

Ways to Increase Cow Efficiency

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- Identify and remove open cows
- Maintain a control breeding season
- Maintain proper body condition at breeding
- Shorten anestrus period
- 70% or more calves in 1st 21 days of breeding season



Improve Reproductive Efficiency

- Heifers should weigh at least 65% of mature weight at breeding
- Weigh cows and calves – record 205-adjusted weaning weights
- Cows should wean around 50% of their weight in calf each year



Evaluate Cow Performance

- ✓ Improve calf crop weaned – 85% or ↑
- ✓ Calf - Every 365 days or less
- ✓ Calve within 90 days or less
- ✓ Reduce or eliminate dystocia
- ✓ Select for desirable traits that will return the most profit



Set Realistic Goals



Beef Cow Size – Efficiency Study (2008-2010)

Northwest Georgia Research & Education Center

Red Bud and Floyd County Farms

Should we be concerned about Cow Size?

- Determine what weight mature cows are the most efficient.
- Determine the difference in % cow weight weaned in relation to the age of the cow
- Use information gained to best determine pasture stocking rate/nutritional needs
- Realize the value of weighing animals



Study Objectives

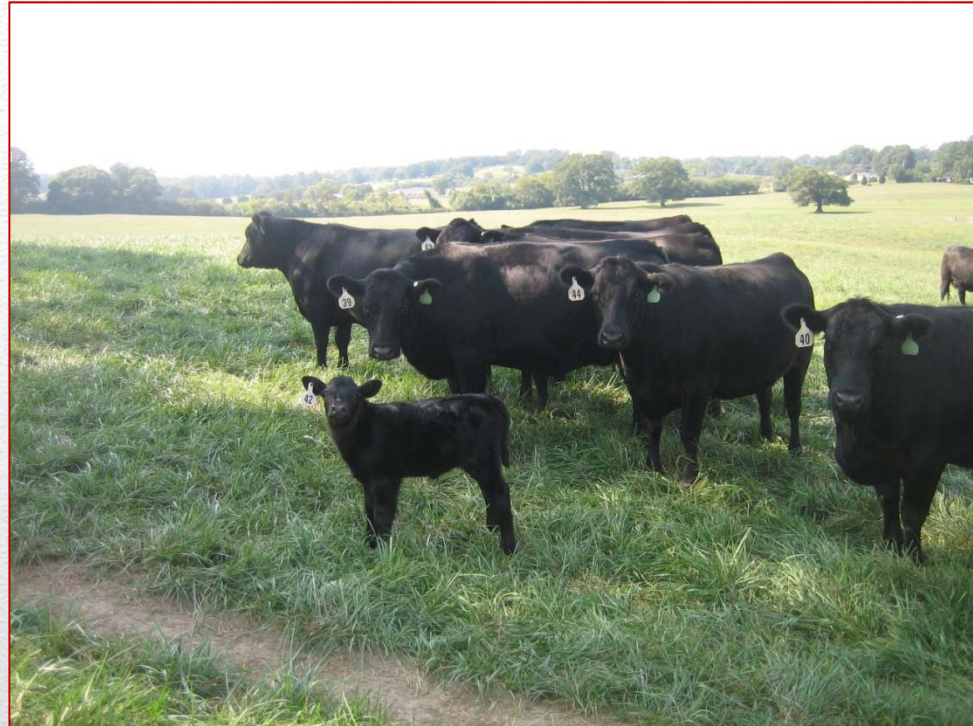
- ☐ Collect Mature Cow Weights
 - ☐ Pregnant
 - ☐ Nursing Calf
 - ☐ Weaning
- ☐ Collect Calf Weights
 - ☐ Actual WW
 - ☐ Adjust actual WW to 205 day WW



Study

438 Mature Cows

- ❖ **Average Wt. 1324**
 - ❖ Range 1780-973
- ❖ **Actual WW – 599**
- ❖ **205 Adj. WW-592**
- ❖ **% Cow Weight Weaned – 44.36%**
- ❖ **Avg. Cow Age -5.7**
 - ❖ Range 2-14 years



