

Contestant Name/#

Key

County/Chapter

Orange

Site #

1

North Dakota Range Judging Card

Ecological Site



North Dakota Ecological Site Key (Choose one)

I. Restrictive to Root Growth: These sites have a limiting layer within 20 inches of the surface of rock, gravel, stone or restrictive clay (hardpan), which restricts most root growth beyond this layer. (If no restriction, go to II).

A. Limiting layer is rock, scoria, gravel, or stone Shallow ☐

B. Limiting layer is restrictive clay Claypan ☐

II. Non-Restrictive to Root Growth: These sites do not have a restrictive layer within 20 inches of the soil surface.

C. Lowlands — These sites receive additional moisture from occasional stream overflow, run-in from adjacent slopes or during major flooding events. (If no additional moisture occurs, go to D).

1. No water table within 5 feet from surface, typically found in swales,
no salt deposits on soil surface Overflow ☒

2. Water table within 5 feet from surface
This site will have salts evident on the surface when dry Saline Lowland ☐

D. Uplands — These sites do not receive additional moisture from occasional stream overflow, run-in from adjacent slopes, or during major flooding events.

1. These sites occur on slopes usually less than 15%

a. Soils will not form a firm ball when wet, coarse Sands ☐

b. Soils will form a firm ball and produce a short ribbon less than
1 inch, feel gritty Sandy ☐

c. Soils will form a ribbon up to 2 inches and not feel gritty, like flour
when dry Loamy ☐

d. Soils form a ribbon greater than 2 inches, support their own weight
and feel greasy when wet Clayey ☐

2. These sites occur on sidehills with slopes usually greater than 15%

a. This site is found on glaciated soils *east* of the Missouri River,
thin top soil Thin Loamy ☐

b. This site is found on non-glaciated soils *west* of the Missouri River,
thin top soil Limy Backslope ☐

Similarity Index (Choose one)

- Excellent (76 to 100%) ☐
 Good (51 to 75%) ☐
 Fair (26 to 50%) ☒ 32%
 Poor (0 to 25%) ☐

Sharp-tailed Grouse Site Evaluation**Nesting Cover****A) Desirable Nesting Plants**

- > 30% aerial cover ☐
 10 to 30% aerial cover ☒
 < 10% aerial cover ☐

B) Nesting Cover Height (marked plant)

- > 16 inches ☒
 4 to 16 inches ☐
 < 4 inches ☐

Food habitat (desirable plants)

- > 30% by weight ☐
 10 to 30% by weight ☐
 < 10% by weight ☒

Protective Cover (% woody cover)

- > 30% aerial cover ☐
 10 to 30% aerial cover ☐
 < 10% aerial cover ☒

Recommended Management Practices Sharp-tailed Grouse

- Continue present management ☐
 Improve nesting cover ☒
 Decrease stocking rate ☐
 Add more livestock grazing or burn ☒
 Improve food habitat ☒
 Improve protective cover ☒
 Apply woody plant control ☐

Beef Cattle Site Evaluation**Forage Value (desirable plants)**

- Excellent (76 to 100%) ☒
 Good (51 to 75%) ☐
 Fair (26 to 50%) ☐
 Poor (0 to 25%) ☐

Stocking Rate (Given on Site Key)

- Increase ☒
 Decrease ☒
 Keep the same ☐

Distribution Factors**A) Slope**

- < 5% ☒
 5 to 10% ☐
 11 to 15% ☐
 > 15% ☐

B) Grazing Restraints

- 1) Terrain: Rough ☐
 Smooth ☒
 2) Woody canopy: > 30% ☐
 < 30% ☒

Recommended Management Practices Beef

- Continue present management ☐
 Develop water ☐
 Decrease stocking rate ☒
 Increase stocking rate ☐
 Change kind of livestock ☐
 Apply woody canopy control ☐
 Apply undesirable grass and forb control ☐
 Burn or mow old grass ☐
 Defer part of grazing season ☒
 Defer one or more grazing season's ☐
 Plant adapted forage species ☐
 Control noxious weeds ☒
 Begin a plan grazing system ☒

