

ACA Best Practices for Dry Matter Intake Verification and Enforcement

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Purpose

ACA Best Practices describe actions certifiers should take to verify operator compliance, as well as producer activities that can easily be approved by certifiers. The ACA strives to ensure that all Best Practices are consistent with the Organic Foods Production Act (OFPA) and the USDA Organic Regulations. These Best Practices are not legally binding, but if a producer presents plans that fall outside of these Best Practices, then the Organic System Plan (OSP) should provide a rationale for alternative methods and an explanation for how their system fulfills the applicable portion(s) of the related regulations. Certifiers will evaluate whether the differences can be justified. Similarly, if certifiers take an approach that is different from what is presented here, they should be able to articulate how the differing approach is justified according to the OFPA and the USDA Organic Regulations.

Background

[7 CFR 205.237](#) describes the USDA Organic Regulations for organic livestock feed, and [§205.240](#) describes required pasture practices for management of organic ruminants. Systems for verifying compliance with requirements related to dry matter intake (DMI) from pasture vary across certifiers, but all agencies must verify the same information. These Best Practices describe basic principles held in common by accredited certifiers of organic ruminant livestock. They include: points at which dry matter intake percentages are verified, forms and information submitted by producers, general procedures for verification, and enforcement and follow-up.

This information has been organized chronologically from the initial review through the inspection and final review processes, including possible notices of noncompliance and subsequent follow-up activities.

Initial Review

Prior to the initial review, producers submit or update Livestock OSP components related to pasture management and pasture access. For producers new to organic certification, the initial review will be comprehensive and will ensure that the OSP contains all information necessary to verify the producer's ability to comply with the applicable regulations. For producers requesting to renew an existing organic livestock certification, the certifier reviews any

updates to the previously approved plan to assess the operation's continued compliance with pasture and grazing requirements.

Evaluation of Livestock OSP information on DMI from pasture

The OSP should include the following:

- Pasture management Plan
 - Description of pastures
 - Types of vegetation
 - Description of irrigation system
 - Description of fencing
 - Description of watering system and water locations
 - Location of shade
 - Map and locations of all pasture
 - Practices that encourage pasture endurance and recovery. May include:
 - Re-seeding activities
 - Rest period between grazing
 - Management of native and invasive species
 - Cutting hay
 - Pasture clipping
 - Plan for compliance in case of drought or other adverse weather
- Feeding and grazing plan, which will explain:
 - Number of animals and animal groups
 - Method for determining dry matter demand and dry matter intake
 - Description of how feed is measured, including typical units of measure for various feed types
 - Description of how grazing season length is determined
- The OSP should describe the regional growing season and how the operation's grazing season relates to this growing season. Operations and certifiers should reference the typical regional grazing season. If the operation's grazing season deviates due to site-specific conditions such as elevation differences, soil type and available irrigation resources, these conditions should be described in the OSP.
 - Typical summer and winter rations for each type of livestock (including percentages of each feed type, including pasture, in the overall ration)
 - Anticipated ration adaptations throughout the grazing season
 - Grazing management
 - Continuous or rotational?

- Details of rotation system (If the OSP does not ask for details such as target entry and exit grass heights and stocking rates, these can be informative in high-risk situations and may be requested at that time).
 - Anticipated temporary confinement as allowed by §205.239(b)(1-8).
 - Dry matter intake from pasture in comparison to feed fed for each animal group over six months of age. Milking cows, dry cows and heifers must each be verified separately; these groups cannot be combined or averaged.
 - Feed sources
 - A list of feed supplements and additives

The certifier may supply DMI calculation worksheets or other forms. Some certifiers use spreadsheets that automatically calculate the results after the necessary information is entered. The certifier may supply additional copies of these to inspectors or producers to record ration modifications throughout the grazing season. Appendix A is one example of a form that can be used for calculating DMI percentage from pasture. Dry matter demand can be verified against standard values such as those outlined in NOP 5017-2, NOP 5017-3, and NOP 5017-7, or when appropriate, by comparing it to dry matter demand described in winter rations. Comparisons to winter rations should take wasted feed and seasonable metabolic differences into consideration.

