

The Value of Trace-ability

**Data and Observations of the MFA
Health Track Beef Alliance**

An opportunity mandated?

Important Parameters to Profit

- **Reproduction**
- **Weaning Weight**
- **Hot Carcass Weight (#1 value determinant)**
- **Carcass Quality and Yield Grade**
- **Health (mid \$20 to low \$30)**
- **Management (\$20 per pull)**
- **Feed efficiency (1,120 vs 2,800 kg of feed)**

What is the Value of Individually Measuring Phenotypic Traits

- **Identify superior females**
- **Evaluate sires**
- **Coordination of data from fabrication to the feedlot, from feedlot to the preconditioning program, and from the preconditioning program to the cow-calf producer**

Efficiency	Start Wt (kg)	ADG (kg)	Feed:Gain
High	274	1.3	3.1
	255	1.4	3.2
	235	1.4	2.4
	271	1.4	3.0
	307	1.4	3.4
	223	1.4	3.1
Low	286	1.5	5.1
	252	1.4	5.0
	243	1.3	4.6
	272	1.7	4.8
	283	1.5	5.1
	243	1.7	4.5

<u>Grand Dam#</u>	<u>Dam #</u>	<u>Calf #</u>	<u>2002</u>		<u>2003</u>	
			<u>ADG</u>	<u>F:G</u>	<u>ADG</u>	<u>F:G</u>
	9009 →	9009	1.4	5.6 (\$54)	1.5	4.8 (\$48)
	8025 →	0045	1.4	6.0 (\$36)		
	152 →	5152 →			1.4	4.9 (\$43)
		Average	1.4	6.8	1.4	5.8

Alliance programs typically advantage the producer by enhancing cattle marketing opportunities and providing carcass data

Individual identification is required to implement an alliance program

MFA Health Track Beef Alliance

- **Minimum 45 day post-weaning period**
- **Vaccination with booster and deworming**
- **Acclimated to full feed and automatic water**
- **Castrated / Open**
- **Source and age verified**
- **Performance and carcass data maintained on an individual basis**

Weaning / Preconditioning (Alliance Program)

	<u>Pulls/Treatments</u>	<u>Deaths</u>
Unweaned (%)	30	4
Weaned (%)	3	0.5

Typically see 15 kg or more weight loss at weaning but capitalize on efficient weight gain during preconditioning.

On diets promoting rapid/efficient gains during preconditioning, followed by a 24 hour hold at point of sale, shrinks of 0% have occurred.

Preconditioning (Alliance Program)

Calves weaned: 27 September 2004

<u>Weaning Wt (kg)</u>	<u>Wean \$ per head</u>	<u>Alliance Sale Wt (kg)</u>	<u>Alliance Value (\$/hd)</u>	<u>Feed Cost (\$/hd)</u>	<u>Increased Value (\$)</u>
144	420	204	598	60	119
190	587	250	651	60	5
235	631	295	708	60	18
280	706	340	784	60	18
319	756	386	880	66	58

Preconditioning (Branded Alliance Program)

Calves weaned: 9 December 2004

<u>Sale Weight</u>	<u>Generic Alliance (\$/cwt)</u>	<u># of Head</u>	<u>MFA Alliance (\$/hd)</u>	<u># of Head</u>	<u>MFA Margin (\$/hd)</u>
204	127.62	343	132.88	196	23.66
250	110.14	1275	118.37	630	45.27
295	103.66	1662	108.86	1227	33.79
340	100.92	749	104.51	847	26.94
386	98.90	238	103.51	223	39.24

Why an increased value from a branded alliance program

- **Less bulls and heifers**
- **Health guaranteed (less pulls and deads)**
- **Reduced lung lesions**
- **International trade compliance (age verification)**
- **Gain and carcass performance**

Producer support

- 100 head comingled from 15 producers weighing 250 kg +/- 11kg
- 5 pulls and 1 death
- Origin of each calf could be determined
- The 6 animals came from 6 different producers, their vaccination program was audited, and MFA stood behind the producer

