ADDENDUM 3.5-A:
VEGETATION MAP

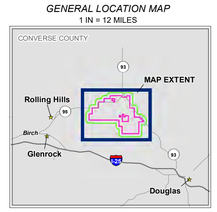
LEGEND

- BS - Field Sample Taken
- CW - Field Sample Taken
- LG - Field Sample Taken
- SS - Field Sample Taken
- UG - Field Sample Taken
- UG-RB - Field Sample Taken
- Deep Disposal Well
- Header House
- Booster Station
- Trunkline
- Deep Disposal Well Pipeline
- Primary Access
- Secondary Access Road
- Vegetation Communities
- Permit Boundary
- Permit Boundary 1/2 Mile Boundary
- Fenced Area
- Plant Facility Site Area
- Permeate Pond Area
- Well Pattern
- Evaporation Ponds
- Monitor Well Ring
- Wellfield

VEGETATION COMMUNITIES TABLE

Map Symbol	Vegetation Community	Acreage within Permit Boundary
BS	Big Sagebrush Shrubland	5374.21
CW	Crested Wheatgrass Field	311.25
D	Disturbed	305.72
LG	Lowland Grassland	1234.82
SS	Silver Sagebrush Shrubland	309.33
UG	Upland Grassland	7596.79
UG-RB	Upland Grassland - Rough Breaks Complex	3722.54

GENERAL LOCATION MAP
1 IN = 12 MILES



N

0 850 1,700 3,400
FEET
1 INCH = 1,667 FEET

DRAFTED BY:	DATE:
T. SPELTS	6/3/2008
COMPLETENESS REVIEW:	DATE:
T. SPELTS	5/4/2016
TECHNICAL REVIEW:	DATE:
C. ADAMS	5/4/2016
MAP PROJECTION: NAD 1983, UTM Z13N, M	
IMAGE TYPE/YEAR: NAIP ORTHO 2015	
FILE: Ludeman_Veg_v7_05022016	

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LUDEMAN PROJECT

BASELINE VEGETATION ASSESSMENT

CONVERSE COUNTY, WY

WEST Environmental Associates, Inc.

MAP # 1 OF 1

ADDENDUM 3.5-B:
VEGETATION METHODOLOGY

Sampling Methods for Vegetation Baseline Study
Uranium One – Ludeman Uranium Project
September 25, 2008

INTRODUCTION

A vegetation baseline study was performed in the Powder River Basin located approximately 20 miles east of Glenrock, Wyoming. This site is specifically located within all or parts of Sections 1, 11, 12, 13, 14, 15, 23, and 24 Township 34N Range 74W as well as Sections 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 34, 35, and 36 Township 34N Range 73W and Section 19 Township 34N Range 72W. The project area contains five native vegetation community types and one agricultural vegetation community. The native vegetation communities are; Big Sagebrush Shrubland, Lowland Grassland, Silver Sagebrush Shrubland, Upland Grassland, and Upland Grassland Rough Breaks Complex. The Crested Wheatgrass Field is the agricultural community. The species diversity in this community is not considered a monoculture and will be evaluated along side the native communities. The proposed permit/license area consists of approximately 23,015.25 acres. Baseline vegetation sampling was conducted from 06/23/2008-07/03/2008.

TREC Corp of Casper, Wyoming carried out the wetland delineation within the project area. Wetlands are anticipated to be found within the Lowland Grassland vegetation community.

Table D8-A1: Vegetation Map Units and Associated Acreages

Vegetation Map Units	Permit/License Area Acreage*	½ Mile Buffer
Big Sagebrush Shrubland	6,518.03	3,595.11
Crested Wheatgrass Field	173.61	391.52
Lowland Grassland	1,927.84	435.94
Silver Sagebrush Shrubland	1,031.17	1,233.44
Upland Grassland	8,330.97	2,543.48
Upland Grassland Rough Breaks Complex	4,813.68	2,503.84
Disturbed	219.95	55.84
TOTAL	23,015.25	10,759.17

*Acreage values were modified prior to report finalization. The current permit/license area acreage is 19,888.10.

Vegetation baseline study monitoring was conducted using the procedures described in this document. Vegetation parameter sampling was conducted by vegetation community type as specified in Table D8-A2. For purposes of this methodology, "project area" will be the same as "study or permit/license area".

Table D8-A2: Vegetation Baseline Sampling – Measured Parameters

Parameter	Big Sagebrush Shrubland	Crested Wheatgrass Field	Lowland Grassland	Silver Sagebrush Shrubland	Upland Grassland	Upland Grassland Rough Breaks Complex
% Absolute Total Ground Cover	Yes	Yes	Yes	Yes	Yes	Yes
First Hit % Absolute Total Vegetation cover	Yes	Yes	Yes	Yes	Yes	Yes
Multiple Hit Vegetation	Yes	Yes	Yes	Yes	Yes	Yes
Production	No	No	No	No	No	No
Shrub/Sub-shrub Density	Yes	Yes	Yes	Yes	Yes	Yes
Tree Count and Distribution	No	No	No	No	No	No

Sampling Methods for Vegetation Baseline Study
Uranium One – Ludeman Uranium Project
September 25, 2008

VEGETATION COMMUNITY CLASSIFICATION & MAPPING

The baseline project area was classified and mapped prior to commencing vegetation sampling. Mapping and classification has identified the following six plant communities:

- Big Sagebrush Shrubland
- Crested Wheatgrass Field
- Lowland Grassland
- Silver Sagebrush Shrubland
- Upland Grassland
- Upland Grassland Rough Breaks Complex

Plant communities were mapped using 2006 National Agricultural Image Program (NAIP) true color orthophotos and verified through field survey. Disturbed areas within the project were also be identified and mapped. Disturbed areas were excluded, however, from all vegetation parameter sampling.

All areas within ½ mile of the project area were mapped, based on a review of aerial photography and known expression of photography within the project area. It will not be necessary to field verify this mapping within a ½ mile.

TRANSECT ORIGIN SELECTION

A computerized systematic grid (through ArcGIS) was used to randomly locate sample points within each vegetation community. These computer generated random numbers were uploaded to a hand-held GPS unit for actual location in the field. Sample points were sampled in numerical order whenever possible until the minimum sample size was attained and then until either sample adequacy was met or the required maximum number of samples was collected.

LINE TRANSECT LAYOUT

A 50-meter line transect was used in the six vegetation communities to be sampled, i.e., Big Sagebrush Shrubland, Crested Wheatgrass Field, Lowland Grassland, Silver Sagebrush Shrubland, Upland Grassland, and Upland Grassland Rough Breaks Complex. Each 50-meter line transect began at its specified random origin point and extend in a randomly generated compass direction.

Transects that exceed the boundaries of the vegetation community being sampled were redirected back into its vegetation community at a 90 degree angle from the original transect direction at the point of intercept. In instances where a 90 degree angle of reflection does not place the transect within the sampled community, a 45 degree angle of reflection was used.

GROUND COVER

Line-transect point-intercept methods were used to collect percent absolute cover data from the six vegetation communities.

In the Big Sagebrush Shrubland, Crested Wheatgrass Field, Lowland Grassland, Silver Sagebrush Shrubland, Upland Grassland, and Upland Grassland Rough Breaks Complex, each 50-meter transect represented a single sample point. Percent cover measurements were taken from point-intercepts at 1-meter intervals along a 50-meter transect using a laser pointer. Should a transect run out of the vegetation community boundary or a non-vegetated feature, it was redirected as described above. Each point-intercept represents 2% towards cover measurements.

Percent cover measurements recorded "first-hit" point-intercepts by live foliar vegetation species, litter, rock, or bare ground. Litter includes all organic material that is dead. According to a WDEQ rule change,

Sampling Methods for Vegetation Baseline Study
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manure is now counted as bare ground instead of litter. Rock fragments were recorded when they are equal to or greater than 2 centimeters in size (i.e., sheet flow, minimum non-erodable particle size). First-hit data was recorded and tabulated to evaluate total ground cover and total vegetation cover. Multiple hits on vegetation were recorded but used only for the purpose of constructing a plant species list for each plant community. Total ground cover is the sum of cover values for percent vegetation, percent litter, and percent rock.

Total Vegetation Cover

Vegetation cover data was recorded by species using first hit data. All point intercepts of living vegetation and growth produced during the current growing season were counted toward total vegetation cover. Total vegetation cover measurements were expressed in absolute percentages for each sample point. Relative cover values for percent species cover will be provided. Percent vegetation cover is the vertical projection of the general outline of plants to the ground surface. Total vegetation cover WILL NOT include lichen and moss.

Total Ground Cover

Total ground cover data was recorded by live vegetation, litter, rock, or bare ground. Litter included all dead organic matter that is recognizable. Total ground cover measurements will be expressed in absolute percentages for each sample point. Total ground cover WILL include lichen and moss.

Species Diversity

Species diversity was made by noting plant species observed or sampled within a 1.0 meter "belt" along the cover transect and will be summarized by lifeform.

PRODUCTION

No production sampling will be necessary for the 2008 baseline vegetation assessment.

SHRUB DENSITY

Even though shrub density sampling is not required for non-coal sites, this data will be taken at the time of cover sampling to ensure adequate use of field time. Summarization of that data will be included in the report submittal for the permit. It is assumed that this area is not part of any wildlife critical winter range.

Shrub density data was collected in conjunction with randomly selected cover transects, wherever possible. All shrubs, full, or sub, were counted within 50 centimeters on either side of the 50 meter cover transect (1 meter x 50 meter belt transect). Sample adequacy was not calculated on shrub density transects; the number of belt transects equaled the number of cover transects for a given vegetation type. Shrub height measurements were collected and summarized.

TREE DENSITY

It is assumed that trees are not present within the project areas. No tree density sampling was carried out; however, if trees were observed within the project areas, they will be qualitatively summarized within the report text.

SAMPLE ADEQUACY

A minimum of 20 cover transects per native vegetation type were sampled in Big Sagebrush Shrubland, Crested Wheatgrass Field, Lowland Grassland, Silver Sagebrush Shrubland, Upland Grassland, and Upland Grassland Rough Breaks Complex communities. Sample adequacy was calculated and an incremental number of cover transects were sampled up the maximum of 50.

Sampling Methods for Vegetation Baseline Study
Uranium One – Ludeman Uranium Project
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Minimum and maximum sample sizes are listed in Table D8-A3. The sample adequacy formula outlined in WDEQ-LQD Guideline 2 was utilized to determine the minimum required size of the sample population.

The six sampled vegetation communities have been identified as both "grassland" and "shrubland". Using Table 1 in WDEQ-LQD Guideline 2, the constant values to be used in statistical test are (for both grassland and shrubland total vegetation cover and total cover): "z"=1.28 and "d" = 0.1. All sampled vegetation will be included in the sample adequacy test (i.e., "undesirable" species will not be eliminated from the equation).

Table D8-A3: Vegetation Monitoring Minimum/Maximum Sample Population Requirements for Big Sagebrush Shrubland, Crested Wheatgrass Field, Lowland Grassland, Silver Sagebrush Shrubland, Upland Grassland, and Upland Grassland Rough Breaks Complex.

Vegetation Community	Parameter	Plant Community Minimum Sample Size	Plant Community Maximum Sample Size
Big Sagebrush Shrubland	Ground Cover	20	50
	Vegetation Cover		
Crested Wheatgrass Field	Ground Cover	20	50
	Vegetation Cover		
Lowland Grassland	Ground Cover	20	50
	Vegetation Cover		
Silver Sagebrush Shrubland	Ground Cover	20	50
	Vegetation Cover		
Upland Grassland	Ground Cover	20	50
	Vegetation Cover		
Upland Grassland Rough Breaks Complex	Ground Cover	20	50
	Vegetation Cover		
Total		120	300

PLANT SPECIES LISTS

A vegetation species list by scientific name, common name, and lifeform was developed individually for each of the six vegetation communities. This list was compiled from species noted during all vegetation monitoring activities including point-intercept line transect cover measurements and other opportunistic observations of the sampling area.

OTHER DATA COLLECTED

Habitat surveys for any United States Fish and Wildlife Service (USFWS) threatened, endangered or candidate species or any state species of special concern listed in the Wyoming Natural Heritage database was conducted. If identified those locations were noted on the map. All state listed noxious weed were noted and significant concentrations identified on the vegetation baseline report map.

Photographs were taken of the vegetation communities. Photographic locations will be documented and illustrated on a map in the application as Addendum D8-B.

EXTENDED REFERENCE AREA MAPPING & JUSTIFICATION

As noted in the Vegetation Community Classification & Mapping section, all lands within the project area were mapped as one of six plant community types. All Big Sagebrush Shrubland, Crested Wheatgrass Field, Lowland Grassland, Silver Sagebrush Shrubland, Upland Grassland, and Upland Grassland Rough Breaks Complex areas unaffected by the mining operation will serve as Extended Reference Area

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(EXREFA). For the purposes of this study EXREFA means a native land unit which will be used to evaluate revegetation success for each of the same native plant communities which were affected by the mining operation. The EXREFA will be a subset of the mapped native communities and will be included as potential sample points for the cover sampling program. The EXREFA will remain unaffected over the course of the mining operation and will be as large as practical, at least 2 acres, considering land ownership patterns, and land management history.

BASELINE STUDY REPORT

A summary of all field data collected and will include the following major headings and content:

I. Table of Contents

II. Approved mapping and sampling methods

- Text that briefly lists the title and date for the approval for the approved methods and includes a reference to the location of the approved methods in Appendix D-8.
- Text making a clear statement that all sampling methods were executed as approved.
- Text noting the time periods when field sampling occurred.

III. Map of the Big Sagebrush Shrubland, Lowland Grassland, Silver Sagebrush Shrubland, Upland Grassland, Upland Grassland Rough Breaks Complex, Crested Wheatgrass Field, and Extended Reference Areas

- Map with appropriate legend information for all entries.
- Identify photo locations.
- Identify sample points in each plant community.
- Identify projected affected area and tabulate acreage.
- Tabulate acreage of each map unit.

IV. Present and discuss sample numbers.

- Tabular presentation

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Plant Community * Vegetation Parameter	Big Sagebrush Shrubland		Achieved Sample Adequacy	
	Min.	Actual	Yes	No
% Vegetation Cover				
% Total Cover				

Plant Community * Vegetation Parameter	Crested Wheatgrass Field		Achieved Sample Adequacy	
	Min.	Actual	Yes	No
% Vegetation Cover				
% Total Cover				

Plant Community * Vegetation Parameter	Lowland Grassland		Achieved Sample Adequacy	
	Min.	Actual	Yes	No
% Vegetation Cover				
% Total Cover				

Plant Community * Vegetation Parameter	Silver Sagebrush Shrubland		Achieved Sample Adequacy	
	Min.	Actual	Yes	No
% Vegetation Cover				
% Total Cover				

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Plant Community * Vegetation Parameter	Upland Grassland		Achieved Sample Adequacy	
	Min.	Actual	Yes	No
% Vegetation Cover				
% Total Cover				

Plant Community * Vegetation Parameter	Upland Grassland Rough Breaks Complex		Achieved Sample Adequacy	
	Min.	Actual	Yes	No
% Vegetation Cover				
% Total Cover				

- Text briefly discussing numbers in relation to the approved methods

V. Present sample data

- Tabular presentation.

