

Range Plant Identification

Important Note: Please thoroughly read the General Rules at the beginning of this handbook for complete rules and procedures that are relevant to all South Dakota FFA Career Development Events.

Purpose

The purpose of the Range Plant Identification Career Development is to provide SD FFA members with the opportunity to understand rangeland resources and develop a sense of stewardship in natural resource management.

Objectives

Identify range plants and their characteristics, including:

1. Common name
2. Life span
3. Season of growth
4. Origin
5. Grouse food/cover
6. Beef food

Event Rules

The State FFA Range Plant Identification CDE shall be sponsored by South Dakota State University's Range Club.

Each chapter may send up to two teams, with each team being composed of three or four members.

The three highest individual scores will count as the team score.

There will be a \$40 registration fee for each team to be paid before CDE Registration.

- Individuals not on a team will pay a registration fee of \$6.
- Make checks payable to SDSU Range Management Club.

Participants will judge in four sessions.

The groups will begin judging at 11:00am, 1:30pm, 2:30pm, and 3:30pm.

Refer to State FFA Convention schedule if not the same as above.

All members of a particular team will be required to judge in the same group.

In order to ensure a timely progression of students through the contest, officials may allow teams to start early, if the team agrees to do so.

Event Format

The Range Plant Identification CDE will consist of a minimum of fifty (50) plant mounts.

There may be more than one mount of an individual species in the CDE.

All plants used in this CDE are from the Master Plant List.

Participants will have one minute per plant for a total of fifty (50) minutes.

Three (3) minutes at the end of the CDE will be allowed for students to make changes to their scorecards.

Under no circumstances will a participant be allowed to go back and look at a plant or plants a second time.

Participants can move through the CDE faster than this if they prefer.

Participants will not be allowed to handle the plant mounts; however, a hand magnifier with or without a battery-operated light may be used to assist in identification.

Participants may use a clean clipboard.

Scoring

Scoring will be as follows:

For each plant, the contestants need to know:

- Common Name = 4 points
- Life Span = 1 point
- Season of Growth = 1 point
- Origin = 1 point (invader would count as all or nothing with native or introduced)
- Grouse Food = 1 point
- Grouse Cover = 1 point
- Beef Food = 1 point

Therefore, the maximum total per plant is ten (10) points.

If the common name is incorrect, no points can be earned on the characteristics. A score of zero would result for that plant.

Answer sheets must be marked by:

Printing the corresponding number(from the master plant list), correctly.

Clearly filling in the bubble for each of the characteristics (i.e., life span, season of growth, origin, grouse food, grouse cover, and beef food).

There will be one, and only one, correct answer for the characteristics for each plant with the exception of Sedge, which is considered both desirable and undesirable for grouse cover. Marking either or both will result in a correct score.

In the event of two or more perfect scores, co-championships for individual placing will be announced.

Tiebreakers

In the case of a team tie, the scores from the fourth-place team member will break the tie.

In the case of an individual tie, the order to break the tie will be:

1. Fewest Missed Plants
2. Fewest Missed Total Characteristics
3. Fewest Missed Characteristics in the Life Span Column
4. After that, one can continue through the columns until the tie is broken. If the tie cannot be broken, declare a tie.

