

Grass Fed Beef Production



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Topics that will be covered?

- Grass Fed Beef Definition
- Specs for Grass Fed Beef – ISDA & USDA Rules
- Meat sales – Laws
- Marketing
- Carcass Evaluation and Grading
- Production cycle considerations for raising Grass Fed Beef.
- Feeding and nutrition
- Grazing Systems

What is Grass Fed Beef?

USDA Definition = “Ruminant animals and the meat and meat products derived from such animals whose diet throughout their lifespan, except for milk prior to weaning, is solely derived from forage which is any edible herbaceous plant material that can be grazed or harvested for feeding, with exception of grain.”

USDA Certification

Can register as a Grass Fed Producer with the USDA – Look on web for USDA Grass Fed Program –

Complete forms – fee = \$115 good for 2 years.

Grass Fed Beef – AGA Definition

American Grass-fed Association (AGA) =
“Animals having been, from birth to harvest, fed on grass, legumes and forages, and animals having not been: creep fed as calves, fed for extended periods in confinement or finished on grains.”

AGA Continued

AGA – three tier certification system:

Tier 1 – Animals must be maintained on 100% forage diets with no exposure to any non-forage supplements.

AGA Tier 2

- Tier 2 – Animals may only be fed approved non-forage supplements to ensure the animal's well-being during periods of low forage quality or inclement weather.

AGA – Tier 3

Tier 3 = Pasture finished cattle may be fed approved non-forage supplements at a rate of 0.5% of body weight during the growth stage and 1.0% during the finishing phase defined as the last 200 pounds gained before harvest.

American Grass-fed Association

Can become certified:

Americangrassfed.org

Grass Fed Specifications

Raised on forages or harvested forages

- Pasture
- Cover crops
- Grass or legume hay
- Silage
- Grain hay if harvested prior to seed ripe

Grass Fed – Specs - No No's

Can't be fed Grain

- Corn
- Barley
- Wheat
- Etc

Grass Fed – Specs – Animal Health?

Most programs focus on preventative health care:

- Vaccinations allowed
- Vitamin and Mineral supplements allowed
- No antibiotics
- No growth implants
- No ionophores

Selling Meat – Laws to keep in mind

Federal Meat Inspection Act (FMIA)

“All meat sold commercially must be inspected and passed to ensure that it is safe, wholesome and properly labeled”

FMIA

- Enforced by the United States
Department of Agriculture – (USDA)
Food Safety Inspection Service – (FSIS)
regulations

Meat Inspection Laws

- Federal inspectors must be present at all time during slaughter
- Will inspect post-mortem carcasses
- Will inspect facilities and equipment of slaughter plant
- Must be labeled correctly, have a USDA inspection label on it.

Meat Inspection Laws

FMIA – Exemption

- Custom slaughter plants

Processing for a livestock owner –
product not entering commercial trade

Meat Inspection Laws

State Inspection

- State Meat and Poultry Inspection (MPI) programs.
- Can replace FMIA – USDA inspections - if the product is sold in the state where it was inspected.
- Wyoming has this law and I hear that the Idaho Farm Bureau is pushing for this law in Idaho this year with the legislature.

Meat Inspection Laws - Summary

- To sell wholesale or retail cuts of meat – has to be slaughtered in a USDA or state inspected plant
- If processed in non-inspected plant – only can sell the beef live to a customer and they have to process it.

Laws cont:

Ex. Sell $\frac{1}{4}$ of beef to 4 customers. You set the price based on live wt.

You haul the beef to a slaughter plant.

Customers pay for processing and cutting.

Have you decided on a Processor?

Extremely Important!!

- Who will process your beef? (where)
- Can you bring cattle to them when you need to?
- Will they package and label for you?



Marketing??

Have to be able to sell what you produce at a profit!!

We are good at producing beef, not so good at marketing.



Marketing – Develop a Marketing Plan!!

- What are you wanting to market? – carcasses – wholesale or retail cuts of beef?
- Who will be your target customers?
- How will you let them know you have something to sell?