Plant Community Vegetation Parameter	Big Sagebrush Shrubland	Crested Wheatgrass Field	Lowland Grassland	Silver Sagebrush Shrubland	Upland Grassland	Upland Grassland Rough Breaks Complex
Absolute Vegetation Cover (%)						
Absolute Total Cover (%)						

- Text which describes the major vegetation and topographic characteristics of each community; integrate soil type(s) as useful.
- Tabulate and discuss relative cover values; if useful.
- Present and discuss photographs.

VI. Present species lists by plant community type

- Text briefly discussing lists.

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- Text noting the presence or absence of federally listed T&E species and State of Wyoming listed prohibited noxious weeds.

VII. Present Extended Reference Area

- Text briefly describing reference units in baseline map.
- Text discussing and justifying representative nature of the EXREFA.

VIII. References

- Includes citations for plant identification, etc.

IX. Photographs

- Each caption is complete and descriptive.

ADDENDUM 3.5-C:
VEGETATION SPECIES SUMMARIES

Acronym	Current Nomenclature	Common Name	Upland Grassland	Big Sagebrush Shrubland	Upland Grassland/ Rough Breaks Complex	Lowland Grassland	Silver Sagebrush Shrubland	Crested Wheatgrass
Cool Season Perennial Grasses and Grasslike Plants								
ACHHYM	*Achnatherum hymenoides*	Indian ricegrass	X	X	X		X	
AGRCRI	*Agropyron cristatum*	Crested wheatgrass	X		X	X	X	X
BROINE	*Bromus inermis*	Smooth brome					X	
CARDOU	*Carex douglasii*	Douglas sedge				X	X	
CARFIL	*Carex filifolia*	Threadleaf Sedge	X	X	X	X		
CARNEB	*Carex nebrascensis*	Nebraska sedge				X		
CARPRA	*Carex praegracilis*	Silver sedge				X		
CARSTE	*Carex stenophylla*	Needleleaf Sedge				X		
ELEPAL	*Eleocharis palustris*	Common spikerush				X		
ELYHIS	*Elymus hispidus*	Intermediate wheatgrass				X	X	
ELYLAN	*Elymus lanceolatus*	Thickspike wheatgrass			X	X	X	
ELYSMI	*Elymus smithii*	Western wheatgrass	X	X	X	X	X	X
ELYSPI	*Elymus spicatus*	Bluebunch wheatgrass			X	X	X	X
ELYTRA	*Elymus trachycaulus*	Slender wheatgrass				X		
HESCOM	*Hesperostipa comata*	Needle and thread	X	X	X	X	X	X
HORJUB	*Hordeum jubatum*	Foxtail barley		X	X	X		
JUNBAL	*Juncus balticus*	Baltic rush				X		
KOEMAC	*Koeleria macrantha*	Prairie junegrass	X	X	X	X		X
NASVIR	*Nassella viridula*	Green needlegrass	X	X	X	X	X	
PHLPRA	*Phleum pratense*	Common timothy				X		
POACUS	*Poa cusickii*	Cusick bluegrass				X		
POAPRA	*Poa pratensis*	Kentucky bluegrass		X	X	X		
	Species obseved but not sampled							

Acronym	Current Nomenclature	Common Name	Upland Grassland	Big Sagebrush Shrubland	Upland Grassland/ Rough Breaks Complex	Lowland Grassland	Silver Sagebrush Shrubland	Crested Wheatgrass
Cool Season Perennial Grasses and Grasslike Plants (Continued)								
POASEC	*Poa secunda*	Sandberg bluegrass	X	X	X	X	X	X
POASPP	*Poa species*	Bluegrass					X	
SCHTAB	*Schoenoplectus tabernaemontani*	Softstem bulrush				X		
SCIACU	*Scirpus acutus*	Hardstem bulrush				X		
Warm Season Perennial Grasses								
ARIPUR	*Aristida purpurea*	Purple threeawn					X	X
BOUGRA	*Bouteloua gracilis*	Blue grama	X	X	X	X	X	X
CALLON	*Calamovilfa longifolia*	Prarie sandreed	X			X		
DISSTR	*Distichilis stricta*	Inland saltgrass				X		
PANVIR	*Panicum virgatum*	Switchgrass				X		
SPAPEC	*Spartina pectinata*	Prairie cordgrass				X		
SPOAIR	*Sporobolus airoides*	Alkali sacaton				X	X	
SPOCRY	*Sporobolus cryptandrus*	Sand dropseed	X			X	X	
Annual Grasses								
BROJAP	*Bromus japonicus*	Japanese brome	X	X	X	X	X	
BROTEC	*Bromus tectorum*	Cheatgrass	X	X	X	X	X	X
HORVUL	*Hordeum vulgare*	Sixrow barley				X	X	
VULOCT	*Vulpia octoflora*	Sixweeks fescue	X	X	X	X	X	X
Annual Forbs								
ALYALY	*Alyssum alyssoides*	Pale alyssum					X	
ALYDES	*Alyssum desertorum*	Desert alyssum	X	X	X	X	X	X
CAMMIC	*Camelina microcarpa*	Littleseed falseflax			X	X	X	X
CHEALB	*Chenopodium album*	Common lambsquarter	X		X		X	
	Species obseved but not sampled							

Acronym	Current Nomenclature	Common Name	Upland Grassland	Big Sagebrush Shrubland	Upland Grassland/ Rough Breaks Complex	Lowland Grassland	Silver Sagebrush Shrubland	Crested Wheatgrass
Annual Forbs (Continued)								
CHELEP	*Chenopodium leptophylum*	Narrowleaf goosefoot				X	X	X
CLESER	*Cleome serrulata*	Rocky Mountain bee plant					X	
COLLIN	*Collomia linearis*	Linearleaf collomia				X		
CRYMIN	*Cryptantha minima*	Little cryptantha				X	X	
CRYSPP	*Crypantha species*	Miners candle			X			
DESPIN	*Descurainia pinnata*	Tansey mustard			X	X	X	
DESSOP	*Descurainia sophia*	Flixweed	X		X	X	X	X
LAPRED	*Lappula redowskii*	Bluebur stickseed	X	X	X	X	X	X
LEPDEN	*Lepidium denisflorum*	Prairie pepperweed		X		X	X	X
MONNUT	*Monolepis nuttalliana*	Nuttall's povertyweed			X	X	X	X
OENSTR	*Oenothera stricta*	Chilean evening primrose				X		
PLAPAT	*Plantago patagonica*	Pursh's plantain	X	X	X	X	X	X
POLAVI	*Polygonum aviculare*	Prostrate knotweed			X		X	
SALTRA	*Salsola tragus*	Russian thistle			X		X	
SISALT	*Sisymbrium altissimum*	Tumble mustard					X	
THLARV	*Thlaspi arvense*	Field pennycress				X		
Annual/Biennial Forbs								
MELOFF	*Melilotus officinalis*	Yellow sweetclover				X		X
TRADUB	*Tragopogon dubius*	Goat's beard (Western salsify)		X	X	X	X	X
Perennial Forbs								
ACHMIL	*Achillea millefolium*	Western yarrow			X	X		
ALLTEX	*Allium textile*	Textile onion	X	X	X	X	X	X
	Species obseved but not sampled							

Acronym	Current Nomenclature	Common Name	Upland Grassland	Big Sagebrush Shrubland	Upland Grassland/ Rough Breaks Complex	Lowland Grassland	Silver Sagebrush Shrubland	Crested Wheatgrass
Perennial Forbs (Continued)								
ANTMIC	*Antennaria microphylla*	Littleleaf pussytoes			X	X		
ASTASC	*Aster ascendens*	Aster						X
ASTBIS	*Astragalus bisulcatus*	Twogrooved milkvetch			X	X	X	
ASTCRA	*Astragalus crassicarpus*	Groundplum milkvetch	X					
ASTMOL	*Astragalus mollisimus*	Woolly locoweed						X
ASTPEC	*Astragalus pectinatus*	Woolly locoweed			X			
ASTSPA	*Astragalus spatulatus*	Spoonleaf milkvetch			X			X
ASTSPP	*Astragalus species*	Milkvetch			X	X		X
CALNUT	*Calochortun nuttallii*	Sego lily	X	X	X			X
CAMROT	*Campanula rotundigolia*	Bluebell bellflower	X					
CARDRA	*Cardaria draba*	White-top				X		
CIRFLO	*Cirsium flodmanii*	Flodman thistle					X	X
CIRSPP	*Cirsium species*	Thistle	X			X	X	
CIRUND	*Cirsium undulatum*	Wavyleaf Thistle			X			
CONARV	*Convolvulus arvensis*	Field bindweed						X
CRERUN	*Crepis runcinata*	Fiddleaf hawksbeard				X		
CRYCEL	*Crypantha celosioides*	Buttecandle				X	X	
CRYCIN	*Cryptantha cinerea*	Minerscandle					X	
DELBIC	*Delphinium bicolor*	Little larkspur	X				X	
DELSPP	*Delphinium species*	Larkspur		X	X			
EQULAE	*Equisetum laevigatum*	Smooth horsetail				X	X	
EREHOO	*Eremogone hookeri*	Hooker sandwort				X	X	X
ERICAE	*Eriogonum caespitosum*	Matted buckwheat	X	X		X		
	Species obseved but not sampled							

Acronym	Current Nomenclature	Common Name	Upland Grassland	Big Sagebrush Shrubland	Upland Grassland/ Rough Breaks Complex	Lowland Grassland	Silver Sagebrush Shrubland	Crested Wheatgrass
Perennial Forbs (Continued)								
ERISPP	*Eriogonum species*	Wild buckwheat		X		X		X
GAUCOC	*Gaura coccinea*	Scarlet gaura	X	X	X	X	X	X
GLYLEP	*Glycyrrhiza lepidota*	American licorice				X		
GRISQU	*Grindelia squarrosa*	Curlycup gumweed						X
HAPMUL	*Haplopappus mulitcaulis*	Stemmy goldenweed			X			
HAPSPP	*Haplopappus species*	Goldenweed		X	X			
HETVIL	*Heterotheca villosa*	Golden aster			X			
LESLUD	*Lesquerella ludoviciana*	Foothill bladderpod					X	
LIAPUN	*Liatris punctata*	Dotted blazing star				X		
LOMFOE	*Lomatium foeniculaceum*	Biscuitroot	X	X	X	X		X
LUPARG	*Lupinus argenteus*	Silvery lupine			X			
LYGJUN	*Lygodesmia juncea*	Skeletonweed					X	X
MACGRI	*Machaeranthera grindeliodes*	Nuttall goldenweed	X			X		
MACTAN	*Machaeranthera tanacetifolia*	Tansy aster				X	X	
MAIDIL	*Maianthemum dilatatum*	False lily of the valley						X
MEDSAT	*Medicago sativa*	Alfafa medic						X
MUSDIV	*Musineon divaricatum*	Biscuitroot		X	X			
MUSSPP	*Musineon species*	Wildparsley				X		
OENCOR	*Oenothera coronopifolia*	Evening primrose				X		X
OENSPP	*Oenothera species*	Evening primrose		X	X			
OONMUL	*Oonopsis multicaulis*	Branched False Goldenweed						
OXYLAM	*Oxytropis lambertii*	Lambert locoweed (Crazyweed)						X
PLAERI	*Plantago eriopoda*	Redwoll plantain				X		
	Species obseved but not sampled							

Acronym	Current Nomenclature	Common Name	Upland Grassland	Big Sagebrush Shrubland	Upland Grassland/ Rough Breaks Complex	Lowland Grassland	Silver Sagebrush Shrubland	Crested Wheatgrass
Perennial Forbs (Continued)								
PEDESC	*Pediomelum esculentum*	Breadroot scurfpea					X	X
PEDSPP	*Pediomelum species*	Scurfpea				X		
PENALB	*Penstemon albidus*	White beardtongue		X	X		X	
PENPRO	*Penstemon procerus*	Littleflower penstemon	X					
PENSPP	*Penstemon species*	Penstemon					X	X
PHLHOO	*Phlox hoodii*	Hoods phlox	X	X	X	X		X
PHLLON	*Phlox longifolia*	Longleaf phlox		X	X		X	
PSOESC	*Psoralea esculenta*	Breadroot scurfpea		X	X			
PSOSPP	*Psoralea species*	Scurfpea			X			
PSOTEN	*Psoralea tenuiflora*	Slimflower scurfpea		X		X		X
RANCYM	*Ranunculus cymbalaria*	Shore buttercup				X		
SPHCOC	*Sphaeralcea coccinea*	Scarlet globemallow	X	X	X	X	X	X
TAROFF	*Taraxacum officinale*	Common dandelion			X	X	X	X
THERHO	*Thermopsis rhombifolia*	Golden banner			X			X
TRAOCC	*Tradescantia occidentalis*	Spiderwort					X	
VICAME	*Vicia americana*	American vetch	X	X	X	X	X	X
ZYGVEN	*Zygadenus venenosus*	Death camas			X		X	X
Perennial Shrubs								
ARTCAN	*Artemisia cana*	Silver sagebrush		X	X	X	X	
ARTTRI	*Artemisia tridentata*	Big sagebrush	X	X	X	X	X	X
ATRCAN	*Atriplex canescens*	Fourwing saltbrush			X			
CHRSPP	*Chrysothamnus species*	Rabbitbrush			X			
	Species obseved but not sampled							

Acronym	Current Nomenclature	Common Name	Upland Grassland	Big Sagebrush Shrubland	Upland Grassland/ Rough Breaks Complex	Lowland Grassland	Silver Sagebrush Shrubland	Crested Wheatgrass
Perennial Shrubs (Continued)								
CHRVIS	*Chrysothamnus viscidflorus*	Sticky-leaved Rabbitbrush					X	X
ERINAU	*Ericameria nauseosa*	Rubber rabbitbrush						X
ROSWOO	*Rosa woodsii*	Wood's rose			X	X		
SYMOCC	*Symphoricarpos occidentalis*	Western snowberry				X		
Perennial Half & Sub-Shrubs								
ARTFRI	*Artemisia frigida*	Fringed sagewort	X	X	X	X	X	X
ARTLUD	*Artemisia ludoviciana*	Louisiana sagewort	X		X	X		
ARTPED	*Artemisia pedatifida*	Birdsfoot sagewort		X	X			X
ATRGAR	*Atriplex gardneri*	Gardner saltbrush		X	X		X	X
GUTSAR	*Gutierrezia sarothrae*	Broom snakeweed	X			X		
KRALAN	*Krascheninnikovia lanata*	Winterfat		X	X	X	X	X
LINPUN	*Linanthus pungens*	Granite prickly gilia					X	X
LUPSER	*Lupinus sericeus*	Silky lupine	X					
YUCGLA	*Yucca glauca*	Small soapweed			X	X		X
Succulents								
CORVIV	*Coryphantha vivipara*	Pincushion cactus	X					X
OPUPOL	*Opuntia polyacantha*	Plains prickly pear	X	X	X	X	X	X
Lichen								
LICHEN	*Lichen*	Lichen	X	X	X	X	X	X
	Species obseved but not sampled							