Value to point of commerce

- Sale of 6,000 head. How do you commingle?
- Increases the flexibility of putting similar lots together
- That wasn't my calf that sold
- I didn't buy this calf
- I brought 32 head not 31 head
- The calves I bought from you got sick (usually leveled against the salebarn most likely to pay)

Disease Recognition

Infection

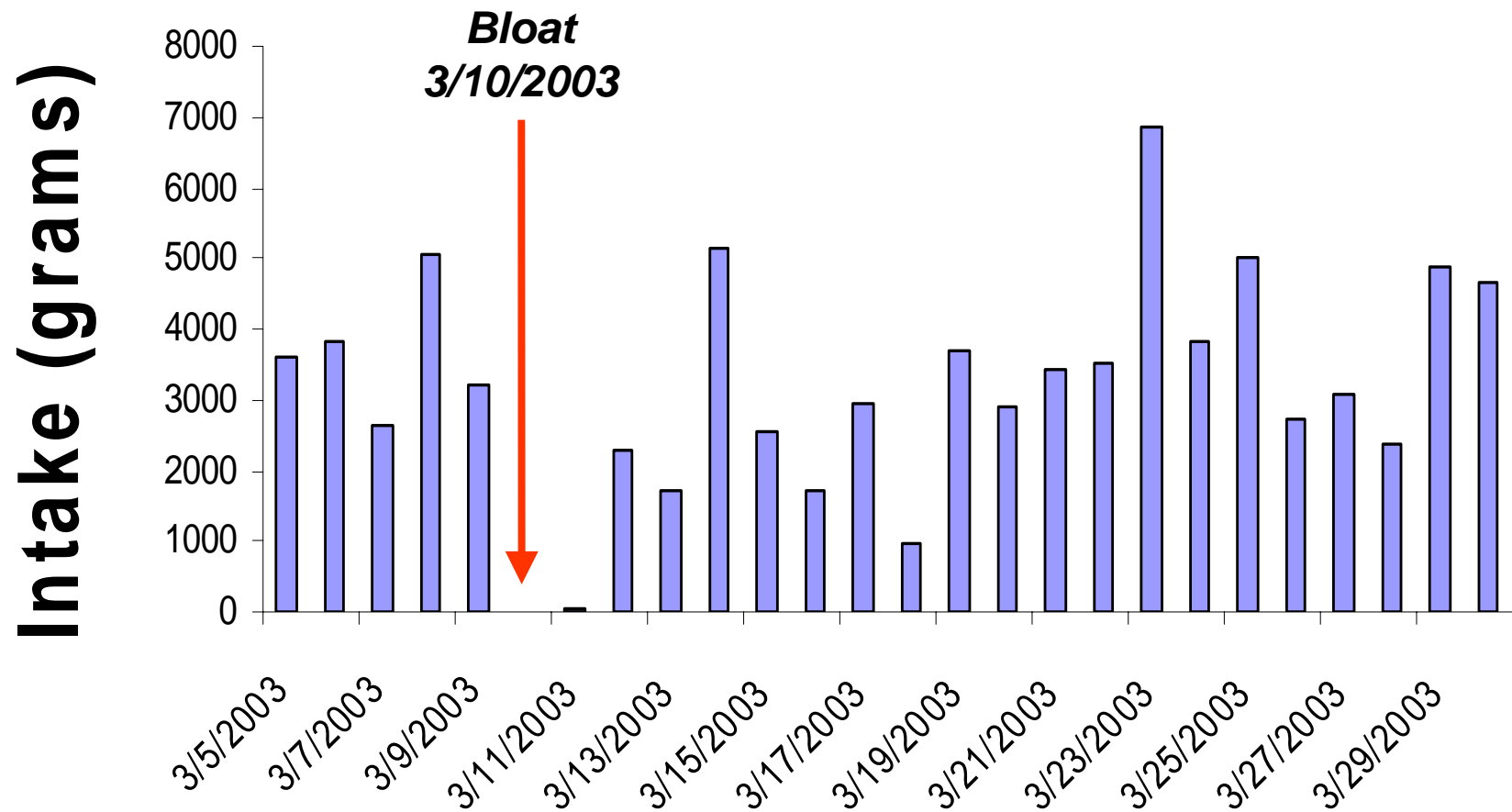
Incubation

Symptom Expression

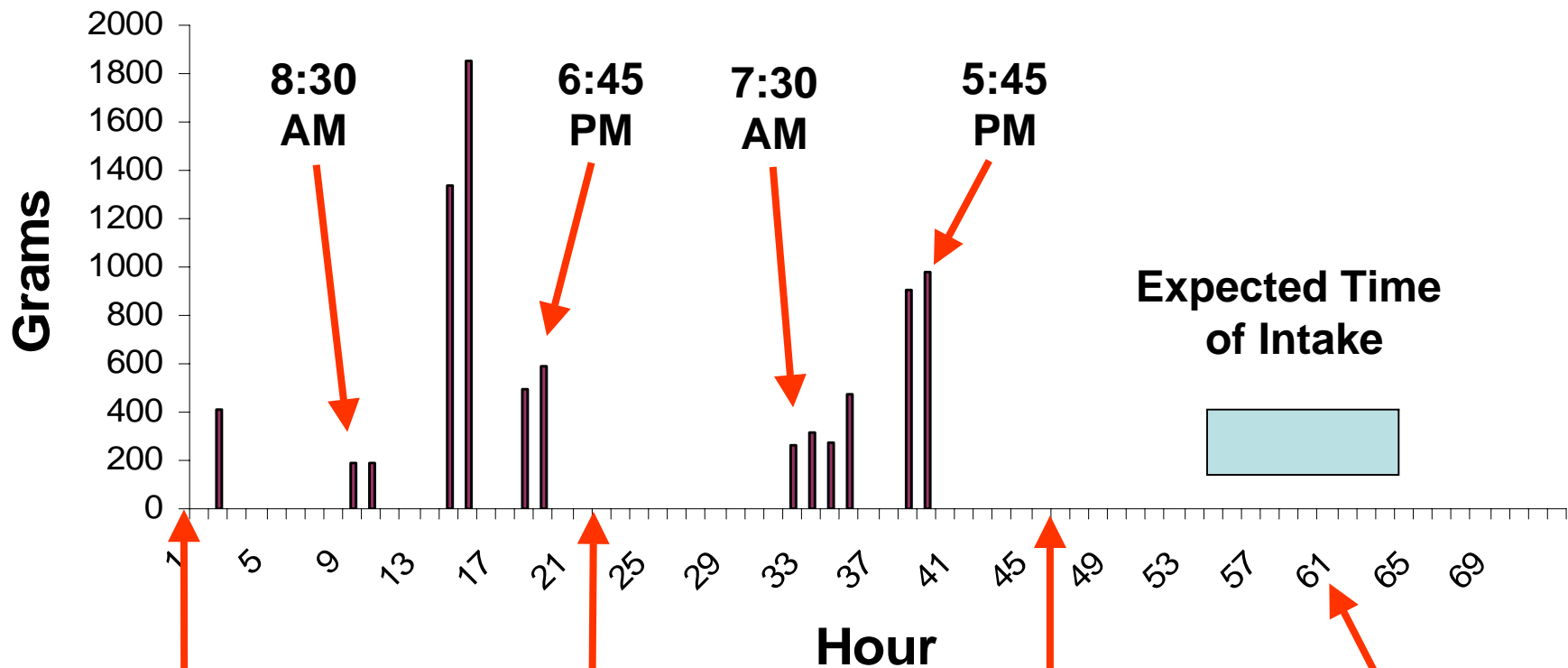
Disease Identification

Treatment / Quarantine

Intake Data (10672276)