Marketing Cont:

- Develop a logo and other advertising materials.
- How will you price the product?
- Will you be a certified Grass Fed Beef Producer? USDA or AGA
- May need some help.

Marketing cont:

- Should have a complete marketing plan and determine what you will be selling and to whom before you start raising the beef. This should be part of your business plan.
- **Market Research!**
- **Developing a marketing plan should be the first step before you do anything or produce anything.**

Marketing??

- [Grass-Fed Beef, Meat - Lazy JM Ranch - Liberty Lake, Washington](#)
- [Big Canyon Beef](#)
- [BEEF - grass-fed and finished - Kristin's Farm Stand - Boise \(kristins-boise.com\)](#)

Grass Fed Beef



Grass Fed Beef

Goal = to produce the highest quality grass fed beef for your customers.

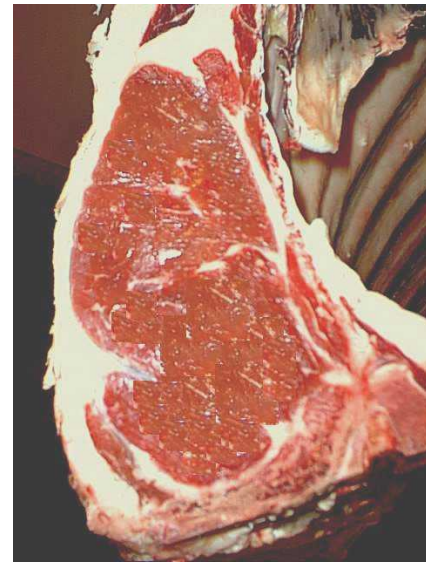
Starts with an understanding of carcass quality – know what you are trying to produce.

Beef Carcass Grading



The 2 grades we give a beef carcass

1. Quality Grade
2. Yield Grade



Quality Grading Review

- What are the two factors used for Quality Grading?

1. Age

2. Marbling

Figure 1.—Relationship between marbling, maturity, and carcass quality grade.¹

Degrees of marbling	Maturity ²				
	A ³	B	C	D	E
Slightly abundant	Prime				
Moderate			Commercial		
Modest	Choice				
Small					
Slight	Select		Utility		
Traces					
Practically devoid	Standard			Cutter	

Maturity Classification.

A³: 9 – 30 months

B³: 30 – 42 months

C³: 42 – 72 months

D³: 72 – 96 months

E³: 96 months and over

Maturity determination.

Bone characteristics

Ossification of cartilage

Ribeye color and texture

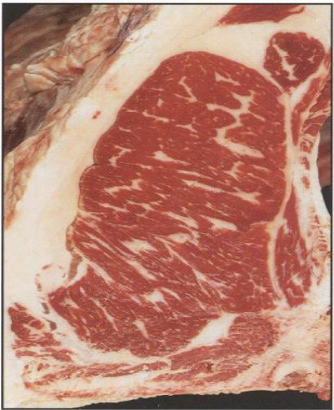
¹Assumes that firmness of lean is comparably developed with the degrees of marbling and that the carcass is not a "dark cutter."

²Maturity increases from left to right (A through E).

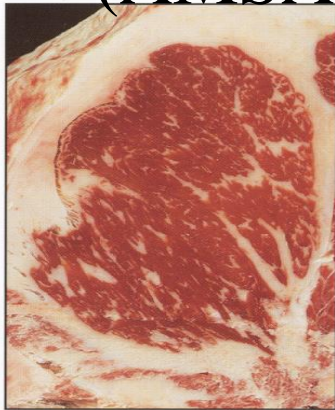
³The A maturity portion of the figure is the only portion applicable to bullock carcasses.

