevation		States	Breeding/Nesting			Brood Rearing			
					Sage	Grass	Forb	Sage	Grass	Forb	
Late to Mid-Seral:											
ARFR4/BOGR2	2	9177	9302	UT	Y	N	Y	Y	N	Y	
ARFR4/FECA4	4	3540	4340	MT	Y	Y	Y	Y	Y	Y	
ARFR4/FEID	3	3680	9378	MT UT	Y	Y	Y	Y	Y	Y	
ARFR4/HECO26	7	4720	6101	MT UT	Y	Y	Y	Y	Y	Y	
ARFR4/NAVI4	2	4520	4920	MT	Y	Y	Y	Y	Y	Y	
ARFR4/POSES6	--	----		UT	Y	N	Y	Y	N	Y	
ARFR4/PSSP6	18	3360	8203	ID MT UT WY	Y	Y	Y	Y	Y	Y	
Mid to Early-Seral:											
ARFR4/CAVA3	1	8130		ID	Y	Y	Y	Y	Y	Y	
ARFR4/JUARL	1	7790		UT	Y	Y	Y	Y	Y	Y	
ARFR4/KOMA	2	8740	9240	ID UT	Y	Y	Y	Y	Y	Y	
ARFR4/POFE	1	9725		UT	Y	Y	Y	Y	Y	Y	
					Y = Yes	? = Not always			N = No		

**Artemisia rigida Group
stiff sagebrush**

1a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 5% cover.....	ARRI2/FEID c.t.
1b	<i>Festuca idahoensis</i> < 5% cover.....	2
2a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 5% cover.....	ARRI2/PSSP6 c.t.
2b	<i>Pseudoroegneria spicata</i> < 5% cover.....	3
3a	<i>Poa secunda</i> ssp. <i>secunda</i> (Sandberg bluegrass) ≥ 5% cover	ARRI2/POSES6 c.t.
3b	<i>Poa secunda</i> ssp. <i>secunda</i> < 5% cover.....	Unclassified

Distribution **Capability of meeting sage grouse habitat guidelines**

	N	Elevation		States	Breeding/Nesting			Brood Rearing			
					Sage	Grass	Forb	Sage	Grass	Forb	
Late to Mid-Seral:											
ARRI2/FEID	1	3640		ID	Y	Y	Y	Y	Y	Y	
ARRI2/POSES6	5	3150 - 5240		ID	Y	N	Y	Y	N	Y	
ARRI2/PSSP6	1	3500		ID	Y	Y	Y	Y	Y	Y	
					Y = Yes	? = Not always			N = No		

Artemisia tridentata* ssp. *x* *bonnevilleensis
Bonneville big sagebrush

1a	<i>Leymus cinereus</i> (basin wildrye) ≥ 5% cover.....	ARTRB3/LECI4 c.t.
1b	<i>Leymus cinereus</i> < 5% cover.....	2
2a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 5% cover.....	ARTRB3/FEID c.t.
2b	<i>Festuca idahoensis</i> < 5% cover.....	3
3a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 5% cover.....	ARTRB3/PSSP6 c.t.
3b	<i>Pseudoroegneria spicata</i> < 5% cover.....	4
4a	<i>Leymus salinus</i> (saline wildrye) ≥ 5% cover.....	ARTRB3/LESA4 c.t.
4b	<i>Leymus salinus</i> < 5% cover.....	5
5a	<i>Agropyron cristatum</i> (crested wheatgrass) ≥ 10% cover.....	ARTRB3/AGCR c.t.
5b	<i>Agropyron cristatum</i> < 10% cover.....	6
6a	<i>Poa bulbosa</i> (bulbous bluegrass) ≥ 10% cover.....	ARTRB3/POBU c.t.
6b	<i>Poa bulbosa</i> < 10% cover.....	7
7a	<i>Poa secunda</i> ssp. <i>secunda</i> (Sandberg bluegrass) ≥ 5% cover.....	ARTRB3/POSES6 c.t.
7b	<i>Poa secunda</i> ssp. <i>secunda</i> < 5% cover.....	8
8a	<i>Bromus tectorum</i> (cheatgrass) ≥ 5% cover.....	ARTRB3/BRTE c.t.
8b	<i>Bromus tectorum</i> < 5% cover.....	9
9a	Total grass cover < 10%.....	ARTRB3/Sparse c.t.
9b	Total grass cover ≥ 10%.....	Unclassified ¹