South Dakota Range and Pasture Plants Master List

Plant Number	Range Plant Name	Plant Characteristics								Ecological & Resource Rating D = Desirable - U = Undesirable					
		Perennial	Biennial	Annual	Cool	Warm	Native	Introduced	Invader	Prairie Grouse		Cattle			
										Food		Cover		Food	
										D	U	D	U	D	U
Grasses and Grasslike (Mid and Tall)															
1	big or sand bluestem <i>Andropogon spp.</i>	x				x	x				x	x		x	
2	Canada wildrye <i>Elymus Canadensis</i>	x			x		x				x	x		x	
3	crested wheatgrass <i>Agropyron cristatum</i>	x			x			x	x		x	x		x	
4	green needlegrass <i>Stipa viridula</i>	x			x		x			x		x		x	
5	Indian ricegrass <i>Oryzopsis hymenoides</i>	x				x	x			x		x		x	
6	Indiangrass <i>Sorghastrum nutans</i>	x				x	x				x	x		x	
7	junegrass <i>Koeleria macrantha</i>	x			x		x				x	x		x	
8	little bluestem <i>Schizachyrium scoparium</i>	x				x	x				x	x		x	
9	needleandthread <i>Stipa comata</i>	x			x		x			x		x		x	
10	plains muhly <i>Muhlenbergia cuspidate</i>	x				x	x				x	x		x	
11	porcupinegrass <i>Stipa spartea</i>	x			x		x			x		x		x	
12	prairie cordgrass <i>Spartina pectinata</i>	x				x	x				x	x		x	
13	prairie dropseed <i>Sporobolus heterolepis</i>	x				x	x			x		x		x	
14	prairie sandreed <i>Calamovilfa longifolia</i>	x				x	x				x	x		x	
15	quackgrass <i>Elytrigia repens</i>	x			x			x	x		x	x		x	
16	red threeawn <i>Aristida purpurea</i>	x				x	x			x		x		x	
17	reed canarygrass <i>Phalaris arundinacea</i>	x			x		x				x	x		x	
18	sand dropseed <i>Sporobolus cryptandrus</i>	x				x	x				x	x		x	
19	sideoats grama <i>Bouteloua curtipendula</i>	x				x	x			x		x		x	
20	slender wheatgrass <i>Elymus trachycaulus</i>	x			x		x				x	x		x	
21	smooth bromegrass <i>Bromus inermis</i>	x			x			x	x		x	x		x	
22	switchgrass <i>Panicum virgatum</i>	x				x	x			x		x		x	
23	tall dropseed <i>Sporobolus asper</i>	x				x	x				x	x		x	
24	western wheatgrass <i>Pascopyrum smithii</i>	x			x		x				x	x		x	
Grasses and Grasslike (Short)															
25	annual brome <i>Bromus spp.</i>			x	x			x	x		x		x	x	
26	blue grama <i>Bouteloua gracilis</i>	x				x	x			x			x	x	
27	bluegrass <i>Poa spp.</i>	x			x			x	x		x		x	x	
28	buffalograss <i>Buchloe dactyloides</i>	x				x	x				x		x	x	
29	foxtail barley <i>Hordeum jubatum</i>	x			x		x				x		x	x	
30	hairy grama <i>Bouteloua hirsute</i>	x				x	x			x			x	x	
31	inland saltgrass <i>Distichlis spicata</i>	x				x	x				x		x	x	
32	Scribner panicgrass <i>Dicanthelium oligoanthes</i>	x				x	x				x		x	x	
33	sedge <i>Carex spp.</i>	x			x		x			x		x	x	x	
34	sixweeks fescue <i>Vulpia octoflora</i>			x	x		x				x		x	x	
35	tumblegrass <i>Schedonnardus paniculatus</i>	x				x	x				x		x	x	
36	witchgrass <i>Panicum capillare</i>			x		x	x			x			x	x	

