



National Organic Program (NOP) – Access to Pasture (Livestock)

7 CFR Part 205

Final rule with request for comments



Summary

- Reassure consumers that organic milk and meat comes from organically-raised animals that are **actively grazing on pasture during the grazing season**.
- The **measures** within this rule will allow NOP to efficiently administer and **enforce the integrity** of the organic seal with regards to livestock feed and living conditions.



Summary of Amendments

- Clarity and specificity to the livestock feed and living conditions provisions.
- Establishes a pasture practice standard for ruminant animals.
 - Recognize pasture as a crop



Summary of Amendments

Producers must:

1. Provide year-round access for all animals to the outdoors ,
2. Establish a functioning management plan for pasture,
3. Incorporate the pasture management plan into their organic system plan (OSP),



Summary of Amendments

4. Provide ruminants with pasture throughout the grazing season for their geographical location,
5. Ensure ruminants derive not less than an average of 30 percent of their dry matter intake (DMI) requirement from pasture grazed over the course of the grazing season (**at least 120 days**).



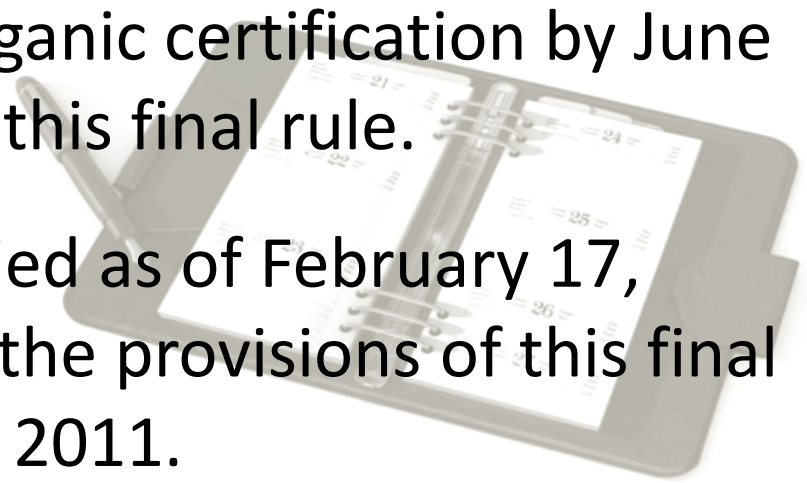
Proposed requirements deleted in the final rule

- Fencing of water bodies
- Providing water at all times, indoors and outdoors
- The requirement for a sacrificial pasture
- The origin of livestock section
 - Issues pertaining to this topic will be reviewed and evaluated separately from this action.



Effective Dates

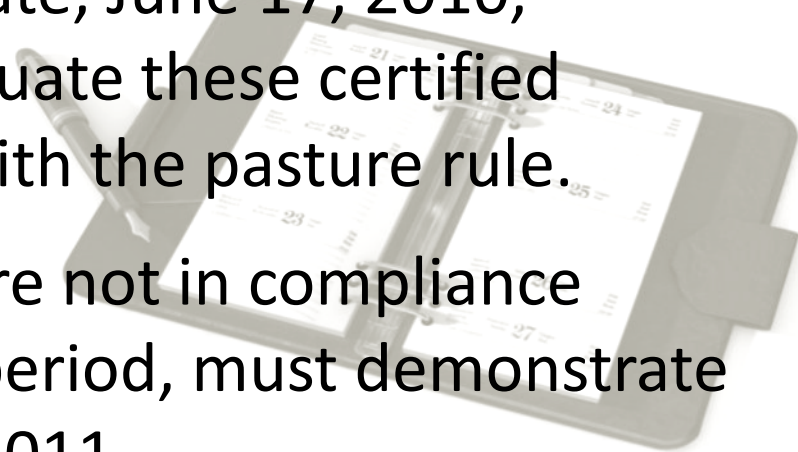
- This rule becomes effective **June 17, 2010**.
- Will be fully implemented **June 17, 2011**.
- Operations which obtain organic certification by June 17, 2010 must comply with this final rule.
- Operations which are certified as of February 17, 2010 must fully implement the provisions of this final rule, as applicable, June 17, 2011.





Operations certified prior to February 17, 2010 (Existing Certified Operations)

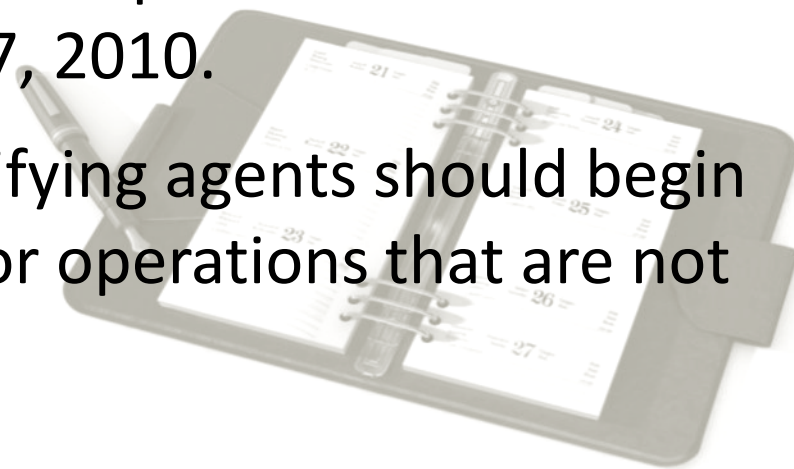
- Operations which were certified as of the publication date, February 17, 2010, must fully implement this rule by June 17, 2011.
- Beginning on the effective date, June 17, 2010, certifying agents should evaluate these certified operations for compliance with the pasture rule.
- Certified operations which are not in compliance during the implementation period, must demonstrate full compliance by June 17, 2011.





