

Line Point Intercept Form
(Complete During All Monitoring Efforts)

Collection Date: _____
 Service Area: Tall Grass
 Site ID: 100
 Management Unit: Limy Upland
 Evaluation Unit: 1
 Transect #: 1
 Collector(s): _____
 Start Coordinates: _____
 End Coordinates: _____

Code	Growth Habit
PG	GPC Pefered Grasses
TG	Other Tufted Grass
SG	Sod Grass
FO	Forb
SH	Shrub*
SS	Sand Sagebrush
SO	Shinnery Oak*
WL	Woody Litter
HL	Herbacous Litter
OL	Organic Litter
AL	Artifical Litter
BG	Bare Ground
*	add* if >5 feet tall

Notes:

Greater Prairie-chicken preferred grasses: Big bluestem, switchgrass, Indiangrass, eastern gamagrass, little bluestem

Mark (ft.)	Interceptions						
	1	2	3	4	5	6	BG
0	PG	TG	FO				
3	PG	HL					
6	SS						
9	TG						
12	BG						
15	PG						
18	SH						
21	BG						
24	PG						
27	FO						
30	FO						
33	FO						
36	hl						bg
39							bg
42							bg
45							
48							
51							
54							
57							
60							
63							
66							
69							
72							
75							

Mark (ft.)	Interceptions						
	1	2	3	4	5	6	BG
78							
81							
84							
87							
90							
93							
96							
99							
102							
105							
108							
111							
114							
117							
120							
123							
126							
129							
132							
135							
138							
141							
144							
147							
150							
TOTAL HITS=							16

Results:

	PG	TG	SG	FO	SH	SS	SO	WL	HL	OL	AL	Canopy Total	Litter	BG
Number of Hits:	4	1	0	3	1	1	0	0	1	0	0	10	1	3
% Canopy Cover:	7.8	2.0	0.0	5.9	2.0	2.0	0.0	0.0	2.0	0.0	0.0	71.4	7.1	21.4

Total Forb Hits: 3
 Total Grass & Shrub Hits: 8 PG, SS, SO Hits: 5
 (PG, TG, SG, SH, SS, SO)

Forb Comp. %: 30.0
 Preferred Grass/Shrub Comp. (%): 62.5

WAFWA Visual Obstruction Reading (VOR) Data Form

(Complete Only During Breeding Season at Management Sites)

Collection Date: 0
 Service Area: Tall Grass
 Site ID: 100
 Management Unit: Limy Upland
 Evaluation Unit: 1
 Transect #: 1
 Collector(s): 0
 Start Coordinates: 0
 End Coordinates: 0

Mark (ft)	Visual Obstruction Reading (VOR)												
	Obscured Bands												
20													
40													
60													
80													
100													
120													
140													

Notes:
 Optimal VOR for nesting: 2.5

•VOR pole is 5 feet tall, 1 inch in diameter, with bands 4 inches in length. Place VOR pole at the mark, on the north side of the transect line. Sighting pole is 1.5 feet tall. Placed at a distance of 6.5 feet from the VOR pole, perpendicular to, and on the north side of, the transect line. One reading taken per mark.

•VOR is recorded as a decimal number of each band obscured. For example, 1.5 means that all of band 1 is completely obscured and HALF of band-2 is obscured, or 3.25 means that all of bands-1,2, & 3 are obscured and 0.25 of band 4 is completely obscured.

Note: Record "0" if a reading does not result in a VOR ; this indicates that a reading was made.

Results:

#DIV/O!	#REF!	Average VOR Reading
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WAFWA Plant Height Data Form

(Complete Only During Breeding Season at Management Sites)

Collection Date: 0
 Service Area: Tall Grass
 Site ID: 100
 Management Unit: Limy Upland
 Evaluation Unit: 1
 Transect #: 1
 Collector(s): 0
 Start Coordinates: 0
 End Coordinates: 0

Mark (ft)	Herbaceous Plant Height (inches)	Woody Plant Height (inches)
15		
25		
35		
45		
55		
65		
75		
85		
95		
105		
115		
125		
135		
145		
Avg.	#DIV/0!	#DIV/0!

Notes:

Plant Height	Record to:
0' to 3 feet:	Nearest inch
3'1" to 10' feet:	Nearest foot
>10'.1" feet	Nearest 5 feet

•Measure tallest living or dead plant, including seed heads, intersecting a 12" diameter vertical cylinder next to and north of the tape, at the mark.