Hourly Intake (10672276)

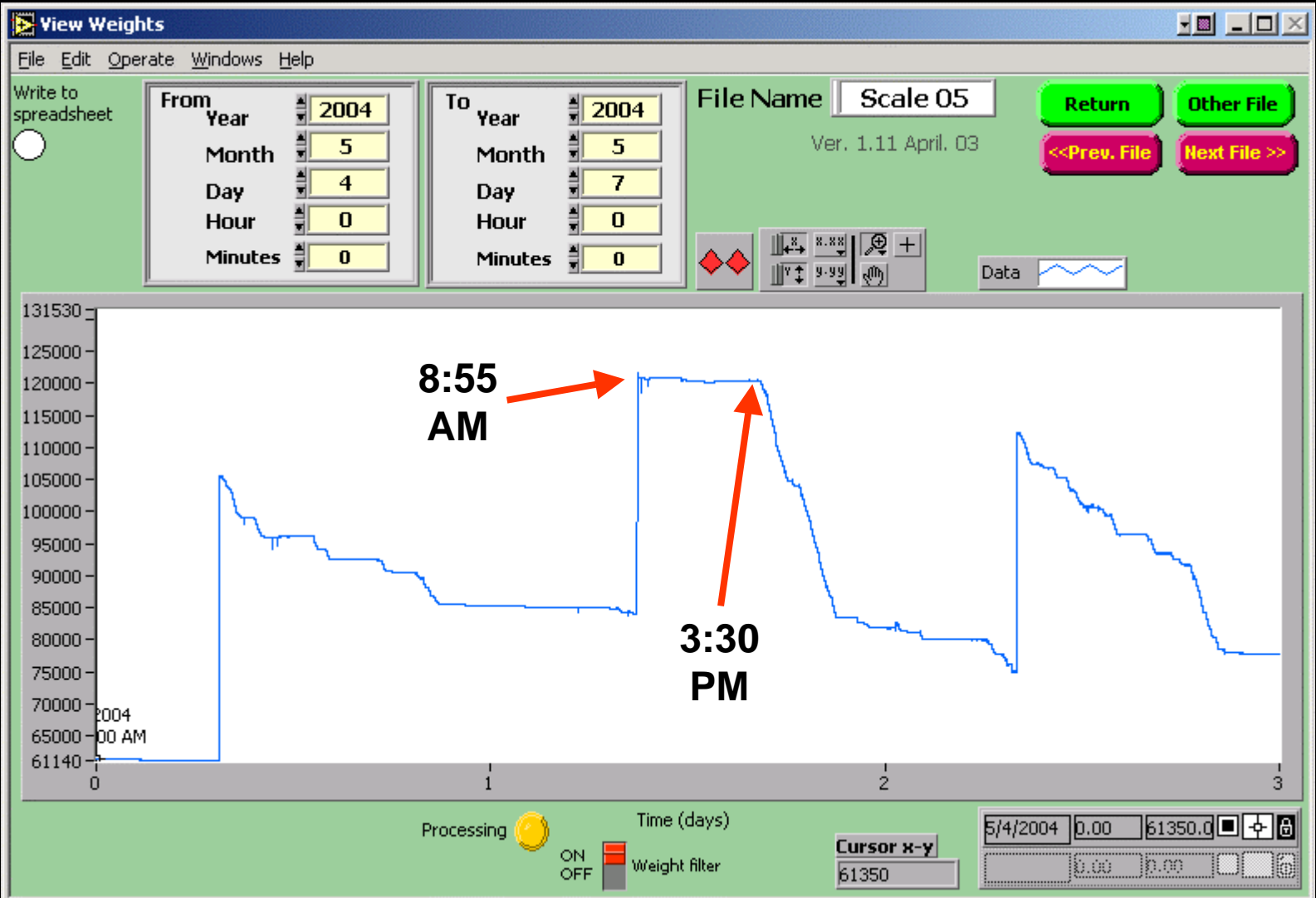


3/08/2003
