Pasture Rule Refresher

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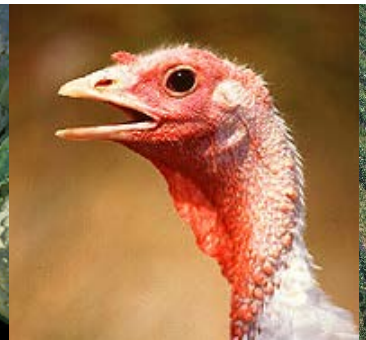
USDA Agricultural Marketing Service
National Organic Program





Overview

- Reviewing the Organic System Plan for accuracy (testing key assumptions)
- Recordkeeping requirements
- Grazing season
- Adverse actions for pasture rule violations

Overview

Sensible tests to compare Organic System Plan to actual practices:

- Dry Matter Demand
- Pasture Production (Yield)
- Actual Grazing Practices

Quantitative and **qualitative** components

Responsibility of inspectors and reviewers

Overview

Qualifications: certifiers must demonstrate expertise and ability of inspectors and reviewers (§ 205.504)

Selection of inspectors/reviewers

- Complexity component (simple vs complex)
- Type component (poultry vs. cattle)
- Sub-type component (beef vs. dairy cattle)

Sensible Tests—DMD

Sensible tests to compare Organic System Plan to actual practices:

- **Dry Matter Demand**
- Pasture Production (Yield)
- Actual Grazing Practices

Exaggerating dry matter demand **exaggerates** pasture consumed

Sensible Tests—DMD

Subtraction method

Detailed information on application of this method in Handbook – NOP 5017

Total Demand - Feed Fed = Pasture Consumed

Sensible Tests—DMD

Subtraction method:

Total Demand - Feed Fed = Pasture Consumed

Example:

Producer states cows have DMD of 52 lbs./day

Producer feeds 35 lbs. a day (not including pasture)

How much pasture are animals receiving?

52 lbs. – 35 lbs. = 17 lbs. (33% of intake)

Sensible Tests—DMD

Subtraction method:

Total Demand - Feed Fed = Pasture Consumed

Example:

If the **actual** (i.e., **not** exaggerated) DMD for these animals is 40 lbs./day what is effect?

Producer still feeds 35 lbs. a day

How much pasture are animals receiving?

40 lbs. – 35 lbs. = 5 lbs. (12.5% of intake)

Sensible Tests—DMD

Overstating DMD will overestimate pasture consumption

How to verify the DMD figure used is accurate?

- Compare to dry matter fed when animals are temporarily confined (producer **documentation required** per § 205.237)
- Compare to published values (NOP Handbook or elsewhere)

Sensible Tests - DMD

Verify Dry Matter Demand (DMD) Figures

- Compare to dry matter fed when confined
  - Does DMD fed align with operation's stated dry matter demand? (i.e., if 40 lbs. are fed per animal when confined, DMD is likely close to 40 lbs. when grazing)
  - Essential to know rations year round (and required per recordkeeping requirements - §205.103)

Sensible Tests—DMD

What to do in case of overestimated DMD?

§ 205.237(d)(4)

Exaggerated DMD figures must not be approved in OSP; method for calculating DMD must be appropriate (i.e., align with actual DMD)

Incorrectly stated DMD may result in noncompliance with requirement for 30% DMI from pasture

Sensible Tests—Pasture Production

Sensible tests to compare Organic System Plan to actual practices:

- Dry Matter Demand
- **Pasture Production (Yield)**
- Actual Grazing Practices

How many animals can be supported by the pasture (at 30% DMI from pasture)?

Sensible Tests—Pasture Production

Variability in dry matter production per acre:

- Grazing practices (e.g., number of rotations per year, rest period)
- Plant varieties in pasture
- Water availability
- Climate/weather (generally and in specific year)
- Elevation

When in doubt, use resources to obtain information

Sensible Tests—Pasture Production

What is producer expecting from pasture?

What can the pasture reasonably provide?

Test:

Calculate dry matter demand for **the herd**

- Establish production potential of each acre
- Establish if possible to meet cows' needs
- Operation's burden to support assumptions

Sensible Tests—Pasture Production

Example:

- Operation manages 100 milking cows
- Each cow (on average) requires 40 lbs. dry matter per day
- Location has a grazing season length of approx. 130 days
- Operation manages 50 acres of pasture

Sensible Tests—Pasture Production

What is total dry matter requirement of herd?

100 cows x 40 lbs./cow/day x 130 days per year =

520,000 lbs. dry matter per year

How many pounds must come from pasture?

520,000 lbs. x 30% = **156,000 lbs.**

How many lbs. of dry matter must each acre provide?

156,000 lbs. ÷ 50 acres = **3,120 lbs.** per acre

Sensible Tests—Pasture Production

Is this reasonable?

Can each acre produce 3,120 lbs. (1.4 tons) dry matter per grazing season?

What if operation managed 200 animals instead of 100 animals?

6,240 lbs. (2.8 tons) dry matter per acre?

Sensible Tests—Pasture Production

What is reasonable to expect from each acre?

Depends…

- Climate and irrigation water availability
- Grazing practices (continuous vs. rotational, etc.)
- History of production in the area (check with cooperative extension)

GRAZING EFFICIENCY – the percentage of available forage that actually gets harvested by livestock

Continuous Grazing – 35-50% harvest efficiency - requires more acres

5-7 days (weekly rotation) – slight increase above 50%

3-5 day rotation – 60-70 % harvest efficiency

½ -2 day rotation – 65-90% harvest efficiency

(From NRCS, 2010)

Sensible Tests—Pasture Production

Simple checks can point to issues

Cows per acre of pasture may be used as basic test

– Match inspection/review resources to **risk** (i.e., high ratio of animals to pasture acres)

Best Practices—Grazing Practices

From DMD example, what indications might suggest that the DMD figure used is not correct?

