

FIELD OFFICE TECHNICAL GUIDE: BLACK HILLS TECHNICAL GUIDE
LOCATION:
AREA:
STATE: SOUTH DAKOTA

RANGE SITE DESCRIPTION

RANGE SITE NAME . : OVERFLOW
RANGE SITE NUMBER : 062XY005SD
ORIGINAL DATE ... : 05/13/1992
REVISION DATE ... : 05/13/1992
AUTHOR'S INITIALS : RDB/DWS

* SOIL NARRATIVE CONTINUED:

THESE ARE DEEP, WELL DRAINED SOILD FORMED IN LOAMY ALLUVIUM WEATHERED FROM SEDIMENTARY AND METAMORPHIC ROCK. SURFACE TEXTURES ARE LOAM TO COBBLY LOAM AND SUBSURFACE TEXTURES ARE LOAM OR LOAMY SAND OR GRAVELLY SANDY LOAM. PERMEABILITY IS MODERATE MODERATELY RAPID. THESE SOILS ARE IN MOUNTAIN MEADOWS OR ON FLOOD PLAINS AND LOW TERRACES ALONG THE MAJOR CREEKS.

* LIST OF SOIL TAXONOMIC UNITS OR SOILS MAPPING UNITS FOR ALL SOILS INCLUDED IN THIS SITE:

CORDESTON SILT LOAM WINETTI COBBLY LOAM

* LANDSCAPE FACTORS

PHYSIOGRAPHY:

ELEVATION/ASPECT:

LOW 3500 ft / HIGH 7200 ft /

PERCENT SLOPE:

LOW 0
HIGH 10

RANGE SITE NAME: OVERFLOW
 RANGE SITE NUMBER: 062XY005SD

* CLIMATE FACTORS

FREEZE-FREE PERIOD (FFP): 0 TO 0 (DAYS)
 FROST-FREE PERIOD: 111 TO 123 (DAYS)
 MEAN ANNUAL PRECIPITATION (MAP): 18 TO 26 (INCHES)
 MEAN ANNUAL AIR TEMPERATURE (MAAT): 34 TO 55 (F)
 MEAN ANNUAL SOIL TEMPERATURE (MAST): 32 TO 57 (F)

MOISTURE AND TEMPERATURE DISTRIBUTION:

	-JAN---	FEB---	MAR---	APR---	MAY---	JUN---	JUL---	AUG---	SEP---	OCT---	NOV---	DEC---
- PPT -												
HIGH	4.78	4.32	4.79	7.82	15.31	10.02	8.78	7.77	5.08	3.28	6.30	3.51
MEAN	1.13	1.10	1.75	3.10	4.02	4.07	2.56	2.00	1.86	1.47	1.26	1.09
LOW	0.00	0.17	0.52	0.45	0.47	0.81	0.43	0.22	0.04	0.00	0.03	0.19
- TEMP -												
HIGH	33	35	41	51	61	72	81	79	69	58	44	36
MEAN	23	25	30	41	50	60	68	67	57	47	34	27
LOW	14	16	20	30	39	49	56	54	45	36	25	18

* VEGETATION FACTORS - CLIMAX PLANT COMMUNITY

RANGE SITE DESCRIPTION NARRATIVE:

THESE SITES ARE BENEFITED FROM EXCESS WATER RECEIVED FROM OVERFLOW FROM SURROUNDING UPLANDS. THE POTENTIAL NATIVE VEGETATION ON THIS SITE IS MIXED PRAIRIE GRASSES. BIG BLUESTEM, A TALL WARM SEASON GRASS, IS THE MAJOR CONSTANT DOMINANT. OTHER WARM SEASON GRASSES SUCH AS SWITCHGRASS, INDIANGRASS, AND LITTLE BLUESTEM ARE COMMON. COOL SEASON GRASSES SUCH AS GREEN NEEDLEGRASS AND WESTERN WHEATGRASS ARE AN IMPORTANT PART OF THE PLANT COMMUNITY BUT ARE NOT AS ABUNDANT AS THE WARM SEASON GRASSES. BLUEGRASS AND SEDGES ARE COMMON IN THE UNDERSTORY. FORBS ARE COMMON BUT ARE NEVER DOMINANT. SHRUBS SUCH AS LEADPLANT, SNOWBERRY AND WILDROSE OCCUR FREQUENTLY. TREES OCCUR IN SOME AREAS AND CAN BE THE DOMINANT SPECIES WHEN OCCURRING. COMMON TREES INCLUDE PONDEROSA PINE, GREEN ASH, COTTONWOOD, IRONWOOD, BUR OAK, QUACKING ASPEN AND PAPER BIRCH.

