

Pasture Condition Scoresheet – Cornell Small Farms Program 2019

Farm Name				Date				
Paddock Description				Paddock number				
Current Years Precipitation (check one)	Above Normal	Normal	Below Normal					
Evaluate the site and rate each indicator based upon your observations. Scores for each indicator may range from 1 to 5. Multiply the points x the weight to get weighted points. Sum the weighted points to determine overall CSP pasture condition score.								
Indicator/Weight	1 Points	2 Point	3 Points	4 Point	5 Points	Points	Wt.	Wtd. Pts.
Percent Desirable Plants 10%	Desirable species <20% of stand Annual weeds and/or woody non-desirable invasives are dominant.	Desirable species 20-40% of stand Mostly weedy annuals and/or woody invasives present and expanding. Shade is a factor.	Desirable species 40-60% of stand Weeds and annual non-desirable weedy grasses invading. Some woody species invading	60-80% of plant community are desirable species. Remainder mostly intermediates and a few undesirables are present.	Desirable species exceed 80% of plant community with scattered intermediates. No undesirables present.		1.0	
Live Plant Cover 15%	Canopy: <50% Photosynthetic area is very low. Very little plant cover to slow or stop runoff.	Canopy: 50-70% Photosynthetic area is low. Runoff is fast due to low plant cover.	Canopy: 70-90% Most forages are grazed close, with little leaf area to intercept sunlight. Runoff is moderate due to moderate plant cover.	Canopy: 90-95% Spot grazed so there is some loss of photosynthetic potential. Runoff is low due to good plant cover.	Canopy: 95-100% Forages are maintained in leafy condition for best photosynthetic activity. Stands are very thick stand with slow or no runoff flows.		1.5	
Plant diversity 10%	One dominant (>75% of DM wt.) forage species is present. Or, over 5 forage species are present (all < 20%) from 1 dominant functional group, not evenly grazed - poorly distributed.	Two to five forage species are present from 1 dominant functional group (> 75% of DM wt.). At least one avoided by livestock and mature seedstalks are displayed. Species in patches.	Three forage species are present (each ≥ 20% of DM wt.) from 1 functional group. None are avoided. Or, one forage species each from two functional groups, both supply 25-50% of DM wt.	Three to four forage species representing 2 functional groups are present (each ≥ 20% of DM wt.) with at least one being a legume. Well inter-mixed, compatible growth habit, and comparable palatability.	Four to five forage species representing three functional groups (each 20% of DM wt.) with at least one being a legume. Intermixed well, comparable growth habit, and comparable palatability.		1.0	
Plant Residue (organic material covering soil) 3%	Ground cover: No dead leaves or stems present on soil surface. Or, heavy thatch is evident (>1 inch).	Ground cover: 1-10% is covered with dead leaves or stems. Or, thatch is 0.5 inch to 1 inch thick.	Ground cover: 10-20% is covered with dead leaves or stems. Or, there is slight thatch buildup but <0.5 inch.	Ground cover: There is 20-30% covered with dead leaves or stems but there is no thatch present.	Ground cover: 30-70% is covered with dead leaves or stems, but there is no thatch buildup.		0.2	
Plant Vigor 20%	There is no recovery after grazing. More than 80% of plants are pale yellow or brown, or permanently wilted, or lost due to insects or disease. Yields are regularly more than 30% below site potential, or there is lodged, dark green overly lush forage, often avoided by grazers.	Recovery after grazing takes 2 or more weeks longer than normal, or 50% to 80% of plants are yellowish green leaves, or there is major insect or disease yield loss, or plants are wilted most of day. Productivity is very low, 20-30% below site potential.	Recovery after grazing takes 1 week longer than normal, or the urine/dung patches are dark green in contrast to rest of plants, or there is minor insect or disease loss or mid-day plant wilting. Yields are regularly 10-20% below site potential.	Recovery after grazing takes 1 to 2 days longer than normal; 50 to 80 % of plants appear turgid and of natural green for the crop, or there is minor insect or disease damage. No plant are wilting. Yields are near site potential.	Rapid recovery after grazing. More than 80% of the plants appear turgid and of natural green color for the crop. There are no signs of insect or disease damage. Yields are near the potential for the species, adapted to the site's soil and climate. Desirable plants appear very competitive.		2.0	
