



MARKETING MEAT

direct to consumers

A WEBINAR SERIES FOR PRODUCERS INTERESTED IN MARKETING THEIR FARM-FRESH MEATS



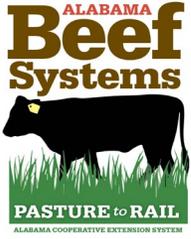
Part 1- Creating the Product Consumers Expect

Alex Tighe

Regional Extension Agent

Alabama Cooperative Extension System





Immense Opportunity for Local Meat Production

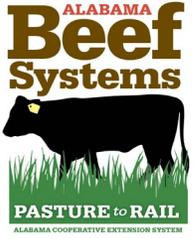
Consumers are seeking out locally produced meats that have never done so before

- Price issues
- Commercial availability

Producers must deliver on their expectations

- Consumers are normally price driven
- Why pay for sub-par product? (or more?)





What do consumers expect?

Palatability

- Tenderness
- Juiciness
- Flavor

Some Species Variation

This requires an animal to be “finished”



What does “finished” mean?

For Cattle:

- Approaching Mature Weight
 - Weight dependent on frame
- Muscle Growth has slowed
- Fat deposition increased
 - Targeting 0.5-0.6”

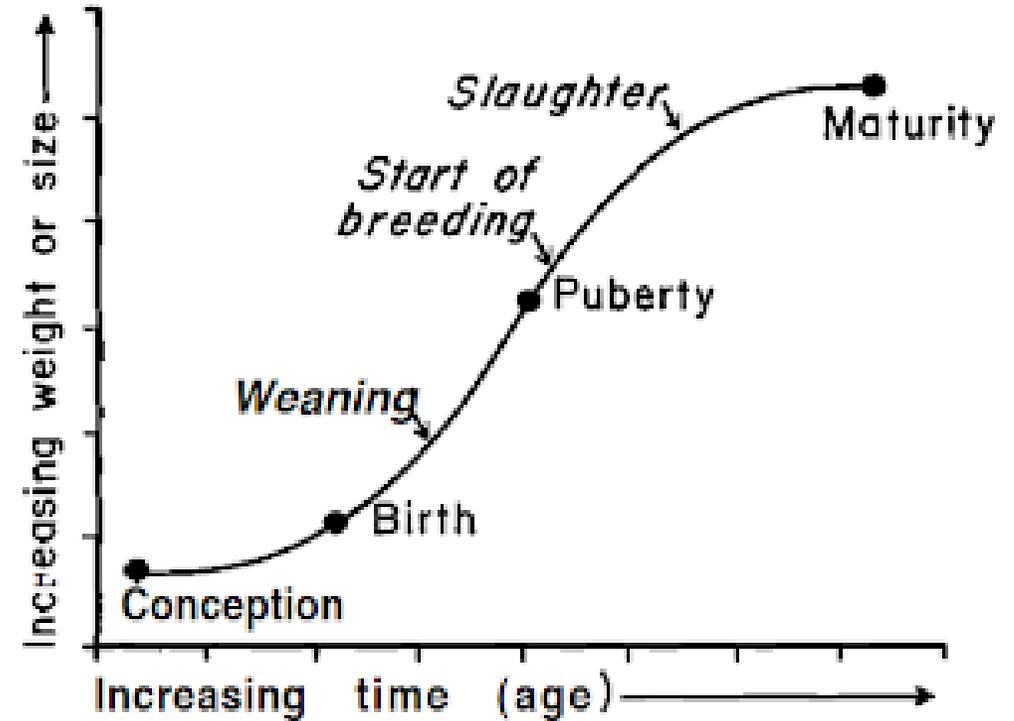
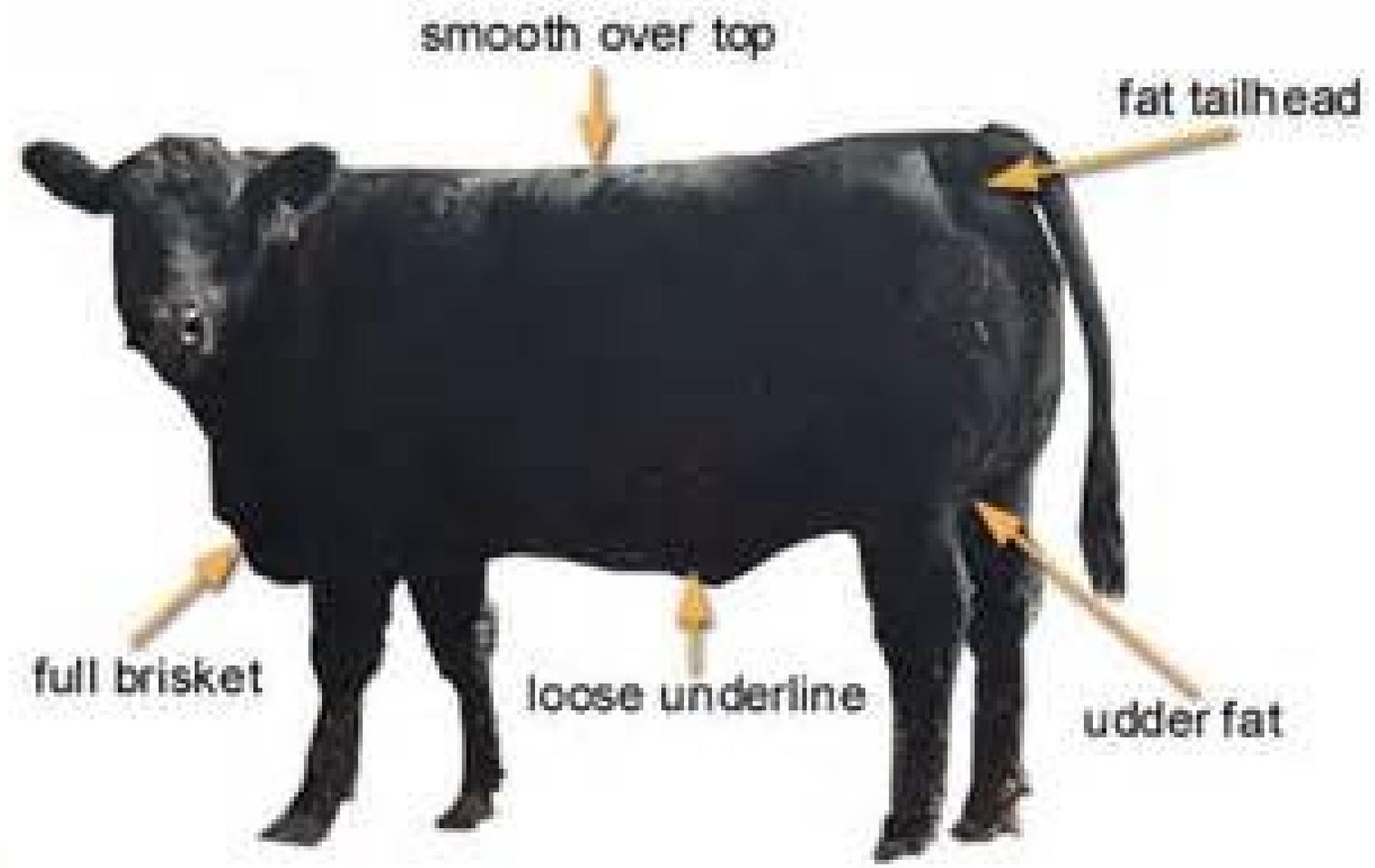
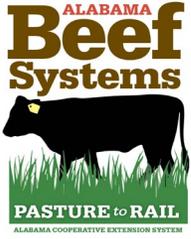