Plant No.	Range Plant Name	Plant Characteristics							Ecological & Resource Rating							
		Perennial	Biennial	Annual	Cool Season	Warm	Native	Introduced	Invader	D = Desirable - U = Undesirable						
										Prairie Grouse			Cattle			
										Food	Cover	Food	Cover	Food	Cover	
D	U	D	U	D	U	D	U	D	U							
Forbs																
37	absinthe wormwood <i>Artemisia absinthium</i>	x				x		x	x		x	x				x
38	alfalfa <i>Medicago sativa</i>	x			x			x	x	x		x				x
39	American licorice <i>Glycyrrhiza lepidota</i>	x				x	x			x		x				x
40	American vetch <i>Vicia Americana</i>	x			x		x			x			x	x		
41	annual sunflower <i>Helianthus annuus</i>			x		x	x			x		x				x
42	breadroot scurfpea <i>Psoralea esculenta</i>	x			x		x			x			x			x
43	Canada thistle <i>Cirsium arvense</i>	x				x		x	x		x	x				x
44	clover <i>Trifolium spp.</i>	x			x			x	x	x			x	x		
45	cocklebur <i>Xanthium strumarium</i>			x		x	x			x	x					x
46	common mullein <i>Verbascum Thapsus</i>		x			x		x	x		x	x				x
47	common yarrow <i>Achillea millefolium</i>	x			x		x			x			x			x
48	crazyweed <i>Oxytropis spp.</i>	x			x		x			x			x			x
49	curlycup gumweed <i>Grindelia squarrosa</i>		x			x	x			x	x					x
50	daisy fleabane <i>Erigeron strigosus</i>		x		x		x			x		x				x
51	dame's rocket <i>Hesperis matronalis</i>		x		x			x	x	x		x				x
52	deathcamus <i>Zigadenus spp.</i>	x			x		x				x		x			x
53	false boneset <i>Kuhnia eupatorioides</i>	x				x	x			x		x				x
54	false gromwell <i>Onosmodium molle</i>	x				x	x			x		x				x
55	field bindweed <i>Convolvulus arvensis</i>	x				x		x	x	x			x	x		
56	field pennycress <i>Thlaspi arvense</i>			x	x			x	x		x	x				x
57	gayfeather <i>Liatris spp.</i>	x				x	x			x		x				x
58	golden pea <i>Thermopsis rhombifolia</i>	x			x		x			x			x			x
59	goldenrod <i>Solidago spp.</i>	x				x	x			x		x				x
60	groundplum milkvetch <i>Astragalus crassicaerpus</i>	x			x	x	x			x			x	x		
61	hairy goldaster <i>Chrysopsis villosa</i>	x					x			x			x			x
62	heath aster <i>Aster ericoides</i>	x				x	x			x		x				x
63	horseweed <i>Conzya Canadensis</i>			x		x	x				x		x			x
64	hounds tongue <i>Cynoglossum officinale</i>		x		x	x		x	x		x		x			x
65	leafy spurge <i>Euphorbia esula</i>	x						x	x	x		x				x
66	Maximillian sunflower <i>Helianthus maximiliani</i>	x				x	x			x		x				x
67	milkweed <i>Asclepias spp.</i>	x				x	x				x		x			x
68	parsley <i>Musineon & Lomatium spp.</i>	x			x	x	x			x			x			x
69	pasqueflower <i>Anemone patens</i>	x			x		x			x			x			x
70	penstemon <i>Penstemon spp.</i>	x					x			x			x	x		
71	phlox <i>Phlox spp.</i>	x			x	x	x				x		x			x
72	poison hemlock <i>Conium masculatum</i>	x						x	x		x	x				x