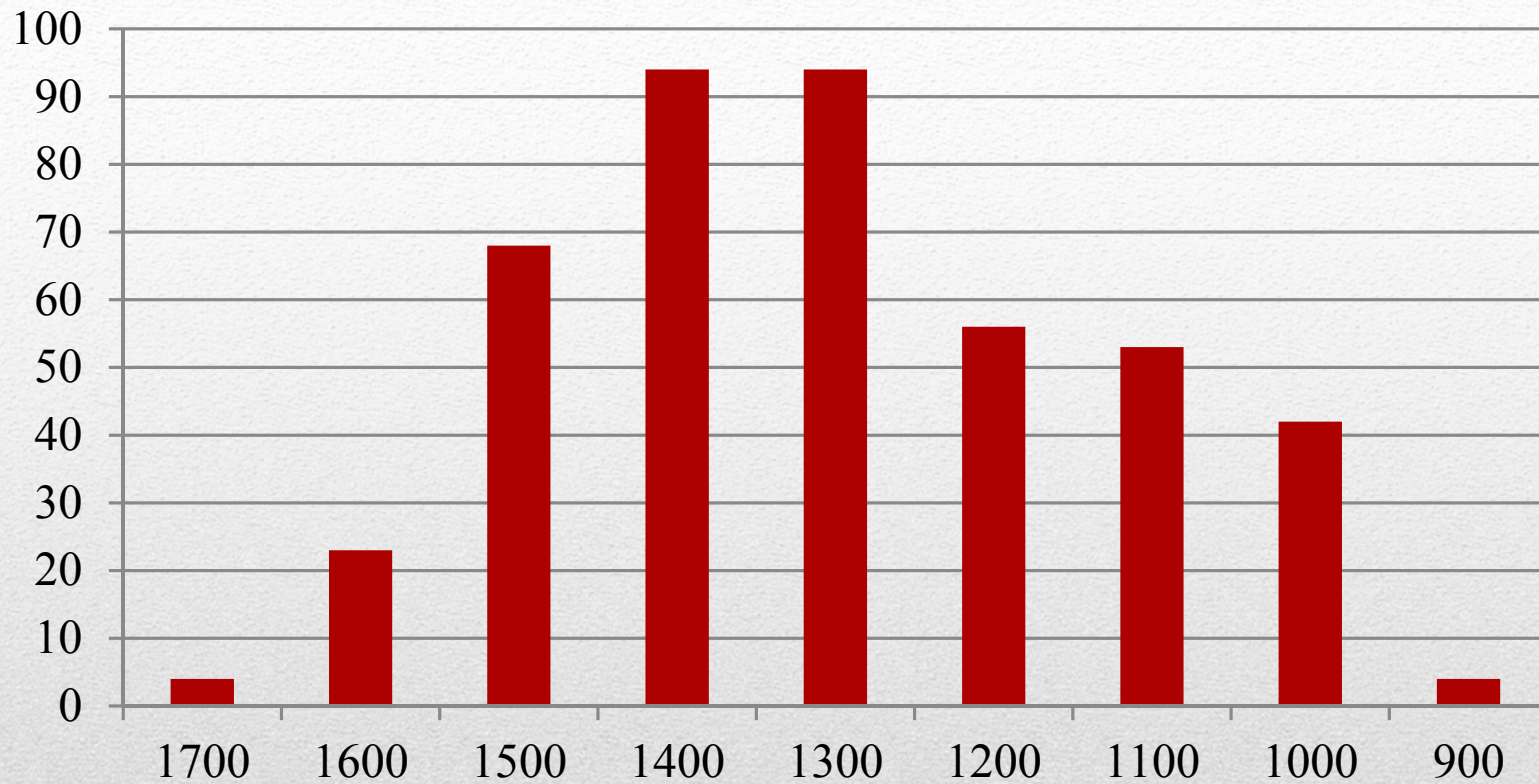
2009 Results

417 Mature Cows

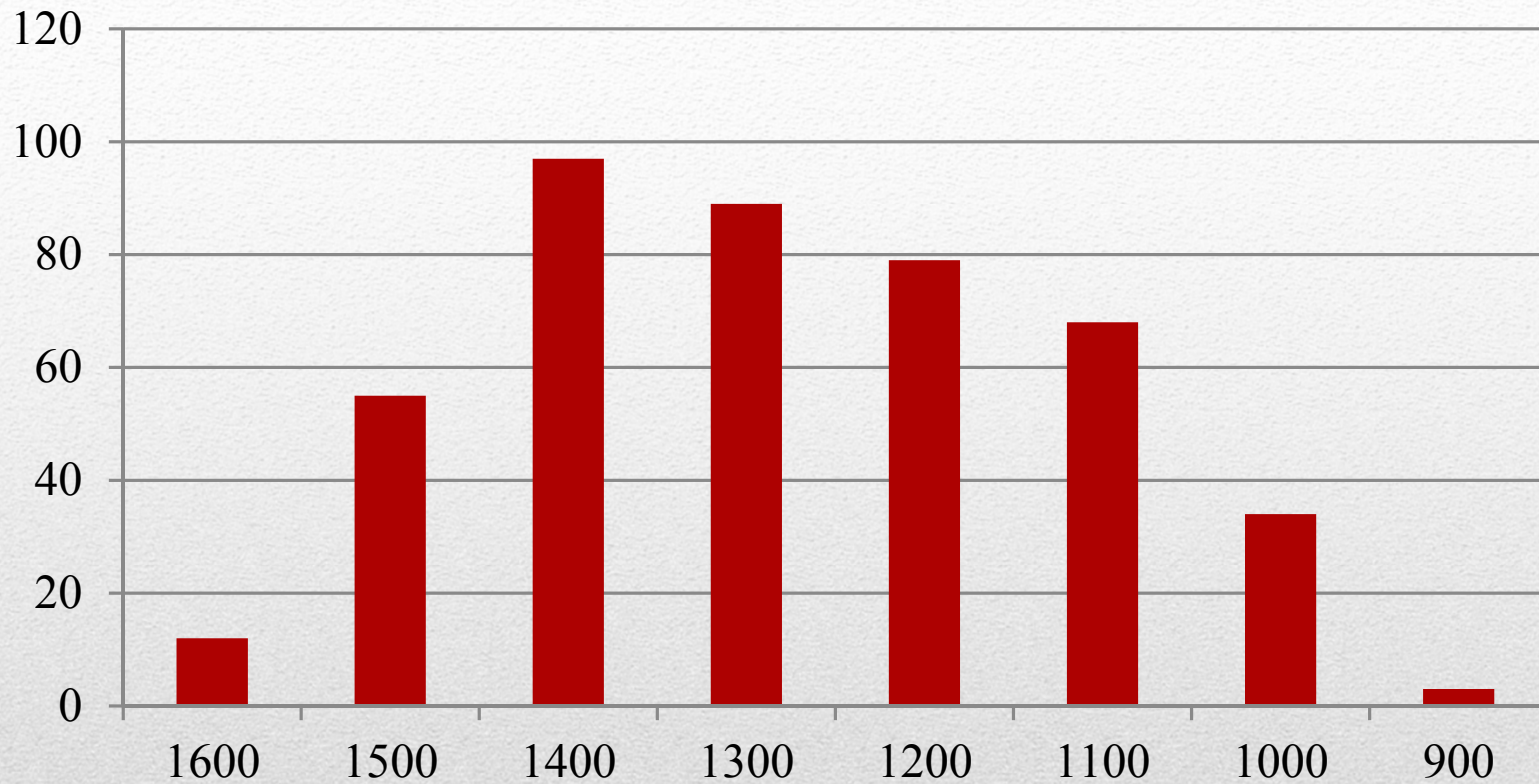
- ☐ **Average Wt. 1318**
 - ☐ Range 1686-962
- ☐ **Actual WW-490**
- ☐ **205 Adj. WW-579**
- ☐ **% Cow Weight Weaned – 44.53%**
- ☐ **Avg. Cow Age – 5.27**
 - ☐ Range 2-13 years



2010 Results



2009 Number of Cows/Weight Group



2010 Number of Cows/Weight Group

1600	1500	1400	1300	1200	1100	1000	900
9	24	58	33	41	27	14	3
35%	39%	42%	45%	47%	50%	55%	57%

Number of cows and % of cow weight weaned per weight group – **Floyd Co.**



Cow Efficiency by Weight

$$\% \text{Cow Weight} = \text{WW} / \text{CW}$$

1600	1500	1400	1300	1200	1100	1000
3	11	39	56	38	41	20
30%	36%	39%	42%	46%	49%	54%

Number of cows and % of cow weight weaned per weight group – **Red Bud**



Cow Efficiency by Weight

% Cow Weight = WW/CW

>10	10	9	8	7	6	5	4	3	2
6	3	26	13	22	41	31	19	20	28
42%	41%	42%	42%	44%	43%	44%	45%	49%	52%

Number of cows and % of cow weight weaned per age group – **Floyd County**



Cow Efficiency by Age

% Cow Weight = WW/CW

>10	10	9	8	7	6	5	4	3	2
10	2	0	21	21	26	28	8	46	46
41%	38%	0	42%	39%	40%	39%	43%	50%	49%