WAFWA Plant Phenology Form

(Complete Only During Breeding Season at Management Sites)

Collection Date: 0
 Service Area: Tall Grass
 Site ID: 100
 Management Unit: Limy Upland
 Evaluation Unit: 1
 Transect #: 1
 Collector(s): 1
 Start Coordinates: 0
 End Coordinates: 0

GRASS (check 2 boxes when both warm- & cool-season grasses are present)	
1 - GREEN LEAVES BEFORE BOOT	
2 - BOOT STAGE	
3 - SEED SOFT DOUGH TO RIPE	
4 - SEED DESIMINATION	
5 - WINTER DORMANCY CURED	
FORB	
1 - GREEN BEFORE FLOWERING	
2 - FULL BLOOM PETALS FALLING	
3 - FRUIT RIPENING	
4 - FRUIT RIPE TRANSITIONAL TO FALL DORMANCY	
5 - SEED DESIMINATION TRANSITIONAL TO WINTER DORMANCY	
SHRUB	
1 - GREEN LEAVES ONLY TRANSITIONAL TO FULL LEAF STAGE	
2 - FLOWERS IN BUD, GREEN FLOWERING STAGE	
3 - FLOWERS OPEN TRANSITIONAL TO FRUIT FORM	
4 - SEED MATURITY TRANSITIONAL TO FALL DORMANCY * = GREEN FRUIT WT	
5 - WINTER DORMANCY TRANSITIONAL TO CURED LEAVES ** = DRY FRUIT WEIGHT	
SAND SAGEBRUSH	
1 - BUDS SWOLLEN	
2 - EARLY LEAF DEVELOPMENT	
3 - STEM ELONGATION, FULL LEAF	
4 - FLOWERING	
5 - SEED MATURITY	
6 - EARLY LEAF SENESCENCE	
7 - DORMANCY	
SHINNERY OAK	
1 - BUD SWELL	
2 - FLOWERING CATKINS	
3 - PISTILLATE FLOWERS AND OR LATERAL BUD FORMATION IN LEAF AXILS	
4 - LEAVES < 4 CM	
5 - LEAVES > 4 CM	
6 - ACORNS DISTINGUISHED FROM CAP	
7 - ACORNS GREEN	
8 - ACORNS SEPARATE FROM CAP	
9 - DORMANCY	

WAFWA Tree Coverage, Habitat Availability, and Vegetation Summary Form

(Complete During All Monitoring Efforts)

Collection Date: 0
 Service Area: Tall Grass
 Site ID: 100
 Management Unit: Limy Upland
 Evaluation Unit: 1
 Collector(s): 0

A map will be inserted here showing the evaluation units overlaid with aerial imagery. The map will also show the evaluation unit centroid and the circular 1-mile radius around it.

	Total Canopy (%)	Prefered Grass/Shrub Composition (%)	Tree Cover Across Entire Unit (%)
Transect #1	71.4	62.5	NA
Transect #2	#DIV/0!	#DIV/0!	NA
Average	71.4	62.5	0.0%

WAFWA Habitat Evaluation Guide (HEG) Score Sheet

(Complete During All Monitoring Efforts)

Collection Date: 0
 Service Area: Tall Grass
 Site ID: 100
 Management Unit: Limy Upland
 Evaluation Unit: 1
 Collector(s): 0

		Score
Instructions: Score by using a "x" adjacent to appropriate condition.		
A. ANTHROPOGENIC FRAGMENTATION		
Impact buffers will be applied to existing anthropogenic features prior to estimating the number of previously		
Newly Impacted Acreage (calculated by applying impact buffers)		
<i>only applicable for estimating debits</i>		
CHAT 1		
CHAT 2		
CHAT 3		
CHAT 4		
Unimpacted Acreage (calculated by applying impact buffers)		
<i>only applicable for estimating credits</i>		
CHAT 1		6.43
CHAT 2		0.00
CHAT 3		0.00
CHAT 4		0.00
B. SITE CONDITION		
1.) <u>Vegetation Cover</u> - Non-overlapping canopy cover of herbaceous plants and woody shrubs within evaluation unit		
a Cover is >45%	1.00	
b Cover is 30-45%	0.85	
c Cover is 15-29%	0.60	
d Cover is < 15%	0.25	
e Evaluation unit is used for crop production	0.05	
<i>Assigned Point Value</i>		0
2.) little bluestem, sideoats grama, big bluestem, indiagrass, sand bluestem, switchgrass, sand sagbrush, and sand		
a >75% of vegetation is preferred species of grasses or shrubs	1.00	
b 50-74% of vegetation is preferred species of grasses or shrubs	0.85	
c 25-49% of vegetation is preferred species of grasses or shrubs	0.60	
d < 25% of vegetation is preferred species of grasses or shrubs	0.25	
e Evaluation unit is used for crop production	0.05	
<i>Assigned Point Value</i>		0
3.) <u>Presence of Tall Woody Plants</u>		
a No woody plants >3ft in height in uplands within the evaluation unit	1.00	
b Woody plants >3ft in height have an average canopy cover of <1% in the upland portion of the evaluation unit	0.85	
c Woody plants >3ft in height have an average canopy cover of 1-5% in the upland portion of the evaluation unit	0.60	
d Woody plants >3ft in height have an average canopy cover >5% in the upland portion of the evaluation unit	0.25	
e Evaluation unit is used for crop production	0.05	
<i>Assigned Point Value</i>		0

