DETERMINING GRASSLAND CONDITION / TREND

Owner:_____ Technician:_____ Field Office:_____

Date_____ Tract:_____ Field:

Species Composition_____

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CATEGORY	PARAMETER - VALUE										
1) **Plant Population -** estimated % by weight is mostly:	desirable	4									
	intermediate	2									
	undesirable	0									
2) **Plant Diversity -** diversity of forage plant species is:	broad 5 species	4									
	medium 3 species	2									
	narrow 1 specie	0									
3) **Plant Density -** desirable and intermediates are:	dense 80%	4									
	medium 60%	2									
	sparse 40%	0									
4) **Plant Vigor** desirable and intermediates are:	strong	4									
	medium	2									
	weak	0									
5) **Legumes in Stand** percent of legumes by weight make up:	> 30%	4									
	15 - 20%	2									
	< 5%	0									
6) **Severity of Use** degree and frequency of use is:	heavy	0									
	appropriate	4									
	light	0									
7) **Uniformity of Use** uniformity of use is:	uniform	4									
	intermediate	2									
	spotty	0									
8) **Soil Resources** productivity, all erosion, concentrated areas, etc.	good	4									
	fair	2									
	poor	0									
9) **Undesirable Canopy** percent canopy of undesirable plants is:	10%	4									
	20%	2									
	30%	0									
10) **Plant Residue** dead and decaying plant material is:	heavy	0									
	appropriate	4									
	light	0									
	TOTALS										

0 - 10 = VERY POOR 11 - 20 = POOR 21 - 30 = GOOD 31 - 40 = VERY GOOD

CRITERIA

GENERAL:

This Job Sheet was designed for use by persons with different levels of technical ability. It can be used quickly and without tools, to visually estimate the condition and trend on grassland. For example, when the form asks for a "%", the user should make their best visual estimate. It reminds the user to evaluate 10 items important to grassland condition/trend. With experience, condition/trend surveys will be quite consistent among users. Use this form to inventory up to 10 different fields or sites or monitor changes over time in one or more fields.

SPECIES COMPOSITION:

List the percent of various plant species in relation to the total plant volume. This should equal 100% and not to be confused with plant density, which includes bare ground, litter, etc.

VALUE:

Where needed, use weighted values and interpolate. For example, if you can't decide between a value of 2 or 3 use a value of 2.5.

CATEGORY:

1) Plant Population – Visually estimate the % composition by weight of each plant grouping and assign a weighted value. Desirable, intermediate, and undesirable will vary with site, kind of grazing animal and intended use.

2) Plant Diversity – Is the number of different kinds of desirable and intermediate plants that are well represented (greater than 5% by weight) on the site. Diversity promotes stability.

3) Plant Density – Ignore undesirables and visually estimate canopy of living desirable and intermediate species that would be present at the minimum recommended grazing heights. This is the % of total ground cover that is made up of desirable and intermediate species.

4) Plant Vigor – Are the desirable and intermediate species healthy and growing at their potential? Some things to look for are: color, leaf area index, reproduction, presence of weeds, rate of initial growth and regrowth, etc.

5) Legumes in Stand – Visually estimate the % composition by weight, of the legumes present in the stand, for the area being evaluated. If you are unaccustomed to estimating % composition by weight, a good rule of thumb for legumes is to estimate % canopy that the legumes make up and divide by 2.

6) Severity of Use – Close and frequent use causes loss of vigor, reduces desirable species, increases erosion and runoff. Light use allows excessive residue buildup, blocks sunlight, reduces palatability, and production. If the site is used Heavy or Light, add an H or L beside the score given.

7) Uniformity of Use – Uniform grazing results in all plants grazed to a moderate, uniform height throughout the field. Spotty grazing appears uneven, with some plants or parts of the field grazed heavily and others lightly used.

8) Soil Resources – Visually observe and evaluate the soil resource. Note all erosion, soil productivity and concentrated livestock areas and collectively determine their condition for the area being surveyed.

9) Undesirable Plant Canopy – Canopy of weedy and/or woody species that are present in amounts sufficient to hinder production of desirable species. Changes in management or more extreme remedial action is needed to restore a desired plant community.

10) Plant Residue – Appropriate residue (about ¼") provides adequate ground cover to retard runoff, improve water intake, return nutrients to the soil surface and provide a favorable microclimate for biological activity. If the site has Heavy or Light residue, add an H or L beside the score given.