Operations certified after February 17, 2010 (New Operations Seeking Certification)

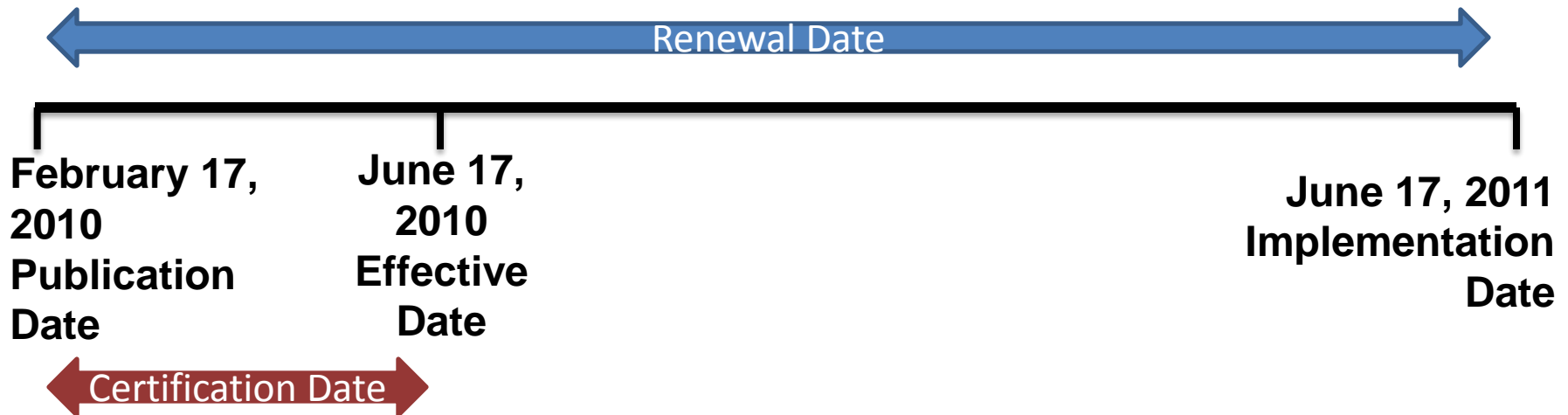
- Operations which were not certified as of the publication date, but become certified before June 17, 2010, must demonstrate full compliance with the rule by the effective date, June 17, 2010.
- After the effective date, certifying agents should begin the adverse action process for operations that are not in full compliance.





Effective Dates

- EXISTING Programs – longer implementation time; adverse actions begin after June 17, 2011.



- Certification of NEW programs – must comply with rule NOW, compressed implementation time; adverse actions begin after June 17, 2010.



Amendments to
Main Provisions
ALL LIVESTOCK
7 CFR PART 205



General Clarifications

§ 205.237 Livestock feed

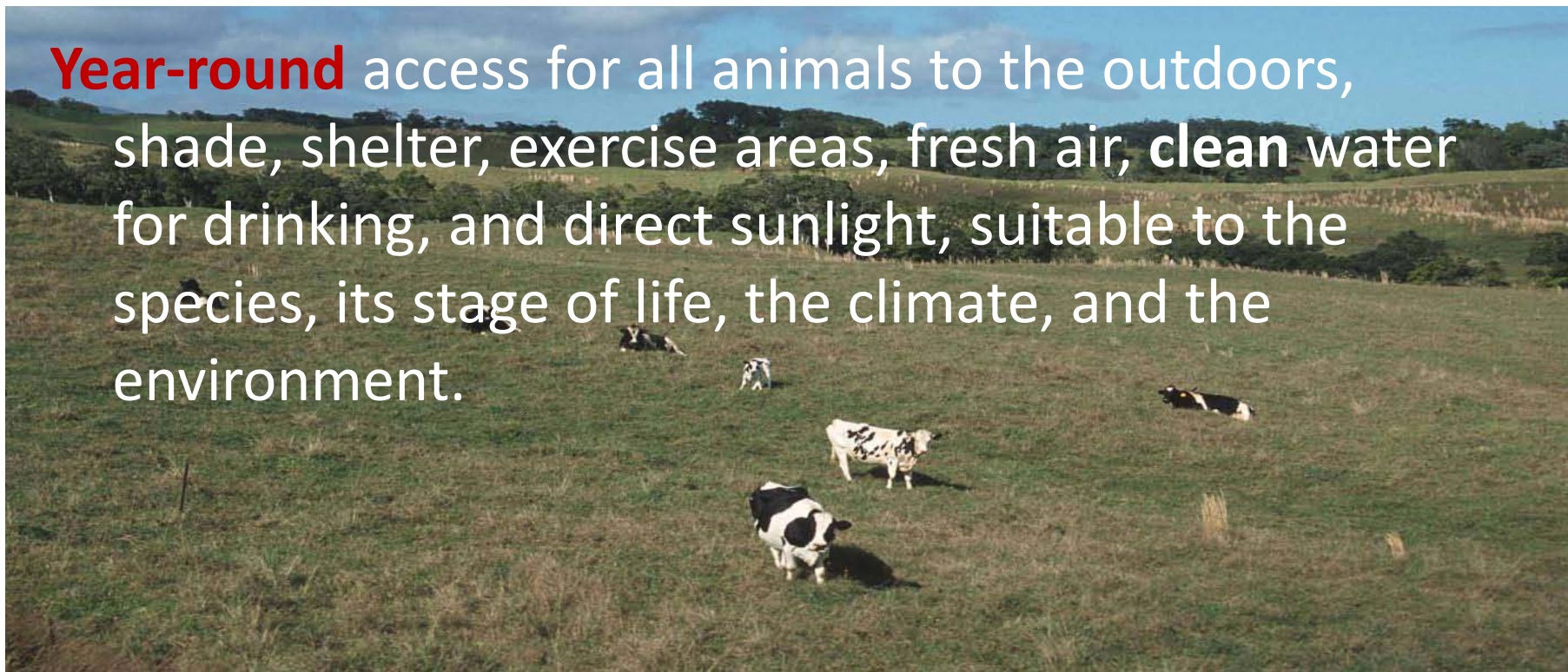
- All agricultural ingredients included in the ingredients list for feed additives and supplements **must be organically produced and handled** (§ 205.237 Livestock feed (a)).
- Ionophores, a class of antibiotics, are specifically prohibited (§ 205.237 Livestock feed (b)(7)).