ADDENDUM 3.5-D:
VEGETATION PHOTOGRAPHS

UG 1: Transect Direction 150°

UG 2: Transect Direction 170°

UG 3: Transect Direction 200°

UG 4: Transect Direction 180°

UG 5: Transect Direction 30°°

UG 15: Transect Direction 290

UG 17: Transect Direction 80°

UG 18: Transect Direction 250°

UG 19: Transect Direction 250°

UG 20: Transect Direction 130°

UG 22: Transect Direction 320°

UG 23: Transect Direction 150°

UG 26-1: Transect Direction 70°

NO PHOTO AVAILABLE

UG 27: Transect Direction 150°

UG 28: Transect Direction 18°

UG 29: Transect Direction 350°

UG 33-1: Transect Direction 150°

UG 35: Transect Direction 30°

UG 36-1: Transect Direction 290°

UG 38-1: Transect Direction 30°

UG 40: Transect Direction 330°

UG 41: Transect Direction 270°

UG 43: Transect Direction 330°

UG 45-1: Transect Direction 230°

UG 46: Transect Direction 325°

BS1: Transect Direction 40°

BS2: Transect Direction 320°

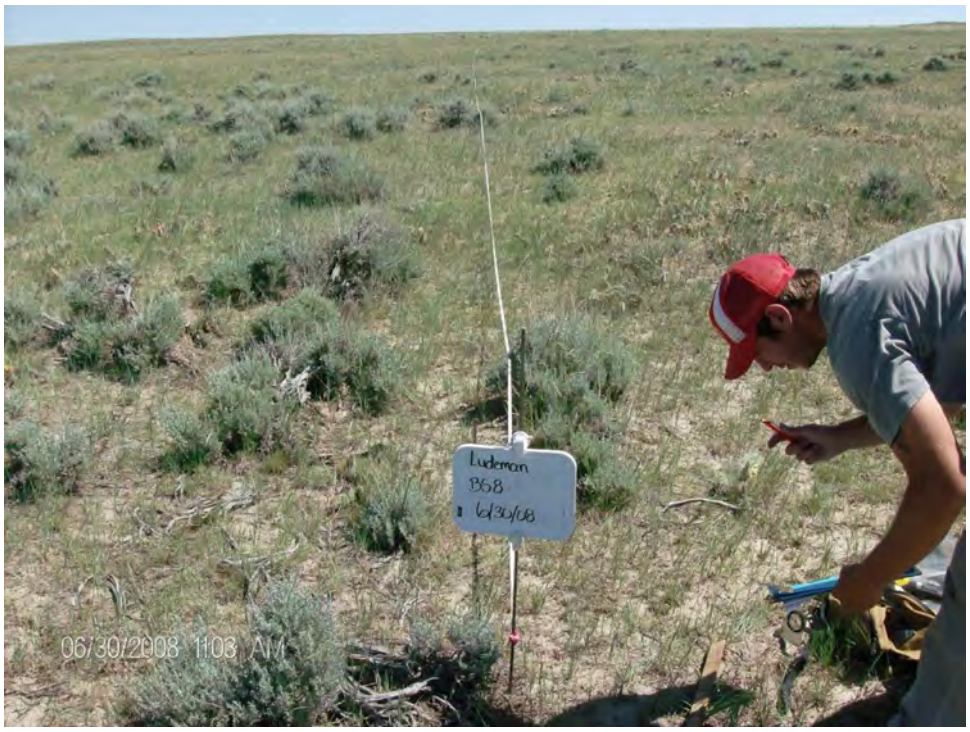
BS3: Transect Direction 140°

BS 4: Transect Direction 220°

BS5: Transect Direction 300°

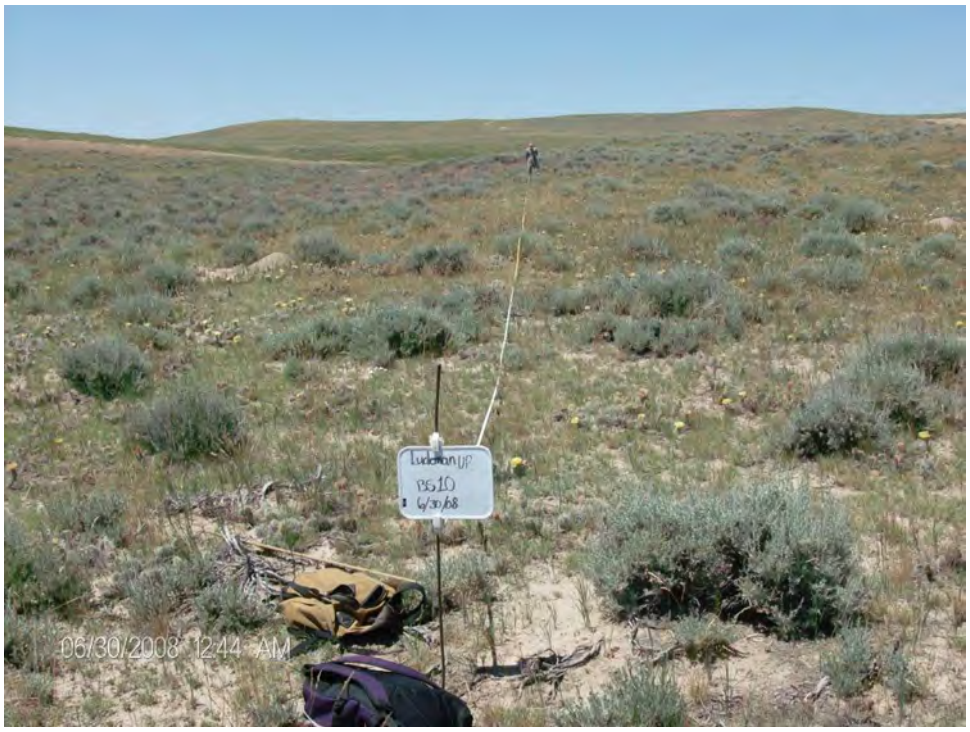
BS6: Transect Direction 320°

BS7: Transect Direction 220°



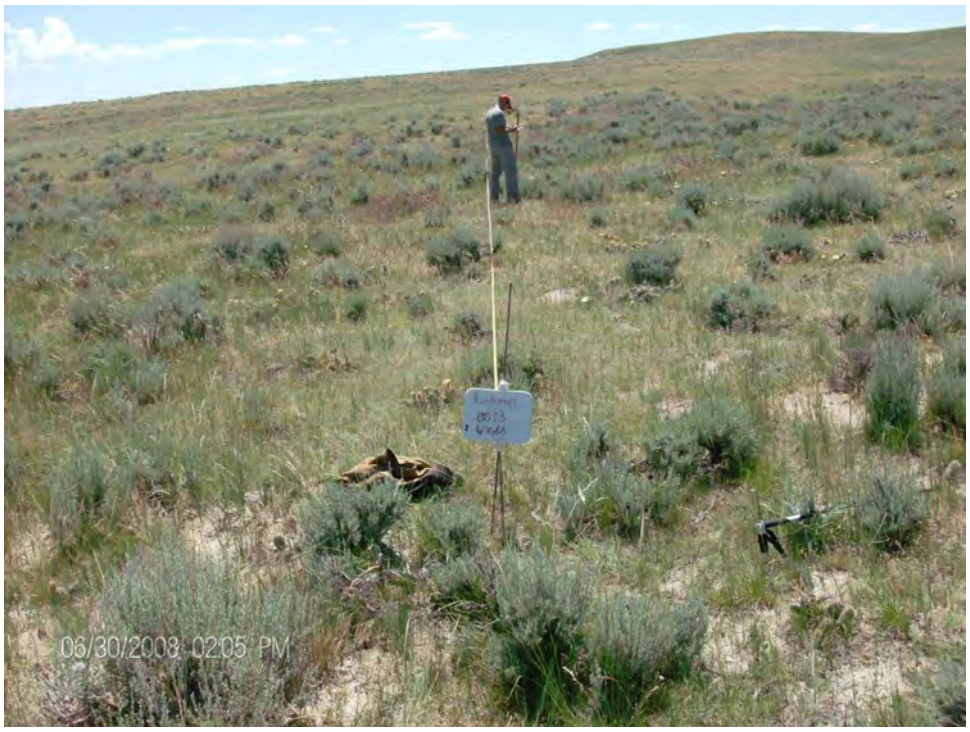
BS 8: Transect Direction 30°

BS9: Transect Direction 95°



BS 10: Transect Direction 280°

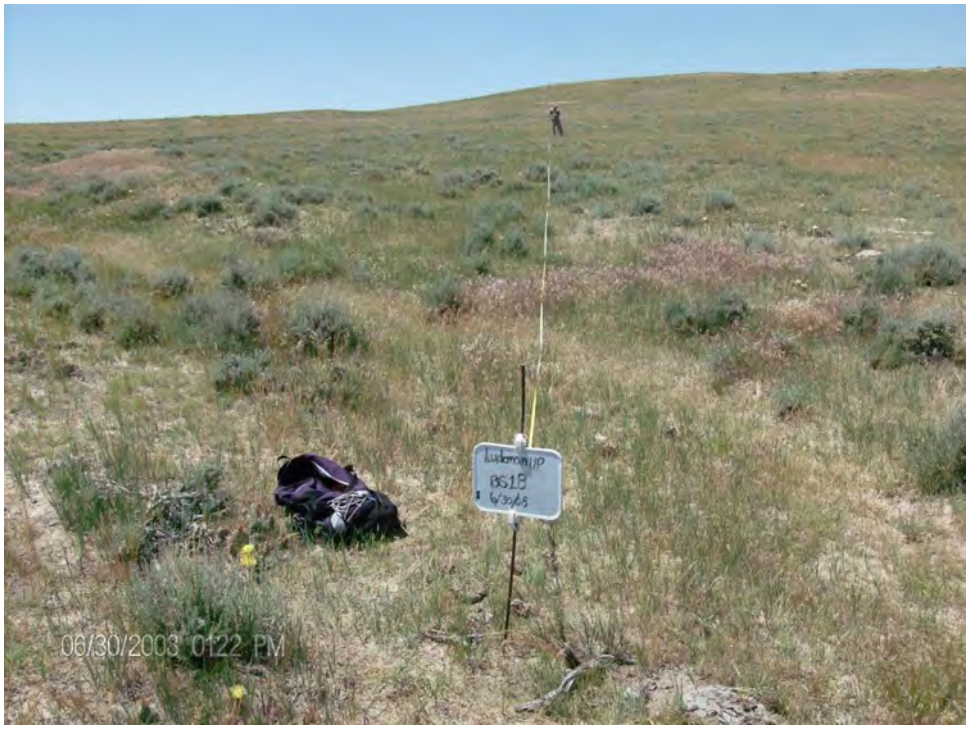
BS 11: Transect Direction 90°



BS 13: Transect Direction 140°

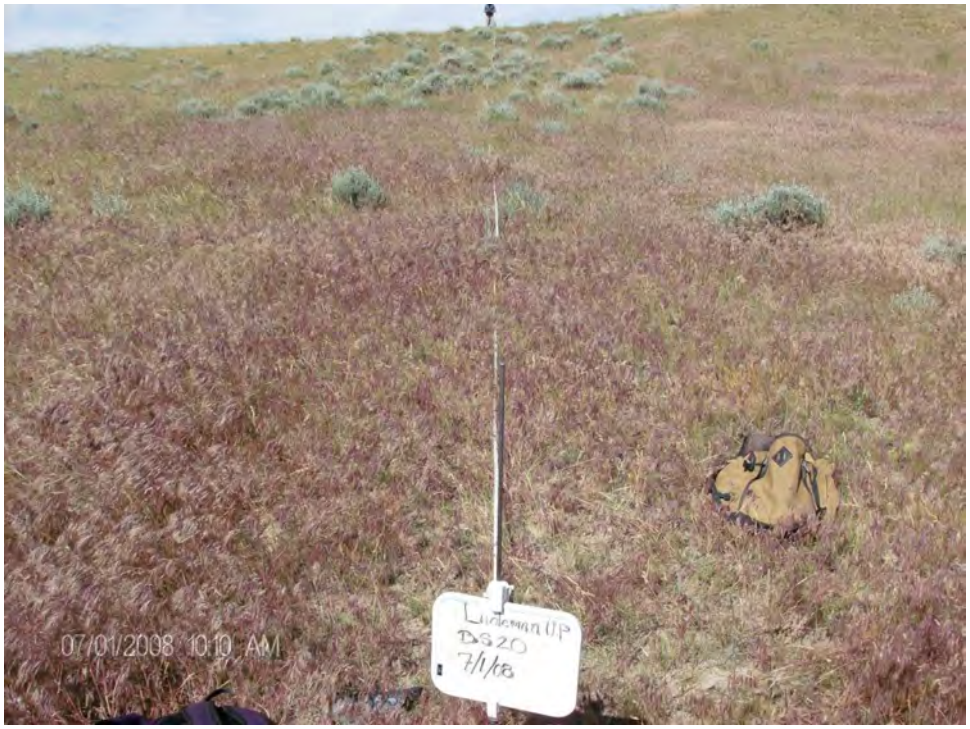