1. Key out stand in the mountain big sagebrush key (p.12) and rate sage grouse habitat capability accordingly.

Distribution				Capability of meeting sage grouse habitat guidelines					
	n	Elevation	States	Breeding/Nesting			Brood Rearing		
				Sage	Grass	Forb	Sage	Grass	Forb
<u>Late to Mid-Seral:</u>									
ARTRB3/FEID	--	----	ID	Y	Y	Y	Y	Y	Y
ARTRB3/LECI4	1	5430	ID	Y	Y	Y	Y	Y	Y
ARTRB3/LESA4	1	----	UT	Y	Y	?	Y	Y	?
ARTRB3/PSSP6	1	----	UT	Y	Y	Y	Y	Y	Y
<u>Early-Seral:</u>									
ARTRB3/BRTE	1	----	UT	Y	Y	?	Y	Y	?
ARTRB3/POSES6	--	----	---	Y	Y	Y	Y	Y	Y
ARTRB3/Sparse	1	----	UT	Y	Y	?	Y	Y	?
<u>Seeded Early-Seral:</u>									
ARTRB3/AGCR	3	5305 - 5427	ID UT	Y	Y	Y	Y	Y	Y
ARTRB3/POBU	2	5436 - 5640	ID	Y	Y	Y	Y	Y	Y

Y = Yes ? = Not always N = No

**Artemisia tridentata ssp. xericensis Group
basin X mountain big sagebrush hybrid**

1a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 1% cover.....	ARTRX/FEID c.t.
1b	<i>Festuca idahoensis</i> < 1% cover.....	2
2a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 1% cover.....	ARTRX/PSSP6 c.t.
2b	<i>Pseudoroegneria spicata</i> < 1% cover.....	3
3a	<i>Poa secunda</i> ssp. <i>secunda</i> (Sandberg bluegrass) ≥ 5% cover	ARTRX/POSES6 c.t.
3b	<i>Poa secunda</i> ssp. <i>secunda</i> < 5% cover.....	4
4a	<i>Bromus tectorum</i> (cheatgrass) ≥ 5% cover.....	ARTRX/BRTE c.t.
4b	<i>Bromus tectorum</i> < 5% cover.....	5
5a	Total grass cover < 10%.....	ARTRX/Sparse c.t.
5b	Total grass cover ≥ 10%.....	Unclassified ¹

1. Key out stand in the basin big sagebrush key (p.22) and rate sage grouse habitat capability accordingly.

Distribution				Capability of meeting sage grouse habitat guidelines					
	n	Elevation	States	Breeding/Nesting			Brood Rearing		
				Sage	Grass	Forb	Sage	Grass	Forb

	n	Elevation	States	Breeding/Nesting			Brood Rearing		
				Sage	Grass	Forb	Sage	Grass	Forb
Late to Mid-Seral:									
ARTRX/FEID	--	----	ID	Y	Y	Y	Y	Y	Y
ARTRX/PSSP6	1	6300	UT	Y	Y	Y	Y	Y	Y
Early-Seral:									
ARTRB3/BRTE	--	----	---	Y	Y	Y	Y	Y	Y
ARTRB3/POSES6	--	----	---	Y	Y	Y	Y	Y	Y
ARTRB3/Sparse	--	----	---	Y	Y	Y	Y	Y	Y

Y = Yes ? = Not always N = No

Artemisia cana ssp. bolanderi Group
Bolander's silver sagebrush

1a	<i>Muhlenbergia richardsonis</i> (mat muhly) and/or <i>Juncus arcticus</i> ssp. <i>littoralis</i> (mountain or Baltic rush) dominate a sparse herbaceous layer.....	ARCAB3/MURI c.t.
1b	<i>Muhlenbergia richardsonis</i> (mat muhly) and/or <i>Juncus arcticus</i> ssp. <i>littoralis</i> (mountain or Baltic rush) do not dominate the herbaceous layer.....	2
2a	<i>Leymus cinereus</i> (basin wildrye) ≥ 10% cover.....	ARCAB3/LECI4 c.t.
2b	<i>Leymus cinereus</i> < 10% cover.....	3
3a	<i>Poa secunda</i> ssp. <i>juncifolia</i> (Nevada bluegrass) ≥ 5% cover	ARCAB3/POSEJ c.t.
3b	<i>Poa secunda</i> ssp. <i>juncifolia</i> < 5% cover.....	4
4a	<i>Poa fendleriana</i> (muttongrass) ≥ 5% cover.....	ARCAB3/POFE c.t.
4b	<i>Poa fendleriana</i> < 5% cover.....	5
5a	<i>Poa pratensis</i> (Kentucky bluegrass) ≥ 5% cover.....	ARCAB3/POPR c.t.
5b	<i>Poa pratensis</i> < 5% cover.....	Unclassified

Silver sagebrush is not used by sage grouse for nesting habitat. These community types may be used for brood rearing habitat where they are within 100m of mountain or Wyoming big sagebrush cover. All can provide adequate cover of perennial grasses and forbs.