General Clarifications

§ 205.239 Livestock living conditions (a)(1)

Year-round access for all animals to the outdoors, shade, shelter, exercise areas, fresh air, clean water for drinking, and direct sunlight, suitable to the species, its stage of life, the climate, and the environment.





§ 205.239 Livestock living conditions (a)(1)

Except, that, animals may be **temporarily** denied access to the outdoors in accordance with **§§ 205.239(b) and (c)**.

Temporary and Temporarily. Occurring for a limited time only (e.g., overnight, throughout a storm, during a period of illness, the period of time specified by the Administrator when granting a temporary variance), not permanent or lasting.



§ 205.239 Livestock living conditions (b)

May provide **temporary confinement or shelter** for an animal because of:

(1) Inclement weather;

Inclement weather. Weather that is violent, or characterized by temperatures (high or low), **or characterized by excessive precipitation** that can cause physical harm to a given species of livestock. **Production yields or growth rates of livestock lower than the maximum achievable do not qualify as physical harm.**



§ 205.239 Livestock living conditions (b)

May provide **temporary confinement or shelter** for an animal because of:

- (2) The animal's **stage of life**: Except, That lactation is not a **stage of life**;

Stage of life. A discrete time period in an animal's life which requires specific management practices different than during other periods (e.g., poultry during feathering). Breeding, freshening, lactation and other recurring events are not a stage of life.



§ 205.239 Livestock living conditions (b)

Temporary confinement or shelter – *continued*

- (3) Conditions under which the health, safety, or wellbeing of the animal could be jeopardized;
- (4) Risk to soil or water quality;
- (5) Preventive healthcare procedures or for the treatment of illness or injury (neither the various life stages nor lactation is an illness or injury);
- (6) Sorting or shipping animals and livestock sales; (7) Breeding; or (8) Youth projects.



§ 205.239 Livestock living conditions (a)(1)

Yards, feeding pads, and feedlots may be used to provide ruminants with **access to the outdoors during the non-grazing season** and **supplemental feeding** during the grazing season.

Yards, feeding pads, and feedlots shall be large enough to allow all ruminant livestock occupying the space to feed simultaneously without crowding and without competition for food.





§ 205.239 Livestock living conditions (a)(5)

Yards, feeding pads, feedlots and laneways shall be:

- well-drained,
- kept in good condition (including frequent removal of wastes), and
- managed to prevent runoff of wastes and contaminated waters to adjoining or nearby surface water and across property boundaries.



§ 205.239 Livestock living conditions (a)(1)

Continuous total confinement of any animal indoors is prohibited.

Continuous total confinement of ruminants in yards, feeding pads, and feedlots is prohibited.



§ 205.239 Livestock living conditions (a)(3)

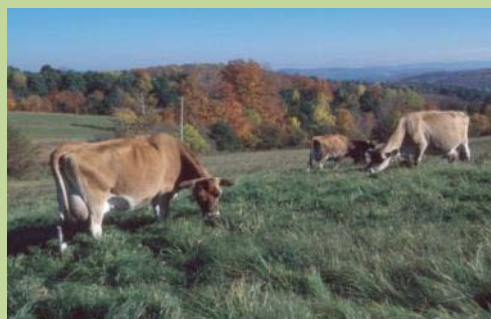
Appropriate clean, dry bedding.

- Roughages used as bedding, shall be **organically produced by an operation certified** and,
- If applicable, organically handled by operations certified to the NOP.