12 AM

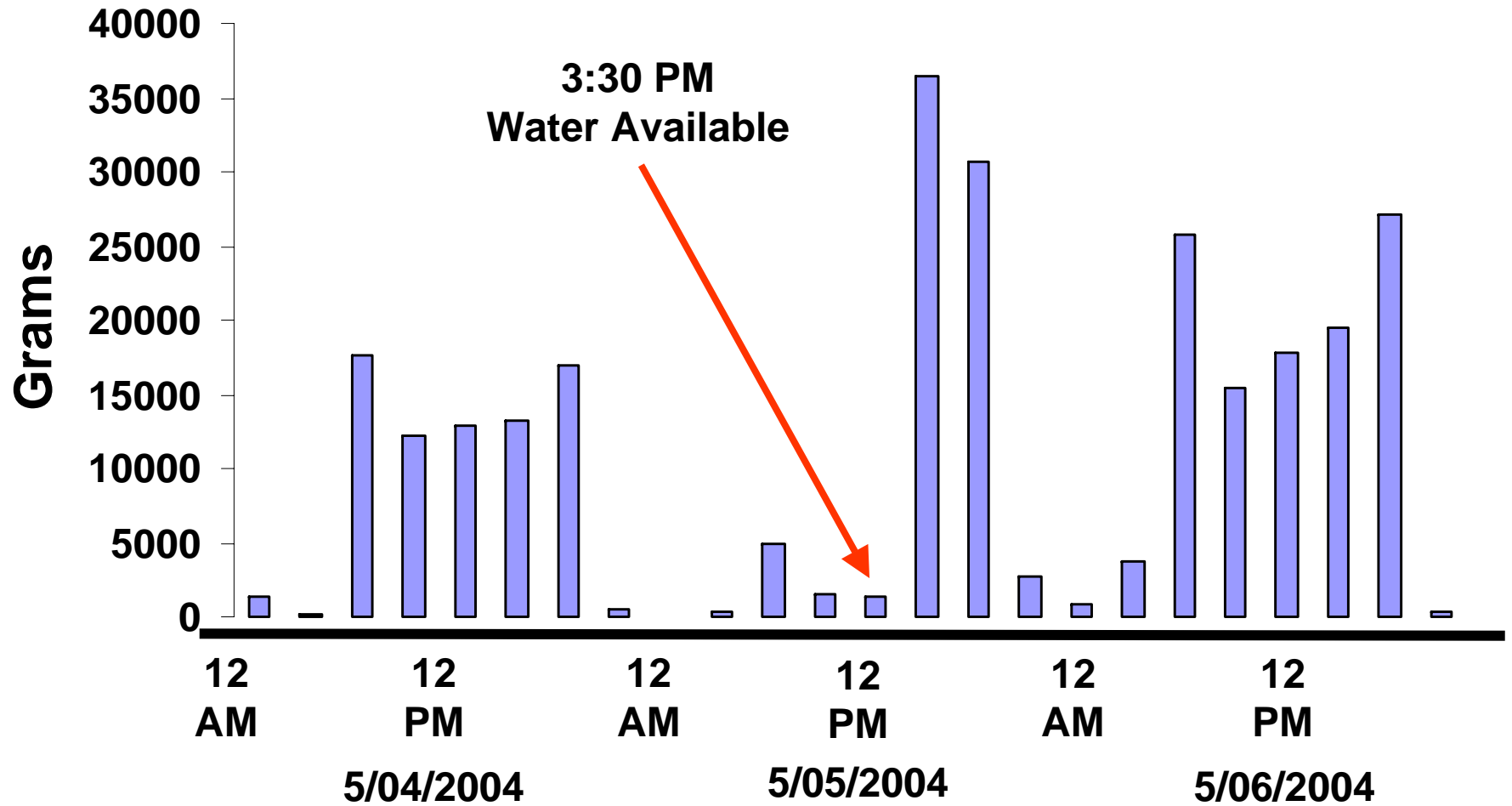
3/09/2003
12 AM