Number of cows and % of cow weight weaned per age group – **Red Bud**



Cow Efficiency by Age

% Cow Weight = WW/CW

- Smaller younger cows – proved to be most efficient
- Can ↑ Stocking rate
 - Same land area
 - 50 1200 lb. cows
 - 40 1500 lb. cows
- Know your cows mature weight
 - Stay close to herd average
 - Avoid extremes



Summary

- ❖ Keep Mature Cow Size Under 1300 Pounds
 - ❖ Keep Cow Herd Young
- ❖ Have a Cow Herd that Weans 50% or more of their mature weight in calf each year
 - ❖ Cull Cow Herd Annually
- ❖ Have access or own a set of Cattle Scales
 - ❖ Weigh Mature Cows and Calves
- ❖ Record Calf Weaning Weights and Adjust to 205 Days
 - ❖ MAINTAIN GOOD RECORDS

Additional Goals for Best Management

- ❑ Study differences in Winter Feed Cost among different mature weight cows
 - ❑ Red Bud Farm – 2010-11
 - ❑ Two groups of 60 Cows each – Ages 4-8
 - ❑ Group #1 – Weight 1000-1322
 - ❑ Group #2 – Weight 1371-1686



2010-11 Plans

**Two Weight Groups –
60 Cows/Group**

Measure Hay intake



**Feeding Trial (90 Day)
Dec. 1, 2010 – Mar. 1, 2011**

Hay consumed per/day
36.21 pounds

169 rolls (1100 lb.)