Carcass Grading

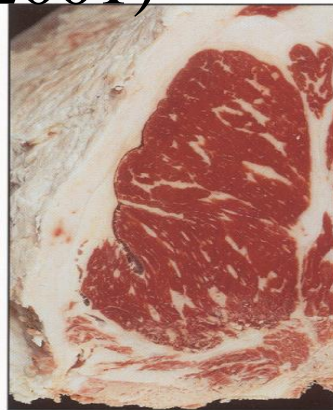
USDA Quality Grades (AMSA, 2001)



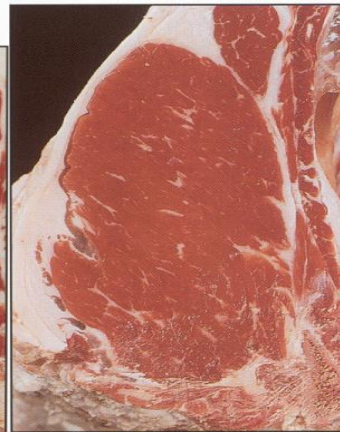
Prime+
Abundant-



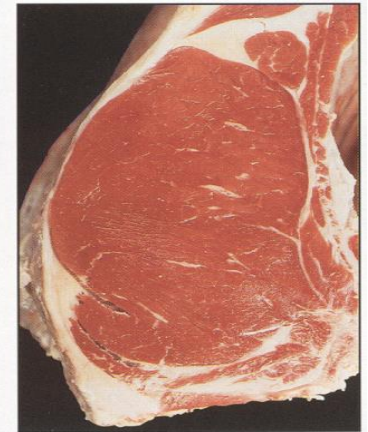
Prime ◦
Moderately Abundant ◦



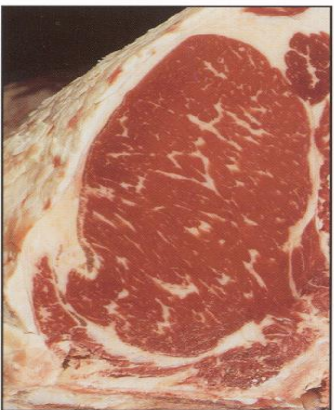
Prime-
Slightly Abundant-



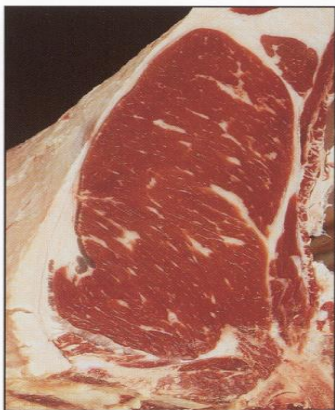
Select+
Slight+



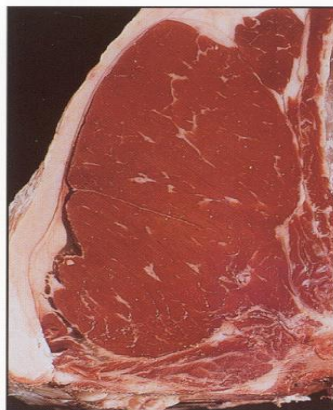
Select-