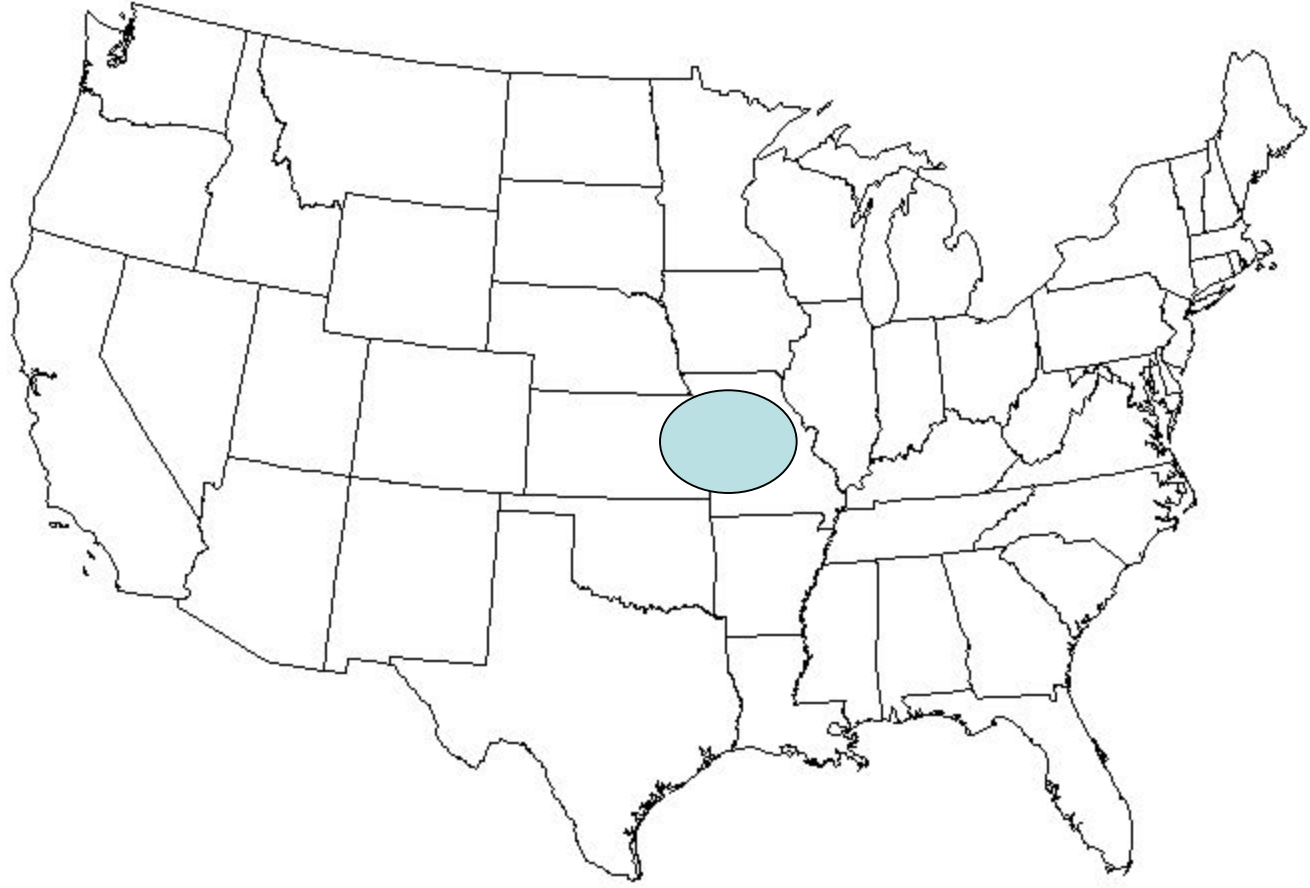
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12 AM

