Pasture Condition Scoring (and other assessment tools)

Susan Parry and James Hyde

Pasture Assessment Methods:

- Walking the Pasture (Visual observations)
- Grazing Stick (estimate DM and size paddocks)
- Step-Point Worksheet (Data Collection)
- Pasture Condition Scoring (National Protocol and Required Assessment for NRCS)

Walking the Pasture (visual monitoring):

- When you look out onto your fields, you are monitoring the "landscape" view.
- It looks green/nice, but when you start walking through the pasture, what do you see?

Key Area concept:

- A relatively small area of pasture or management unit; selected because of location, use, or value as a monitoring point for overall pasture use.
- It's assumed that key areas, if properly selected, will reflect the current grazing management over the entire pasture or management unit.
“You can’t manage what you don’t measure.”

Bob Hendershot

Using a Grazing Stick to measure and plan pastures:

Determining Forage Volumes/Yields

**Pasture Stick Exercise**

1. Select a spot in the pasture that has a representation of the forage mix or select 2 or 3 spots and average your results.
2. Identify the forage species present (for this example, it’s Orchardgrass and clover)
Determining Forage Volumes/Yields
Pasture Stick Exercise

3. Place the grazing stick on the ground within a typical sward, with the dot grid face up under the forage leaves.
4. Count the dots that are visible without moving your head side to side. (In this example, we see 2 dots)

5. Look at the chart on the stick and estimate the Dry Matter/Acre/Inch (DM/AC/In). In our example, it’s 300 lbs/acre/inch for Orchardgrass and clover, which represents avg. yield for that forage mix.
6. Measure the average height of the standing forage (in this example, it’s 7 inches tall).

7. Refer to the grazing stick for grazing residue height and calculate the inches of available forage (in this example, graze to 3 inches, leaves 4 inches of available forage).
8. Multiply the available forage inches X DM/AC/IN from the chart on the stick and that will give you the pounds of Available Forage per acre (Lbs/acre).

4 inches (Available) X 300 lbs/acre/inch
= 1,200 lbs/acre

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PCS Tools (Bring to the Field):

- Step-Point Worksheet (shown on right)
- Pace/Note Animal Concentration Areas (ACAs) while walking pastures
- Take a shovel or probe with you
- Using the PCS and tools outlined can help to make your job easier!

Step-Point Method

1. Percent Desirable Plants
2. Percent Legume
3. Live Plant Cover
4. Plant Diversity
5. Plant Residue

PCS has ten “Indicators” of pasture health
- Each indicator has a “rubric” that ranks from 1-5 for each topic
Percent Desirable Plants
(Dry Weight by Livestock Type)

Percent Legume
By Dry Weight

Percent Legume
By Dry Weight

Live (includes dormant) Plant Cover

How good is my solar panel?
Live (includes dormant) Plant Cover

- Rate percent of live or dormant green plant material.
- Dead standing material, or bare ground is discounted.

How good is my solar panel?

Plant Diversity (By Dry Weight)

Dominant Species:
- Must make up at least 15% to be counted as a Functional Group
- Must be > 50% desirable species or automatically 1 point
- A functional group can be represented by minor species totaling ≥15%
  *Example: 12% chicory and 5% plantain

Functional Groups:
- Cool Season Grasses
- Warm Season Grasses
- Legumes
- Non-leguminous Forbs

Plant Residue and Litter as Soil Cover

Residue or residual? What’s between the plants?
Plant Residue and Litter as Soil Cover

Pull back canopy and look!

Grazing Utilization and Severity

Uniform Grazing without Overgrazing

Grazing Utilization and Severity

1. Distance to surface water
2. Size of concentrated area

Livestock Concentration Areas

1. Distance to surface water
2. Size of concentrated area

Face or measure as needed
Livestock Concentration Areas

1. Distance to surface water
2. Size of concentrated area

Soil Compaction and Soil Regenerative Features

1. Root and compaction are primary subindicators.
2. Color and soil life secondary.

Plant Vigor

1. Recovery/rest
2. Plant color
1. Recovery/rest
2. Plant color

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**TOTAL YOUR PCS SCORE**

**Summary:**

WHY Pasture Condition Scoring (PCS)?
- Assess and rate different pastures in a single growing season or rate the same pasture or paddock over several years. It should be done at least annually.
- Rating pastures seasonally to track trends in pasture condition.
  - Pasture indicators may rank very low initially but improve as management changes over time.
- A review of score summaries and specific low scoring indicators should be done with the farmer.

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Erosion

- Sheet and/or rills that form or deepen to form gullies
- *Note: management issues
- Invasive species present
- Toxic weed issues
- Other noteworthy items that need to be discussed or addressed

(Rate the most adverse erosion type; circle all that apply)

TOTAL YOUR PCS SCORE

Overall Pasture Condition Score: 36

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Comments/Notes:
- Rate management issues
- Invasion species present
- Toxic weed issue
- Other noteworthy items that need to be discussed or addressed

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