BS 15: Transect Direction 300°

BS 16: Transect Direction 0°



BS 18: Transect Direction 290°

BS 19: Transect Direction 180°



BS 20: Transect Direction 0°

BS 23: Transect Direction 120°

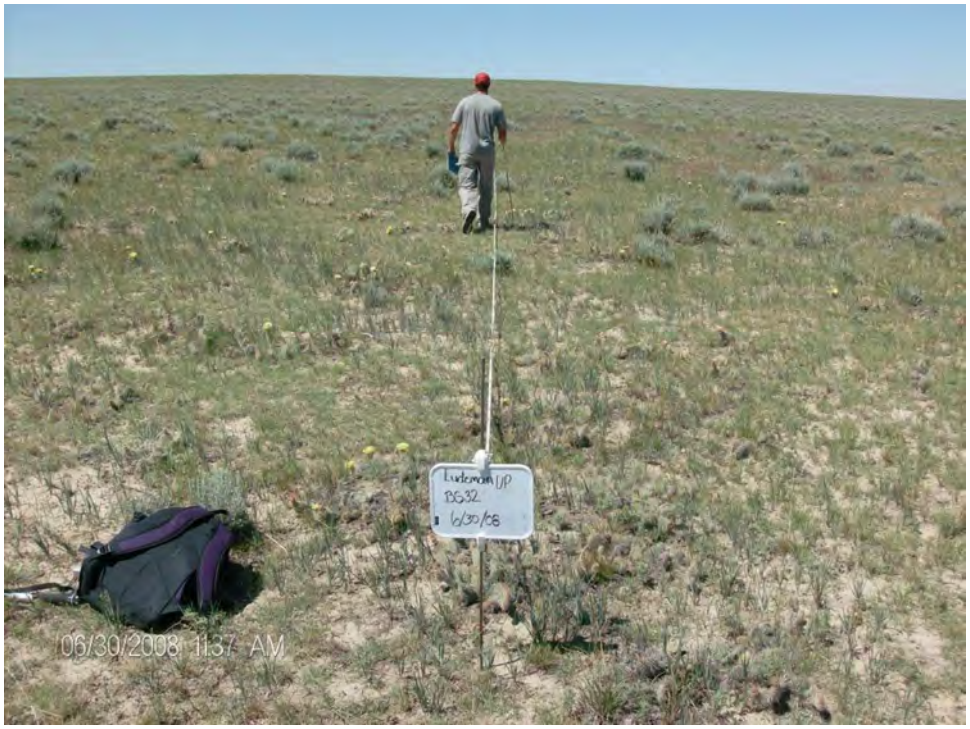
BS 25: Transect Direction 240°

NO PHOTO AVAILABLE

BS 28: Transect Direction 155°

BS 29: Transect Direction 0°

BS 30: Transect Direction 180°



BS 32: Transect Direction 260°

BS 40: Transect Direction 0°

BS 42: Transect Direction: 55°

BS 46: Transect Direction 330°

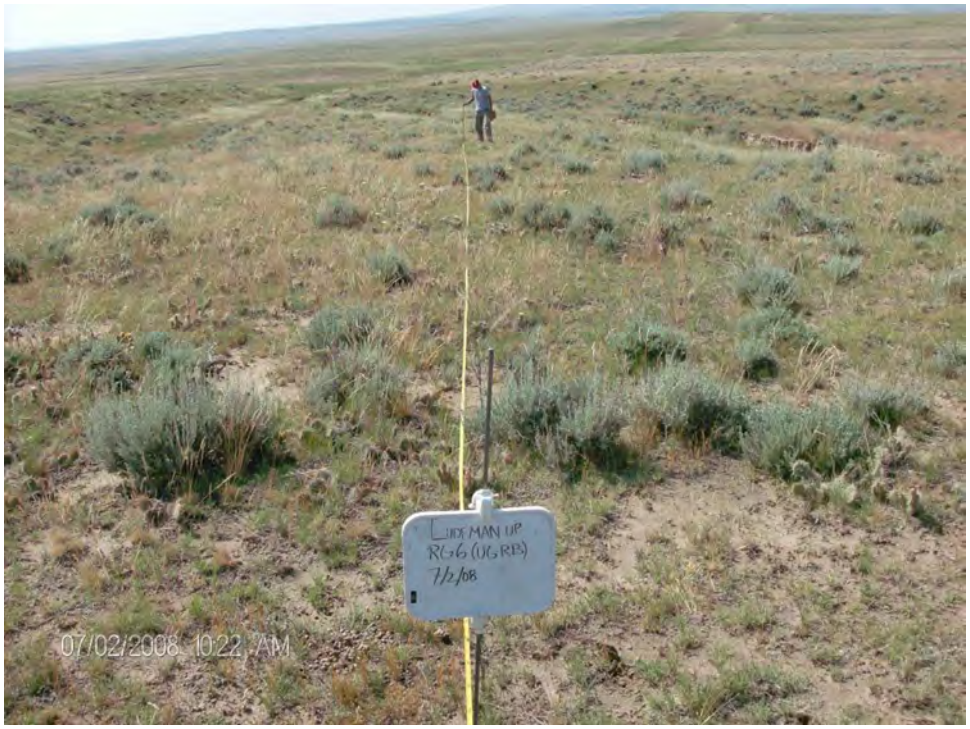
UGRB 2: Transect Direction 30° Photo was mislabeled in the field.

NO PHOTO AVAILABLE

UGRB2-1: Transect Direction 270°

UGRB 3: Transect Direction 0°

UGBR 5: Transect Direction 330°



UGBR 6: Transect Direction 150°

UGRB 7: Transect Direction 290°

UGRB 8: Transect Direction 250°

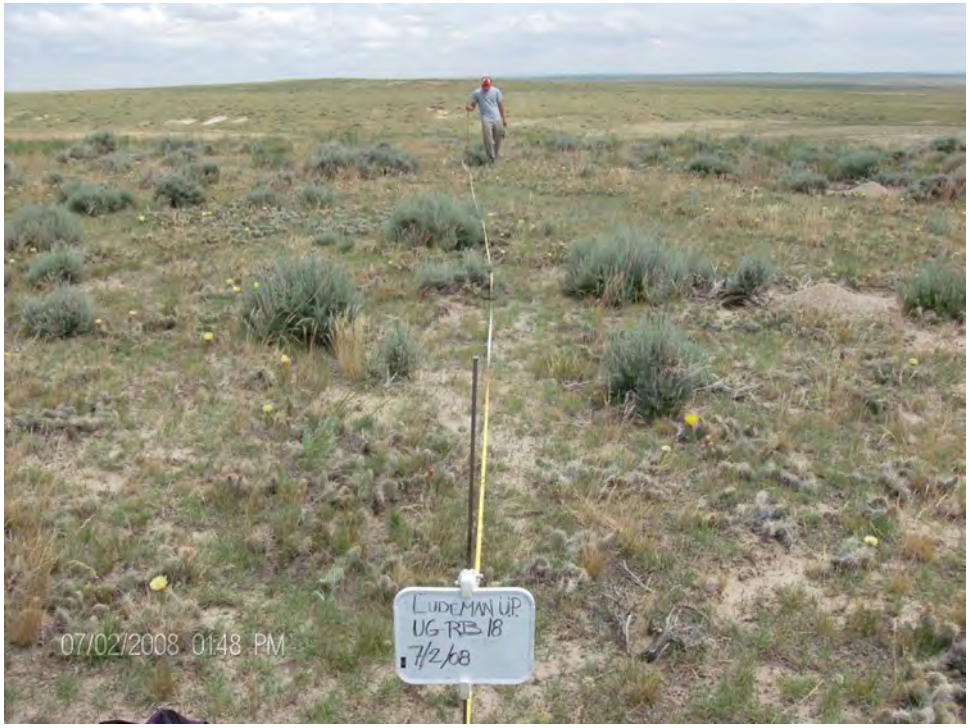
UGRB 9: Transect Direction 0°

UGRB 11: Transect Direction 280°

UGRB 13: Transect Direction 0°

UGRB 14: Transect Direction 270°

UGRB 17: Transect Direction 250°



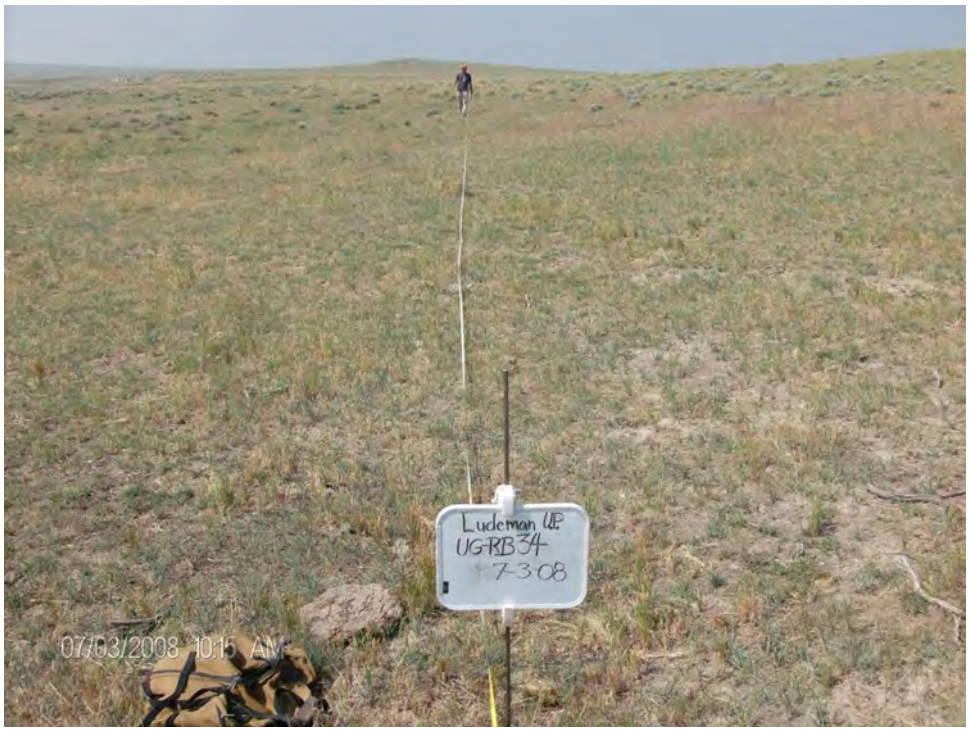
UGRB 18: Transect Direction 0°

UGRB 24: Transect Direction 0°

UGRB 26-1: Transect Direction 0°

UGRB 30: Transect Direction 330°

UGRB 32: Transect Direction 250°



UGRB 34: Transect Direction 0°

UGRB 37: Transect Direction 230°

UGRB 39: Transect Direction 70°

UGRB 39-1: Transect Direction 0° Photo was mislabeled in the field.