WAFWA Habitat Evaluation Guide (HEG) Score Sheet

Availability of Desired Plant Cover - Percentage of area consisting of grass with <1% canopy cover of trees >3 ft. in height; do not remove impacted acreage when making this calculation

Estimated within a one mile radius from center of evaluation unit (2000 acres)

- a >90% of area
- b 80-90% of area
- c 70-79% of area
- d 60-69% of area
- e 50-59% of area
- f 40-49% of area
- g 30-39% of area
- h 20-29% of area
- i 10-19% of area
- j 1-9% of area
- k <1% of area

	Score
1	
0.9	
0.8	
0.7	
0.6	
0.5	x
0.4	
0.3	
0.2	
0.1	
0	
Assigned Point Value	0.5

	Score
Condition Score	0
Maximum Score	1

	Impacted Habitat Units	Managed Habitat Units	Impact Multiplier	Offset Multiplier	Annual Impact Units	Annual Offset Units	Endowment Multiplier	Endowment Units
CHAT 1	0.00	0.00	2.5	1.25	0.00	0.00		0.00
CHAT 2	0.00	0.00	2.1	1.05	0.00	0.00	25	0.00
CHAT 3	0.00	0.00	1.8	0.9	0.00	0.00		0.00
CHAT 4	0.00	0.00	1.6	0.8	0.00	0.00		0.00
TOTAL	0.00	0.00			0.00	0.00		0.00

WAFWA Line Point Intercept Form
(Complete During All Monitoring Efforts)

Collection Date: 0
 Service Area: Tall Grass
 Site ID: 100
 Management Unit: Limy Upland
 Evaluation Unit: 1
 Transect #: 2
 Collector(s): 0
 Start Coordinates: _____
 End Coordinates: _____

Code	Growth Habit
PG	LPC Preferred Grasses
TG	Other Tufted Grass
SG	Sod Grass
FO	Forb
SH	Shrub*
SS	Sand Sagebrush
SO	Shinnery Oak*
WL	Woody Litter
HL	Herbaceous Litter
OL	Organic Litter
AL	Artificial Litter
BG	Bare Ground
*	add* if >5 feet tall

Notes:
 Greater Prairie-chicken preferred grasses: Big bluestem, switchgrass, Indiangrass, eastern gamagrass, little bluestem

Mark (ft.)	Interceptions						
	1	2	3	4	5	6	BG
0							
3							
6							
9							
12							
15							
18							
21							
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30							
33							
36							
39							
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Mark (ft.)	Interceptions						
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117							
120							
123							
126							
129							
132							
135							
138							
141							
144							
147							
150							
TOTAL HITS=							0

Results:

	PG	TG	SG	FO	SH	SS	SO	WL	HL	OL	AL	Canopy Total	Litter	BG
Number of Hits:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Canopy Cover:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	#DIV/0!	#####	#####

Total Grass & Shrub Hits: PG, SS, SO Hits: Preferred Grass/Shrub Comp. (%):
 (PG, TG, SG, SH, SS, SO)

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Mark (ft)	Visual Obstruction Reading (VOR)									
	Obscured Bands									
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100										
120										
140										

Notes:

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Results:

#DIV/0!	#REF!	Average VOR Reading
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WAFWA Plant Height Data Form

(Complete Only During Breeding Season at Management Sites)

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 Site ID: 100
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 Transect #: 2
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45		
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65		
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Avg.	#DIV/0!	#DIV/0!

Notes:

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WAFWA Plant Phenology Form
(Complete Only During Breeding Season at Management Sites)

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 Site ID: 100
 Management Unit: 1
 Evaluation Unit: 1
 Transect #: 2
 Collector(s): 2
 Start Coordinates: 0
 End Coordinates: 0

GRASS (check 2 boxes when both warm- & cool-season grasses are present)	
1 - GREEN LEAVES BEFORE BOOT	
2 - BOOT STAGE	
3 - SEED SOFT DOUGH TO RIPE	
4 - SEED DESIMINATION	
5 - WINTER DORMANCY CURED	
FORB	
1 - GREEN BEFORE FLOWERING	
2 - FULL BLOOM PETALS FALLING	
3 - FRUIT RIPENING	
4 - FRUIT RIPE TRANSITIONAL TO FALL DORMANCY	
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SHRUB	
1 - GREEN LEAVES ONLY TRANSITIONAL TO FULL LEAF STAGE	
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SAND SAGEBRUSH	
1 - BUDS SWOLLEN	
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SHINNERY OAK	
1 - BUD SWELL	
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4 - LEAVES < 4 CM	
5 - LEAVES > 4 CM	
6 - ACORNS DISTINGUISHED FROM CAP	
7 - ACORNS GREEN	
8 - ACORNS SEPARATE FROM CAP	
9 - DORMANCY	