Slight-



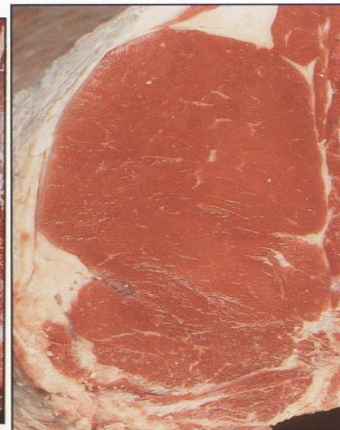
Choice+
Moderate ◦



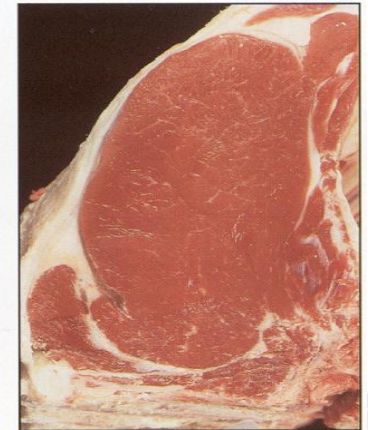
Choice-
Modest-



Choice-
Small-

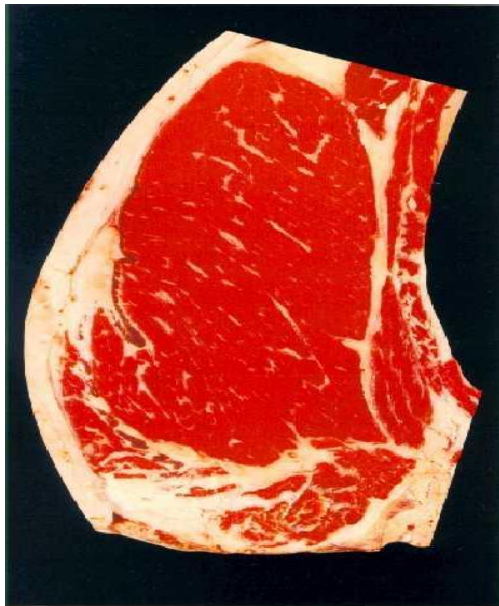


Standard+
Traces ◦



Standard-
Practically Devoid+

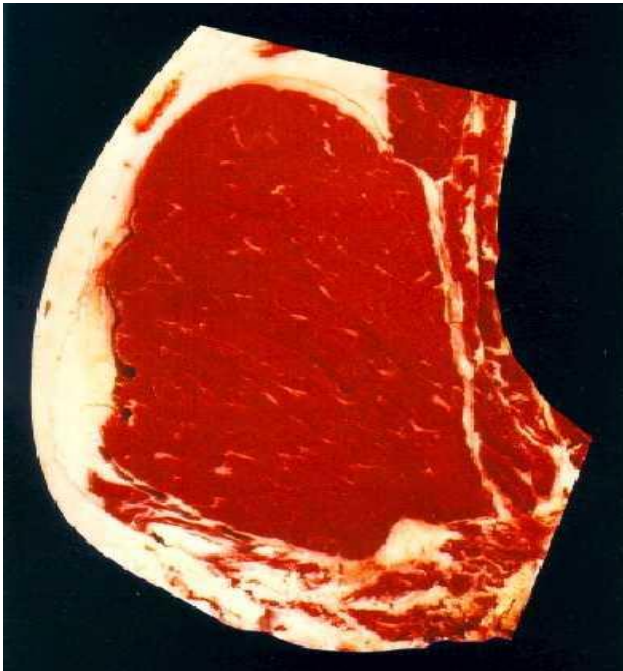
What is the Q grade?



Modest marbling

Choice Average

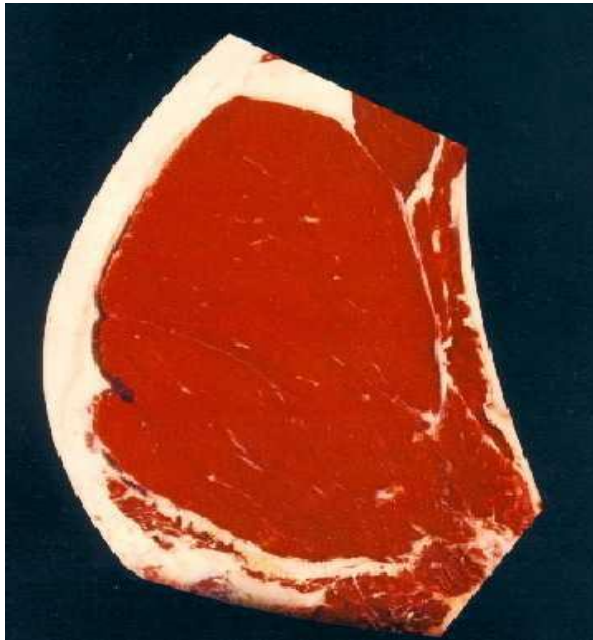
What is the Q grade?