Site # 1

55 Major Land Resource Area

Orange flags

Vegetation	Ov - Site Composition Maximum ¹ -	SL	Sw	Cp	Sa	Observed Composition ²	Amount Allowable ³
Grasses	75	90	75	80	75		
Green needlegrass	15			20	25	2	2
Porcupine grass							
Western wheatgrass	10	30	5	30			
Slender wheatgrass							
Needle-and-thread			5	10	10		
Prairie sandreed					25		
Blue grama				15	5		
Little bluestem	5		35		5		
Sideoats grama							
Big bluestem	40		20			15	15
Switchgrass Sand bluegrass							
Prairie cordgrass		25				15	-
Reed Canary Bearded WG Foxtail Barley		20					
Nuttall's alkaligrass							
Plains muhly	5						
Sand dropseed							
Prairie Junegrass							
Red threeawn							
Prairie dropseed		15	10	5	5	3 + 15	5
Other native grass							
Invaders							0
Sedges	5	5	5	5	10		
Upland sedge							
Midland sedge						1	1
Forbs and legumes	10	5	10	10	10		
Natives						8	8
Invaders						1	0
Leaky spurge							
Woodies	10	-	10	5	5		
Natives						1	1
Invaders							
	100%					100%	
						Index	32 %

Similarity Index: 0 to 25 = Poor; 26 to 50 = Fair; 51 to 75 = Good; 76 to 100 = Excellent

Ov - Overflow, SL - Saline Lowland, Sw - Shallow, TL - Thin Loamy, Sa - Sands

¹Modified from NRCS Technical Guide

²Visual estimation made by judger

³The smaller value from two previous columns

Contestant Name/# Key County/Chapter Green Site # 2

North Dakota Range Judging Card

Ecological Site



North Dakota Ecological Site Key (Choose one)

I. Restrictive to Root Growth: These sites have a limiting layer within 20 inches of the surface of rock, gravel, stone or restrictive clay (hardpan), which restricts most root growth beyond this layer. (If no restriction, go to II).

A. Limiting layer is rock, scoria, gravel, or stone **Shallow** ☒

B. Limiting layer is restrictive clay **Claypan** ☐

II. Non-Restrictive to Root Growth: These sites do not have a restrictive layer within 20 inches of the soil surface.

C. Lowlands — These sites receive additional moisture from occasional stream overflow, run-in from adjacent slopes or during major flooding events. (If no additional moisture occurs, go to D).

1. No water table within 5 feet from surface, typically found in swales,
no salt deposits on soil surface **Overflow** ☐

2. Water table within 5 feet from surface
This site will have salts evident on the surface when dry **Saline Lowland** ☐

D. Uplands — These sites do not receive additional moisture from occasional stream overflow, run-in from adjacent slopes, or during major flooding events.

1. These sites occur on slopes usually less than 15%
a. Soils will not form a firm ball when wet, coarse **Sands** ☐

b. Soils will form a firm ball and produce a short ribbon less than
1 inch, feel gritty **Sandy** ☐

c. Soils will form a ribbon up to 2 inches and not feel gritty, like flour
when dry **Loamy** ☐

d. Soils form a ribbon greater than 2 inches, support their own weight
and feel greasy when wet **Clayey** ☐

2. These sites occur on sidehills with slopes usually greater than 15%
a. This site is found on glaciated soils *east* of the Missouri River,
thin top soil **Thin Loamy** ☐

b. This site is found on non-glaciated soils *west* of the Missouri River,
thin top soil **Limy Backslope** ☐

Site # 2

Green flags

Similarity Index (Choose one)

- Excellent (76 to 100%) ☐
 Good (51 to 75%) ☒ 56
 Fair (26 to 50%) ☐
 Poor (0 to 25%) ☐

Sharp-tailed Grouse Site Evaluation

Nesting Cover

- A) Desirable Nesting Plants
 > 30% aerial cover ☒
 10 to 30% aerial cover ☐
 < 10% aerial cover ☐
 B) Nesting Cover Height (marked plant)
 > 16 inches ☐
 4 to 16 inches ☒
 < 4 inches ☐

Food habitat (desirable plants)

- > 30% by weight ☐
 10 to 30% by weight ☐
 < 10% by weight ☒

Protective Cover (% woody cover)

- > 30% aerial cover ☐
 10 to 30% aerial cover ☐
 < 10% aerial cover ☒

Recommended Management Practices Sharp-tailed Grouse

- Continue present management ☐
 Improve nesting cover ☐
 Decrease stocking rate ☐
 Add more livestock grazing or burn ☐
 Improve food habitat ☒
 Improve protective cover ☒
 Apply woody plant control ☐

Beef Cattle Site Evaluation

Forage Value (desirable plants)

- Excellent (76 to 100%) ☒
 Good (51 to 75%) ☐
 Fair (26 to 50%) ☐
 Poor (0 to 25%) ☐

Stocking Rate (Given on Site Key)