Fig.2 Simplified growth curve





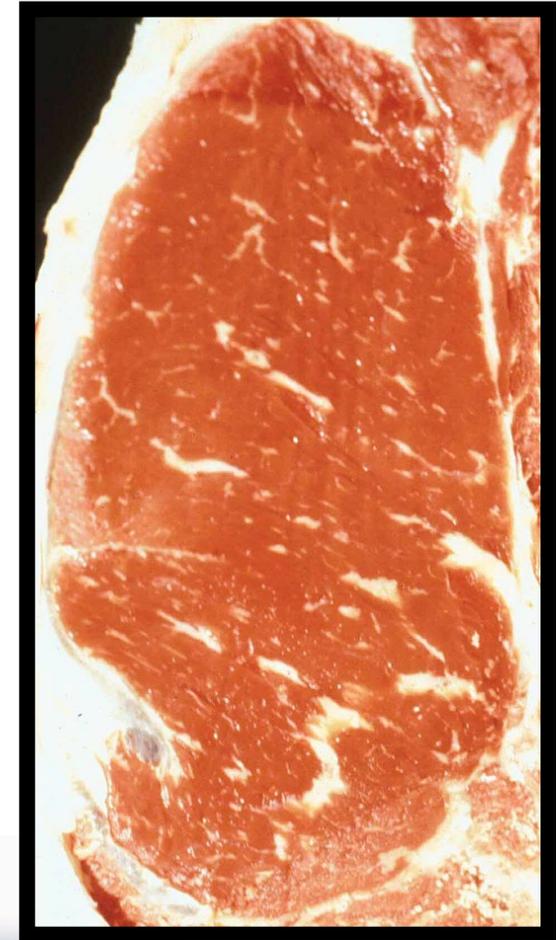


Ensuring Flavor and Juiciness

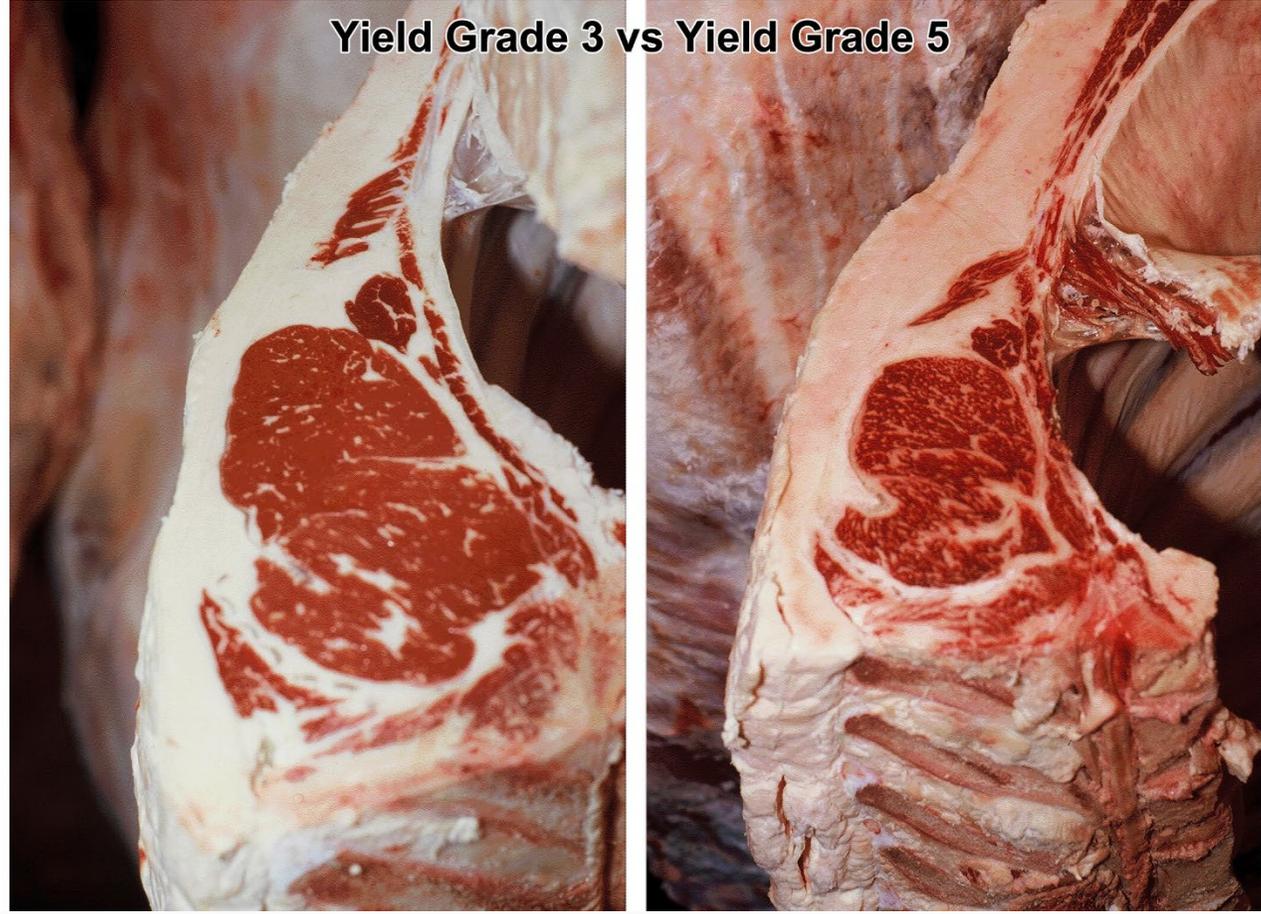
Intramuscular Fat

- Marbling important in beef carcass evaluation. Helps with tenderness, juiciness and flavor

Genetics and Nutrition



Fatness



What does “finished” mean?