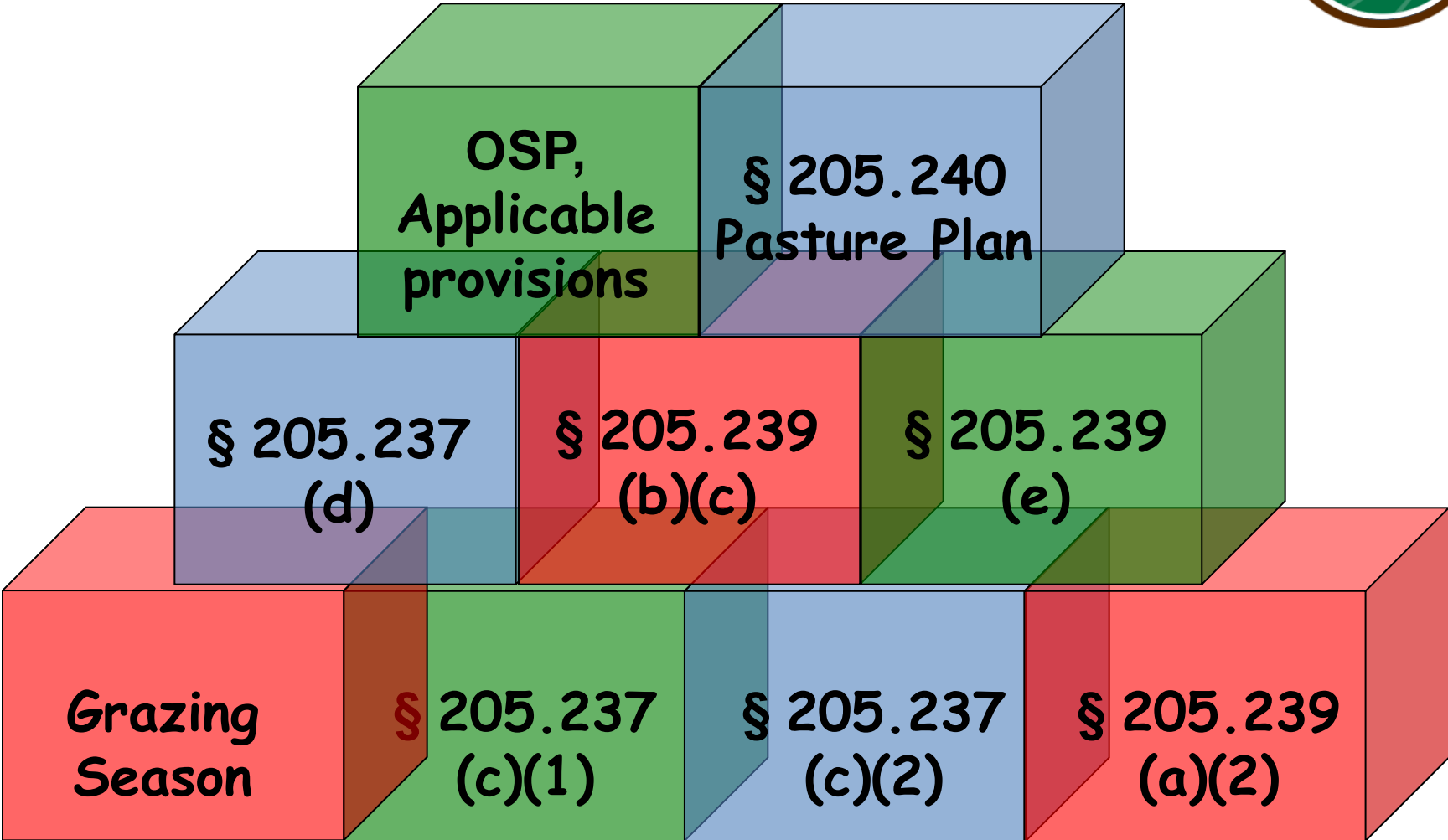


§ 205.239 Livestock living conditions (e)

Producers must manage pastures and other outdoor access areas in a manner that does not put soil or water quality at risk.



Amendments to
Main Provisions
RUMINANT LIVESTOCK
7 CFR PART 205





§ 205.237 Livestock feed (b)(8)

(8) Prevent, withhold, restrain, or otherwise restrict ruminant animals from actively obtaining feed grazed from pasture during the **grazing** season, except for conditions as described under § 205.239(b) and (c).





§ 205.237 Livestock feed (c)

During the grazing season, producers shall:



Growing Season

Last frost to first frost
Specific period of time

Grazing Season

More flexibility

AVAILABILITY

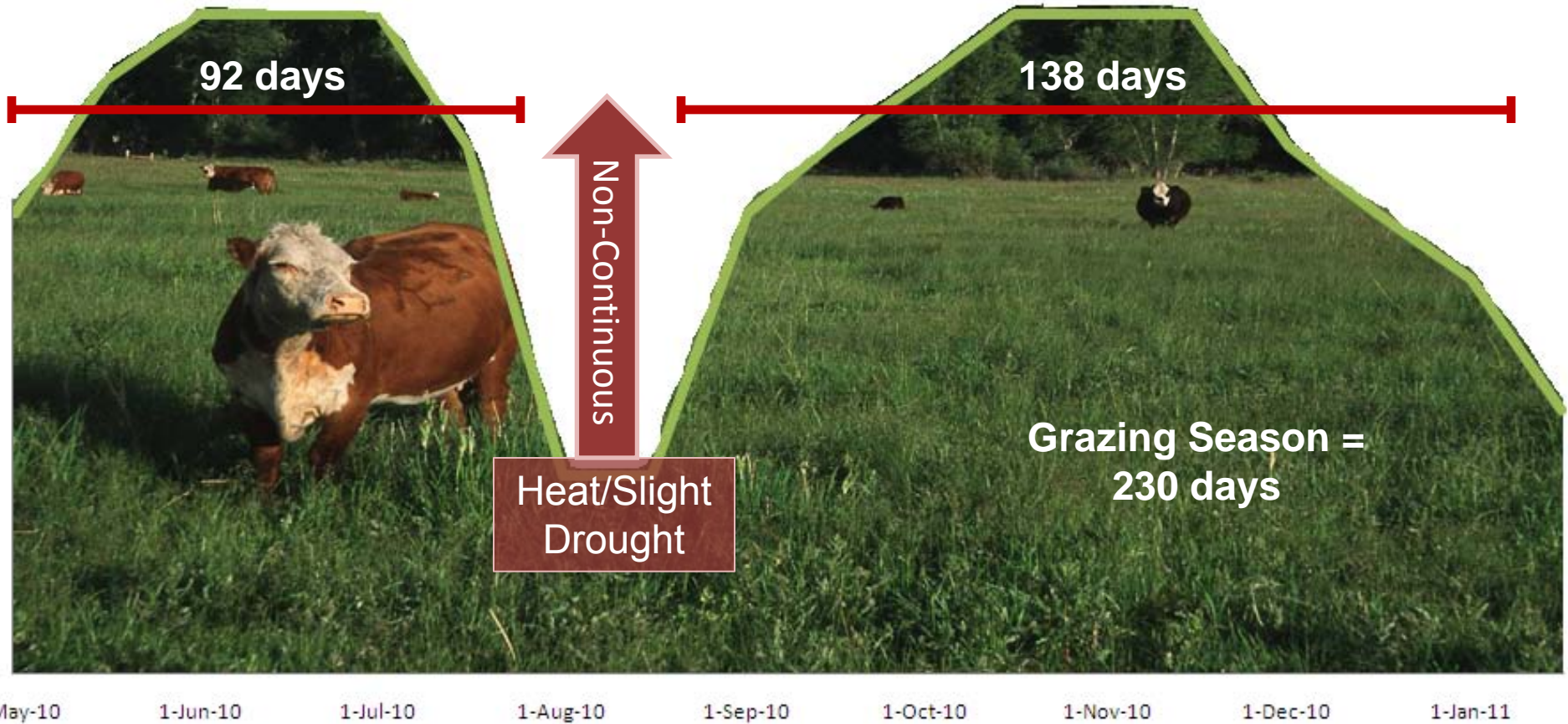


Definitions

- **Grazing season.** 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





§ 205.237 Livestock feed (c)

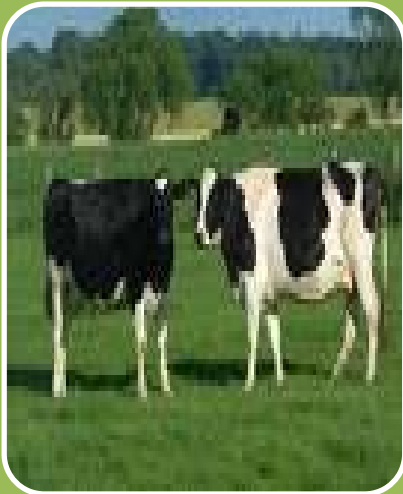
- (1) Provide not more than an average of 70 percent of a ruminant's **dry matter demand** from dry matter fed
 - dry matter fed does not include dry matter grazed from **residual forage** or vegetation rooted in pasture



NOP Definition – Residual Forage

- Forage cut and left to lie, or windrowed and left to lie, in place in the pasture.

Pasture/Rangeland Mgmt



- Residual vegetation (the amount of forage remaining) after grazing.
- Critical measure of pasture/rangeland health.
- Protects the plant crown from cold, heat and insect damage.
- Boost it gives to forage production in subsequent years.



