

COYOTE SPRING - TREND STUDY NO. 15-16

Site Information

Site Description: The study is located in the foothills on the east side of Mt. Pennell. The area was a pinyon/juniper/oak community, but burned in the Bulldog Fire in 2003 and was subsequently reseeded (Table - Seed Mix). The community is now dominated by seeded grass species. Pellet group data for bison and cattle were combined due to difficulties in distinguishing between these species. Bison/cattle use was estimated to be fairly heavy on the site. Deer and elk use was estimated to be light to minimal (Table - Pellet Group Data).

Browse: Browse species are not abundant on this site. The two preferred browse species Utah serviceberry (*Amelanchier utahensis*) and fourwing saltbush (*Atriplex canescens*) provide the majority of the browse cover on the site (Table - Browse Trends).

Herbaceous Understory: Grass cover on the site is provided almost entirely by seeded perennial species. Crested wheatgrass (*Agropyron cristatum*) is the dominant grass species. Bluebunch wheatgrass (*Agropyron spicatum*) is the dominant native species on the site. The forb component on the site is comprised almost entirely by the seeded species alfalfa (*Medicago sativa*) (Table - Herbaceous Trends).

Soil: The soil is a sandy clay loam with a neutral pH (6.84) (Table - Soil Analysis Data) and a very rocky profile. Bare ground cover is moderately low on the site with ample vegetation, litter, and rock cover (Table - Basic Cover). The soil erosion condition was classified as stable in 2009.

SEED MIX -- BLM BULLDOG FIRE (NON-WSA)

Management unit 15, study no. 16

Seed Type

- Crested Wheatgrass, Hycrest
- Pubescent Wheatgrass, Luna
- Russian Wild Rye, Bozoisky
- Tall Wheatgrass, Alkar
- Indian Ricegrass, Rimrock
- Alfalfa, Ladak
- Lewis Flax, Appar
- Fourwing Saltbush

Trend Assessments

DEER DESIRABLE COMPONENTS INDEX - LOW POTENTIAL SCALE --

Management unit 15, study no: 16

Year	Preferred Browse Cover	Preferred Browse Decadence	Preferred Browse Young	Perennial Grass Cover	Annual Grass Cover	Perennial Forb Cover	Noxious Weeds	Total Score	Ranking
09	0.5	0.0	0.0	30.0	0.0	2.8	0.0	33.2	Fair

Trend Summary

HERBACEOUS TRENDS--

Management unit 15, Study no: 16

Type	Species	Nested	Average
		Frequency	Cover %
		'09	'09
G	Agropyron cristatum	200	9.25
G	Agropyron intermedium	119	4.75
G	Agropyron spicatum	52	3.05
G	Agropyron trachycaulum	63	3.31
G	Bromus tectorum (a)	9	.02
G	Elymus junceus	96	3.94
G	Oryzopsis hymenoides	5	.39
Total for Annual Grasses		9	0.01
Total for Perennial Grasses		535	24.72
Total for Grasses		544	24.75
F	Achillea millefolium	-	.00
F	Astragalus sp.	5	.22
F	Chenopodium leptophyllum(a)	8	.02
F	Linum lewisii	1	.00
F	Medicago sativa	15	1.07
F	Phlox longifolia	2	.00
F	Sphaeralcea coccinea	8	.07
Total for Annual Forbs		8	0.01
Total for Perennial Forbs		31	1.38
Total for Forbs		39	1.40

Values with different subscript letters are significantly different at alpha = 0.10

BROWSE TRENDS--

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Type	Species	Strip	Average
		Frequency	Cover %
		'09	'09
B	Amelanchier utahensis	1	.15
B	Atriplex canescens	7	.21
B	Cercocarpus montanus	1	.00
B	Chrysothamnus nauseosus	1	.03
Total for Browse		10	0.39

CANOPY COVER, LINE INTERCEPT--

Management unit 15, Study no: 16

Species	Percent Cover
	'09
Atriplex canescens	.20
Chrysothamnus nauseosus	.31

KEY BROWSE ANNUAL LEADER GROWTH--
Management unit 15, Study no: 16

Species	Average leader growth (in) '09
Amelanchier utahensis	2.6
Atriplex canescens	2.9

BASIC COVER--
Management unit 15, Study no: 16

Cover Type	Average Cover % '09
Vegetation	29.91
Rock	21.67
Pavement	2.83
Litter	35.45
Bare Ground	22.32

SOIL ANALYSIS DATA --
Management unit 15, Study no: 16, Study Name: Coyote Spring

Effective rooting depth (in)	pH	sandy clay loam			%OM	PPM P	PPM K	ds/m
		%sand	%silt	%clay				
	6.8	47.44	26.72	25.8	2.65	22.17	172.8	0.88

PELLET GROUP DATA--
Management unit 15, Study no: 16

Type	Quadrat Frequency '09	Days use per acre (ha) '09
Rabbit	15	-
Elk	-	1 (3)
Deer	6	4 (10)
Bison/Cattle	13	46 (115)

BROWSE CHARACTERISTICS--
Management unit 15, Study no: 16

		Age class distribution					Utilization			
Year	Plants per Acre (excluding seedlings)	% Young	% Mature	% Decadent	Seedling (plants/acre)	% moderate	% heavy	% poor vigor	Average Height Crown (in)	
<i>Amelanchier utahensis</i>										
09	40	0	100	-	-	0	100	0	29/40	
<i>Artemisia tridentata wyomingensis</i>										
09	0	0	0	-	-	0	0	0	11/13	
<i>Atriplex canescens</i>										
09	260	15	38	46	-	8	69	15	14/17	
<i>Cercocarpus montanus</i>										
09	20	0	100	-	-	0	100	0	22/25	
<i>Chrysothamnus nauseosus</i>										
09	20	0	100	-	-	0	0	0	23/27	
<i>Chrysothamnus viscidiflorus</i>										
09	0	0	0	-	-	0	0	0	19/31	
<i>Gutierrezia sarothrae</i>										
09	0	0	0	-	-	0	0	0	8/16	