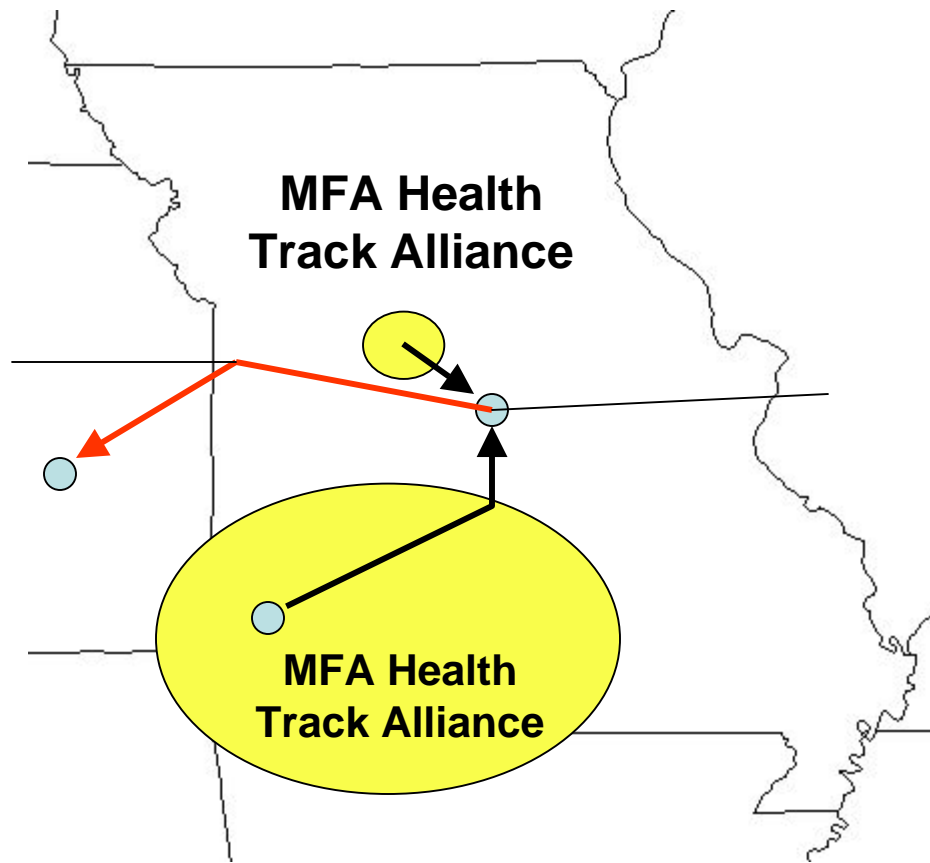
Bloat
Diagnosed
(10 AM)



Pen Intake







What We Can Do Now

MFA HealthTrack - Joplin Regional Stockyards - GrowSafe Equipped Feedlot

- **At any point in time calves can be traced back to their point of origin**
- **Feed intake, gain, and carcass composition can be determined on a daily basis**
- **Health history can be accessed**
- **Disease/Injury can be treated/quarantined 6 to 18 hours after symptoms occur**
- **Individual ownership can be identified in co-mingled groups of cattle**
- **Diet, health, and genetics can be identified that result in over a \$120 advantage per head for fat cattle**

Going Beyond Traceback Capability

- Individual, pen, and herd disease identification within hours after behavior modifications (symptoms) occur
- Diet formulations that improve animal performance, reduce waste volume, and identify genetically superior animals
- EPD generation and genetic marker development for feed efficiency
- Feedlot costs assessed on an individual animal basis
- Progeny evaluation
- Market timing decisions based on estimatable carcass value

So What is Trace-ability worth?

- **Feed efficiency genetics (\$ 40 and up)**
- **Health management (\$ 27 and up)**
- **Branded program marketing (\$24 and up)**



Calf raised by Olds College

Calf fed by Cattleland Feedyard

Slaughter date of 07 January 2005