Residual Forage

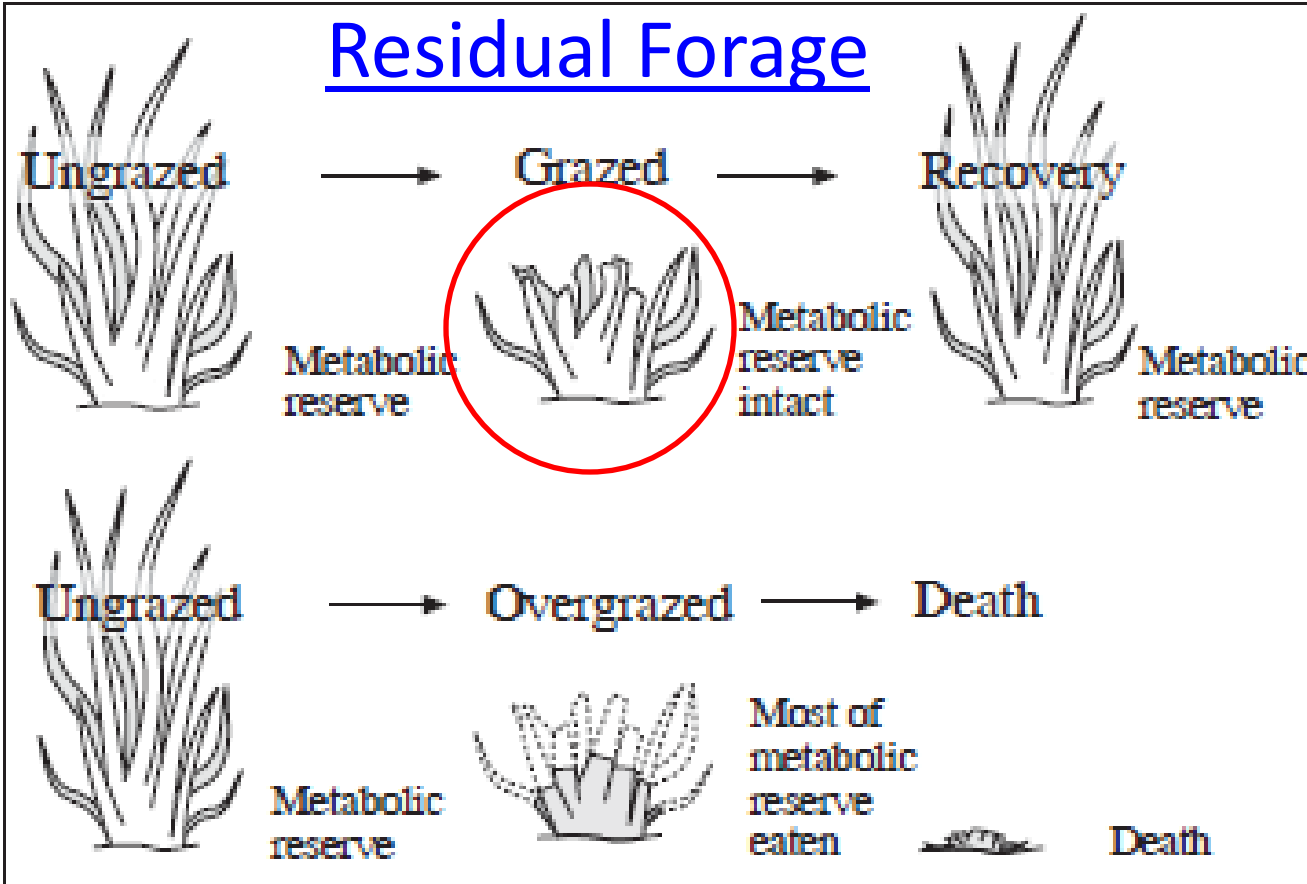


Figure 1. Grasses can be grazed without damage if a “metabolic reserve” is left intact and the residual forage threshold is not consistently exceeded (Holecheck et al. 2001).

Texas AgriLife Extension Service

<http://texasextension.tamu.edu>

Publication E-127



§ 205.237 Livestock feed (c)

(2) Provide pasture of a **sufficient quality and quantity** to graze &

– $\geq 30\%$ of their **Dry Matter Intake** from grazing

Ruminant animals must be grazed throughout the entire grazing season for the geographical region (120 – 365 days).



§ 205.237 Livestock feed (c)(1-2)

DMI is calculated as an average over the entire grazing season for each type and **class of animal**.

- Examples: Dairy Cow – Lactating, Beef Bred Replacement Heifer, Beef Steer—Slaughter Stock

NOTE: If animals are managed in multiple, separate class/type sub-groups, then the DMI must be calculated as an average for each class/type sub-groups.



§ 205.237 Livestock feed (c)(2)



Exceptions: Temporary confinement or shelter; temporarily deny animal pasture or outdoor access; breeding bulls; (finishing) slaughter stock .



§ 205.237 Livestock feed (d)(1)

Describe **the total feed ration** for each type and class of animal. The description must include:

- (i) All feed **produced** on-farm;
- (ii) All feed **purchased** from off-farm sources;
- (iii) The **percentage of each** feed type, including pasture, in the total ration; and
- (iv) A list of all **feed supplements** and additives.





§ 205.237 Livestock feed(d)(2-4)

- (2) Document the **amount of each type of feed actually fed** to each type and class of animal.
- (3) Document **changes** that are made to all rations throughout the year in response to seasonal grazing changes.
- (4) Provide the **method for calculating dry matter demand and dry matter intake.**



National Organic Program

Pasture Rulemaking

The NOP has issued a final rule to provide greater detail to the NOP livestock regulations, especially as they relate to pasture and rotational systems. The following links will take you to key documents related to this rulemaking.

<http://www.ams.usda.gov/NOP> -
Pasture Rulemaking Information
(link on right hand side)

Access to Pasture

Final Rule Notice: Final Rule National Organic Program (NOP) Access to Pasture (Livestock) (PDF)

Frequently Asked Questions (PDF)

Worksheet (PDF)

Side-by-side: A comparison of the current NOP regulation, and proposed and final pasture rules (PDF)

Dry Matter Intake Information

- Calculating DMI from Pasture (PDF)
- Dry Matter Demand - Dairy (PDF)
- Dry Matter Demand - Beef (PDF)
- DMI Calculation Worksheet - NRC Value (PDF)
- DMI Calculation Worksheet - NRC Value EXAMPLE (PDF)
- DMI Calculation Worksheet (PDF)
- Pasture Worksheet for Rotational/Stocking Grazing Systems (PDF)



What is Dry Matter Demand/Intake?

As-fed basis vs. Dry matter basis

As-fed – the amount of feed a cow consumes per day (lb actually fed).

Dry matter – the amount of feed a cow consumes per day **on a moisture-free basis.**

Examples: Grain is ~ 89% dry matter
Grass is ~ 20 – 30% dry matter



Why is DMI Important?

Dry matter demand/intake:

- an accurate estimate to compare feeds
 - must put feeds on an equal basis
- amount of nutrients available to an animal for health and production

Level of intake from a ration that contains the recommended energy concentration for the animal's stage of life and level of production



What Affects DMI?

Three major factors that affect dry matter intake:

- The feed ration (the quality and availability of forage and the amount and type of supplements);
- the environment; and
- the animal itself (including size, body condition, stage of life and level of production).



What Affects DMI?

Most ruminants eat to satisfy a need for total pounds of dry matter (physical fill)

or

Eat to meet energy needs

- energy intake/requirements in response to energy expenditure such as milk production



How is DMI Calculated?

It is important for DMI to be actually measured or accurately estimated

- proper diet formulation
- prevent underfeeding or overfeeding of nutrients
- promote efficient nutrient use

Estimating daily DMI from pasture is a challenge.

- Condense a complex subject matter into a usable/practical tool
- Actual pasture consumption is difficult to measure.