Risk assessment at Initial Review

Farms will fall into an elevated risk category if any of the following are true:

- The calculated DMI from pasture is less than 40% for any livestock group.
- The producer has received a Notice of Noncompliance related to pasture rule compliance within the last two years
- Pasture availability is less than one acre per animal and management intensive grazing is not employed or described. Note that the regulation does not cite a specific quantitative animals per acre measure and onsite practices must be verified. For instance, an operation may be sending their livestock to other operations for custom grazing.
- Herd size increased by more than 10% over the previous year
- Pasture acres decreased by more than 10% since the previous year
- Large size, multiple locations, or other management factors introduce added complexity

The producer's plan is evaluated during the initial review. Based on assessed risk, the certifier will assign an appropriate annual inspector and may arrange for an unannounced inspection or other investigative activity.

Appendix B is a DMI High Risk Verification Form that exemplifies questions reviewers should ask to identify risk in pasture systems. It also provides strategies for additional verifications that may be appropriate in response to risks identified.

Inspection

Inspectors should confirm the completeness and accuracy of OSP details related to pasture, grazing, and feeding and indicate any areas of concern or potential noncompliance. Specifically, inspectors should verify:

- Organic certification of all feeds, purchased and grown on farm
- Traceability for all inputs, including organic feed purchased from off-farm as well as feed supplements and additives
- Feeding records that support ration calculation estimates or expected averages over the course of the grazing season (as opposed to an average over 120 days if the grazing season in the region is longer)
- Pasture management records, including dates on which each animal group was given access to pasture (and taken off pasture as applicable)
- Documentation confirming grazing season length. Each class of livestock on the operation should have similar grazing days when the pasture is of a sufficient quality and quantity for all ruminants. The length of the grazing season should not differ for different classes of animals on a single site. Additional grazing of livestock on lesser quality pasture outside of the grazing season is considered supplemental grazing and is not calculated as part of the grazing season in feed auditing.
- Dates and reasons for temporary confinement
- Current percentage of DMI from pasture for each livestock group
- Pasture quality and quantity
- Animal management and general body condition

Inspectors should also respond to any file-specific requests from the certifier; these may include additional questions related to elevated risk or uncertainty regarding OSP details. Inspection reports should provide a thorough description of any new risks identified during the inspection, along with details that will enable verification of compliance. For example, if herd size has increased or pasture size has decreased, is the amount of pasture still sufficient?

When DMI intake from pasture is not at least 30%, or other factors related to feed and grazing do not appear to comply with the regulations, inspectors should collect any relevant documentation, including partial records, to submit to the certifier along with the Inspection Report.

When DMI intake from pasture narrowly exceeds the 30% requirement or uncertainty exists with regard to verification of OSP details, inspectors should provide additional details as applicable. The following questions might be considered:

- Is hay harvested from pasture fields?
- Are pastures managed effectively to maximize production?
- Does the operation have records to support all of the information provided in the OSP?

Quantitative pasture assessments can also be performed and may be especially useful on farms where compliance is marginal or difficult to verify. The dry matter content of pasture changes throughout the grazing season, so a quantitative calculation may be more difficult to determine than the more standard subtraction method when calculating DMI consumed from pasture. NRCS has developed a tool that certifiers or inspectors might use or modify. It can be found at the following link:

https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1044237.pdf

Inspections should be scheduled in a way that enables verification of compliance with the pasture rule. If the annual inspection does not occur during the grazing season, some type of additional inspection should be conducted to confirm compliance, especially on dairies that are determined to be high risk or where compliance is marginal or more difficult to verify. Certifiers should not overlook the importance of off-season inspections for the verification of winter housing conditions, maintenance of natural resources, etc. Certifiers and inspectors should also recognize the importance of visiting farms at varying times of year in order to gain a more holistic picture of farm activity and pasture rule compliance.

Final Review

During the final review process, the final reviewer makes a determination regarding compliance with the pasture rule and DMI requirements. For most low-risk operations, where no concerns were identified during the Initial Review or inspection, determinations can be made quickly.

If low-risk issues are identified at the inspection or if the operation narrowly complies with the requirements (is between 30-40% DMI from pasture or has animals on pasture for the bare minimum grazing season length), additional information and/or monitoring will be appropriate.

If pasture rule compliance cannot be verified, and the noncompliance appears to be linked to a seasonal drought or other isolated circumstance, the certifier should issue a Notice of Noncompliance and request a corrective action plan, including a timeline for implementation. If compliance cannot be verified, and the problem is linked to willful violations of the regulations

related to feed, pasture, or record keeping, it may be appropriate to issue a combined Notice of Noncompliance and Proposed Suspension.

Enforcement and Follow-Up

In some cases, onsite observation confirms an operation's compliance with the Pasture Rule, but records are not sufficient to document this. In low-risk situations, inspectors may be able to verify through feed purchase records, grazing records, and feed as fed records that all classes of livestock met the Pasture Rule requirement, as applicable.

