

# Overview of the Beef Industry

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## H-Calf

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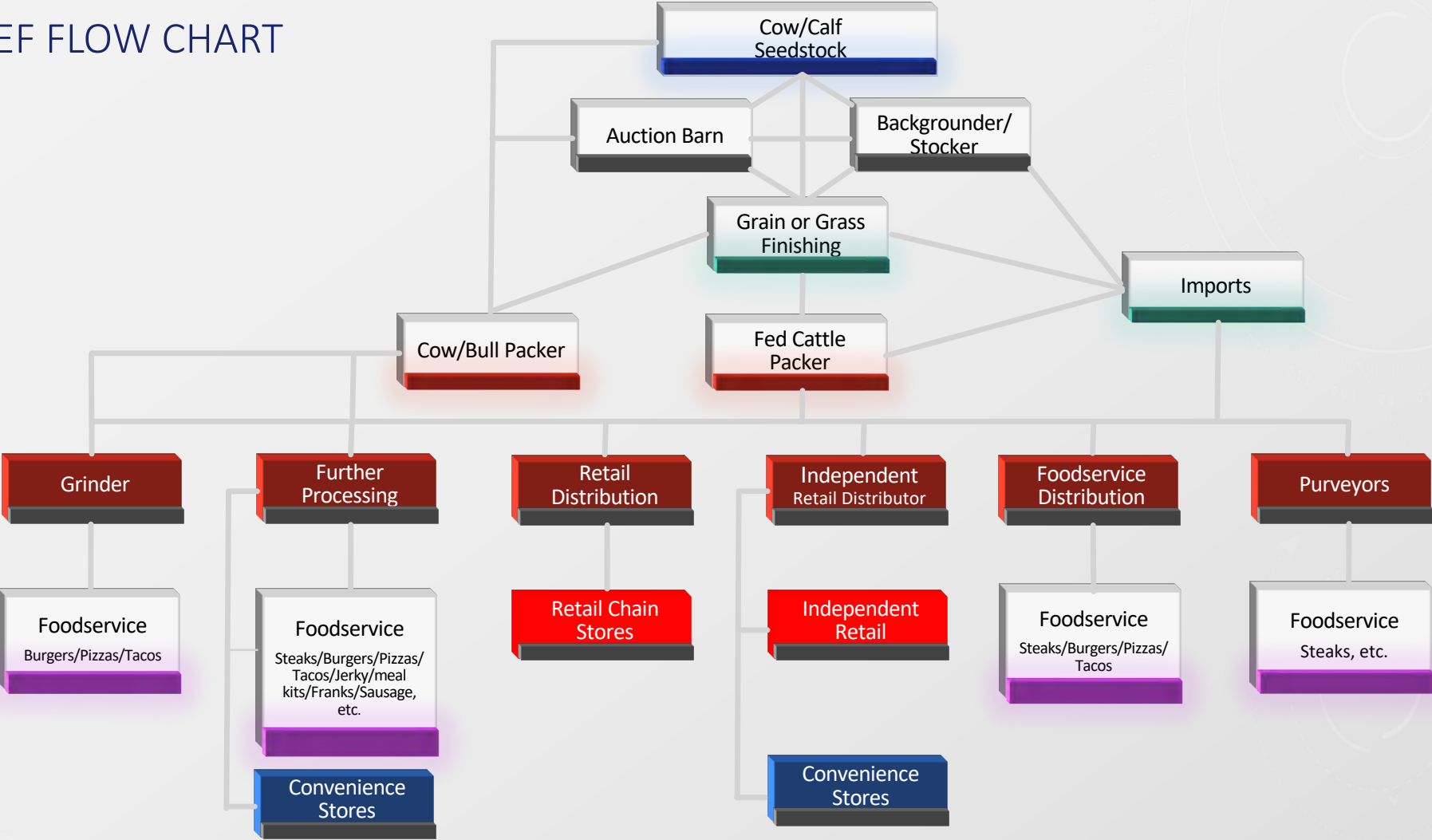
College Station, TX



# 30,000 Foot View



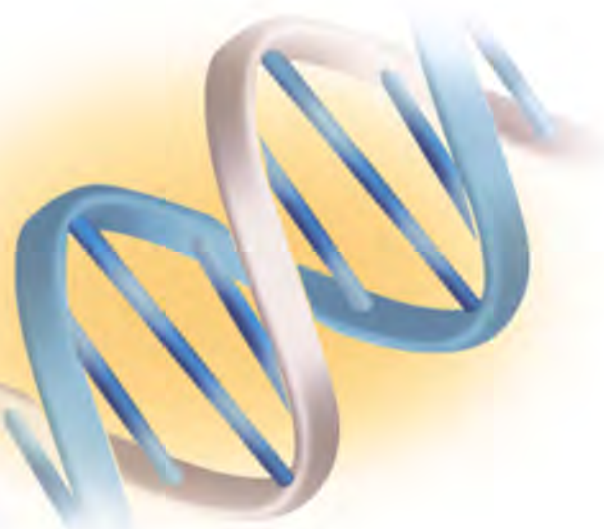
# BEEF FLOW CHART



# Beef Production Phases

- Production
  - Cow-calf
- Transition
  - Weaning
  - Preconditioning
  - Backgrounding





**1 Birth-seed-stock producers** Genetic traits are bred into U.S. cattle herds and sold to cow-calf operators. Cattle have a nine-month gestation period, and many are born in the spring so they'll be strong enough to endure a harsh winter.