1

- Determine Dry Matter Demand (DMD; expected DMI)

2

- Determine DMI from feed sources
 - Grain, hay, silage

3

- Determine DMI for Pasture
 - Subtract DMI from feed sources from expected DMI (DMD)

4

- Calculate the percentage of DMI from Pasture
 - $\geq 30\%$ ✓



How is DMI Calculated?

Step (1) – Establish dry matter demand (DMD) (= expected DMI)

Predicting DMI is not an exact science

- class of animal, stage of production (for example, lactating, reproductive status, or growth stage) and body weight
- do not account for the numerous physiological, environmental, and management factors that alter DMD;
- **use these values as general estimates.**



How is DMI Calculated?

Step (1) – Establish dry matter demand (DMD)

[NOTE: See NOP Calculating DMI from Pasture]

Option 1 (Preferred): Most producers will predict, or estimate, DMD/DMI from reference tables or published data.

- National Research Council
- NOP DMD Tables for [Dairy](#) and [Beef](#)

Option 2: Use a % body weight value to determine dry matter demand for the class of animal.



How is DMI Calculated?

Step 2: Determine DMI from Other Feed Sources

Amount (lb; on dry matter basis) of supplemental feed (such as grain and hay)

1. Know the percent DM of the feed source (convert lb of feed consumed on an as-fed basis to a dry matter basis)
 - Reference value or **feed analysis** [NOTE: References in NOP Calculation DMI from Pasture]

General assumptions for the percent dry matter are as follows: Grain = 89% DM; Dry hay = 90% DM; Grain Silage = 25-35% DM; Haylage/Baleage = 35-60% DM



How is DMI Calculated?

Step 2: Determine DMI from Other Feed Sources (*continued*)

Amount (lb; on dry matter basis) of supplemental feed (such as grain and hay)

2. Determine DMI from Feed Sources

EXAMPLE:

<u>Feed Source</u>	<u>lb, as-fed</u>	x	<u>DM, %</u>	=	<u>Lb, DM</u>
Hay	5	x	90/100		4.5
<u>Grain</u>	11	x	89/100		<u>9.79</u>
Total lb DMI from Feed Sources =					14.29



How is DMI Calculated?

Step 3: Determine DMI from Pasture

Option 1: Subtract DMI from other feed sources from the dry matter demand (expected DMI).

EXAMPLE:

Estimated dry matter demand per animal (lb):	36
- total lb DMI from other feed sources	-14.29
= estimated pasture DMI	=21.71 (lb)



How is DMI Calculated?

Step 3: Determine DMI from Pasture (*continued*)

Option 2: Determine actual DMI from pasture by field measurements .

- Available forage before/after grazing
 - Chop & weigh, pasture sticks, meters, & probes
 - Based on pasture-related characteristics
 - height and density
- Grazing time (minutes/day) x biting rate (bite/minutes) x bite size (g intake/bite) = pasture intake
- Forage quality is not factored in (e.g., summer forages)



How is DMI Calculated?

Step 4: Calculate the percentage of DMI to determine if requirement of 30% DMI from pasture is met.

% DMI from pasture = (Estimated lb DMI from pasture divided by (÷) estimated dry matter demand (lb)) x 100

EXAMPLE:

% Dry matter intake from pasture = $(21.71 \div 36) \times 100 = 60.31\%$ (✓ Requirement is met)



How is DMI Calculated?

Initial DMI should be calculated at the beginning of the grazing season for each class and type of animal (sub-groups).

Additional calculations should be made whenever a change occurs.

- the nutritional requirements of a ruminant animal
- the diet of an animal –due to the availability, quantity, and quality of the pasture (forages).

[Average of those values over the entire grazing season in the OSP.](#) [NOTE: See NOP DMI Calculation Worksheet NRC Value]



§ 205.239 Livestock living conditions (a)(2)

For all ruminants, **management on pasture and daily grazing** throughout the grazing season(s) to meet the requirements of § 205.237 (livestock feed).





§ 205.239 Livestock living conditions (c)

May temporarily **deny** a ruminant animal **pasture** or **outdoor access** under the following conditions:

- (1) One week at the end of a lactation for dry off (for denial of access to pasture only), three weeks prior to parturition (birthing), parturition, and up to one week after parturition;
- (2) In the case of **newborn dairy cattle** for up to six months:
 - Provided, That, an animal shall not be confined or tethered in a way that prevents the animal from lying down, standing up, fully extending its limbs, and moving about freely;



§ 205.239 Livestock living conditions (c)

- (3) In the case of fiber bearing animals, for short periods for shearing; and
- (4) In the case of dairy animals, for short periods daily for milking.
 - Milking must be scheduled in a manner **to ensure sufficient grazing time to provide each animal with an average of at least 30 percent DMI** from grazing throughout the grazing season.
 - Milking frequencies or duration practices cannot be used to deny dairy animals pasture.



Request for Comments

§ 205.239 Livestock living conditions (d)

- Ruminant slaughter stock must be **maintained on pasture for each day that the finishing period corresponds with the grazing season** for the geographical location.
 - However, rule **exempts ruminant slaughter stock** from the 30 percent DMI from grazing requirement during the finishing period.
- The finishing period shall not exceed **one fifth (1/5) of the animal's total life or 120 days, whichever is shorter.**





Finishing Period

- Slaughter Cattle:
 - **Basically, if the expected slaughter age is ≥ 20 months than the finishing period will be a maximum of 120 days;**
 - If the expected slaughter age is ≤ 20 months than the finishing period will be a maximum of $1/5$ it's lifespan.
- Slaughter sheep:
 - Typical life span for a slaughter lamb is 5-8 months.
 - The finishing period will be a maximum of $1/5$ it's lifespan.