Small marbling

Low Choice

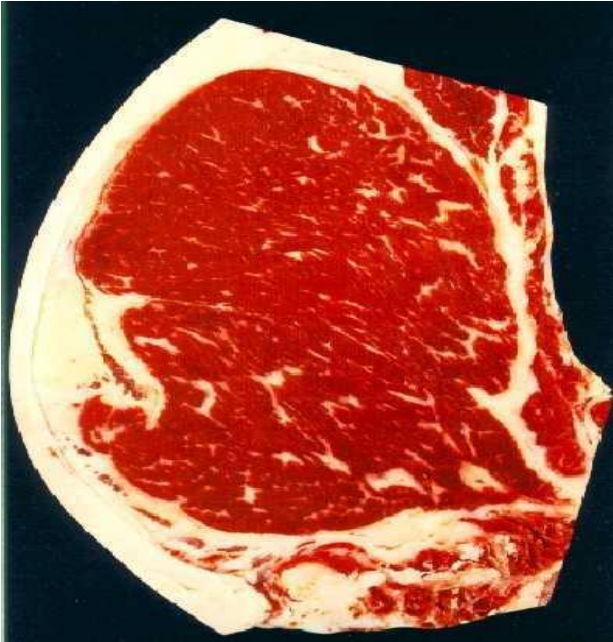
What is the Q grade?



Slight marbling

Select

What is the Q Grade?



Slightly abundant

Low Prime

Yield Grade

- What is a yield grade?

A measurement of cutability.

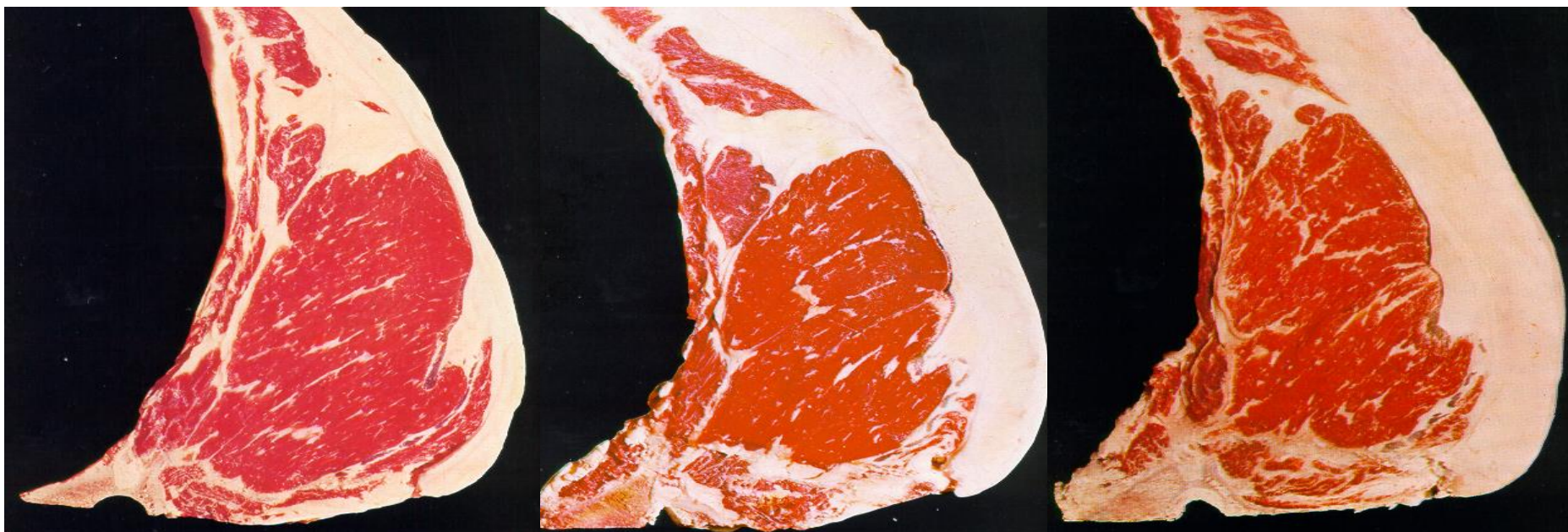
More meat less fat =
YG 1,2 or 3

More fat less meat =
YG 4,5

YG 1

YG 3

YG 5



Grass Fed Beef Quality

Target??

Should be at least:

QG = Select

YG = 3 or less

Production Cycle

To meet the goal of producing high quality beef what should you do?