No plot data is available for this group. The reported state distributions of the c.t.s are listed below:

ARCAB3/LECI4	NV	ARCAB3/POPR	CA ID NV
ARCAB3/MURI	ID NV	ARCAB3/POSEJ	ID
ARCAB3/POFE	NV		

***Artemisia arbuscula* ssp. *longicaulis* Group**
little sagebrush

1a	<i>Grayia spinosa</i> (spiny hopsage) ≥ 5% cover.....	ARARL3-GRSP c.t.
1b	<i>Grayia spinosa</i> < 5% cover.....	3
2a	<i>Pseudoroegneria spicata</i> (bluebunch wheatgrass) ≥ 1% cover.....	ARARL3/PSSP6 c.t.
2b	<i>Pseudoroegneria spicata</i> < 1% cover.....	3
3a	<i>Achnatherum thurberianum</i> (Thurber's needlegrass) ≥ 5% cover.....	ARARL3/ACTH7 c.t.
3b	<i>Achnatherum thurberianum</i> < 5% cover.....	7
4a	<i>Elymus elymoides</i> (squirreltail) ≥ 5% cover.....	ARARL3/ELEL5 c.t.
4b	<i>Elymus elymoides</i> < 5% cover.....	8
5a	<i>Bromus tectorum</i> (cheatgrass) ≥ 5% cover.....	ARARL3/BRTE c.t.
5b	<i>Bromus tectorum</i> < 5% cover.....	Unclassified ¹

1. Key out stand in the low sagebrush key (p.28) and rate sage grouse habitat capability accordingly.

Distribution				Capability of meeting sage grouse habitat guidelines					
	n	Elevation	States	Breeding/Nesting			Brood Rearing		
				Sage	Grass	Forb	Sage	Grass	Forb
<u>Late to Mid-Seral:</u>									
ARARL3/ACTH7	--	----	NV	Y	Y	?	Y	Y	Y
ARARL3/GRSP	--	----	NV	Y	Y	Y	Y	Y	Y
ARARL3/PSSP6	--	----	NV	Y	Y	Y	Y	Y	Y
<u>Mid to Early-Seral:</u>									
ARARA/ELEL5	--	----	NV	Y	Y	Y	Y	Y	Y
<u>Early-Seral:</u>									
ARARL3/BRTE	--	----	NV	Y	Y	Y	Y	Y	Y
				Y = Yes			? = Not always		N = No

Artemisia papposa Group
Owyhee sagebrush

1a	<i>Danthonia californica</i> (California oatgrass) ≥ 5% cover.....	ARPA16/DACA3 c.t.
1b	<i>Danthonia californica</i> < 5% cover.....	2
2a	<i>Festuca idahoensis</i> (Idaho fescue) ≥ 5% cover.....	ARPA16/FEID c.t.
2b	<i>Festuca idahoensis</i> < 5% cover.....	3
3a	<i>Danthonia unispicata</i> (onespike oatgrass) ≥ 5% cover.....	ARPA16/DAUN c.t.
3b	<i>Danthonia unispicata</i> < 5% cover.....	4
4a	<i>Poa secunda</i> ssp. <i>secunda</i> (Sandberg bluegrass) ≥ 5% cover	ARPA16/POSES6 c.t.
4b	<i>Poa secunda</i> ssp. <i>secunda</i> < 5% cover.....	Unclassified

Distribution				Capability of meeting sage grouse habitat guidelines					
	n	Elevation	States	Breeding/Nesting			Brood Rearing		
				Sage	Grass	Forb	Sage	Grass	Forb
Late to Mid-Seral:									
ARPA16/DACA3	--	----	ID	N	Y	Y	N	Y	Y
ARPA16/DAUN	1	5762	ID	N	Y	Y	N	Y	Y
ARPA16/FEID	--	----	ID	N	Y	Y	N	Y	Y
Mid to Early-Seral:									
ARPA16/POSES6	--	----	ID	N	N	Y	N	N	Y
				Y = Yes ? = Not always			N = No		

Artemisia pygmaea Group
pygmy sagebrush

Only one community type has been documented in this group – *Artemisia pygmaea/Achnatherum hymenoides*. These sites are too harsh to support adequate sagebrush and grass cover for sage grouse habitat.

Distribution				Capability of meeting sage grouse habitat guidelines					
	n	Elevation	States	Breeding/Nesting			Brood Rearing		
				Sage	Grass	Forb	Sage	Grass	Forb
Late to Mid-Seral:									
ARPY2/ACHY	2	5880 - 7596	NV UT	N	N	Y	N	N	Y