RANGE SITE NAME: OVERFLOW
 RANGE SITE NUMBER: 062XY005SD

PERCENT COVER:

GROUND COVER AND STRUCTURE:

	% CANOPY COVER (VERTICAL VIEW)	AVERAGE HEIGHT (FT)	% BASAL AREA COVER
GRASSES AND GRASSLIKES	75	3.50	65
FORBS	10	1.50	5
CRYPTOGAMS	0	0.00	0
SHRUBS	5	3.00	3
TREES	5	15.00	2

PLANT COMMUNITY COMPOSITION AND PRODUCTION:

Herbaceous

Grasses and grasslikes

National Symbol	Common Name	Grp	% Composition by weight	Group % Allowable
ANGE	BIG BLUESTEM	1	0 to 0	20 to 40
PAVI2	SWITCHGRASS	1	0 to 0	20 to 40
SONU2	INDIANGRASS	1	0 to 0	20 to 40
SCSC	LITTLE BLUESTEM	2	0 to 0	0 to 10
BOCU	SIDEOATS GRAMA	2	0 to 0	0 to 10
POA++	BLUEGRASSES	0	0 to 5	0 to 0
STCO3	COLUMBIA NEEDLEGRASS	3	0 to 0	5 to 15
STRI2	RICHARDSEN NEEDLEGRASS	3	0 to 0	5 to 15
STVI4	GREEN NEEDLEGRASS	3	0 to 0	5 to 15
AGSU	BEARDED WHEATGRASS	4	0 to 0	10 to 25
AGTR	SLENDER WHEATGRASS	4	0 to 0	10 to 25
AGSM	WESTERN WHEATGRASS	4	0 to 0	10 to 25
STCO4	NEEDLEANDTHREAD	0	0 to 5	0 to 0
KOPY	PRAIRIE JUNEGRASS	0	0 to 5	0 to 0

RANGE SITE NAME: OVERFLOW
 RANGE SITE NUMBER: 062XY005SD

Grasses and grasslike continued

National Symbol	Common Name	Grp	% Composition by weight	Group % Allowable
CAREX	SEDGES	0	0 to 10	0 to 0

Forbs

National Symbol	Common Name	Grp	% Composition by weight	Group % Allowable
ARLU	CUDWEED SAGEWORT	1	0 to 0	5 to 15
ARFR4	FRINGED SAGEWORT	1	0 to 0	5 to 15
ARCA12	GREEN SAGEWORT	1	0 to 0	5 to 15
SOMI2	MISSOURI GOLDENROD	1	0 to 0	5 to 15
SORI2	STIFF GOLDENROD	1	0 to 0	5 to 15
ACMI2	WESTERN YARROW	1	0 to 0	5 to 15
DAPU5	PURPLE PRAIRIECLOVER	1	0 to 0	5 to 15

Shrubs

National Symbol	Common Name	Grp	% Composition by weight	Group % Allowable
AMCA6	LEADPLANT	1	0 to 0	0 to 10
ROWO	WILDROSE	1	0 to 0	0 to 10
SYOC	WESTERN SNOWBERRY	1	0 to 0	0 to 10
PRVI	COMMON CHOKECHERRY	1	0 to 0	0 to 10

RANGE SITE NAME: OVERFLOW
 RANGE SITE NUMBER: 062XY005SD

Trees

National Symbol	Common Name	Grp	% Composition by weight	Group % Allowable
PIPO	PONDEROSA PINE	1	0 to 0	0 to 10
FRAM2	GREEN ASH	1	0 to 0	0 to 10
PODE3	COTTONWOOD	1	0 to 0	0 to 10
OSVI	HOPHORNBEAM	1	0 to 0	0 to 10
QUMA2	BUR OAK	1	0 to 0	0 to 10
BEPA	PAPER BIRCH	1	0 to 0	0 to 10
POTR10	QUACKING ASPEN	1	0 to 0	0 to 10