Plant No.	Range Plant Name	Plant Characteristics							Ecological & Resource Rating						
		Perennial	Biennial	Annual	Cool Season	Warm	Native	Introduced	Invader	D = Desirable - U = Undesirable					
										Prairie Grouse			Cattle		
										Food	Cover	Food	Cover	Food	Cover
73	prairie clover <i>Dalea spp.</i>	x				x	x			x		x		x	
74	prairie coneflower <i>Ratibida columnifera</i>	x				x	x			x		x		x	
75	prairiesmoke <i>Geum triflorum</i>	x			x	x	x			x			x		x
76	pricklypear <i>Opuntia spp.</i>	x					x		x			x			x
77	purple coneflower <i>Echinacea angustifolia</i>	x				x	x			x		x		x	
78	ragwort <i>Senecio spp.</i>	x			x	x	x				x		x		x
79	rush skeletonplant <i>Lygodesmia juncea</i>	x					x				x		x		x
80	sagewort <i>Artemisia spp.</i>	x				x	x			x		x			x
81	salsify <i>Tragopogon dubius</i>		x			x		x	x		x		x	x	
82	scarlet gaura <i>Gaura coccinea</i>	x				x	x				x		x		x
83	scarlet globemallow <i>Sphaeralcea coccinea</i>	x				x	x			x			x		
84	scurfpea <i>Psoralea spp.</i>	x				x	x			x		x			x
85	sensitive briar <i>Schrankia nuttallii</i>	x				x	x			x		x			x
86	spanishclover deervetch <i>Lotus purshianus</i>			x		x	x			x			x		x
87	spiderwort <i>Tradescantia spp.</i>	x			x		x			x			x	x	
88	stiff sunflower <i>Helianthus pauciflorus</i>	x				x	x			x			x	x	
89	sweetclover <i>Melilotus spp.</i>		x		x			x	x	x		x		x	
90	wavyleaf thistle <i>Cirsium undulatum</i>	x				x	x				x		x		x
91	western ragweed <i>Ambrosia psilostachya</i>	x				x	x			x		x			x
92	western wallflower <i>Erysimum asperum</i>		x		x		x				x		x		x
93	wild onion <i>Allium spp.</i>	x			x		x			x			x	x	
94	woolly verbena <i>Verbena stricta</i>	x				x	x		x	x		x			x
Shrubs															
95	broom snakeweed <i>Gutierrezia sarothrae</i>	x				x	x				x	x			x
96	chokecherry <i>Prunus virginiana</i>	x				x	x			x		x			x
97	currant or gooseberry <i>Ribes spp.</i>	x			x		x			x		x			x
98	greasewood <i>Sarcobatus vermiculatus</i>	x				x	x				x	x			x
99	juniper <i>Juniperus spp.</i>	x				x	x			x		x			x
100	leadplant <i>Amorpha canescens</i>	x				x	x			x		x		x	
101	poison ivy <i>Toxicodendron radicans</i>	x				x	x				x	x		x	
102	rubber rabbitbrush <i>Chrysothamnus nauseosus</i>	x				x	x				x	x			x
103	sagebrush <i>Artemisia spp.</i>	x				x	x			x		x			x
104	saltbush <i>Atriplex spp.</i>	x				x	x			x		x		x	
105	sand cherry <i>Prunus pumila</i>	x				x	x			x		x			x
106	sandbar willow <i>Salix exigua</i>	x				x	x			x		x		x	
107	serviceberry <i>Amelanchier spp.</i>	x				x	x			x		x		x	
108	silver buffaloberry <i>Shepherdia argentea</i>	x				x	x			x		x			x

Plant No.	Range Plant Name	Plant Characteristics							Ecological & Resource Rating						
									D = Desirable - U = Undesirable						Prairie Grouse
		Perennial	Biennial	Annual	Cool Season	Warm	Native	Introduced	Invader	Food		Cover		Food	
										D	U	D	U	D	U
109	skunkbrush <i>Rhus aromatica</i>	x				x	x			x		x		x	
110	smooth sumac <i>Rhus glabra</i>	x				x	x			x			x		
111	western snowberry <i>Symphoricarpos occidentalis</i>	x				x	x			x		x		x	
112	wild plum <i>Prunus americana</i>	x				x	x			x		x		x	
113	wild rose <i>Rosa spp.</i>	x				x	x			x		x		x	
114	yucca <i>Yucca glauca</i>	x			x		x					x		x	
Trees															
115	American elm <i>Ulmus americana</i>	x				x	x			x		x		x	
116	boxelder <i>Acer negundo</i>	x				x	x			x		x		x	
117	bur oak <i>Quercus macrocarpa</i>	x				x	x			x		x		x	
118	green ash <i>Fraxinus pennsylvanica</i>	x				x	x			x		x		x	
119	juniper or cedar <i>Juniperus spp.</i>	x				x	x		x	x		x		x	
120	plains cottonwood <i>Populus deltoides</i>	x				x	x			x		x		x	
121	ponderosa pine <i>Pinus ponderosa</i>	x				x	x		x	x		x		x	
122	Russian olive <i>Elaeagnus angustifolia</i>	x				x		x	x	x		x		x	