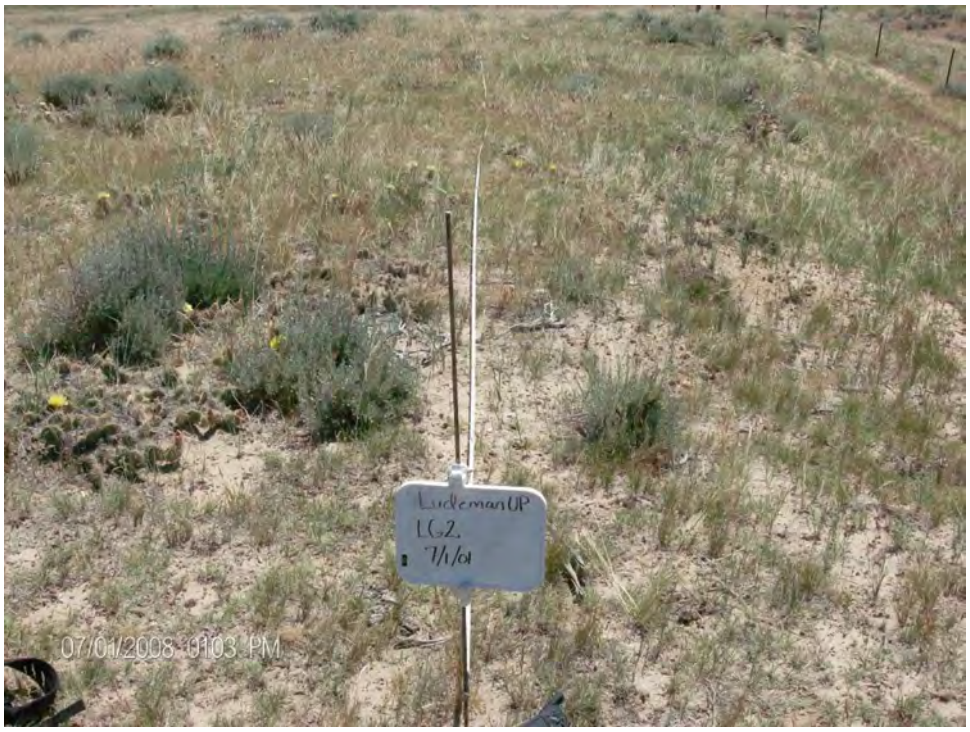
UGRB 40: Transect Direction 0°

UGRB 45: Transect Direction 0°

UGRB 48: Transect Direction 170°

NO PHOTO AVAILABLE

UGRB 49: Transect Direction 80°



LG 2-1: Transect Direction 120°

LG 4-1: Transect Direction 290°

LG 7-1: Transect Direction 330°

LG10-1: Transect Direction 140°

LG 11: Transect Direction 330°

LG 13: Transect Direction 250°

LG 14-1: Transect Direction 260°

LG 15-1: Transect Direction 210°

LG 16-1: Transect Direction 230°

LG 17-1: Transect Direction 15°

LG 20: Transect Direction 131°

LG 21-1: Transect Direction 310°

LG 22: Transect Direction 250°

LG 23-1: Transect Direction 150°

LG 24: Transect Direction 310°

LG 26-1: Transect Direction 170°

LG 28: Transect Direction 150°

LG 29: Transect Direction 106°

LG 31-1: Transect Direction 290°

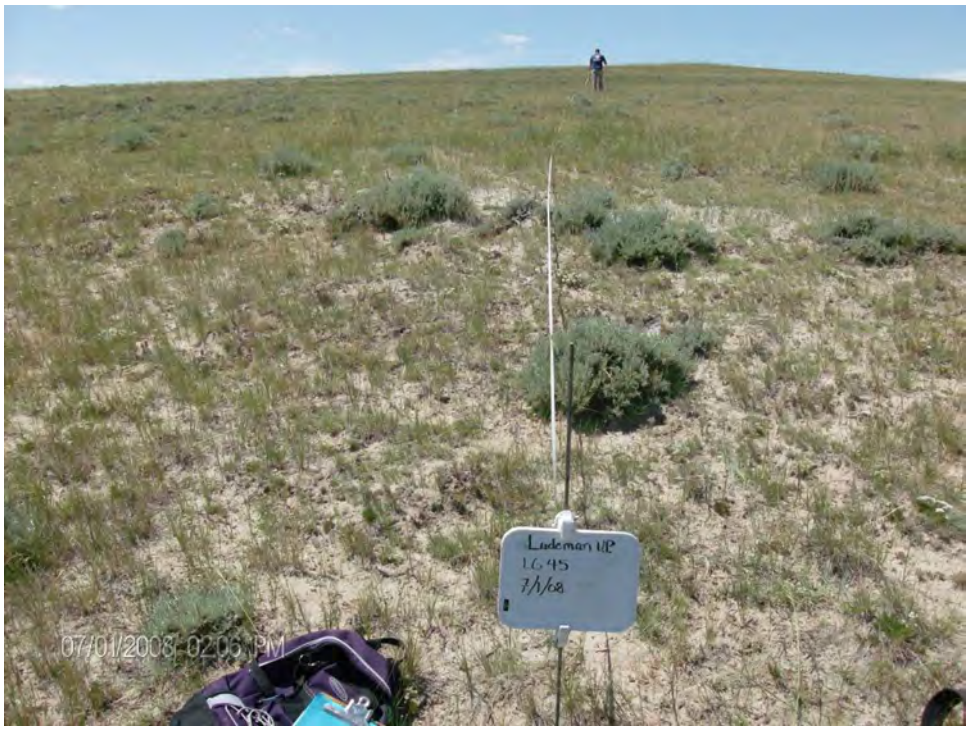
LG 33-1: Transect Direction 150°

LG 35-1: Transect Direction 270°

NO PHOTO AVAILABLE

LG 36: Transect Direction 6°

LG 37-1: Transect Direction 20°



LG 45: Transect Direction 312°

LG 46-1: Transect Direction 160°

SS 1A: Transect Direction 288°

SS 2A: Transect Direction 350°

SS 3A: Transect Direction 158°

SS 4A: Transect Direction 267°

SS 5A: Transect Direction 180°

SS 6A: Transect Direction 342°

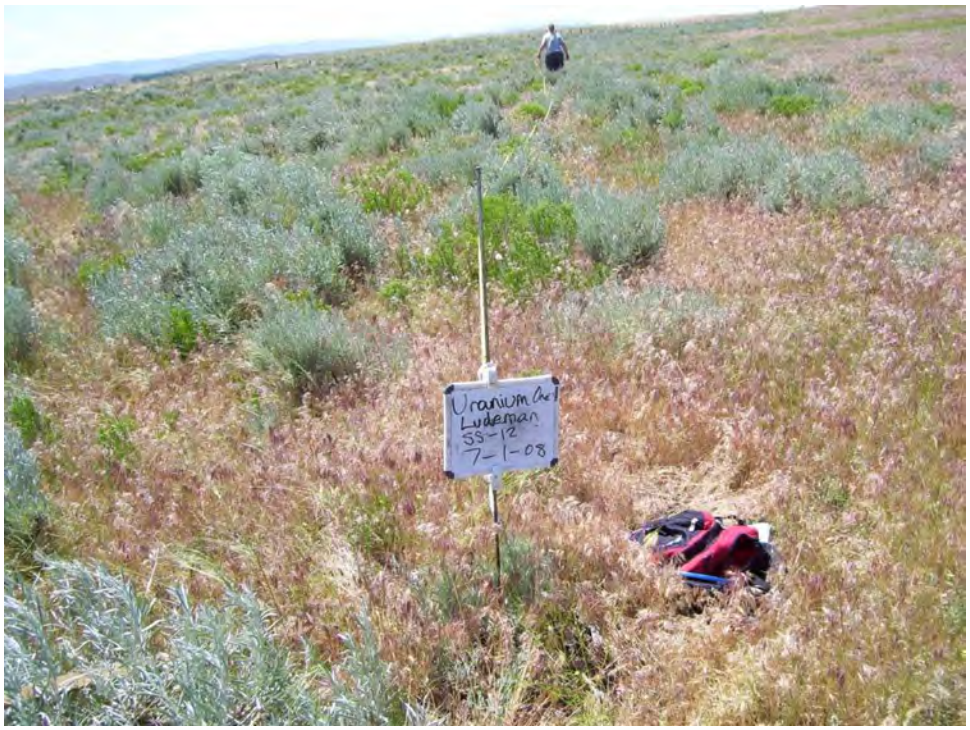
SS 7A: Transect Direction 248°

SS 8A: Transect Direction 0°

SS 9A: Transect Direction 260°

SS 10A: Transect Direction 354°

SS 11A: Transect Direction 83°

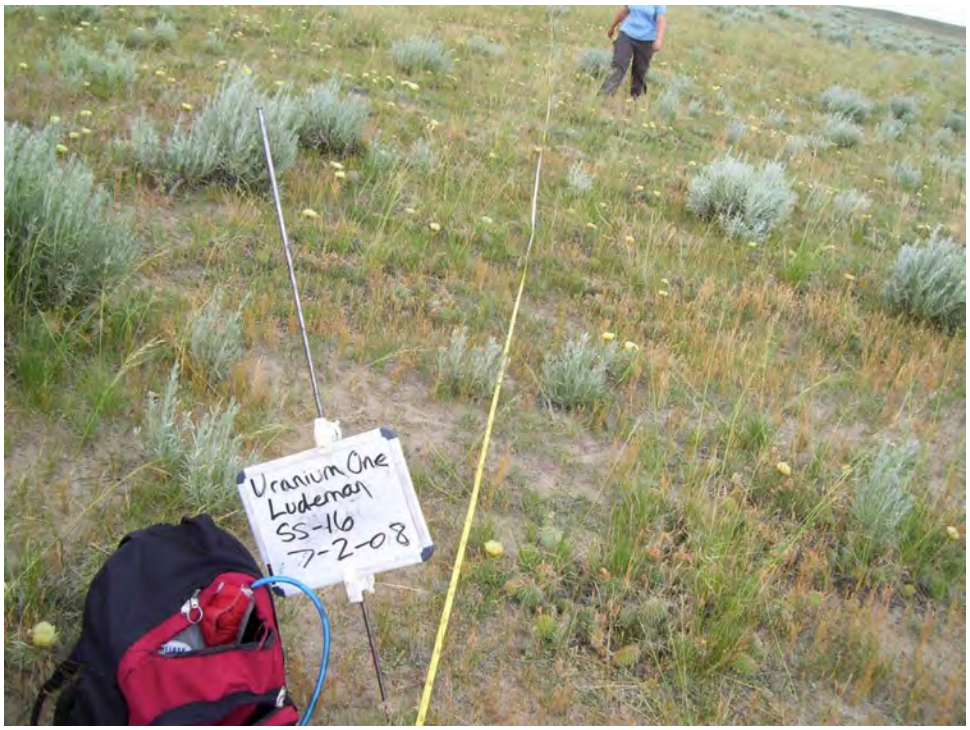


SS 12A: Transect Direction 252°

SS 13A: Transect Direction 60°

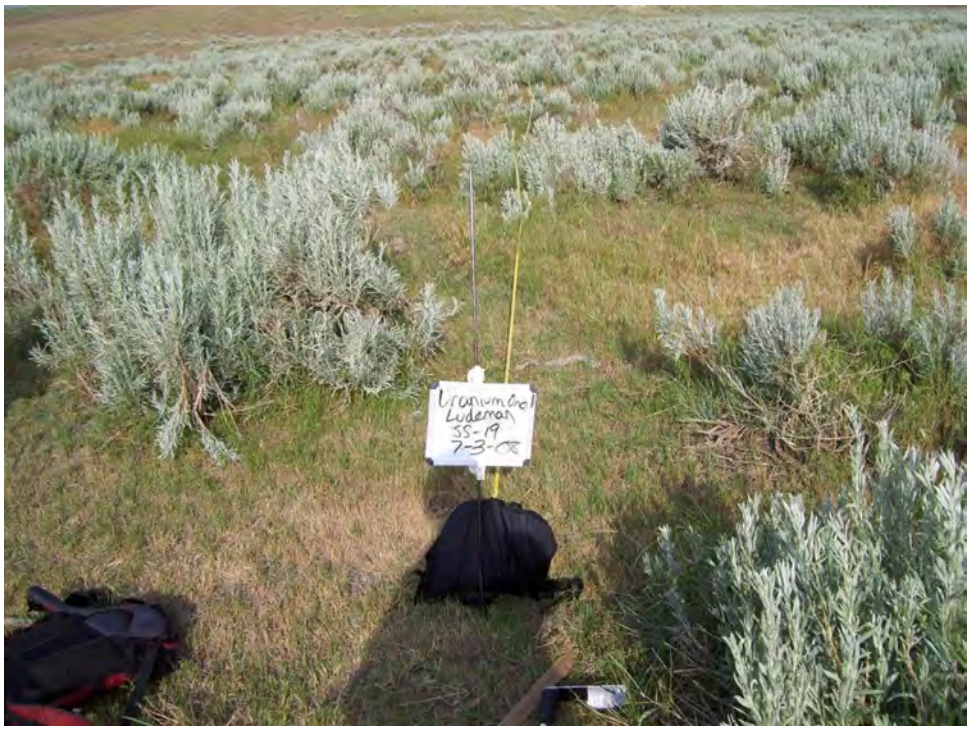
SS 14A: Transect Direction 334°

SS 15A: Transect Direction 290°



SS 16A: Transect Direction 144°

SS 17A: Transect Direction 0°



SS 18A: Transect Direction 300° Photo was mislabeled in the field

SS 19A: Transect Direction 262°

SS 20A: Transect Direction 132°

SS 21A: Transect Direction 44°

SS 25: Transect Direction 300°

SS 28A: Transect Direction 290°

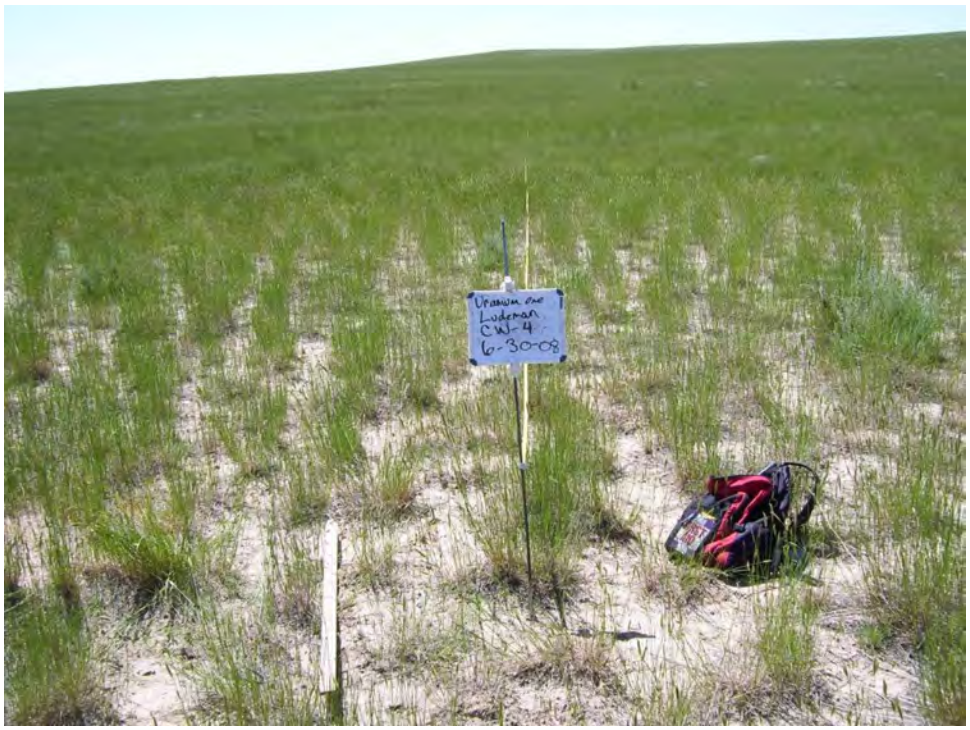
SS 29: Transect Direction 124°

SS 31: Transect Direction 134°

CW 1: Transect Direction 350°

CW 2: Transect Direction 80°

CW 3A: Transect Direction 12°



CW 4A: Transect Direction 144°

CW 5: Transect Direction 300°

CW 6A: Transect Direction 198°

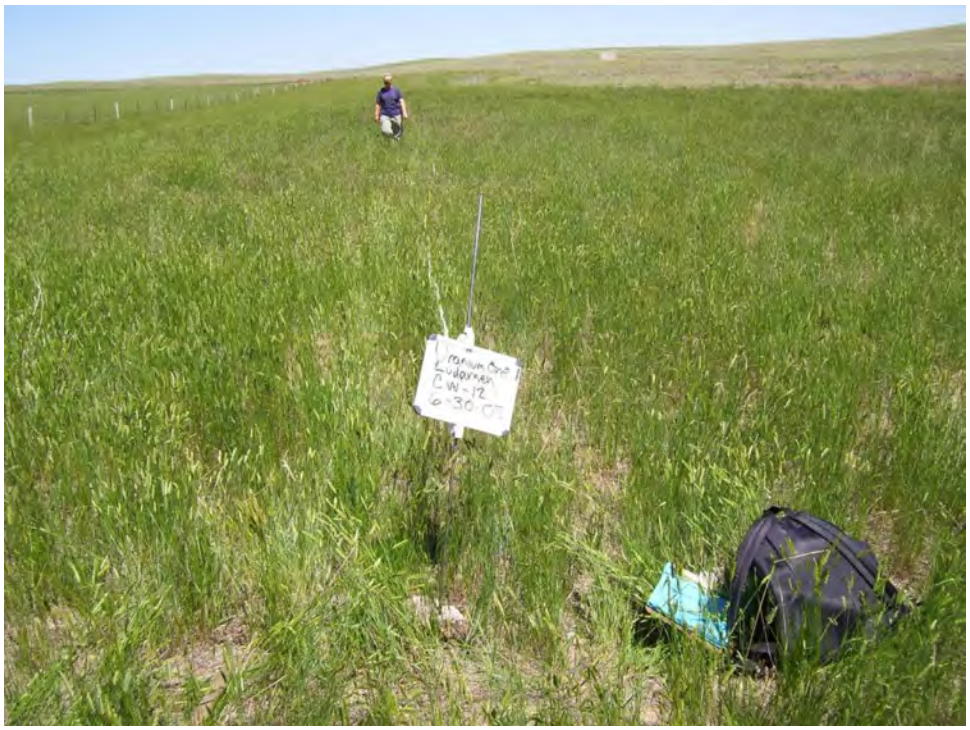
CW 7: Transect Direction 74°

CW 8A: Transect Direction 198°

CW 9A: Transect Direction 56°

CW 10A: Transect Direction 320°

CW 11: Transect Direction 270°



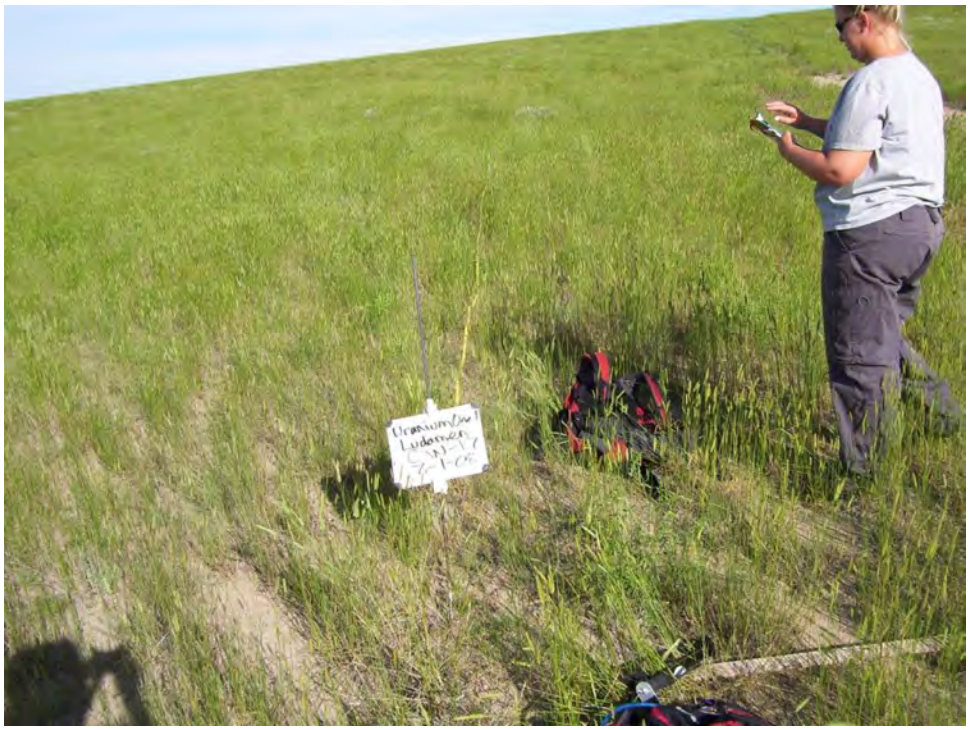
CW 12: Transect Direction 88°

CW 13A: Transect Direction 190°

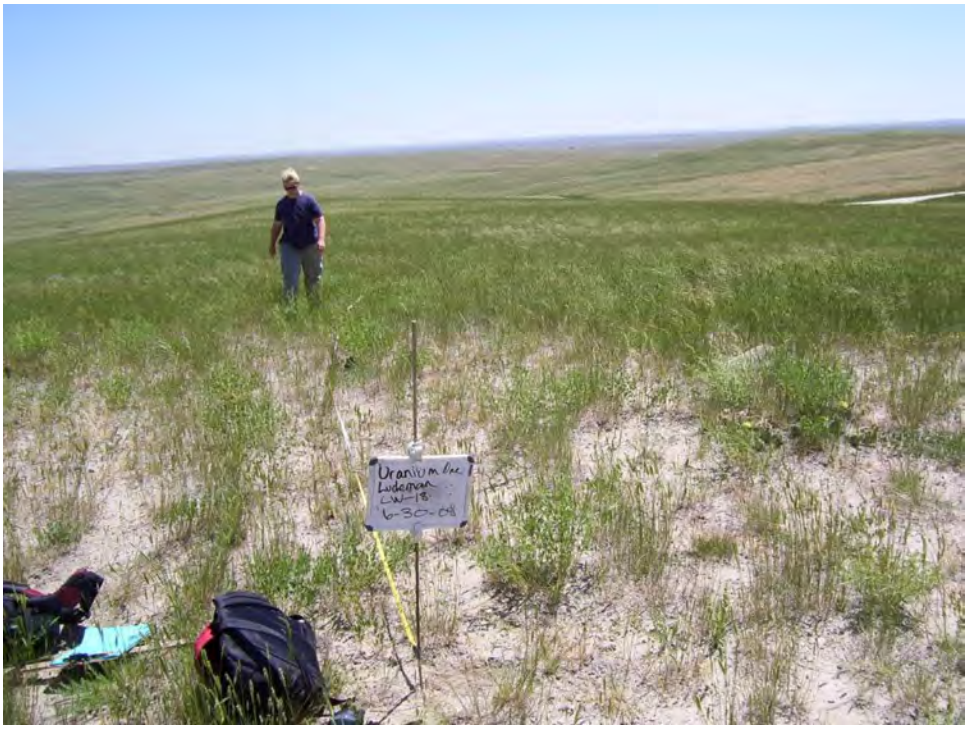
CW 14: Transect Direction 244°

CW 15: Transect Direction 0°

CW 16A: Transect Direction 0°



CW 17A: Transect Direction 280°

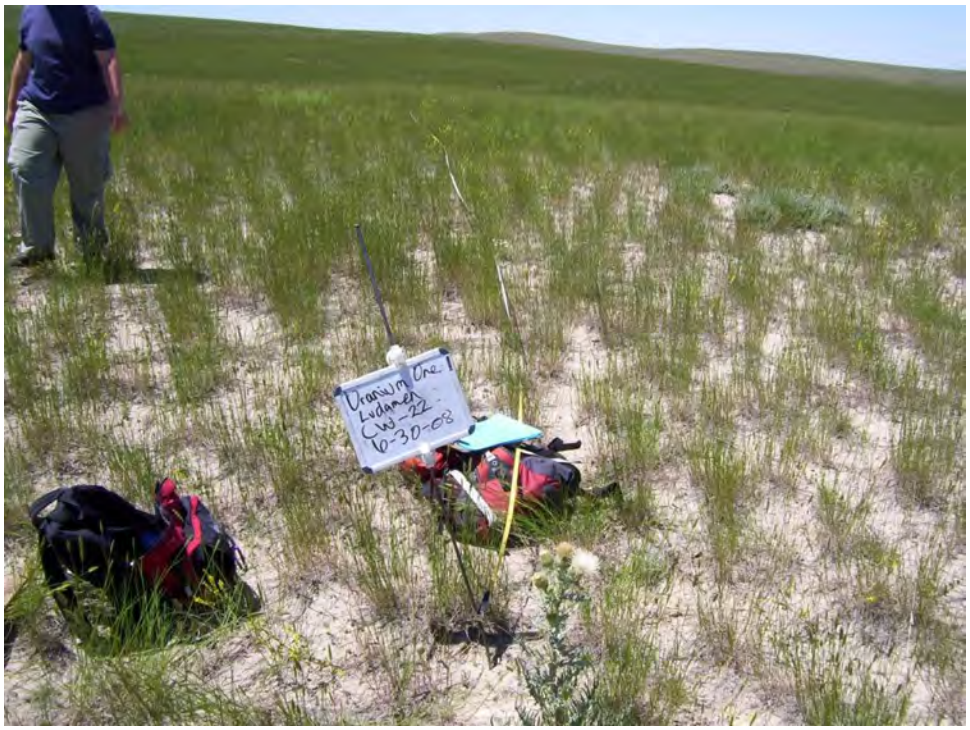


CW 18A: Transect Direction 80°

CW 19A: Transect Direction 49°

CW 20: Transect Direction 24°

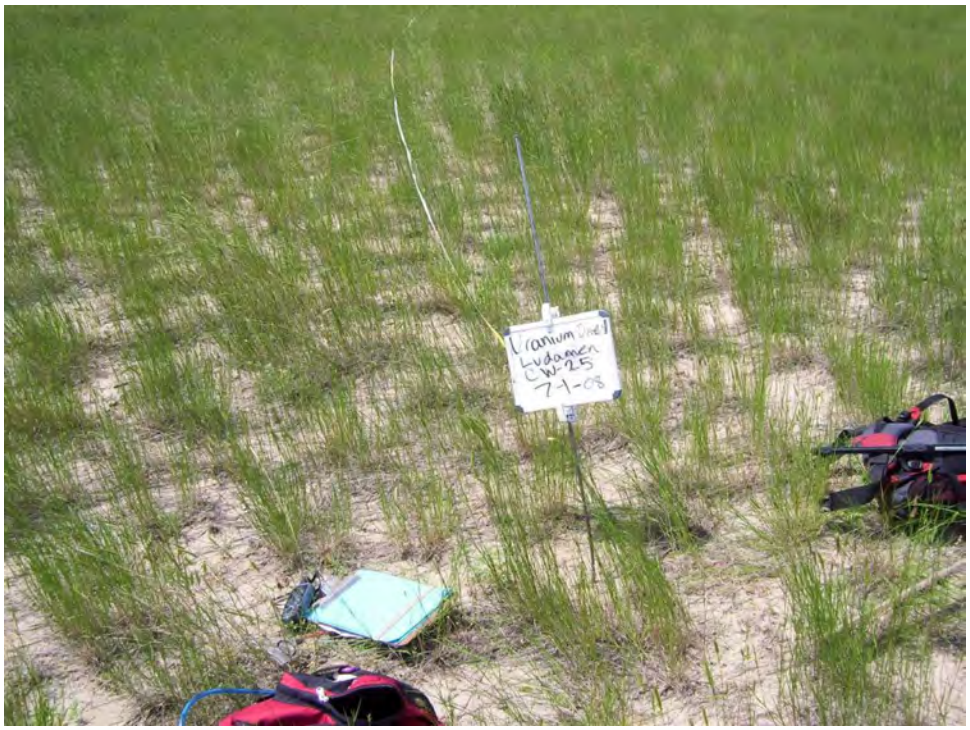
CW 21: Transect Direction 180°



CW 22A: Transect Direction 242°

CW 23A: Transect Direction 278°

CW 24A: Transect Direction 32°



CW 25A: Transect Direction 192°

ADDENDUM 3.5-E:
VEGETATION COVER SUMMARIES

Ludeman
Report: Cover Summary

Site Id: Upland Grassland
Name:
Comm. Type/Form:
Sample Date: 7/1/2008

*() Represents Second Hit Data

Sample Method: Point Intercept
Sample Size: 50 Meter Transect
Number of Samples: 25
Report Date: 11/6/2008

Species	Cover (%) Mean Absolute *	Cover (%) Relative	Std. Dev. n - 1	Frequency (%) Absolute	Frequency (%) Relative	I.V.	Rank
Annual Forbs							
Alyssum desertorum	10.48(0.96)	15.45	11.77	84.00	8.97	24.42	2
Collomia linearis	0.08	0.12	0.40	4.00	0.43	0.55	23
Descurainia sophia	0.08(0.08)	0.12	0.40	4.00	0.43	0.55	25
Lappula redowskii	0.08	0.12	0.40	4.00	0.43	0.55	26
Plantago patagonica	3.92(0.08)	5.78	5.28	68.00	7.26	13.04	6
Sub-Total	14.64	21.59					
Annual Grasses							
Bromus japonicus	0.32	0.47	1.25	8.00	0.85	1.32	19
Bromus tectorum	3.28(0.40)	4.83	7.91	24.00	2.56	7.39	11
Vulpia octoflora	1.60(0.16)	2.36	2.58	44.00	4.70	7.06	12
Sub-Total	5.20	7.66					
Cacti & Succulents							
Opuntia polyacantha	2.16(0.08)	3.18	1.99	64.00	6.84	10.02	9
Sub-Total	2.16	3.18					
Cool Season Perennial Grasses							
Carex filifolia	6.08(0.08)	8.96	7.67	68.00	7.26	16.22	5
Elymus smithii	12.56(0.16)	18.51	8.18	92.00	9.83	28.34	1