For Swine, typically:

- 225-275# live weight
- Carcass still very lean
- Heavily Muscled

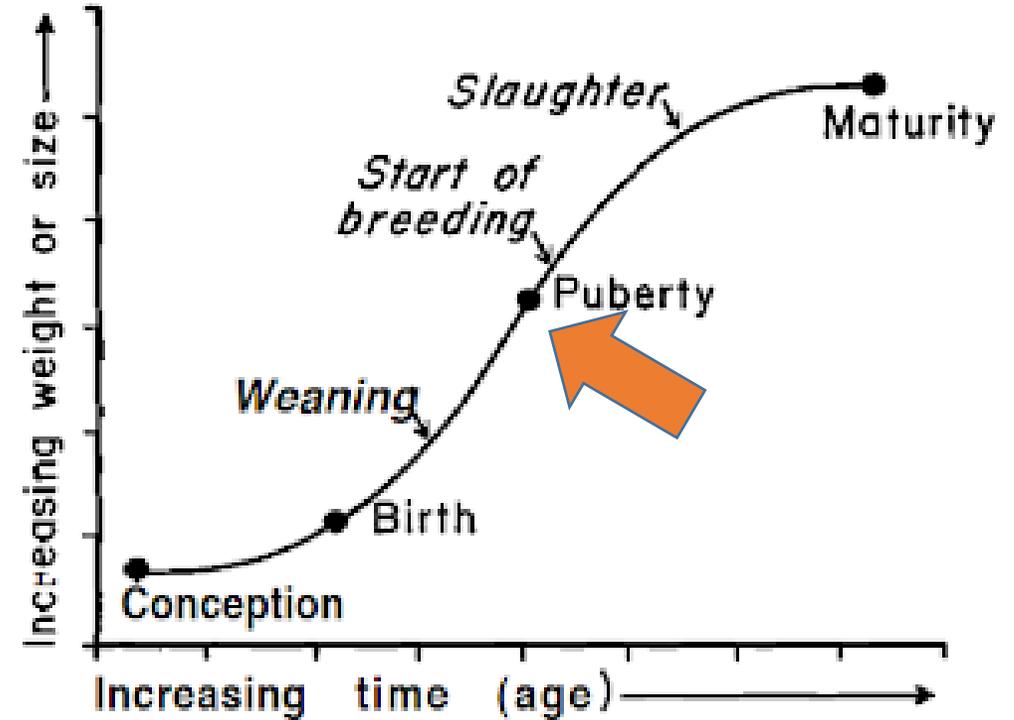


Fig.2 Simplified growth curve



What does “finished” mean?

For small ruminants:

- Moving Target
- Depends largely on holidays
- Whole animal vs. fabricated carcass

