

Pennsylvania's Equine Pasture Condition Score Sheet

* If you can't decide between two values use fractions (e.g. If the value is between 2 and 3, then use a value of 2.5)

Owner/ Operator:					Date:			
	General weather conditions for the previous three weeks:					Wet	Dry	Average
CATEGORY	PARAMETER	VALUE*	Field ID:					
Population of Forage Plants The estimated % by weight is mostly:	Desirable Intermediate Undesirable	3 or 4 1 to 2 0						
1) Plant Density % of the pasture covered by desirable & intermediate plants is:	Dense > 85% Medium 75-85% Sparse < 75%	3 or 4 1 to 2 0						
2) Forage Plant Diversity The diversity of forage plant species is:	Broad >5 species Medium 3-4 species Narrow <3 species	3 or 4 1 to 2 0						
3) Plant Vigor Desirable plants are:	Strong Medium Weak	3 or 4 1 to 2 0						
4) Legumes in Stand Percent of legumes in the stand is:	>20% 10-20% <10%	3 or 4 1 to 2 0						
5) Intensity of Use The degree and frequency of use is:	Appropriate Moderate Heavy	3 or 4 1 to 2 0						
6) Uniformity of Grazing Uniformity of grazing is:	Uniform Spotty Overgrazed	3 or 4 1 to 2 0						
7) Plant Residue Dead or decaying plant material is:	Moderate Excessive Lacking	3 or 4 1 to 2 0						
8) Soil Erosion Gully and/or stream bank erosion is:	Slight Moderate Severe	3 or 4 1 to 2 0						
9) Woody Canopy The amount of woody canopy over 6 feet high is:	< 11% 30 - 11% > 30%	3 or 4 1 to 2 0						
	TOTAL SCORE FOR FIELD							
Scale for Pasture Condition Score 0-10 = Very Poor, 11-20 = Poor, 21-30 Good, 31-40 = Very Good								

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The pasture condition score sheet can be used to record the conditions of six different fields or paddocks. The score sheet can also be used to record changes in the same field or paddock over time. General weather conditions and time of year are important factors affecting pasture condition. Before conducting the pasture assessment, walk the entire pasture and then conduct the assessment in several locations representative of the entire field or paddock. If there are significant areas of the field or paddock that have very different forages, then separate evaluations should be done for each area. Produced by Donna Foulk, Penn State Equine and Natural Resources Extension Educator. Adapted from the Vermont Pasture Condition Score Sheet.

CATEGORY DEFINITIONS AND GUIDANCE

- 1. Population of Forage Plants** – Pastures can be composed of many different plant species. *Desirable* plant species are forages that provide a large quantity of high quality food throughout the growing season. Examples include white clover, red clover, alfalfa, bluegrass, perennial ryegrass, orchard grass, timothy, fescue, and brome. *Intermediate* plants are species that horses will not usually eat or plants that have short growing periods and loose quality fast. Some examples are dandelion, foxtail, and crabgrass. *Undesirable* plants are “weeds” that have very low forage value, are often unpalatable and may be toxic. Since horses rarely eat undesirable plants, they will frequently dominate overgrazed pastures. Examples include buttercup, thistle, ragweed, and muliflora rose.
- 2. Plant Density** – High plant density provides canopy cover for the pasture and intercepts rain drops preventing erosion. Bare spots in pastures are an indication of overgrazing and are an open invitation to weed invasion. Pastures containing a high density of desirable and intermediate plants provide greater nutrition than pastures containing primarily weeds.
- 3. Plant Diversity** – Plant diversity indicates the number of different species of desirable plants. Since forage species vary in nutrition and in their susceptibility to insects, disease and environmental extremes, pastures that have greater diversity are healthier and more resilient.
- 4. Plant Vigor** – Forage species should be healthy and growing at their full potential. A dark green plant color, an abundance of leaves and ample regrowth are indicators of good plant vigor. Strong vigorous pastures recover rapidly after grazing while a weak pasture may not recover for two or more weeks.
- 5. Legumes in Stand** – Legumes provide nitrogen to the grasses in the pasture which enhances pasture quality. However, clover may occasionally be associated with fungus induced salivation, photosensitization and estrogen concerns in mares. Alsike's clover is toxic if it is heavily grazed. The percent of legumes will change throughout the grazing season with lower values in the spring.
- 6. Intensity of Use** – Pastures that are overgrazed contain very few desirable species. Weed growth is excessive, and many bare spots are present which contribute to soil erosion. Moderately heavy grazing causes a reduction in forage, diversity, and some loss in plant vigor. Weed pressure is moderate and some bare spots are present. Forages are often grazed below three inches in height. Pastures which are grazed appropriately have a large density and diversity of forage species. Plants are maintained at uniform height, generally between three and eight inches. Weed pressure is low and bare spots are absent. Note: Under grazing can also be detrimental to pasture quality. Forages that are under grazed and are not mowed to maintain grasses in the vegetative stage will grow tall, sometimes to seed head production. Overly mature forages are unpalatable and low in nutritional value. Pastures that are under grazed should receive a value between one and two.

7. **Uniformity of Use** – Uniform grazing occurs when a majority of the plants have been moderately grazed to a consistent height. A pasture can be uniformly overgrazed and should not receive points. Walking over the entire pasture is necessary to accurately determine uniformity of use. Horse pastures are typically composed of both “lawns” and “roughs”. The “roughs”, areas where manure is deposited are not normally grazed and will be taller than the “lawn” areas. Use the “lawn” areas when determining uniformity of use.
8. **Plant Residue** – Dead or decaying plant material is indicative of poor pasture condition. If plants are overgrazed there is little residue to recycle into the soil but if the plants are under grazed there is excessive carbon to recycle. Therefore, both overgrazing and under grazing result in low Plant Residue scores.
9. **Soil Erosion** – Soil erosion is magnified in pastures that are heavily grazed resulting in low plant density. Visually observe and evaluate all types of erosion (sheet, gully, etc.) to determine the severity for the pasture.
10. **Woody Canopy** – The percent canopy (shaded area at noon) provided by woody plants over six feet tall. Woody canopy can promote uneven grazing, parasites, soil compaction and manure accumulation.

INTERPRETING YOUR SCORE

Very Good: Very little change in management is needed but new innovations may still be appropriate.

Good: Improvements will benefit pasture productivity. Implement most beneficial practice(s) first.

Poor: Changes are needed soon. A high return on investment is likely.

Very Poor: The pasture requires major inputs of time, management. Immediate changes are suggested.