2.61 rolls/hd.

Total Hay consumed
1.60 tons

**Consumed 8.63%
more hay than Group
#2 – Light Cows**



Group #1 – Heavy Cows
Avg. pregnant wt. - 1611

Hay consumed per day

31.25 pounds

155 rolls (1100 lbs.)

2.58 rolls/hd.

Total Hay Consumed

1.42 tons

**Consumed 8.63% less
hay than Group #1 –
Heavy Cows**



Group #2 – Light Cows

Avg. pregnant wt. - 1411

Heavy Group

- ✓ Per day - \$1.81
- ✓ 90 day - \$162.90



Light Group

- ✓ Per day - \$1.56
- ✓ 90 day - 140.40

Difference

- Per day - \$.25
- 90 day - \$22.50



Feeding Cost
Hay - \$100/ton

Heavy Group (1611 lbs.)

- ❖ **Average Adjusted Weaning Weight – 575**
- ❖ **% Cow Weight Weaned – 40.5%**



Light Group (1411 lbs.)

- ❖ **Average Adjusted Weaning Weight – 553**
- ❖ **% Cow Weight Weaned – 48%**

Difference – (200 lbs.)

- ❖ **WW – 22 lbs.**
- ❖ **%CWW – 7.5%**

Cow Productivity/Efficiency

- Production

- 22 lb. difference WW
- 22 lb. @1.40/lb. = \$30.80

- Feed Cost

- \$22.50 more for heavy cows



**Will a Heavy Cow pay her
way? MAYBE**

Heavy Cows (1500lb)

- 40 cows
- $WW - 575 \times 40 = 23,000$ pounds x \$1.40 = \$32,200

Light Cows (1200lb)

- 50 cows
- $WW - 553 \times 50 = 27,650$ pounds x \$1.40 = \$38,710

Difference - \$6510



Stocking Rate

- ☐ Keep Mature Cow Size under 1300 pounds
 - ☐ Keep Cow Herd Young
- ☐ Have a Cow Herd that weans 50% or more of their mature weight in calf each year
 - ☐ Cull Cow Herd Annually
- ☐ Have access or own a set of livestock scales
 - ☐ Weigh mature cows annually
- ☐ Record calf weaning weights, adjust to 205 days

- ☐ KEEP GOOD RECORDS

Ways to improve Cow Herd Efficiency

Mid-GA Cattlemen

1. 1180 lbs.
2. 46%
3. 2.34 Acres/Cow
4. 12.45 years
5. Yes-6 No-10

Red Carpet Cattlemen

1. 1125 lbs.
2. 48%
3. 1.6 Acres/Cow
4. 12 years
5. Yes-9 No-12

Floyd County Cattlemen

1. 1117 lbs.
2. 49%
3. 1.81 Acres/Cow
4. 11 years
5. Yes-1 No-24



Survey Results

West Georgia Cattlemen

1079 lbs.

50%

2.53 Acres

12.86 years

17-No 11-Yes

Tattnall County Cattlemen

1. 1120 lbs.

2. 51.2%

3. 1.35 Acres

4. 11.4 years

5. 15- No 6-Yes

Stephens County Cattlemen

1180 lbs.

45.66 %

2.34 Acres

12.45 years

10-No 6-Yes

Northeast Georgia Cattlemen

1. 1039 lbs.

2. 52%

3. 1.5 Acres

4. 12.7 years

5. 27-No 6-Yes

Madison County Cattlemen

1. 1098 lbs.

2. 50.55%

3. 1.61 Acres

4. 9.26 years

5. 14-No 3-Yes

Survey Results

- 1.** 1117 lbs.
- 2.** 49%
- 3.** 1.9 Acres
- 4.** 11.7 Years
- 5.** 73% - No
27% - Yes



SURVEY SUMMARY

What is the idea mature cow size? _____ pounds

What % of the cow weight weaned is expected? _____

On the average how much land does it take to run a cow-calf unit in Georgia? _____

What is the average lifespan of a beef brood cow? _____

Do you own a set of cattle scales on your farm? _____

Survey Questions

- May 31, 2011 –
5:30pm -9:00pm
Beef Cattle
Reproductive Mgt.
Workshop -
Calhoun, GA
- June 1, 2011 –
Calhoun HERD
Sale-Calhoun, GA



Upcoming UGA Events



Questions