Production

Grasses and grasslikes: 65 to 95 % of total
 Forbs: 5 to 15 % of total
 Shrubs: 0 to 10 % of total
 Trees: 0 to 10 % of total
 Lichen community: 0.00 lbs/acre (NOT ANNUAL PRODUCTION)
 Moss community: 0.00 lbs/acre

Cover

Lichen community: 0 % cover
 Moss community: 0 % cover

RANGE SITE NAME: OVERFLOW
 RANGE SITE NUMBER: 062XY005SD

* PLANT GROWTH CURVES

ID	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
NUMBER: SD0001	0	0	5	15	30	25	5	5	10	5	0	0
NAME: 100% COOL SEASON SPECIES												
DESC: 100% OF PRODUCTION PROVIDED BY COOL SEASON SPECIES												
NUMBER: SD0002	0	0	5	15	25	20	15	10	7	3	0	0
NAME: 75% COOL, 25% WARM												
DESC: 75% OF PRODUCTION FROM COOL SEASON PLANTS, 25% FROM WARM SEASON PLANT												
NUMBER: SD0003	0	0	5	15	20	20	20	10	7	3	0	0
NAME: 50% WARM, 50% COOL SEASON												
DESC: 50 % OF PRODUCTION FROM COOL SEASON PLANTS, 50% FROM WARM SEASON												
NUMBER: SD0004	0	0	5	5	15	25	30	10	7	3	0	0
NAME: 75% WARM, 25% COOL SEASON												
DESC: 75% OF FORAGE PRODUCED BY WARM SEASON PLANTS, 25% FROM COOL SEASON												
NUMBER: SD0005	0	0	0	0	10	35	30	20	5	0	0	0
NAME: 100% WARM SEASON PLANTS												
DESC: 100% OF PRODUCTION IS FROM WARM SEASON PLANTS												

* TOTAL ANNUAL PRODUCTION (EXCELLENT CONDITION)

FAVORABLE 4300 TO 4700 lbs/acre

AVERAGE 3600 TO 4100 lbs/acre

UNFAVORABLE 2500 TO 2900 lbs/acre

LIVESTOCK DATA

* ESTIMATED STOCKING RATE

EXCELLENT 0 TO 0 AC/AU OR 1.2100 TO 1.6000 AUM/AC

GOOD 0 TO 0 AC/AU OR 0.8510 TO 1.2000 AUM/AC

FAIR 0 TO 0 AC/AU OR 0.5260 TO 0.8500 AUM/AC

POOR 0 TO 0 AC/AU OR 0.1750 TO 0.5250 AUM/AC

RANGE SITE NAME: OVERFLOW
RANGE SITE NUMBER: 062XY005SD

* WILDLIFE SPECIES LIST:

WHITE-TAILED DEER	MULE DEER
TURKEY	RUFFED GROUSE
ELK	RED SQUIRRELS
ANTELOPE	
SHARP TAILED GROUSE	RACCOONS
SKUNKS	COYOTES
RED AND GRAY FOX	BOBCATS
GOLDEN EAGLES	RED-TAILED HAWK
BEAVER	
MINK	

* RANGE SITE DEGRADATION:

WITH CONTINUOUS OVERUSE THE EXTENT OF BIG BLUESTEM. SWICHGRASS, INDIANGRASS, GREEN NEEDLEGRASS AND LITTLE BLUESTEM RAPIDLY THIN OUT AND THE EXTENT OF WESTERN WHEATGRASS AND KENTUCKY BLUEGRASS RAPIDLY INCREASES. IF OVERUSE CONTINUES, KENTUCKY BLUEGRASS A SHORT, COOL SEASON GRASS, INCREASES IN EXTENT AND BECOMES DOMINANT. THE RESULT IS LOW FORAGE PRODUCTION, DEPLETED WILDLIFE VALUES, AND A POOR WATER CYCLE.

* TYPICAL LOCATION:

TO BE ENTERED LOCALLY.