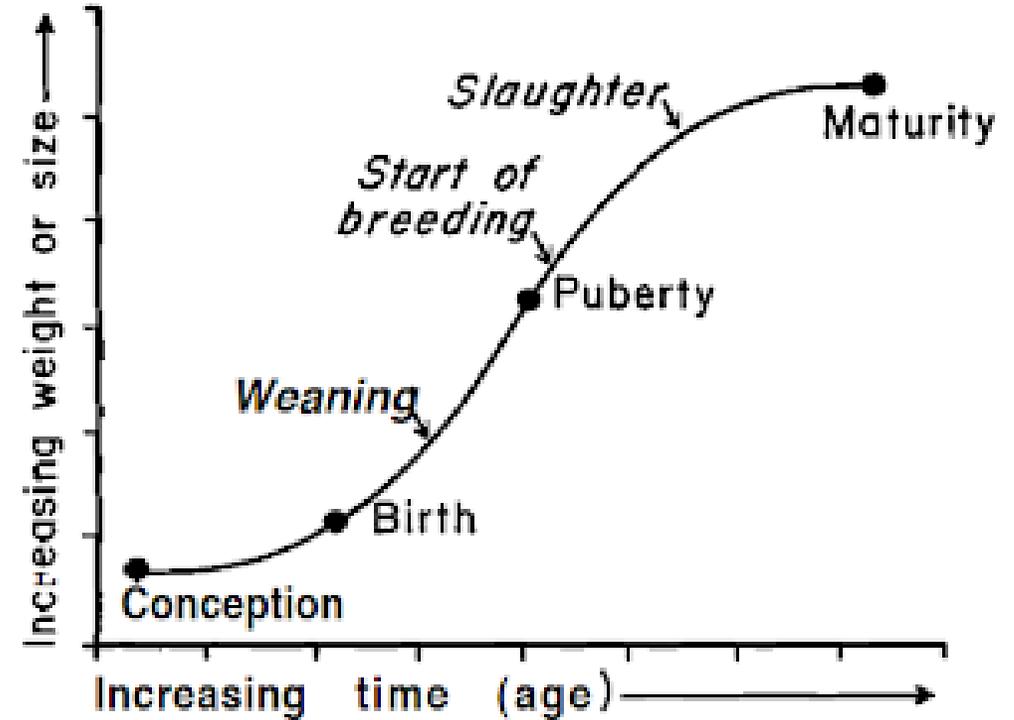
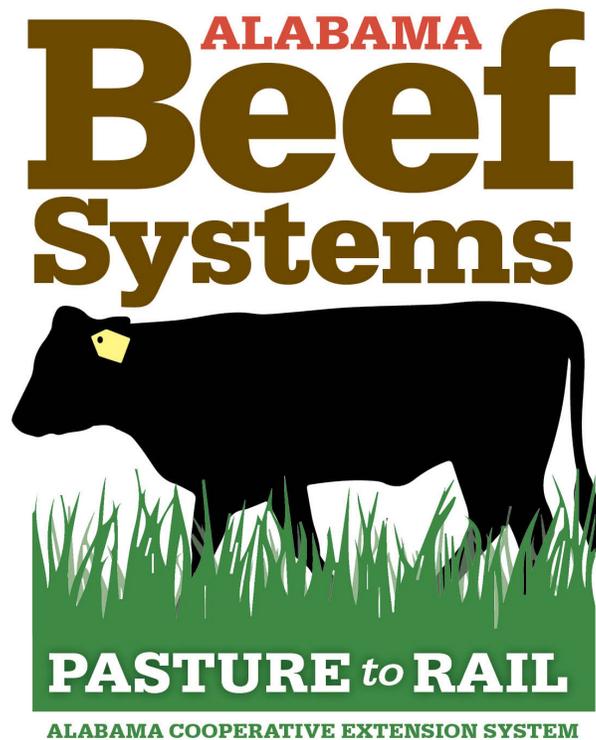


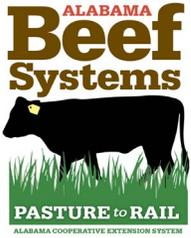
Fig.2 Simplified growth curve





Nutritional Management for Growing Beef Cattle





Nutrient requirements of growing beef cattle

The basis for a feeding program

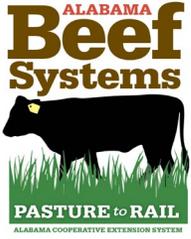
Growing animals targeting 3.0# ADG (1200# Finish Weight)	TDN % Required	CP % Required
600# Calves	83	15.7
700# Calves	83	14.6
800# Yearlings	70	11.2
900# Yearlings	70	10.2

Adapted from NRC for Beef Cattle 7th ed. (2000)



Energy and Crude Protein Value of Forages and Feeds

Forage or Feed	Total Digestible Nutrients, %	Crude Protein, %
Bahiagrass Pasture	58	10
Bermudagrass Pasture	60	12
Tall Fescue Pasture	62	12
Annual Ryegrass Pasture	72	18
Bermudagrass Hay	53	10
Tall Fescue Hay	55	13
Corn	90	9
Soybean Hulls	78	12
Corn Gluten Feed	80	21
Distillers Grains	85	25
Commercial 14% Feed	65	14



Two Major Production Systems

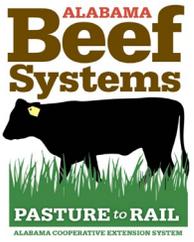
Grassfed/Grass Finished

- Perceived health benefits
- Lean
- Grass-fed Flavor

Grain finished

- Typical finishing method
- Widely accepted by consumers
- White fat/grain-fed flavor



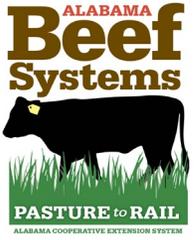


Finishing cattle with grain

General Considerations:

- Maintain 0.5% BW Roughage
 - 2.0% BW Concentrate feed
 - Free choice hay/grazing
- Hand-fed or Self-fed
- Make diet changes slowly





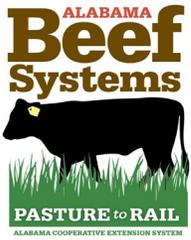
Finishing cattle with grain

Example Nutritional Management Plan:

- Wean at 500-600#
- Feed commodities to 800# (2-2.5# ADG)
- Feed 80% Grain/20% Roughage until “Finished”

Alabama Beef Handbook or
Freezer Beef Reference Guide at aces.edu



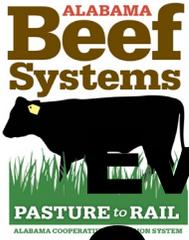


Finishing cattle with grain

Many commercial feeds will work:

- Work with your feed distributor
- Many complete feeds can work
 - “Grower”, “Developer”, “Bull Test/Grower”
- Avoid using feeds designed for brood cows
- Feed Tags likely won’t have TDN





Evaluating Commercial Supplements

- Ingredients are an important consideration
 - Is there a combination of protein and energy ingredients?



For beef cattle on pasture.

Guaranteed Analysis

Crude Protein	(Min)	13.00	%
Crude Fat	(Min)	2.00	%
Crude Fiber	(Max)	20.00	%

Ingredients

Processed Grain By-Products, Roughage Products, Grain Products, Cane Molasses, Vegetable Oil, Propionic Acid, Ferrous Sulfate, Manganese Oxide, Zinc Oxide, Copper Sulfate, Sodium Selenite, Manganese Sulfate, Calcium Iodate, Cobalt Carbonate, Mineral Oil, Salt, Calcium Carbonate, Kaolin, GNR 2, MINTREX, Vitamin A Supplement, Vitamin D3 Supplement, Vitamin E Supplement, Mold Inhibitor and BIOTIN 100.

Feeding Directions

This feed can be provided to all classes of cattle at a rate of no greater than 2% of body weight.