However, if compliance with the 30% DMI requirement is questionable and records do not document compliance, a Notice of Noncompliance for inadequate records might be issued.

If an operation does not meet the requirements for a minimum of 30% DMI from pasture and/or a grazing season of at least 120 days, it is appropriate to issue a Notice of Noncompliance, a Proposed Suspension (Denial of Certification for new certification requests), or a Combined Notice of Noncompliance and Proposed Suspension, depending upon the situation and level of severity. Instructions for these evaluations are outlined in the [Penalty Matrix outlined in NOP 4002](#). These are paraphrased and placed in context below:

Certifiers should typically issue a Notice of Noncompliance in cases where violations are correctable but serious enough to require a corrective action plan, such as a failure in particular record-keeping. Typically, the Notice of Noncompliance is resolved upon submission of a reasonable corrective action plan, which is verified over the course of the next grazing season. If an operation typically has a clear and functioning pasture management system and it appears that due to a severe weather condition such as drought that they may not meet the Pasture Rule Requirement, the certifier should consider working with the client to submit a Temporary Variance Request to the NOP. Requests for Temporary Variance should not be submitted after the client has not met the Pasture Rule Requirement to retroactively pardon the operation from this regulation, but rather as the weather event is occurring and appearing to prevent compliance.

A Combined Notice of Noncompliance and Proposed Suspension should be issued if the operation appears unable to comply with the regulation due to systemic failure of OSP design or implementation (for example, cases in which there is clearly not enough pasture to meet the 30% requirement in a typical year). These notices can be resolved through mediation resulting in a settlement agreement that includes a reasonable corrective action plan, verified over the course of the next grazing season or as deemed suitable by the certifier.

A Notice of Proposed Suspension (or Denial of Certification) should be issued when a past noncompliance is unresolved after an agreed upon timeline for resolution.

A Denial or Proposed Revocation of Certification should be issued when there is a deliberate violation of the pasture rule, refusal to provide access during an inspection, falsification of related records, or continuing noncompliance following a proposed suspension related to the pasture rule.

All corrective action plans must be verified over the course of the following grazing season or as otherwise agreed upon by the operator and the certifier. In many cases, verification will happen in the context of the annual inspection and review cycle. In higher risk situations, unannounced inspections should be used to verify that steps are being taken as needed to bring the operation into compliance on the agreed upon time table. Specialized protocols, including but not limited to those outlined in Appendix B, should be used for ongoing verification of high-risk operations. Inspectors selected for high risk compliance verification scenarios must be adequately trained and prepared for this task. Certifier expectations for onsite verification must be made clear to the inspector so that all past issues can be effectively monitored and corrective actions verified.

Conclusion:

The ACA recommends all accredited certifiers adopt ACA Best Practices for consistent implementation of the USDA Organic Regulations. ACA Best Practices are reviewed periodically to ensure they are accurate and up to date. Concerns with this or any ACA Best Practice or guidance document should be submitted to the ACA Coordinator.

Resources

[NOP 2017-1 Guidance: Calculating Dry Matter Intake from Pasture](#)

[NOP 5017-2: Dry Matter Demand Tables for Classes of Dairy Cattle](#)

[NOP 5017-3: Dry Matter Demand Tables for Classes of Beef Cattle](#)

[NOP 5017-4: Dry Matter Intake Calculation Worksheet & Example Using National Research Council \(NRC\) Values](#)

[NOP 5017-5: Dry Matter Intake Calculation Worksheet using Body Weight Values](#)

[NOP 5017-6: Pasture Worksheet: Rotational/Stocking Grazing Systems](#)

[NOP 5017-7: Dry Matter Demand Tables for Classes of Dairy Goats](#)

[NOP 4002 Instruction: Enforcement of the USDA Organic Regulations: Penalty Matrix](#)

[NOP Noncompliance and Adverse Action Flow Chart](#)

[USDA-NRCS Pasture Condition Score Sheet](#)

an action plan and ask the inspector to gather information needed to complete the protocol in post-review. **

Post-inspection Reviewer:		Date of Review:	
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Additional Verifications:

<p>Verification A: Confirm available pasture can yield dry matter needed. This can be determined from an on-site estimate of pasture productivity or by extrapolating from hay field yields.</p> <ul style="list-style-type: none"> ○ # Animals x lb DMD x # grazing days = lb DM needed ○ lb DM needed x .3 = minimum lb pasture DM needed for compliance <p><i>Document calculations below.</i></p>		
Can available pasture yield the dry matter needed for this operation?	Yes <input type="checkbox"/>	No <input type="checkbox"/>