- Increase ☐
 Decrease ☒
 Keep the same ☐

Distribution Factors

- A) Slope
 < 5% ☐
 5 to 10% ☐
 11 to 15% ☐
 > 15% ☒
 B) Grazing Restraints
 1) Terrain: Rough ☐
 Smooth ☒
 2) Woody canopy: > 30% ☐
 < 30% ☒

Recommended Management Practices Beef

- Continue present management ☐
 Develop water ☒
 Decrease stocking rate ☒
 Increase stocking rate ☐
 Change kind of livestock ☐
 Apply woody canopy control ☐
 Apply undesirable grass and forb control ☐
 Burn or mow old grass ☐
 Defer part of grazing season ☒
 Defer one or more grazing season's ☐
 Plant adapted forage species ☐
 Control noxious weeds ☒
 Begin a plan grazing system ☒

Site #2

55 Major Land Resource Area

Green flags

Vegetation	Ov	SL	Sw	Cp	Sa	Observed Composition ²	Amount Allowable ³
- Site Composition Maximum ¹ -							
Grasses	75	90	75	80	75		
Green needlegrass							
Porcupine grass	15			20	25	15	-
Western wheatgrass							
Slender wheatgrass	10	30	5	30			
Needle-and-thread			5	10	10	2	2
Prairie sandreed					25		
Blue grama				15	5	1	1
Little bluestem							
Sideoats grama	5		35		5	60	35
Big bluestem							
Switchgrass Sand bluegrass	40		20				
Prairie cordgrass		25					
Nuttall's alkaligrass		20					
Plains muhly							
Bearded WG Sand dropseed							
Prairie Junegrass							
Red threeawn							
Prairie dropseed	5	15	10	5	5	1 + 15	10
Other native grass							
Invaders Kentucky bluegrass						12	0
Sedges	5	5	5	5	10		
Upland sedge						1	1
Midland sedge							
Forbs and legumes	10	5	10	10	10		
Natives						5	5
Invaders Leafy spurge						1	0
Woodies	10	-	10	5	5		
Natives						2	2
Invaders							
100%						100%	
						Index	56%

Similarity Index: 0 to 25 = Poor; 26 to 50 = Fair; 51 to 75 = Good; 76 to 100 = Excellent

Ov - Overflow, SL - Saline Lowland, Sw - Shallow, TL - Thin Loamy, Sa - Sands

¹Modified from NRCS Technical Guide

²Visual estimation made by judge

³The smaller value from two previous columns

DDB629

Contestant Name/#

Key

County/Chapter

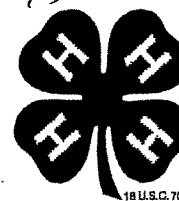
Orange

Site #

3

North Dakota Range Judging Card

Ecological Site



North Dakota Ecological Site Key (Choose one)

I. Restrictive to Root Growth: These sites have a limiting layer within 20 inches of the surface of rock, gravel, stone or restrictive clay (hardpan), which restricts most root growth beyond this layer. (If no restriction, go to II).

A. Limiting layer is rock, scoria, gravel, or stone Shallow



B. Limiting layer is restrictive clay Claypan



II. Non-Restrictive to Root Growth: These sites do not have a restrictive layer within 20 inches of the soil surface.

C. Lowlands — These sites receive additional moisture from occasional stream overflow, run-in from adjacent slopes or during major flooding events. (If no additional moisture occurs, go to D).

1. No water table within 5 feet from surface, typically found in swales, no salt deposits on soil surface Overflow



2. Water table within 5 feet from surface
This site will have salts evident on the surface when dry Saline Lowland



D. Uplands — These sites do not receive additional moisture from occasional stream overflow, run-in from adjacent slopes, or during major flooding events.

1. These sites occur on slopes usually less than 15%
a. Soils will not form a firm ball when wet, coarse Sands



b. Soils will form a firm ball and produce a short ribbon less than 1 inch, feel gritty Sandy



c. Soils will form a ribbon up to 2 inches and not feel gritty, like flour when dry Loamy



d. Soils form a ribbon greater than 2 inches, support their own weight and feel greasy when wet Clayey



2. These sites occur on sidehills with slopes usually greater than 15%

a. This site is found on glaciated soils *east* of the Missouri River, thin top soil Thin Loamy



b. This site is found on non-glaciated soils *west* of the Missouri River, thin top soil Limy Backslope



Similarity Index (Choose one)

- Excellent (76 to 100%) ☐
Good (51 to 75%) ☒
Fair (26 to 50%) ☐
Poor (0 to 25%) ☐