1. Breed selection

- Recommend selecting breeds that are easy keeping that fatten on grass. British breeds – Angus, Red Angus, Hereford

Crossbreeds



Production – Grass Fed Beef

Calving Season?

- Work backwards – Finished age?
22 – 26 months of age
- Want the cattle to finish on grass at the end of the green grass growing season.

Production Cont:

Calving Date?

Consider May – June

Or August –

September calving



Production – Grass Fed

Let's do an example:

Calve in June – 2021

- Calf nursing cow until Jan or Feb and is weaned at 7 to 8 months.
- Eats long grass hay while on cow

Production – Grass Fed Cont:

- At weaning – fed grass hay & alfalfa hay
- Turned out on grass at green up
- Grazes all summer on forages
- Grazes in fall on cover crops, crop aftermath, pasture or other forages
- November/December – fed grass hay and alfalfa hay

Production – Grass Fed Cont:

- In spring at green up – turned out on pasture.
- At approximately 26 months of age – should be finished and sent to slaughter in August as the grass dries down.
- Best chance at this age to achieve Select grade or better on grass.

Production – Grass Fed Cont:

Considerations:

- You own the calf for two years – cash flow
- Need separate pens to winter them from cowherd – won't do well if competing with mature cows.
- May need multiple pastures
- Need fall forages

Nutrition – Winter Feeding

1. First winter still nursing cow
 - Creep feeding area for calves to get away from cows – feed them the best hay you have.
 - Grass hay – free choice
 - Alfalfa – 2 pounds



Nutrition – Winter Feeding

2. Second winter as a yearling

- Separate feeding area away from cows
- Possible ration:

800 – 900 pound calves

18 lbs grass hay per day

6 lbs alfalfa hay per day

Nutrition

- Free choice trace mineral/vitamin supplement in a loose form.



2nd Spring & Summer

- Graze on green grass until late July or August and send to slaughter.



Grazing Program Management Suggestions



Maximize grazed forage program

- Need to be creative with grazing program and plan.
- Need to utilize rotational grazing during active grass growing season.
- Need to develop grazing program for fall and early winter.