Are animals getting 30% or 12.5% pasture?

- Pastures may not show signs of frequent grazing
- Animals may be observed spending large portion of day in barn
- Ratio of cows per acre is high

Best Practices—Grazing Practices

Verify actual grazing practices

Organic System Plan vs. actual practices

- Unannounced inspections
- Annual and unannounced review of records; for example, records of feed as actually fed (grazing season description ok for OSP but records must show feed as actually fed to verify grazing)

Best Practices—Grazing Practices

- Calculate as an average over the entire grazing season for each class of animal (§205.237(c)(1))
- Continuous vs. non-continuous grazing season (§205.237(c)(1))
- Restrict animals from pasture during the grazing season (§205.239)

Best Practices—Records

Operations' records must (§ 205.103):

- Fully disclose all activities and transactions
- Be kept in a manner that can be readily understood and audited
- Demonstrate compliance with the regulations

Operations must describe in OSP how their recordkeeping system will meet requirements (§205.201)

Best Practices—Records

Additionally (§ 205.237):

Producers must:

- Document the amount of each type of feed actually fed
- Document changes made throughout the year
- Provide method for calculating DMD and dry matter intake

It is the producer's responsibility to describe recordkeeping system and how it complies

Best Practices—Records

Dry Matter Intake (DMI) Calculation Worksheets (example in Program Handbook – NOP 5017)

Qs:

How many certifiers require these?

How often are they updated by producers?

Do these alone demonstrate compliance or satisfy recordkeeping requirements?

Best Practices—Records

For dairies especially (regularly changing rations), worksheets alone do not satisfy recordkeeping requirements in § 205.237

Description of operation's **own** recordkeeping system and examples in their OSP:

- Actual feed fed per day
- Pasture movements
- Method to calculate dry matter intake

Grazing Season

Grazing Season (overview)

- How to determine what is grazing season
- What affects the grazing season?
- How is grazing season verified?

Grazing Season

Definition (§ 205.2)

The period of time when pasture is available for grazing, due to natural precipitation or irrigation. Grazing season **dates may vary** because of mid-summer heat/humidity, significant precipitation events, floods, hurricanes, droughts or winter weather events. Grazing season may be extended by the grazing of residual forage as agreed in the operation's organic system plan. Due to weather, season, or climate, the grazing season may or may not be continuous. Grazing season may range from 120 days to 365 days, but **not less than 120 days per year**.

Grazing Season

- Ruminant animals must be grazed throughout the entire grazing season for the geographical region (§205.237(c)(1))
- Producers must provide management on pasture and daily grazing throughout the grazing season (§205.239(a)(2))
- Producers must describe the grazing season for the livestock operation's regional location (§205.240(c)(3))

Grazing Season

Grazing season will vary year-to-year

- Actual grazing season will be reflected in records (dry matter intake calculations, grazing records, confinement records, etc.)
- May need to verify length of grazing season for region

Grazing Season—Resources

- NRCS (grazing specialists staffed in some state NRCS offices)
- Cooperative Extension System
- Animal nutritionists
- Comparison to other certified producers (what is reasonable pasture production per acre for the region?)

Grazing Season

What does not affect grazing season?

- Number of animals on farm
- Animal breed
- Temporary confinement under §205.239—days may be excluded (§205.237(c)(2))

Producers must provide pasture of a sufficient quality and quantity to graze throughout the grazing season (§205.237(c)(2))

Grazing Season

- §205.237(c)(2)(i) “Ruminant animals denied pasture in accordance with §205.239(b)(1) through (8), and §205.239(c)(1) through (3), shall be provided with an average of not less than 30 percent of their dry matter intake from grazing throughout the periods that they are **on pasture during the grazing season**;”

Grazing Season

Scenario –

- Grazing season is 260 days
- Break of 30 days for reasons under §205.239
- 230 days of **actual** grazing

Is DMI calculated at 260 days or 230 days?

Answer: 230 days

Grazing Season

Non-continuous grazing season

Changes to rations must be documented (§205.237(d)(2) and (d)(3))

Records must demonstrate compliance for days when animals are not grazing during the grazing season (i.e., describe reason for confinement) – §205.103(b))

Grazing Season

What does affect grazing season? Factors that affect availability of pasture:

- Water (irrigation and natural)
- Weather (heat/drought induced dormancy)
- Fire
- Natural Disasters (tornado/hurricane)

Grazing Season

Question:

If a producer declares Sept 1 as the end of their grazing season, but pasture is still available in the quantity and quality required until Oct 1 due to unseasonably mild weather and timely rains, do they still have to graze cows until Oct 1?

Grazing Season

Answer:

Yes. The regulations require grazing throughout the grazing season and the grazing season is defined as the time when pasture is available for grazing due to natural precipitation or irrigation.

Best Practices

Verify grazing practices during grazing season

- Unannounced inspections to confirm grazing
- Records review—do they align with observed practices?
- Evidence of grazing?

Adverse Actions

Best Practice:

- Issue a Notice of Noncompliance and give operation opportunity to correct
- Save combined Notice of Noncompliance and Notice of Proposed Suspension/Revocation for non-correctable issues only.
- When in doubt – issue a Notice of Noncompliance first.

Resources

- Natural Resources Conservation Service (NRCS)

https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/landuse/rangepasture/pasture/

- Ben Bowell – Organic Farming Specialist

Benjamin.Bowell@por.usda.gov

Resources

NOP Handbook

https://www.ams.usda.gov/rules-regulations/organic/handbook

NOP 5017-1, 5017-2, 5017-3, 5017-4, 5017-5, 5017-6, and 5017-7

Nutrient Requirements of Domestic Animals Series published by National Research Council