CAUTION

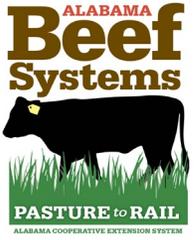
Do not feed to sheep due to copper levels in this feed.

Always provide a source of fresh clean water, and free choice minerals. When making changes in an animal's diet, allow a 7 to 10-day transition period. Provide ample feeder space for livestock. Do not feed wet, moldy, or insect infested feed

This is a 13% protein, high energy feed that was designed primarily for lactating beef cattle when forage quantity and quality are unable to meet the cattle's nutrient requirements. While it is safe for all classes of cattle it is not recommended as a creep feed to young cattle. It should be hand fed in a bunk to most cattle for optimum performance.

Commercial Feeds

- Quick/Rough Estimate of TDN or Energy:
 - $\text{TDN} = 80\% - \text{Crude Fiber \% listed on tag}$

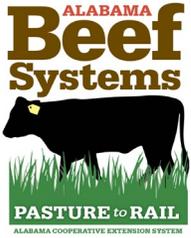


Finishing cattle with grain

Purchasing Feed in bulk

- Feed is the biggest expense
- 1,500-4,500# Feed/calf
- Minimum 3 tons delivered
- Reduced prices for full loads
- 15 Steers could eat a 24 ton load of feed





How long will I have to feed my calf?

Ship/Starting Weight	Days On Feed	Finished Weight	ADG
Under 600	193	1185	3.28
600-649	186	1226	3.25
650-699	179	1269	3.32
700-749	171	1306	3.46
750-799	161	1320	3.43
800-849	156	1364	3.51
850-899	154	1417	3.60
900-949	146	1446	3.64
950-999	147	1508	3.84
Over 1000	134	1621	4.27
Total	170	1311	3.44



What is *possible* with grass-fed?

Kerth, C. L., K.W. Braden, R. Cox, L.K. Kerth, D.L. Rankins, Jr. *Carcass, sensory, fat color, and consumer acceptance characteristics of Angus-cross steers finished on ryegrass (*Lolium multiflorum*) forage or on a high-concentrate diet.* Meat Science, Volume 75, Issue 2, February 2007, Pages 324-331

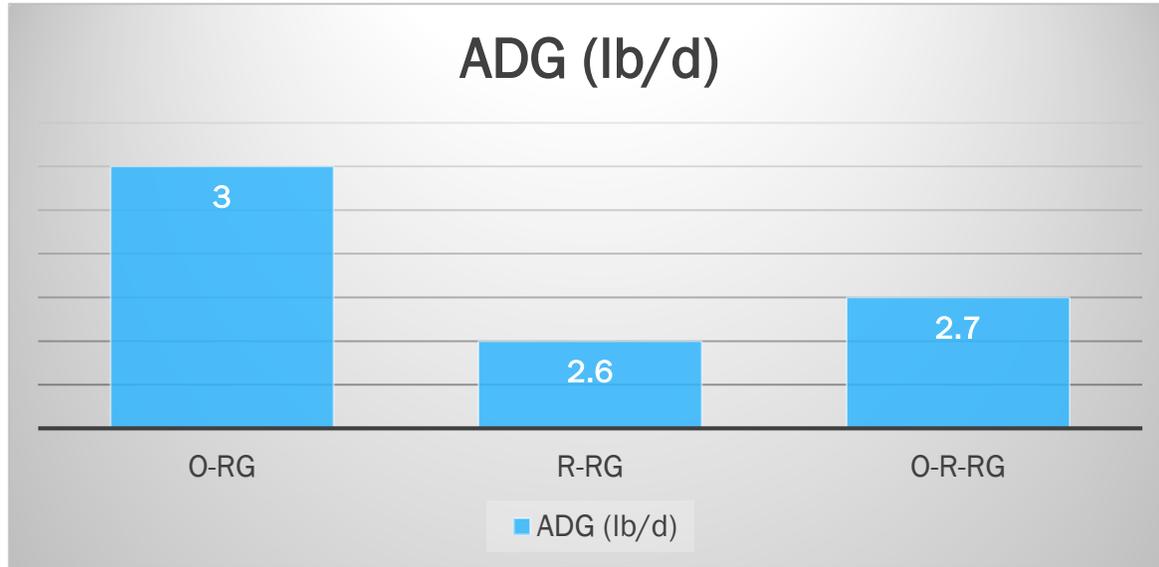
- Compared 30 Angus-sired steers split onto 3 diets:
100% Ryegrass, Ryegrass + Grain Supplement, and Corn-based finishing diet
- Ryegrass finished calves had lower USDA Yield Grade (leaner carcass)
- No differences in Quality Grade or Marbling Score

IT IS POSSIBLE TO TRULY FINISH CATTLE ON FORAGE!!!

*Under very specific conditions....