<p>Verification B: Use total dry matter in actual winter/confinement ration to confirm stated DMD is reasonable. Note: If the operation is a seasonal dairy, this verification may not be useful.</p>		
Is the stated DMD reasonable based on the DMD in the winter ration (taking into consideration any variables related to waste, seasonal metabolic differences, etc.)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>

<p>Verification C: Confirm all calculations in the OSP and verify all data used to calculate DMI (e.g. animal weight, DMD from charts, amounts fed, etc.). Use records and direct observations to verify as many of the stated values as possible.</p>		
Were the calculations completed correctly?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Were data used in the calculations verified to be accurate?	Yes <input type="checkbox"/>	No <input type="checkbox"/>

<p>Verification D: Perform a complete feed audit for all feed consumed on the farm.</p>	
Was available feed consistent with the OSP description of dry matter fed? (IOIA offers a webinar with instructions for computing feed audits.)	Yes <input type="checkbox"/> No <input type="checkbox"/>

Calculations, Comments, and Analysis:

Final Assessment:
Any “No” answers to questions in this section require further follow-up with the operation and may lead to compliance action. If results are unclear, mark the operation for an unannounced inspection. Remember to add details about why this operation has been flagged and consult with the Inspection Coordinator, as applicable.

Mark for an unannounced inspection?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
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Available for Download:

[Dry Matter Intake \(DMI\) High Risk Protocol Assessment Form](#)

**Dry Matter Intake Calculation Worksheet for Organic Ruminant Livestock
Developed by OEFFA Certification and Adapted for ACA Use**

Operation Name: _____	Certification #: _____
Class of Animal/Stage of Production: _____	Number of Animals in Group: _____
Dry Matter Demand (DMD) (lbs.): _____	Source of DMD: <input type="checkbox"/> NRC/NOP Table <input type="checkbox"/> Other _____

RATION 1
Dates this Ration is Fed: from _____ to _____ = # of Days [A] _____ 0

Feed Type (do not list pasture)	Amount Fed Per Animal (lbs.)		DM Content		DM Fed (lbs.)
		x		=	0.00
		x		=	0.00
		x		=	0.00
		x		=	0.00
0	- 0.00	=	0.00	÷	0.00 = #DIV/0!
DMD (lbs.)	Total DM Fed (lbs.)		DMI from Pasture (lbs.)	DMD (lbs.)	DMI from Pasture %
# of Days in this Ration [A]	0 x		DMI from this Ration [a]	#DIV/0!	= Ration Value [1] #DIV/0!

RATION 2
Dates this Ration is Fed: from _____ to _____ = # of Days [B] _____ 0

Feed Type (do not list pasture)	Amount Fed Per Animal (lbs.)		DM Content		DM Fed (lbs.)
		x		=	0.00
		x		=	0.00
		x		=	0.00
		x		=	0.00
0	- 0.00	=	0.00	÷	0.00 = #DIV/0!
DMD (lbs.)	Total DM Fed (lbs.)		DMI from Pasture (lbs.)	DMD (lbs.)	DMI from Pasture %
# of Days in this Ration [B]	0 x		DMI from this Ration [b]	#DIV/0!	= Ration Value [2] #DIV/0!

RATION 3
Dates this Ration is Fed: from _____ to _____ = # of Days [C] _____ 0

Feed Type (do not list pasture)	Amount Fed Per Animal (lbs.)		DM Content		DM Fed (lbs.)
		x		=	0.00
		x		=	0.00
		x		=	0.00
		x		=	0.00
0	- 0.00	=	0.00	÷	0.00 = #DIV/0!
DMD (lbs.)	Total DM Fed (lbs.)		DMI from Pasture (lbs.)	DMD (lbs.)	DMI from Pasture %
# of Days in this Ration [C]	0 x		DMI from this Ration [c]	#DIV/0!	= Ration Value [3] #DIV/0!

Calculating Average Dry Matter Intake from Pasture Over Entire Grazing Season			
Total Days in Grazing Season ([A]+[B]+[C]) = _____ 0 [Z]	Total Ration Value ([1]+[2]+[3]) = _____ #DIV/0! [Y]		
(Y) ÷ (Z) = _____ #DIV/0!	Average % DMI from Pasture for the grazing season		