Percent Legume 5%	CS: legumes are < 10% by wt. Or, greater > 60%. WS: 5% legumes by wt. Or, > 60 %.	CS: 10-19% legumes. Or, losing grass, 40-60% spreading legume. WS: 5-9% legumes Or, losing grass, 40-60% spreading legume.	CS: 20-29% legumes. WS: 10-19% legumes.	CS: 30-39% legumes. WS: 20-29% legumes.	CS: 40 - 60% legumes. No grass loss; grass may be increasing. WS: 30-40% legumes. No grass loss; grass may be increasing.		0.5	
Uniformity of Use 7%	Little-grazed patches cover over 50% of the pasture. Mosaic pattern found throughout pasture or identifiable areas of pasture avoided.	Little-grazed patches cover 30-50% of the pasture either in a mosaic pattern or obvious portion is not frequented.	Little-grazed patches cover 20-30% of the pasture either in a mosaic pattern or obvious portion is not frequented.	Little-grazed patches or minor spots cover 10-20% of the pasture where isolated forage species are rejected. Urine and dung patches are avoided.	Rejected areas cover 10% or less of the pasture only at urine and dung patches.		0.7	
Livestock Concentration Areas 10%	Cover >10% of the pasture; or all convey contaminated runoff directly into water channels.	Livestock conc. areas and trails cover 5-10% of pasture; most close to water channels and drain into them unbuffered.	Isolated livestock conc. areas and trails cover 3-5% of area; one close to water channel and drains into it unbuffered.	Some livestock trails and one or two small concentration areas cover <3% of the pasture. Buffer areas are between them and water channels.	No presence of livestock concentration areas. Areas are well sited, or treated to minimize contaminated runoff.		1.0	
Soil Compaction (Probe moist soil) 5%	Very hard to push probe into soil without damaging the probe. Infiltration capacity and surface runoff severely affected by heavy compaction. Excessive livestock traffic killing plants over wide areas.	Hard to push probe past compacted layers. Livestock trails common throughout the pasture. Off-trail hoof prints common. Infiltration capacity is lowered and surface runoff increased due to large areas of bare ground and dense compaction layer at surface.	Soil resistant to soil probe entry at one or more depths within plow depth. Infiltration capacity lowered and surface runoff increased due to plant cover loss and soil compaction by livestock hooves.	Probe enters soil easily except at rocks. There are scattered signs of livestock trails and hoof prints, confined to lanes or small, wet areas. Infiltration capacity is lowered and surface runoff is increased due to reduced vegetal cover/retardance.	Probe enters soil easily. Soil is friable and biological activity is evident, especially around manure piles. Infiltration capacity and surface runoff are equal to that expected for an ungrazed meadow, not affected by livestock traffic.		0.5	
Erosion 15%	Sheet and rill erosion is active throughout pasture; rills are 3-8 inches deep at close intervals and/or grazing terraces are close-spaced with some slope slippage.	Most sheet and rill erosion is confined to steepest terrain of unit; well defined rills are 0.5-3 inches deep at close intervals and/or grazing terraces are present.	Most sheet and rill erosion is confined to heavy use areas, especially in loafing areas and water sites; rills are 0.5-3 inches deep. Debris fans are found at down slope edge.	No current formation of rills. There is some evidence of past rill formation, but they are grassed. Scattered debris dams of litter are occasionally present.	No evidence of current formation of sheet flow or rills.		1.5	
Overall Pasture Condition Score	Individual Indicator Score	Management Change Suggested			Overall Pasture Condition Score =		0.0	
45 to 50	5	No changes in management needed at this time.						
35 to 45	4	Minor changes would enhance, do most beneficial first.						
25 to 35	3	Improvements would benefit productivity and/or environment.						
15 to 25	2	Needs immediate management changes, high return likely.						
10 to 15	1	Major effort required in time, management and expense.						

Comments/Notes

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