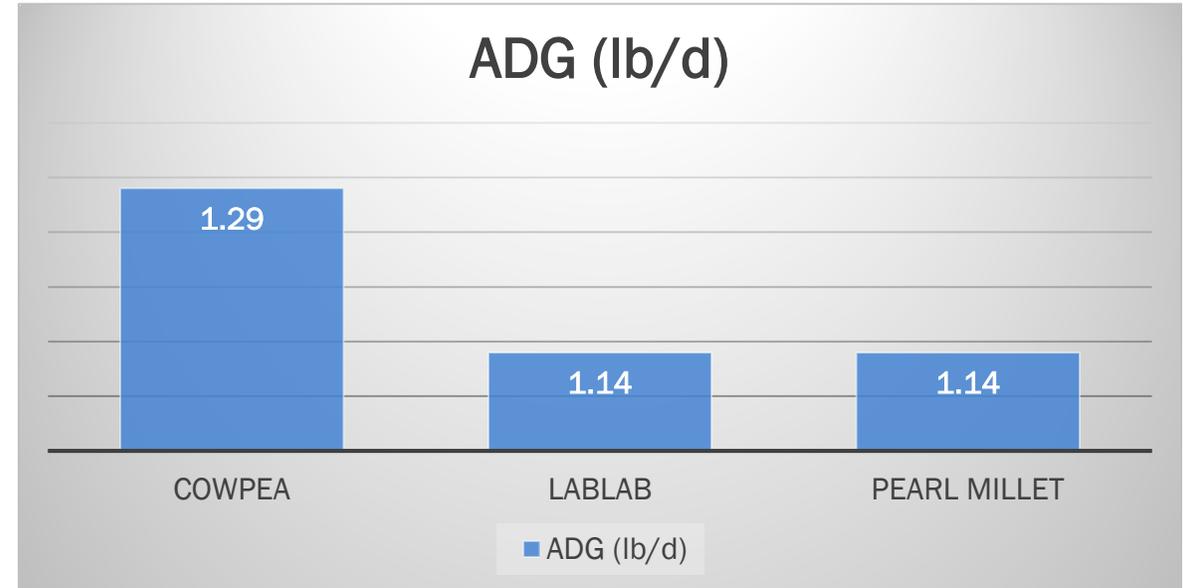


Average Daily Gain of Forage-Finished Steers in Alabama



Growing Phase - Cool-Season Annuals

Initial BW: ~783 lb
 Final BW: ~ 1,166 lb



Finishing Phase - Warm-Season Annuals

Initial BW: ~1,230 lb
 Final BW: ~ 1,324 lb

Cline, 2010; Mullenix et al., 2012

What is realistic with grass-fed?

Vast majority of research paints a different picture

- Leaner Carcasses
- Lower Marbling Scores
- Slower Growth
- Smaller Carcasses/More Days on Feed
- Potential Consumer Sensory Issues



What forage systems work?

Cool-season Annuals

- Ryegrass, Small Grains, Clovers
- Simplest, Easiest

Warm-season Annuals

- Crabgrass, Millets, etc.
- Weather issues
- Quality late season

Cool-season Perennials

- Novel-endophyte fescues, Orchardgrass
- North Alabama



What forage systems might work?

Baleage

- Relatively high cost
- Spoilage if underutilized

Alfalfa

- Requires perfect management

Intensely Management WSP

- Early in the season
- Good grazing management



What forage systems won't work?

Warm-season Perennials

- Bahiagrass, bermudagrass
- Continuously grazed



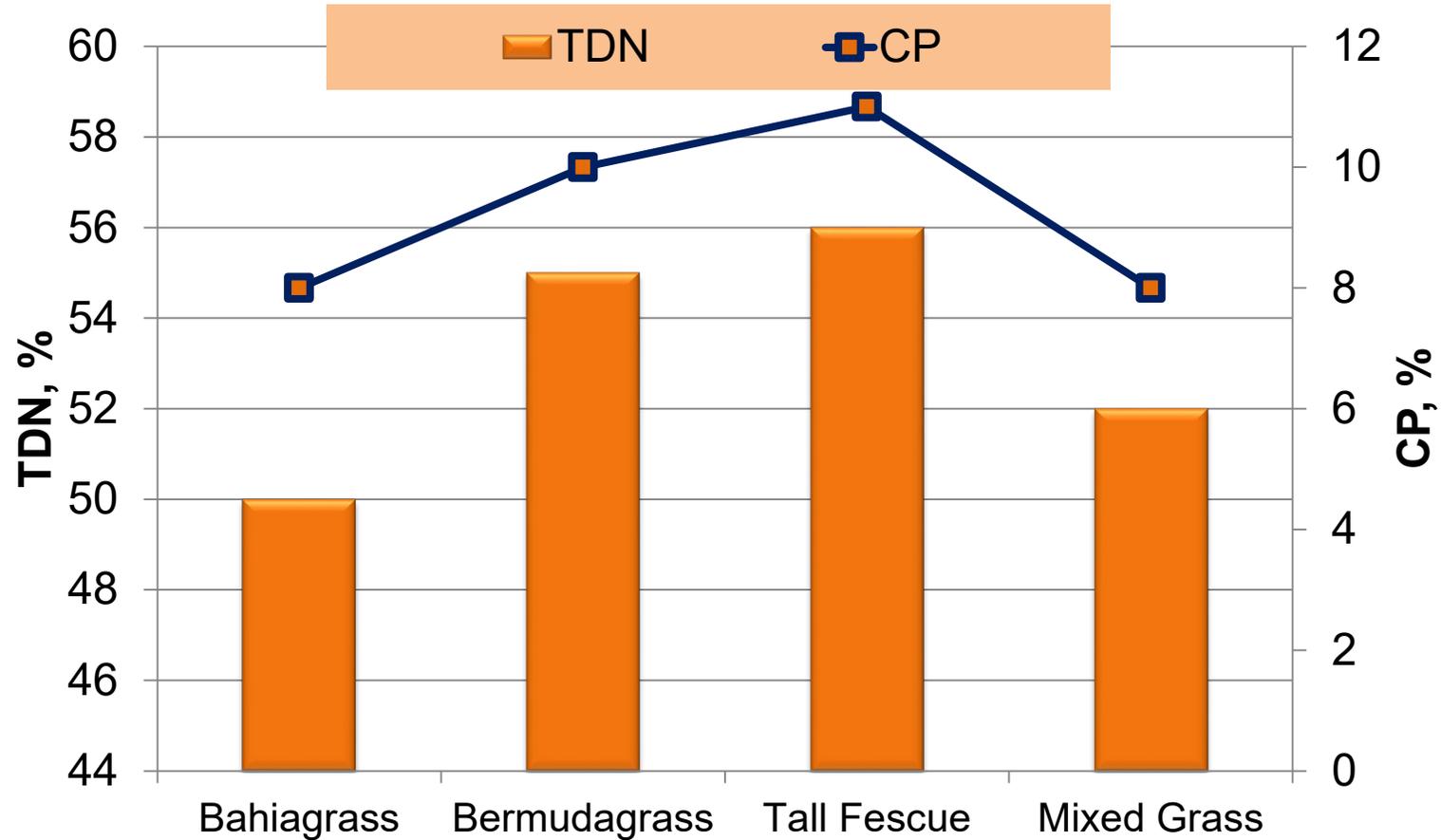
Kentucky 31 Fescue

- Toxic endophyte

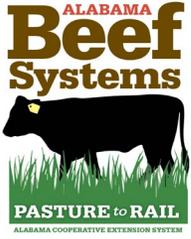


2018 Hay Quality

Samples from AU Soil Testing Lab



Slide adapted from Dr. Kim Mullenix



Other Considerations for Cattle

Breed Types

- Dairy Breeds
 - Holsteins vs. Jerseys
- Wagyu
- Longhorns
- Brahman-influenced
- Mini's and small-framed