Rotational Grazing

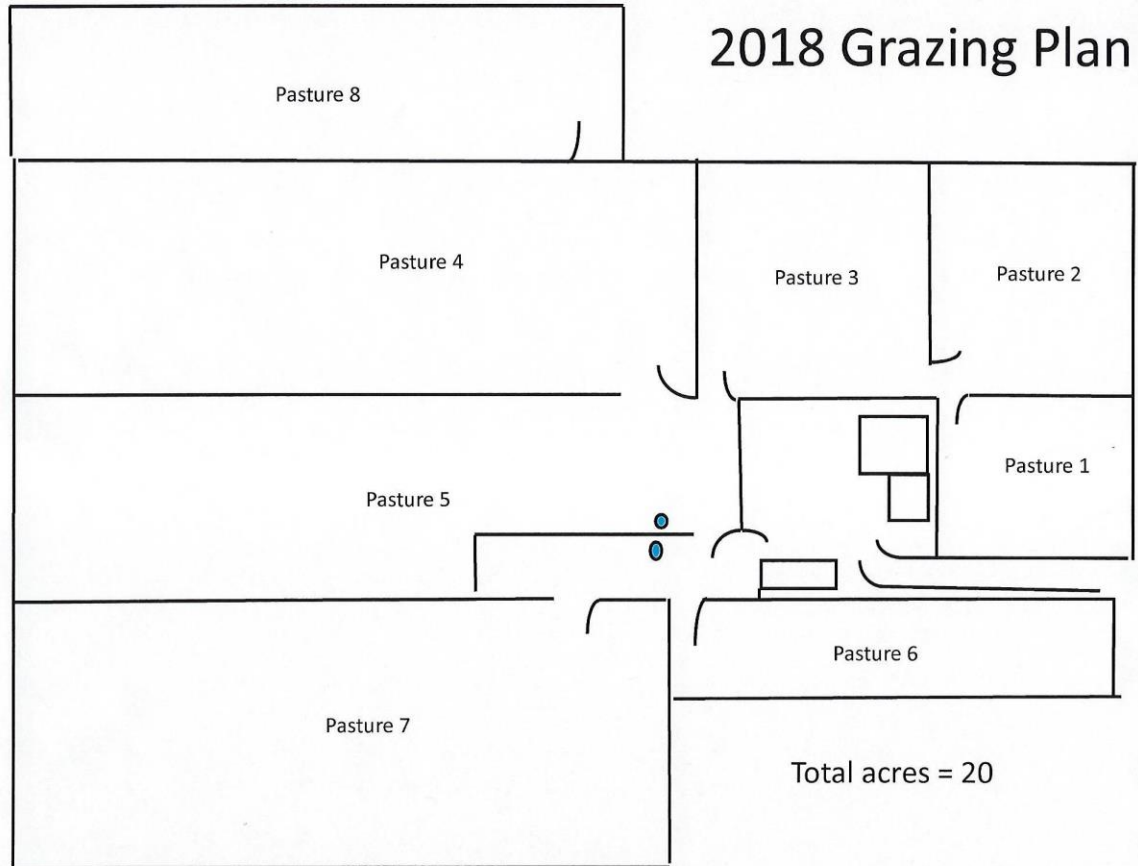


Rotational Grazing 2018 Test



- 16 head of replacement heifers – in weight 560 avg.
- In on April 21, 2018
- 20 acre pasture
- Out on Aug 11, 2018

Rotational Grazing



Rotational Grazing



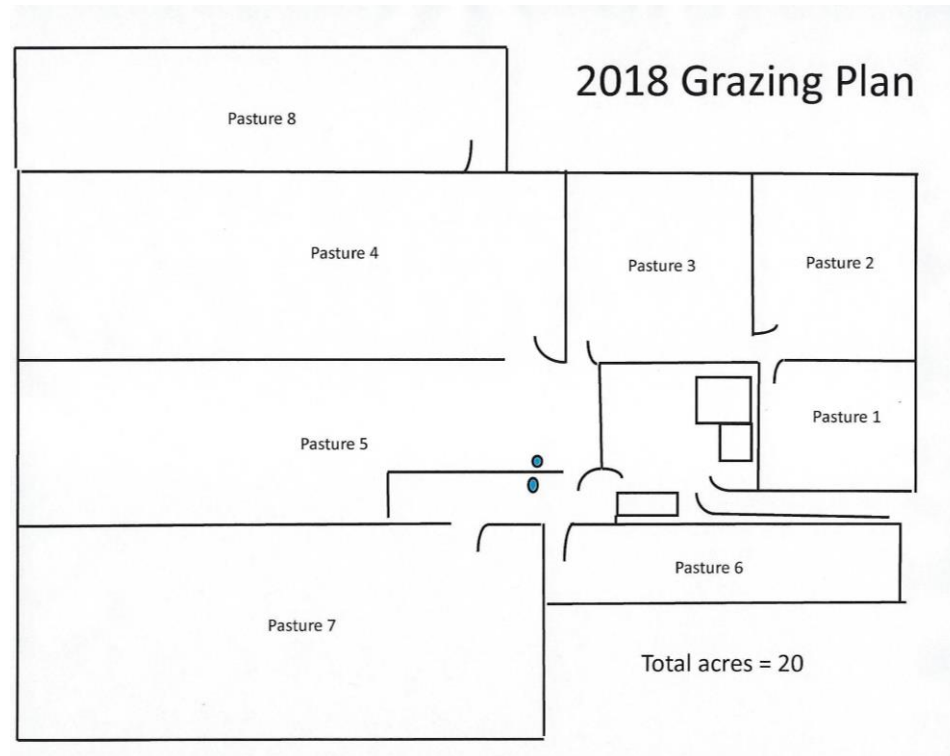
2018 Results

- 112 days on pasture
- 3,932 pounds of beef produced on 20 acres
- 197 pounds per acre
- 16 head ADG = 2.2 pounds per day
- Avg start wt = 560
- Avg out wt = 808