Hesperostipa comata	7.52(0.16)	11.08	9.12	68.00	7.26	18.34	3
Koeleria macrantha	0.48	0.71	1.33	16.00	1.71	2.42	16
Nassella viridula	0.16(0.08)	0.24	0.55	8.00	0.85	1.09	21
Poa secunda	2.16(0.48)	3.18	2.37	72.00	7.69	10.87	7
Sub-Total	28.96	42.68					
Full Shrubs							
Artemisia tridentata	0.56	0.83	1.78	12.00	1.28	2.11	17
Sub-Total	0.56	0.83					
Introduced Perennial Grasses							
Agropyron cristatum	0.48	0.71	2.40	4.00	0.43	1.14	20
Sub-Total	0.48	0.71					
Lower Plants							
Lichens	3.68(0.08)	5.42	5.79	40.00	4.27	9.69	10
Sub-Total	3.68	5.42					
Perennial Forbs							
Allium textile	0.08	0.12	0.40	4.00	0.43	0.55	22
Delphinium bicolor	0.08	0.12	0.40	4.00	0.43	0.55	24
Lomatium foeniculaceum	0.08	0.12	0.40	4.00	0.43	0.55	27
Machaeranthera grindelioides	0.08	0.12	0.40	4.00	0.43	0.55	29
Phlox hoodii	1.76	2.59	3.89	36.00	3.85	6.44	13
Sphaeralcea coccinea	2.56	3.77	2.55	60.00	6.41	10.18	8
Taraxacum officinale	0.00(0.08)	0.00	0.00	4.00	0.43	0.43	31
Vicia americana	0.72	1.06	1.62	20.00	2.14	3.20	14
Sub-Total	5.36	7.90					
Sub-Shrubs & Half-Shrubs							
Artemisia frigida	0.24	0.35	0.66	12.00	1.28	1.63	18
Lupinus sericeus	0.08	0.12	0.40	4.00	0.43	0.55	28
Sub-Total	0.32	0.47					
Warm Season Perennial Grasses							

Ludeman
Report: Cover Summary

Site Id: Upland Grassland
Name:
Comm. Type/Form:
Sample Date: 7/1/2008

*() Represents Second Hit Data

Sample Method: Point Intercept
Sample Size: 50 Meter Transect
Number of Samples: 25
Report Date: 11/6/2008

Species	Cover (%) Mean Absolute *	Relative	Std. Dev. n - 1	Frequency (%) Absolute	Relative	I.V.	Rank
Bouteloua gracilis	5.68(0.08)	8.37	4.27	80.00	8.55	16.92	4
Calamovilfa longifolia	0.72	1.06	1.81	16.00	1.71	2.77	15
Sporobolus cryptandrus	0.08	0.12	0.40	4.00	0.43	0.55	30
Sub-Total	6.48	9.55					
Total Stratified Vegetation Cover	67.04	0.64	11.03				
Total Non-Stratified Vegetation Cover	64.16	0.64	11.09				
LITTER/ROCK	14.40		7.59				
Total Ground Cover	82.24		6.67				
BARE SOIL	18.08		6.67				
Total Cover	97.00		0.00				
Species Abundance (No. of Species/Sample)	31.00						

Ludeman
Report: Cover Summary

Site Id: Big Sage Shrubland
Name:
Comm. Type/Form:
Sample Date: 6/30/2008

*() Represents Second Hit Data

Sample Method: Point Intercept
Sample Size: 50 Meter Transect
Number of Samples: 26
Report Date: 11/6/2008

Species	Cover (%) Mean Absolute *	Relative	Std. Dev. n - 1	Frequency (%) Absolute	Relative	I.V.	Rank
Annual Forbs							
Alyssum desertorum	3.92	6.43	5.50	57.69	6.79	13.22	8
Lappula redowskii	0.08	0.13	0.39	3.85	0.45	0.58	24
Plantago patagonica	0.23	0.38	0.65	11.54	1.36	1.74	19
Sub-Total	4.23	6.94					
Annual Grasses							
Bromus japonicus	0.23	0.38	1.18	3.85	0.45	0.83	20
Bromus tectorum	8.54	14.00	14.67	73.08	8.60	22.60	2
Vulpia octoflora	1.69	2.77	3.33	30.77	3.62	6.39	12
Sub-Total	10.46	17.15					
Cacti & Succulents							
Opuntia polyacantha	4.15(0.08)	6.81	4.00	73.08	8.60	15.41	6
Sub-Total	4.15	6.81					
Cool Season Perennial Grasses							
Carex filifolia	7.00	11.48	8.36	65.38	7.69	19.17	4
Elymus lanceolatus	0.08	0.13	0.39	3.85	0.45	0.58	23
Elymus smithii	4.46(0.08)	7.31	5.69	73.08	8.60	15.91	5
Hesperostipa comata	4.00	6.56	4.27	69.23	8.14	14.70	7
Hordeum jubatum	0.15	0.25	0.78	3.85	0.45	0.70	21
Koeleria macrantha	0.23	0.38	0.65	11.54	1.36	1.74	18
Nassella viridula	0.54	0.88	1.65	15.38	1.81	2.69	14
Poa secunda	2.46	4.04	5.19	23.08	2.71	6.75	10
Sub-Total	18.92	31.03					
Full Shrubs							
Artemisia tridentata	9.54	15.64	6.75	88.46	10.41	26.05	1
Sub-Total	9.54	15.64					
Introduced Perennial Grasses							
Agropyron cristatum	1.00	1.64	5.10	3.85	0.45	2.09	15
Poa pratensis	2.92	4.79	3.63	50.00	5.88	10.67	9
Sub-Total	3.92	6.43					
Lower Plants							
Lichens	1.31(0.08)	2.14	1.95	38.46	4.52	6.66	11
Sub-Total	1.31	2.14					
Perennial Forbs							
Allium textile	0.23	0.38	0.65	11.54	1.36	1.74	17
Musineon divaricatum	0.08	0.13	0.39	3.85	0.45	0.58	25
Phlox longifolia	0.08	0.13	0.39	3.85	0.45	0.58	26
Psoralea tenuiflora	0.08	0.13	0.39	3.85	0.45	0.58	27
Sphaeralcea coccinea	0.54	0.88	0.90	26.92	3.17	4.05	13
Vicia americana	0.31	0.50	0.93	11.54	1.36	1.86	16
Sub-Total	1.32	2.15					
Sub-Shrubs & Half-Shrubs							
Artemisia pedatifida	0.08	0.13	0.39	3.85	0.45	0.58	22
Sub-Total	0.08	0.13					
Warm Season Perennial Grasses							
Bouteloua gracilis	7.08	11.60	6.31	84.62	9.95	21.55	3