Request for Comments

- Requesting comments on the portions of the rule that pertain to **finish feeding of ruminant slaughter stock** (§ 205.239(d)).
 - The length of the finishing period;
 - Infrastructure hurdles and regional differences, if any, and the economic impact;
 - The use of feedlots, as defined in this final rule, for the finish feeding of organic slaughter stock.
- Based upon comments received, the agency will **determine whether any further action is warranted.**



Request for Comments

- 60 day period—**due by April 19, 2010.**
- Interested persons may submit comments by
 - Internet at <http://www.regulations.gov> or
 - by mail
 - Toni Strother, Agricultural Marketing Specialist
National Organic Program, USDA-AMS-TMP-NOP
Room 2646-So., Ag Stop 0268
1400 Independence Ave., SW
Washington, DC 20250-0268
- Comments should be identified with the document number **AMS-TM-06-0198; TM-05-14.**



Amendments to
Main Provisions

**RUMINANT LIVESTOCK –
PASTURE STANDARD
7 CFR PART 205**



§ 205.240 Pasture practice standard

The producer of an organic livestock operation must, for all ruminant livestock on the operation, demonstrate through **auditable records** in the OSP, a **functioning management plan for pasture**.



§ 205.240 Pasture practice standard (a)

Pasture must be **managed as a crop**.

- Pasture management **does not include crop rotation provisions** (§ 205.205).
- **Annual crops for ruminant grazing must be managed in full compliance with §§ 205.202—205.206.**
- **Irrigation shall be used**, as needed, to promote pasture growth, **when an operation has irrigation available.**





§ 205.240 Pasture practice standard (b)

Must provide pasture in compliance with § 205.239(a)(2) and manage pasture to comply with the requirements of:

- Annually provide [sufficient quantity and quality of forage to provide] a minimum of 30% of their DMI, on average, (§ 205.237(c)(2));
- Minimize the occurrence and spread of diseases and parasites (§ 205.238(a)(3)); and
- Refrain from putting soil or water quality at risk (§ 205.239(e)).



§ 205.240 Pasture practice standard (c)

A pasture plan must be included in the producer's organic system plan, and **be updated annually.**

- **The producer may resubmit the previous year's pasture plan when no change has occurred in the plan.**
- **When a change is contemplated that may affect an operation's compliance, the producer must get agreement by ACA before implementation.**





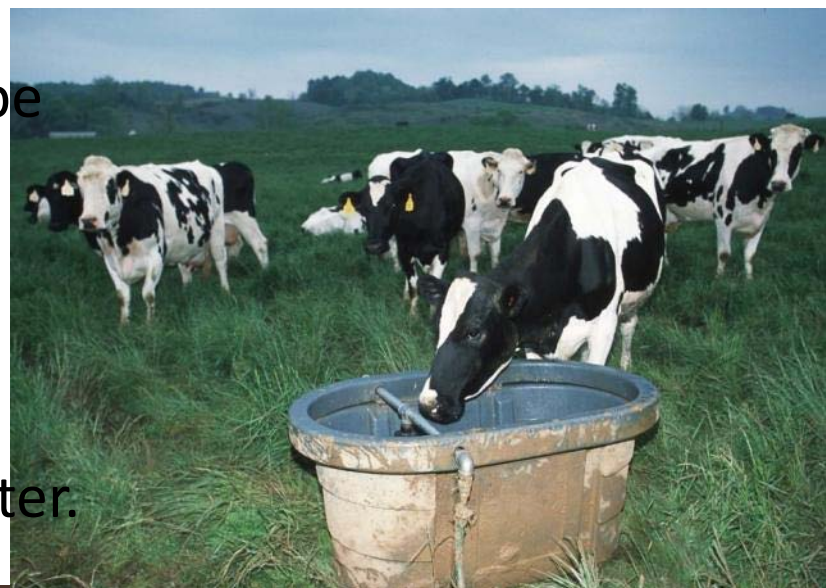
§ 205.240 Pasture practice standard (c)

The pasture plan shall include a description of the:

- (1) **Types of pasture** provided.
- (2) **Cultural and management** practices to be used to ensure pasture of a sufficient quality and quantity is available to graze throughout the grazing season and to provide all ruminants under the OSP with an average of not less than 30% of their DMI from grazing throughout the grazing season.

§ 205.240 Pasture practice standard (c)

- (3) Grazing season for the livestock operation's regional location.
- (4) Location and size of pastures**, including maps giving each pasture its own identification.
- (5) The **types of grazing methods** to be used in the pasture system.
- (6) Location and types of fences, except for temporary fences, and the location and source of shade and the location and source of water.



§ 205.240 Pasture practice standard (c)

- (7) Soil fertility and seeding systems.
- (8) Erosion control and protection of natural wetlands and riparian areas practices.



§ 205.240 Pasture practice standard (c)

1) Pasture Plan – Quality Management System

- Documented “Plan”
- Contingency plan
- Utilize Planning Resources
 - [NRCS Prescribed Grazing Plan \[search by state\]](#)
 - [NOP Pasture Worksheet for Rotational/Stocking Grazing Systems](#)
 - NOP Pasture Worksheet for Continuous Grazing Systems [in development]

2) On-site Auditable Records

- Supports Plan and/or
- Records deviations from plan
- Utilize resources
 - [ATTRA Organic Livestock Documentation Forms](#)



3) On-site Inspection