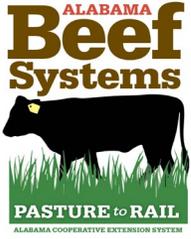
Sex Differences

- Heifers
 - Fatter, Smaller, More Marbling, Less Efficient
- Steers

Production Practices

- Implants, Ionophores, Antibiotics, etc.





Age is a major consideration for Cattle

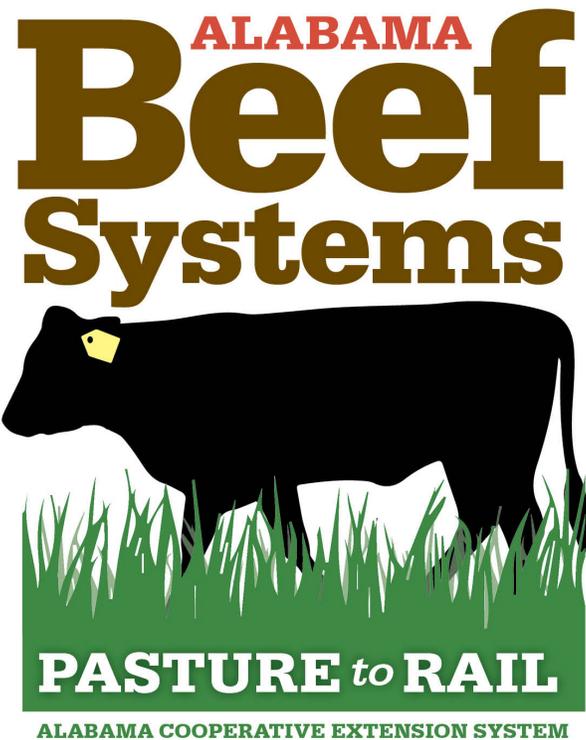
Under 30 months of Age

- No restrictions
- Young, Tenderness
- USDA Maturity A

Over 30 months

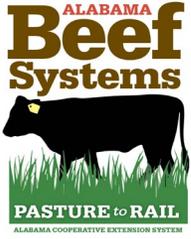
- Specified Risk Materials
 - Head, Spinal Column, Dorsal Root Ganglia
- Can be a challenge for Grass-finished animals





Management considerations for growing Swine





Housing is much different than cattle/sheep/goats

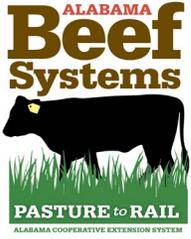
Good Housing MUST:

- Provide Shade at all points of the day
- At least 1 wall as a wind break
- 3 walls best, facing south
- Keep the animals relatively clean
- Keep pigs in and other animals out
- Adequate space
 - 8-10 sq. ft. per pig minimum





Photo courtesy of NWAL 4H



Feeding

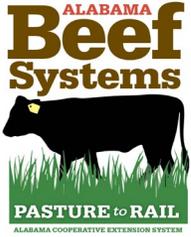
Two ways to feed pigs:

- Hand Feeding
 - Hand feed the pigs every day
 - Preferably multiple times per day
 - Feed to the pigs' appetite
 - Less dominate pig will get pushed away
- Full Feed/Self Feeder
 - Pigs have access to feed all the time
 - Dominate pig cannot keep other pig away
 - Must be checked on daily
 - Preferred method