58%

Sharp-tailed Grouse Site Evaluation

Nesting Cover

A) Desirable Nesting Plants

- > 30% aerial cover ☒
10 to 30% aerial cover ☒
< 10% aerial cover ☐

B) Nesting Cover Height (marked plant)

- > 16 inches ☐
4 to 16 inches ☐
< 4 inches ☒

Food habitat (desirable plants)

- > 30% by weight ☐
10 to 30% by weight ☒
< 10% by weight ☐

Protective Cover (% woody cover)

- > 30% aerial cover ☐
10 to 30% aerial cover ☐
< 10% aerial cover ☒

Recommended Management Practices Sharp-tailed Grouse

- Continue present management ☐
Improve nesting cover ☒
Decrease stocking rate ☒
Add more livestock grazing or burn ☐
Improve food habitat ☒
Improve protective cover ☒
Apply woody plant control ☐

Beef Cattle Site Evaluation

Forage Value (desirable plants)

- Excellent (76 to 100%) ☒
Good (51 to 75%) ☐
Fair (26 to 50%) ☐
Poor (0 to 25%) ☐

Stocking Rate (Given on Site Key)

- Increase ☒
Decrease ☐
Keep the same ☐

Distribution Factors

A) Slope

- < 5% ☐
5 to 10% ☐
11 to 15% ☒
> 15% ☐

B) Grazing Restraints

- 1) Terrain: Rough ☐
Smooth ☒
2) Woody canopy: > 30% ☐
< 30% ☒

Recommended Management Practices Beef

- Continue present management ☐
Develop water ☒
Decrease stocking rate ☐
Increase stocking rate ☒
Change kind of livestock ☐
Apply woody canopy control ☐
Apply undesirable grass and forb control ☐
Burn or mow old grass ☐
Defer part of grazing season ☐
Defer one or more grazing season's ☐
Plant adapted forage species ☐
Control noxious weeds ☐
Begin a plan grazing system ☒

55 Major Land Resource Area

Vegetation	Sy	Ly	Cy	TL	Observed Composition ²	Amount Allowable ³
- Site Composition Maximum ¹ -						
Grasses	78	85	90	80		
Green needlegrass	4	20	30	15		
Porcupine grass						
Western wheatgrass		30	40	15		
Slender wheatgrass						
Needle-and-thread	9	10		10		
Prairie sandreed	20					
Blue grama	8	10	10	5		
Little bluestem	5			15		
Sideoats grama						
Big bluestem	20					
Switchgrass Sand bluegrass						
Plains muhly	12	10	10	20		
Sand dropseed						
Prairie Junegrass						
Red threeawn						
Prairie dropseed						
Other native grass						
Invaders						0
Sedges	7	5	2	5		
Upland sedge						
Midland sedge						
Forbs and legumes	10	10	5	10		
Natives						
Invaders						0
Woodies	5	5	3	5		
Natives						
Invaders						
	100%				100%	
					Index	

Similarity Index: 0 to 25 = Poor; 26 to 50 = Fair; 51 to 75 = Good; 76 to 100 = Excellent

Sy - Sandy, Ly - Loamy, Cy - Clayey, TL - Thin Loamy

¹Modified from NRCS Technical Guide

²Visual estimation made by judger

³The smaller value from two previous columns

55 Major Land Resource Area

Vegetation	Ov	SL	Sw	Cp	Sa	Observed Composition ²	Amount Allowable ³
- Site Composition Maximum ¹ -							
Grasses	75	90	75	80	75		
Green needlegrass	}	15		20	25		
Porcupine grass							
Western wheatgrass	}	10	30	5	30		
Slender wheatgrass							
Needle-and-thread			5	10	10		
Prairie sandreed					25		
Blue grama				15	5		
Little bluestem	}	5		35	5		
Sideoats grama							
Big bluestem	}	40		20			
Switchgrass Sand bluegrass							
Prairie cordgrass		25					
Nuttall's alkaligrass		20					
Plains muhly	}						
Sand dropseed							
Prairie Junegrass							
Red threeawn							
Prairie dropseed							
Other native grass							
Invaders							0
Sedges	5	5	5	5	10		
Upland sedge							
Midland sedge							
Forbs and legumes	10	5	10	10	10		
Natives							
Invaders							0
Woodies	10	—	10	5	5		
Natives							
Invaders							
	100%					100%	58%
						Index	

Similarity Index: 0 to 25 = Poor; 26 to 50 = Fair; 51 to 75 = Good; 76 to 100 = Excellent

Ov - Overflow, SL - Saline Lowland, Sw - Shallow, TL - Thin Loamy, Sa - Sands

¹Modified from NRCS Technical Guide

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