Results 2018

- Number of days grazing each paddock = 18 days

Last 13 days had access to all paddocks except for #8



Results 2019

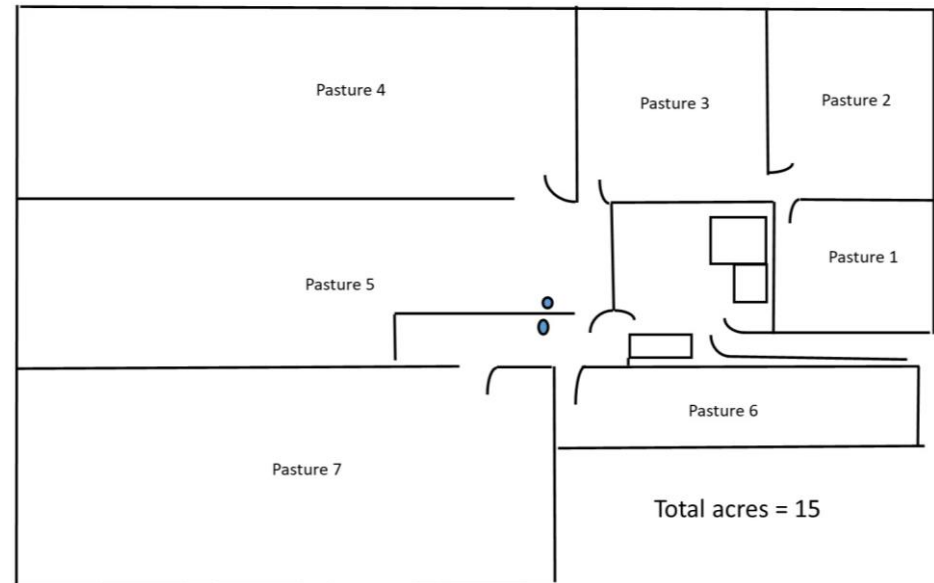
- 98 days on pasture
- 3,565 pounds of beef produced on 15 acres
- 238 pounds per acre
- 15 head ADG = 2.43 pounds per day
- Avg start wt = 537
- Avg out wt = 775

Results 2019

2019 Grazing Plan

- Number of days grazing each paddock = 16 days

Last 11 days had access to all paddocks



Keys to Intensive Rotational Grazing

- Divide pasture into paddocks – size of paddocks will be determined by pasture size and # of cattle. (stocking rate)
- Graze for no longer than 5 – 7 days. Shorter period better.
- Allow paddocks to rest for at least 21 days before going back.

How Long Was the Grazing Season Each Year on the Pasture?

100 days – Approx.

Then what?



Extending the Grazing Season

- How?
 1. Stockpiled Forage
 2. Crop aftermath
 3. Cover crop grazing
 4. Bale grazing



Cover Crop Grazing



What we have learned:

- Seed - late April – early May.
- Various seed mixes available.
- Mixes - cereals, legumes, turnips, radish, canola. Millet, sorghum sudan, etc.
- Soils/rainfall play big role.

Cover Crops

What we have learned:

- Forage quality is very good:
- Conducted forage tests at turnout time: (3rd week of June)

Crude Protein% = 16% to 19%



TDN% = 56.9% - 58.5%

Available Forage

What we have learned:

- Varies – Most producers have had 3 to 4 tons of forage available.
- Lowest – 1.5 tons



Turnout Time?

What we have learned:

- Depends on cover crop growth – let crop get ahead of the cattle.



Late June – early July

Paddock fencing



Paddock Fencing Cont:



Swath and Windrow Graze



Windrow grazing



Bale Grazing

Option:

Bale extra forage:

1. Graze in field
2. Feed in winter



Water Source



Summary

Grass Fed Beef

- Start with market research – if you produce the beef will you be able to sell it?
- Know the rules for grass fed
- Know the laws for selling beef
- Have a well defined grazing plan

Summary Cont:

- Have a production plan – calving date, winter feeding management, nutrition, etc.
- Good luck.

Questions



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