Photo courtesy of NWAL 4H



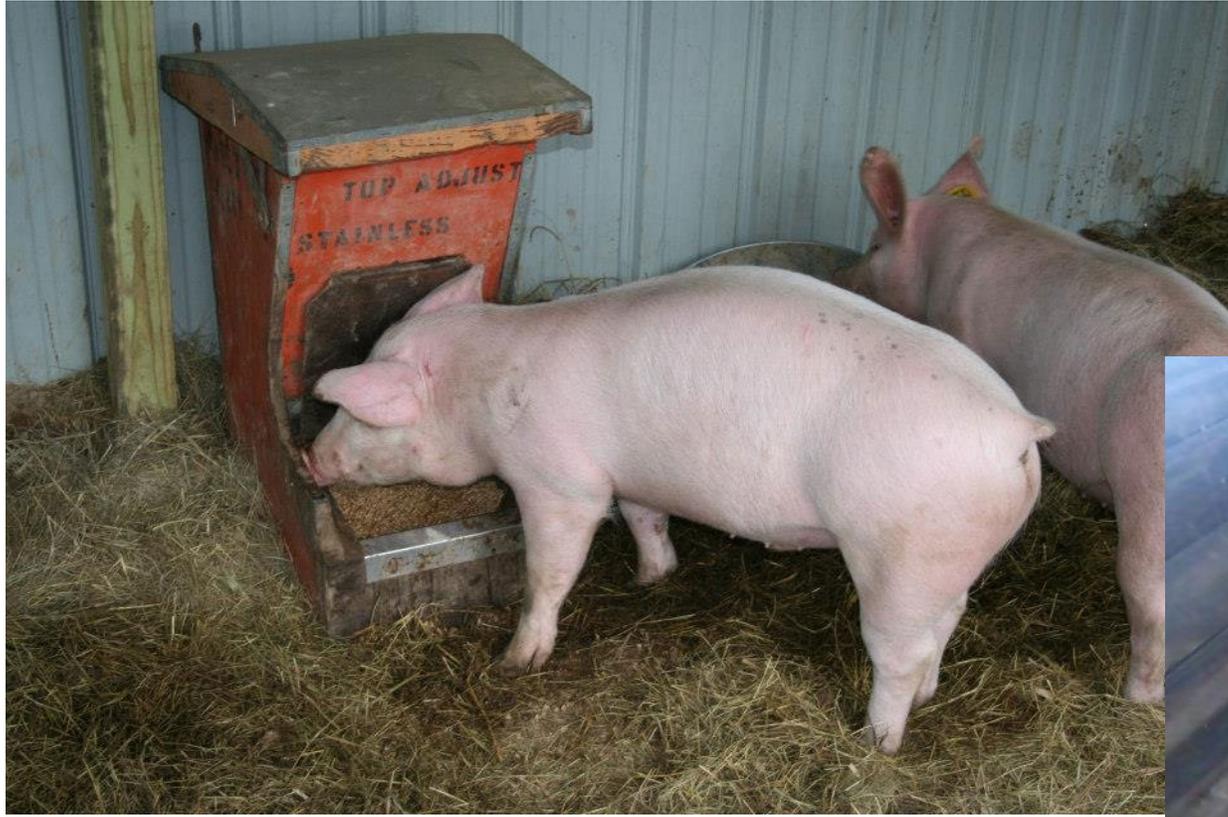


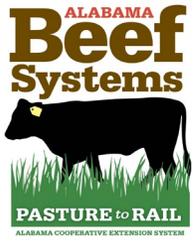
Feeding

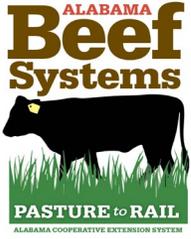
Pigs require adequate nutrition to grow

- **FEED A COMMERCIAL MIXED RATION**
- Use a GROWER ration.
- During the last few weeks, potentially a FINISHER ration
- If you HAVE to mix your own feed, find a commercial blend specifically for GROWING hogs
- **CRACKED CORN, WHOLE CORN, SWEET FEED, ALL STOCK, ETC. WON'T WORK**
- **PIGS ARE NOT RUMINANTS, GRAZING ISN'T EFFECTIVE**
- 800-1400 lbs. of feed per pig









Expectations with pigs

Starting with a 50# Feeder pig:

- Market Weight in 120-150 days

Never feed/harvest boars

Significant breed differences

- Mangalitsa
- York/white pigs
- Duroc/Hamp Terminal Pigs

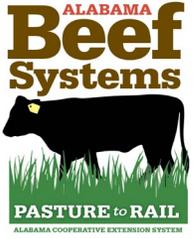


Delivering your animal to the processor

Considerations:

- SCHEDULE IN ADVANCE
- Communicate with the processor
- Use low stress-handling
- Withhold feed 24-hr
- Check withdrawal times on animal health products
- **Make sure animal is healthy**
- Be clear on ownership





Conclusion

Producers have a tremendous opportunity

- Understand what you consumer wants
- Properly manage to create a “finished” animal
- Make sure it arrives at harvest in the best condition possible

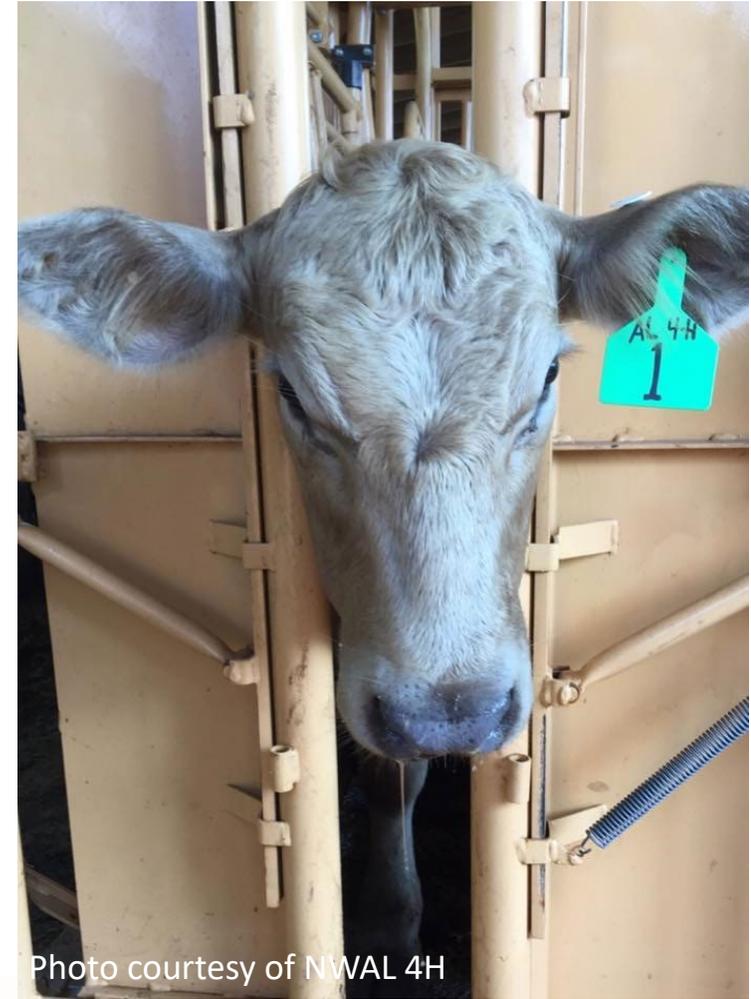
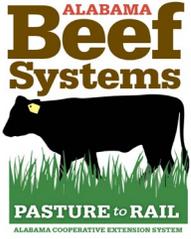


Photo courtesy of NWAL 4H





Questions?

Alex Tigue

Regional Extension
Agent

256-309-9496

dat0002@aces.edu

June 3rd-12:00 PM

The Processing Process

-Dr. Jason Sawyer

June 5th-12:00 PM

Getting your product to
Market...and getting paid for
it

-Ellie Watson

-Alex Tigue