Ludeman
Report: Cover Summary

Site Id: Big Sage Shrubland
Name:
Comm. Type/Form:
Sample Date: 6/30/2008

*() Represents Second Hit Data

Sample Method: Point Intercept
Sample Size: 50 Meter Transect
Number of Samples: 26
Report Date: 11/6/2008

Species	Cover (%) Mean Absolute *	Relative	Std. Dev. n - 1	Frequency (%) Absolute	Relative	I.V.	Rank
Sub-Total	7.08	11.60					
Total Stratified Vegetation Cover	59.86	4.77	13.82				
Total Non-Stratified Vegetation Cover	59.70	4.77	13.90				
LITTER/ROCK	15.62		7.69				
Total Ground Cover	76.63		10.13				
BARE SOIL	23.38		10.13				
Total Cover	99.00		0.00				
Species Abundance (No. of Species/Sample)	27.00						

Ludeman
Report: Cover Summary

Site Id: UG/RB
Name:
Comm. Type/Form:
Sample Date: 7/3/2008

*() Represents Second Hit Data

Sample Method: Point Intercept
Sample Size: 50 Meter Transect
Number of Samples: 25
Report Date: 11/6/2008

Species	Cover (%) Mean Absolute *	Relative	Std. Dev. n - 1	Frequency (%) Absolute	Relative	I.V.	Rank
Annual Forbs							
Alyssum desertorum	2.80	6.16	5.03	44.00	4.85	11.01	7
Descurainia pinnata	0.08	0.18	0.40	4.00	0.44	0.62	41
Lappula redowskii	0.56	1.23	1.58	12.00	1.32	2.55	20
Monolepis nuttalliana	0.40	0.88	1.29	12.00	1.32	2.20	22
Plantago patagonica	0.56	1.23	1.08	24.00	2.64	3.87	14
Polygonum aviculare	0.08	0.18	0.40	4.00	0.44	0.62	43
Salsola tragus	0.16	0.35	0.80	4.00	0.44	0.79	33
Sub-Total	4.64	10.21					
Annual Grasses							
Bromus japonicus	0.64	1.41	1.38	20.00	2.20	3.61	15
Bromus tectorum	5.76(0.08)	12.68	7.51	60.00	6.61	19.29	3
Vulpia octoflora	0.48	1.06	1.33	16.00	1.76	2.82	18
Sub-Total	6.88	15.15					
Cacti & Succulents							
Opuntia polyacantha	1.60	3.52	2.38	44.00	4.85	8.37	8
Sub-Total	1.60	3.52					
Cool Season Perennial Grasses							
Achnatherum hymenoides	0.08	0.18	0.40	4.00	0.44	0.62	35
Carex filifolia	4.40	9.68	5.89	60.00	6.61	16.29	4
Elymus lanceolatus	0.64	1.41	1.50	20.00	2.20	3.61	16
Elymus smithii	5.04	11.09	4.66	80.00	8.81	19.90	2
Elymus spicatus	0.08	0.18	0.40	4.00	0.44	0.62	42
Hesperostipa comata	3.92	8.63	4.67	60.00	6.61	15.24	5
Koeleria macrantha	0.88	1.94	1.83	24.00	2.64	4.58	13
Nassella viridula	0.56	1.23	1.47	16.00	1.76	2.99	17
Poa secunda	0.96	2.11	2.24	24.00	2.64	4.75	12
Sub-Total	16.56	36.45					
Full Shrubs							
Artemisia tridentata	2.48	5.46	3.23	56.00	6.17	11.63	6
Rosa woodsii	0.16	0.35	0.80	4.00	0.44	0.79	32
Sub-Total	2.64	5.81					
Introduced Perennial Grasses							
Agropyron cristatum	0.32	0.70	1.11	8.00	0.88	1.58	25
Poa pratensis	0.24	0.53	0.88	8.00	0.88	1.41	26
Sub-Total	0.56	1.23					
Lower Plants							
Lichens	0.48	1.06	1.33	12.00	1.32	2.38	21
Sub-Total	0.48	1.06					
Perennial Forbs							
Achillea millefolium	0.08	0.18	0.40	4.00	0.44	0.62	34
Allium textile	0.08	0.18	0.40	4.00	0.44	0.62	36
Astragalus bisulcatus	0.08	0.18	0.40	4.00	0.44	0.62	38
Astragalus pectinatus	0.24	0.53	0.66	12.00	1.32	1.85	23
Astragalus spatulatus	0.08	0.18	0.40	4.00	0.44	0.62	39
Heterotheca villosa	0.16	0.35	0.80	4.00	0.44	0.79	30
Oonopsis multicaulis	0.16	0.35	0.80	4.00	0.44	0.79	31

Ludeman
Report: Cover Summary

Site Id: UG/RB
Name:
Comm. Type/Form.
Sample Date: 7/3/2008

*() Represents Second Hit Data

Sample Method: Point Intercept
Sample Size: 50 Meter Transect
Number of Samples: 25
Report Date: 11/6/2008

Species	Cover (%) Mean Absolute *	Relative	Std. Dev. n - 1	Frequency (%) Absolute	Relative	I.V.	Rank
Phlox hoodii	1.04	2.29	2.39	24.00	2.64	4.93	10
Phlox longifolia	0.24(0.08)	0.53	0.66	12.00	1.32	1.85	24
Psoralea esculenta	0.16	0.35	0.55	8.00	0.88	1.23	28
Sphaeralcea coccinea	1.20	2.64	1.41	48.00	5.29	7.93	9
Taraxacum officinale	0.08	0.18	0.40	4.00	0.44	0.62	44
Thermopsis rhombifolia	1.04	2.29	2.89	24.00	2.64	4.93	11
Vicia americana	0.40	0.88	1.00	16.00	1.76	2.64	19
Sub-Total	5.04	11.11					
Sub-Shrubs & Half-Shrubs							
Artemisia frigida	0.16	0.35	0.55	8.00	0.88	1.23	27
Artemisia ludoviciana	0.08	0.18	0.40	4.00	0.44	0.62	37
Atriplex gardneri	0.08	0.18	0.40	4.00	0.44	0.62	40
Yucca glauca	0.16	0.35	0.55	8.00	0.88	1.23	29
Sub-Total	0.48	1.06					
Warm Season Perennial Grasses							
Bouteloua gracilis	6.56	14.44	6.57	88.00	9.69	24.13	1
Sub-Total	6.56	14.44					
Total Stratified Vegetation Cover	45.12	0.49	10.33				
Total Non-Stratified Vegetation Cover	44.96	0.49	10.17				
LITTER/ROCK	17.92		10.90				
Total Ground Cover	63.36		14.09				
BARE SOIL	36.64		14.09				
Total Cover	100.00		0.00				
Species Abundance (No. of Species/Sample)	44.00						

Ludeman
Report: Cover Summary

Site Id: Lowland Grassland
Name:
Comm. Type/Form:
Sample Date: 7/1/2008

*() Represents Second Hit Data

Sample Method: Point Intercept
Sample Size: 50 Meter Transect
Number of Samples: 25
Report Date: 11/6/2008

Species	Cover (%) Mean Absolute *	Relative	Std. Dev. n - 1	Frequency (%) Absolute	Relative	I.V.	Rank
Annual Forbs							
Alyssum desertorum	3.92(0.16)	5.58	6.15	48.00	4.98	10.56	5
Collomia linearis	0.16	0.23	0.55	8.00	0.83	1.06	37
Cryptantha minima	0.08	0.11	0.40	4.00	0.41	0.52	47
Descurainia pinnata	0.16	0.23	0.80	4.00	0.41	0.64	40
Lappula redowskii	0.32	0.46	1.25	8.00	0.83	1.29	32
Melilotus officinalis	0.16	0.23	0.80	4.00	0.41	0.64	41
Monolepis nuttalliana	0.16	0.23	0.80	4.00	0.41	0.64	42
Plantago patagonica	1.36	1.94	2.43	32.00	3.32	5.26	11
Sub-Total	6.32	9.01					
Annual Grasses							
Bromus japonicus	4.88(0.08)	6.95	5.75	48.00	4.98	11.93	3
Bromus tectorum	7.12(0.08)	10.14	13.10	64.00	6.64	16.78	2
Vulpia octoflora	0.64	0.91	1.98	12.00	1.24	2.15	25
Sub-Total	12.64	18.00					
Cacti & Succulents							
Opuntia polyacantha	0.24	0.34	1.20	4.00	0.41	0.75	39
Sub-Total	0.24	0.34					
Cool Season Perennial Grasses							
Carex douglasii	0.24	0.34	0.88	8.00	0.83	1.17	34
Carex filifolia	2.08	2.96	3.63	36.00	3.73	6.69	8
Carex nebrascensis	0.32	0.46	1.60	4.00	0.41	0.87	38
Carex praegracilis	0.32	0.46	1.25	8.00	0.83	1.29	31
Carex stenophylla	0.08	0.11	0.40	4.00	0.41	0.52	45
Elymus lanceolatus	0.08	0.11	0.40	4.00	0.41	0.52	48
Elymus smithii	17.12(0.48)	24.37	15.58	84.00	8.71	33.08	1
Elymus spicatus	0.80	1.14	3.00	8.00	0.83	1.97	27
Elymus trachycaulus	0.24	0.34	0.88	8.00	0.83	1.17	35
Hesperostipa comata	1.36	1.94	1.89	40.00	4.15	6.09	9
Hordeum jubatum	0.64(0.08)	0.91	1.38	20.00	2.07	2.98	20
Juncus balticus	2.24	3.19	7.06	16.00	1.66	4.85	13
Koeleria macrantha	0.64	0.91	1.25	24.00	2.49	3.40	18
Nassella viridula	2.16	3.08	5.62	20.00	2.07	5.15	12
Poa cusickii	0.96	1.37	3.52	8.00	0.83	2.20	24
Poa secunda	3.20(0.16)	4.56	3.61	60.00	6.22	10.78	4
Scirpus acutus	0.16(0.08)	0.23	0.80	4.00	0.41	0.64	43
Sub-Total	32.64	46.48					
Full Shrubs							
Artemisia tridentata	1.20	1.71	2.38	28.00	2.90	4.61	14
Rosa woodsii	0.40	0.57	1.63	8.00	0.83	1.40	29
Symphoricarpos occidentalis	2.64	3.76	6.60	20.00	2.07	5.83	10
Sub-Total	4.24	6.04					
Introduced Perennial Grasses							
Agropyron cristatum	1.44	2.05	4.45	12.00	1.24	3.29	19
Phleum pratense	0.96(0.16)	1.37	4.80	4.00	0.41	1.78	28
Poa pratensis	0.64	0.91	2.06	16.00	1.66	2.57	22
Sub-Total	3.04	4.33					
Lower Plants							

Ludeman
Report: Cover Summary

Site Id: Lowland Grassland
Name:
Comm. Type/Form:
Sample Date: 7/1/2008

*() Represents Second Hit Data

Sample Method: Point Intercept
Sample Size: 50 Meter Transect
Number of Samples: 25
Report Date: 11/6/2008

Species	Cover (%) Mean Absolute *	Relative	Std. Dev. n - 1	Frequency (%) Absolute	Relative	I.V.	Rank
Lichens	0.08	0.11	0.40	4.00	0.41	0.52	51
Sub-Total	0.08	0.11					
Perennial Forbs							
Achillea millefolium	0.64(0.08)	0.91	1.38	28.00	2.90	3.81	16
Antennaria microphylla	0.16	0.23	0.55	8.00	0.83	1.06	36
Crepis runcinata	0.08	0.11	0.40	4.00	0.41	0.52	46
Echinacea angustifolia	0.00(0.08)	0.00	0.00	4.00	0.41	0.41	57
Equisetum laevigatum	0.32(0.24)	0.46	0.95	16.00	1.66	2.12	26
Gaura coccinea	0.08	0.11	0.40	4.00	0.41	0.52	49
Liatris punctata	0.08	0.11	0.40	4.00	0.41	0.52	50
Phlox hoodii	0.08	0.11	0.40	4.00	0.41	0.52	53
Plantago eriopoda	0.32	0.46	1.25	8.00	0.83	1.29	33
Psoralea tenuiflora	0.08	0.11	0.40	4.00	0.41	0.52	54
Ranunculus cymbalaria	0.08	0.11	0.40	4.00	0.41	0.52	55
Sphaeralcea coccinea	0.64	0.91	1.70	20.00	2.07	2.98	21
Taraxacum officinale	0.56(0.16)	0.80	1.08	28.00	2.90	3.70	17
Vicia americana	1.76(0.16)	2.51	2.03	52.00	5.39	7.90	7
Sub-Total	4.88	6.94					
Sub-Shrubs & Half-Shrubs							
Artemisia frigida	0.32	0.46	1.25	8.00	0.83	1.29	30
Artemisia ludoviciana	0.48(0.08)	0.68	1.33	16.00	1.66	2.34	23
Sub-Total	0.80	1.14					
Warm Season Perennial Grasses							
Bouteloua gracilis	2.88	4.10	5.60	40.00	4.15	8.25	6
Calamovilfa longifolia	0.08	0.11	0.40	4.00	0.41	0.52	44
Panicum virgatum	0.08	0.11	0.40	4.00	0.41	0.52	52
Sporobolus airoides	2.24	3.19	6.72	12.00	1.24	4.43	15
Sporobolus cryptandrus	0.08	0.11	0.40	4.00	0.41	0.52	56
Sub-Total	5.36	7.62					
Total Stratified Vegetation Cover	72.24	1.23	17.34				
Total Non-Stratified Vegetation Cover	70.16	1.23	14.59				
LITTER/ROCK	13.04		8.51				
Total Ground Cover	83.28		8.75				
BARE SOIL	16.72		8.75				
Total Cover	100.00		0.00				
Species Abundance (No. of Species/Sample)	57.00						

Ludeman
Report: Cover Summary

Site Id: Silver Sage
Name:
Comm. Type/Form:
Sample Date: 7/1/2008

*() Represents Second Hit Data

Sample Method: Point Intercept
Sample Size: 50 Meter Transect
Number of Samples: 25
Report Date: 11/6/2008

Species	Cover (%) Mean Absolute *	Relative	Std. Dev. n - 1	Frequency (%) Absolute	Relative	I.V.	Rank
Annual Forbs							
Alyssum alyssoides	0.24	0.36	1.20	4.00	0.51	0.87	25
Alyssum desertorum	1.44	2.19	2.68	32.00	4.10	6.29	8
Camelina microcarpa	0.16	0.24	0.55	8.00	1.03	1.27	23
Cryptantha minima	0.32	0.49	0.95	12.00	1.54	2.03	17
Descurainia pinnata	0.32	0.49	0.95	12.00	1.54	2.03	18
Descurainia sophia	1.68	2.55	4.61	24.00	3.08	5.63	10
Lappula redowskii	0.24	0.36	0.66	12.00	1.54	1.90	20
Monolepis nuttalliana	0.08	0.12	0.40	4.00	0.51	0.63	32
Plantago patagonica	0.08	0.12	0.40	4.00	0.51	0.63	33
Polygonum aviculare	0.32	0.49	0.95	12.00	1.54	2.03	19
Sisymbrium altissimum	0.64	0.97	1.11	28.00	3.59	4.56	13
Tragopogon dubius	0.08	0.12	0.40	4.00	0.51	0.63	35
Sub-Total	5.60	8.50					
Annual Grasses							
Bromus tectorum	18.96	28.83	14.26	88.00	11.28	40.11	1
Hordeum vulgare	0.56	0.85	2.42	8.00	1.03	1.88	22
Vulpia octoflora	4.80	7.30	6.76	48.00	6.15	13.45	5
Sub-Total	24.32	36.98					
Cacti & Succulents							
Opuntia polyacantha	5.20	7.91	5.83	56.00	7.18	15.09	4
Sub-Total	5.20	7.91					
Cool Season Perennial Grasses							
Elymus lanceolatus	0.32	0.49	0.75	16.00	2.05	2.54	16
Elymus smithii	3.68	5.60	5.68	40.00	5.13	10.73	6
Elymus spicatus	0.08	0.12	0.40	4.00	0.51	0.63	29
Hesperostipa comata	4.96	7.54	6.25	60.00	7.69	15.23	3
Poa secunda	0.56	0.85	0.92	28.00	3.59	4.44	14
Sub-Total	9.60	14.60					
Full Shrubs							
Artemisia cana	12.72	19.34	7.79	96.00	12.31	31.65	2
Chrysothamnus viscidflorus	2.00	3.04	5.07	16.00	2.05	5.09	11
Sub-Total	14.72	22.38					
Introduced Perennial Grasses							
Agropyron cristatum	0.08	0.12	0.40	4.00	0.51	0.63	27
Bromus inermis	1.68	2.55	3.64	24.00	3.08	5.63	9
Sub-Total	1.76	2.67					
Lower Plants							
Lichens	0.96	1.46	1.74	28.00	3.59	5.05	12
Sub-Total	0.96	1.46					
Perennial Forbs							
Allium textile	0.08	0.12	0.40	4.00	0.51	0.63	28
Eremogone hookeri	0.08	0.12	0.40	4.00	0.51	0.63	30
Sphaeralcea coccinea	0.16	0.24	0.55	8.00	1.03	1.27	24
Taraxacum officinale	0.08	0.12	0.40	4.00	0.51	0.63	34
Vicia americana	0.16	0.24	0.80	4.00	0.51	0.75	26
Zygadenus venenosus	0.08	0.12	0.40	4.00	0.51	0.63	36

Ludeman
Report: Cover Summary

Site Id: Silver Sage
Name:
Comm. Type/Form:
Sample Date: 7/1/2008

*() Represents Second Hit Data

Sample Method: Point Intercept
Sample Size: 50 Meter Transect
Number of Samples: 25
Report Date: 11/6/2008

Species	Cover (%) Mean Absolute *	Relative	Std. Dev. n - 1	Frequency (%) Absolute	Relative	I.V.	Rank
Sub-Total	0.64	0.96					
Sub-Shrubs & Half-Shrubs							
Krascheninnikovia lanata	0.08	0.12	0.40	4.00	0.51	0.63	31
Sub-Total	0.08	0.12					
Warm Season Perennial Grasses							
Bouteloua gracilis	2.08	3.16	2.91	48.00	6.15	9.31	7
Sporobolus airoides	0.56	0.85	1.47	16.00	2.05	2.90	15
Sporobolus cryptandrus	0.24	0.36	0.66	12.00	1.54	1.90	21
Sub-Total	2.88	4.37					
Total Stratified Vegetation Cover	64.80	0.93	6.83				
Total Non-Stratified Vegetation Cover	64.80	0.93	6.83				
LITTER/ROCK	20.88		4.44				
Total Ground Cover	86.64		5.65				
BARE SOIL	13.36		5.65				
Total Cover	99.00		0.00				
Species Abundance (No. of Species/Sample)	36.00						

Ludeman
Report: Cover Summary

Site Id: Crested Wheatgrass
Name:
Comm. Type/Form:
Sample Date: 7/1/2008

*() Represents Second Hit Data

Sample Method: Point Intercept
Sample Size: 50 Meter Transect
Number of Samples: 25
Report Date: 11/6/2008

Species	Cover (%) Mean Absolute *	Relative	Std. Dev. n - 1	Frequency (%) Absolute	Relative	I.V.	Rank
Annual Forbs							
Alyssum desertorum	4.88	9.31	4.44	88.00	16.06	25.37	2
Lappula redowskii	0.16(0.08)	0.31	0.55	8.00	1.46	1.77	21
Melilotus officinalis	0.32	0.61	0.95	12.00	2.19	2.80	14
Monolepis nuttalliana	0.08	0.15	0.40	4.00	0.73	0.88	29
Plantago patagonica	0.64	1.22	1.11	28.00	5.11	6.33	6
Sub-Total	6.08	11.60					
Annual Grasses							
Bromus tectorum	1.68	3.21	4.15	24.00	4.38	7.59	4
Vulpia octoflora	0.80	1.53	1.29	32.00	5.84	7.37	5
Sub-Total	2.48	4.74					
Cacti & Succulents							
Opuntia polyacantha	0.24	0.46	0.88	8.00	1.46	1.92	19
Sub-Total	0.24	0.46					
Cool Season Perennial Grasses							
Elymus smithii	0.16	0.31	0.80	4.00	0.73	1.04	24
Elymus spicatus	0.56	1.07	2.42	8.00	1.46	2.53	16
Hesperostipa comata	0.80	1.53	1.73	20.00	3.65	5.18	11
Koeleria macrantha	0.24	0.46	0.88	8.00	1.46	1.92	18
Poa secunda	0.40	0.76	2.00	4.00	0.73	1.49	23
Sub-Total	2.16	4.13					
Full Shrubs							
Artemisia tridentata	0.80(0.08)	1.53	2.16	24.00	4.38	5.91	8
Sub-Total	0.80	1.53					
Introduced Perennial Grasses							
Agropyron cristatum	33.60	64.12	8.21	100.00	18.25	82.37	1
Sub-Total	33.60	64.12					
Lower Plants							
Lichens	0.56	1.07	1.08	24.00	4.38	5.45	9
Sub-Total	0.56	1.07					
Perennial Forbs							
Astragalus spatulatus	0.16	0.31	0.55	8.00	1.46	1.77	20
Calochortus nuttallii	0.08	0.15	0.40	4.00	0.73	0.88	26
Convolvulus arvensis	0.08	0.15	0.40	4.00	0.73	0.88	27
Gaura coccinea	0.24	0.46	0.66	12.00	2.19	2.65	15
Lomatium foeniculaceum	0.08	0.15	0.40	4.00	0.73	0.88	28
Lygodesmia juncea	0.56	1.07	1.36	16.00	2.92	3.99	12
Medicago sativa	1.12	2.14	4.25	8.00	1.46	3.60	13
Psoralea tenuiflora	1.28	2.44	3.26	20.00	3.65	6.09	7
Sphaeralcea coccinea	0.48	0.92	0.87	24.00	4.38	5.30	10
Vicia americana	0.16	0.31	0.55	8.00	1.46	1.77	22
Sub-Total	4.24	8.10					
Sub-Shrubs & Half-Shrubs							
Artemisia frigida	0.08	0.15	0.40	4.00	0.73	0.88	25
Sub-Total	0.08	0.15					
Warm Season Perennial Grasses							
Aristida purpurea	1.68	3.21	3.30	32.00	5.84	9.05	3

Ludeman
Report: Cover Summary

Site Id: Crested Wheatgrass
Name:
Comm. Type/Form:
Sample Date: 7/1/2008

*() Represents Second Hit Data

Sample Method: Point Intercept
Sample Size: 50 Meter Transect
Number of Samples: 25
Report Date: 11/6/2008

Species	Cover (%) Mean Absolute *	Relative	Std. Dev. n - 1	Frequency (%) Absolute	Relative	I.V.	Rank
Bouteloua gracilis	0.48	0.92	2.02	8.00	1.46	2.38	17
Sub-Total	2.16	4.13					
Total Stratified Vegetation Cover	52.00	1.83	7.35				
Total Non-Stratified Vegetation Cover	51.84	1.83	7.14				
LITTER/ROCK	23.68		5.91				
Total Ground Cover	76.08		5.87				
BARE SOIL	23.92		5.87				
Total Cover	99.00		0.00				
Species Abundance (No. of Species/Sample)	29.00						

ADDENDUM 3.5-F:
DENSITY SUMMARIES

Ludeman
Report: Density Summary

Site Id: Upland Grassland
Name:
Comm. Type/Form:
Sample Date: 6/30/2008

Sample Method: Transect
Sample Size: 50 sq. m.
Number of Samples: 25
Report Date: 8/26/2008

	Mean (Number/Plot)	Relative Density	Std. Dev. n - 1 (Number/Plot)	Mean (Number/sq.m.)	Mean (Number/Acre)
Full Shrubs					
Artemisia tridentata	2.32	13.98	6.13	0.05	187.85
Sub-Total	2.32	13.98	6.13	0.05	187.85
Sub-Shrubs & Half-Shrubs					
Artemisia frigida	13.68	82.41	21.65	0.27	1,107.69
Artemisia ludoviciana	0.12	0.72	0.60	0.00	9.72
Gutierrezia sarothrae	0.48	2.89	1.58	0.01	38.87
Sub-Total	14.28	86.02	23.83	0.29	1,156.28
Total	16.60	100.00	22.19	0.33	1,344.13

Ludeman
Report: Density Summary

Site Id: Big Sage Shrubland
Name:
Comm. Type/Form:
Sample Date: 6/23/2008

Sample Method: Transect
Sample Size: 50 sq. m.
Number of Samples: 26
Report Date: 8/27/2008

	Mean (Number/Plot)	Relative Density	Std. Dev. n - 1 (Number/Plot)	Mean (Number/sq.m.)	Mean (Number/Acre)
Full Shrubs					
Artemisia cana	0.50	1.00	1.66	0.01	40.49
Artemisia tridentata	46.00	91.93	23.91	0.92	3,724.70
Sub-Total	46.50	92.93	25.56	0.93	3,765.18
Sub-Shrubs & Half-Shrubs					
Artemisia frigida	2.04	4.07	5.30	0.04	165.06
Artemisia pedatifida	1.38	2.77	7.06	0.03	112.11
Krascheninnikovia lanata	0.12	0.23	0.43	0.00	9.34
Sub-Total	3.54	7.07	12.79	0.07	286.52
Total	50.04	100.00	25.22	1.00	4,051.70

Ludeman
Report: Density Summary

Site Id: UG/RB
Name:
Comm. Type/Form:
Sample Date: 7/2/2008

Sample Method: Transect
Sample Size: 50 sq. m.
Number of Samples: 25
Report Date: 8/26/2008

	Mean (Number/Plot)	Relative Density	Std. Dev. n - 1 (Number/Plot)	Mean (Number/sq.m.)	Mean (Number/Acre)
Full Shrubs					
Artemisia tridentata	8.52	55.61	10.10	0.17	689.88
Atriplex canescens	0.16	1.04	0.47	0.00	12.96
Chrysothamnus sp.	0.40	2.61	2.00	0.01	32.39
Sub-Total	9.08	59.27	12.58	0.18	735.22
Sub-Shrubs & Half-Shrubs					
Artemisia frigida	5.76	37.60	14.32	0.12	466.40
Artemisia pedatifida	0.04	0.26	0.20	0.00	3.24
Yucca glauca	0.44	2.87	2.20	0.01	35.63
Sub-Total	6.24	40.73	16.72	0.12	505.26
Total	15.32	100.00	17.51	0.31	1,240.49

Ludeman
Report: Density Summary

Site Id: Lowland Grassland
Name:
Comm. Type/Form:
Sample Date: 7/1/2008

Sample Method: Transect
Sample Size: 50 sq. m.
Number of Samples: 25
Report Date: 8/28/2008

	Mean (Number/Plot)	Relative Density	Std. Dev. n - 1 (Number/Plot)	Mean (Number/sq.m.)	Mean (Number/Acre)
Full Shrubs					
Artemisia cana	0.08	0.13	0.40	0.00	6.48
Artemisia tridentata	7.28	12.24	13.91	0.15	589.47
Rosa woodsii	1.12	1.88	3.41	0.02	90.69
Symphoricarpos occidentalis	45.56	76.60	108.70	0.91	3,689.07
Sub-Total	54.04	90.85	126.42	1.08	4,375.71
Sub-Shrubs & Half-Shrubs					
Artemisia frigida	4.92	8.27	23.98	0.10	398.38
Artemisia ludoviciana	0.40	0.67	1.12	0.01	32.39
Gutierrezia sarothrae	0.08	0.13	0.40	0.00	6.48
Krascheninnikovia lanata	0.04	0.07	0.20	0.00	3.24
Sub-Total	5.44	9.15	25.70	0.11	440.49
Total	59.48	100.00	107.44	1.19	4,816.19

Ludeman
Report: Density Summary

Site Id: Silver Sage
Name:
Comm. Type/Form:
Sample Date: 7/3/2008

Sample Method: Transect
Sample Size: 50 sq. m.
Number of Samples: 25
Report Date: 8/29/2008

	Mean (Number/Plot)	Relative Density	Std. Dev. n - 1 (Number/Plot)	Mean (Number/sq.m.)	Mean (Number/Acre)
Full Shrubs					
Artemisia cana	54.32	71.51	35.30	1.09	4,398.38
Artemisia tridentata	2.28	3.00	10.58	0.05	184.62
Chrysothamnus viscidflorus	17.32	22.80	40.55	0.35	1,402.43
Sub-Total	73.92	97.31	86.43	1.48	5,985.43
Sub-Shrubs & Half-Shrubs					
Artemisia frigida	1.76	2.32	4.55	0.04	142.51
Atriplex gardneri	0.04	0.05	0.20	0.00	3.24
Krascheninnikovia lanata	0.12	0.16	0.44	0.00	9.72
Linanthus pungens	0.12	0.16	0.60	0.00	9.72
Sub-Total	2.04	2.69	5.79	0.04	165.18
Total	75.96	100.00	52.35	1.52	6,150.61

Ludeman
Report: Density Summary

Site Id: Crested Wheatgrass
Name:
Comm. Type/Form:
Sample Date: 6/30/2008

Sample Method: Transect
Sample Size: 50 sq. m.
Number of Samples: 25
Report Date: 8/18/2008

	Mean (Number/Plot)	Relative Density	Std. Dev. n - 1 (Number/Plot)	Mean (Number/sq.m.)	Mean (Number/Acre)
Full Shrubs					
Artemisia tridentata	5.64	56.63	13.93	0.11	456.68
Chrysothamnus viscidflorus	0.36	3.61	1.44	0.01	29.15
Ericameria nauseosa	0.16	1.61	0.55	0.00	12.96
Sub-Total	6.16	61.85	15.92	0.12	498.79
Sub-Shrubs & Half-Shrubs					
Artemisia frigida	3.28	32.93	7.30	0.07	265.59
Artemisia pedatifida	0.04	0.40	0.20	0.00	3.24
Krascheninnikovia lanata	0.12	1.20	0.60	0.00	9.72
Linanthus pungens	0.36	3.61	1.80	0.01	29.15
Sub-Total	3.80	38.15	9.90	0.08	307.69
Total	9.96	100.00	18.39	0.20	806.48