**2 Cow-calf operation** Cattle graze in herds on large pastures, remaining with their mothers until they're weaned between six and 10 months, weighing 500 to 700 pounds.



## **Beef Cattle *Averages***

Gestation, days	280
Birth weight, lb.	80
Weaning age, mos.	7
Weaning weight, lbs.	500
Age @ 1 <sup>st</sup> calving, yr.	2
Cow mature weight, lb.	1275
# calves in lifetime	8
Daily Forage intake, lb.	32
Milk Production, lb./day	20
Preweaning calf gain, lb./day	1.75





# Beef Production Phases

- Growing
  - Stocker Cattle
    - Winter Annual grass/crops
    - Spring/Summer grass
- Fattening
  - Feeder Cattle
  - Finished Cattle







**3 Stockers and backgrounders** Most cow-calf operators sell their weaned calves at a livestock auction market, where stockers and backgrounders buy them and put them back on pasture or feed them grain until they are 12 to 18 months, weighing 800 to 1,100 pounds.



**4 Feedlot** Cattle are then taken to a feedlot, where they live in pens and eat corn and grain. Feedlots are typically large operations with hundreds to thousands of cattle, which spend four to six months there.

# Beef Production Phases

- Finished Cattle
- (Where variation in systems differ)
  - Feedlot
  - Grass





# Grassfed/finished





© 2011 Google  
Texas Orthoimagery Program

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Imagery Date: 3/31/2008

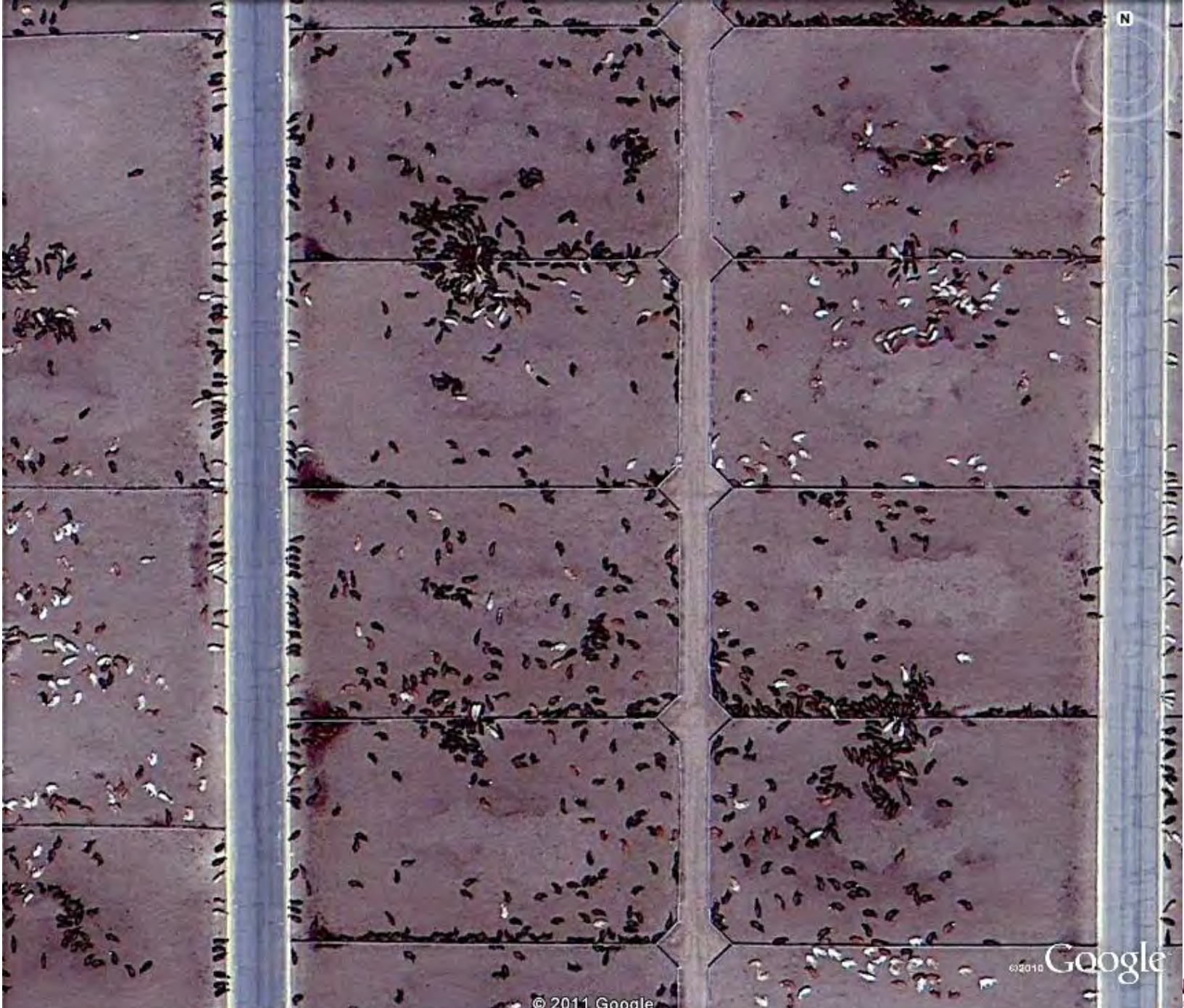


34° 47' 54.89" N 102° 28' 11.92" W elev 3857 ft

Eye alt

4592 ft

ENSON  
maps A&M System



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VISION  
S&M System

Imagery Date: 6/25/2011

2005

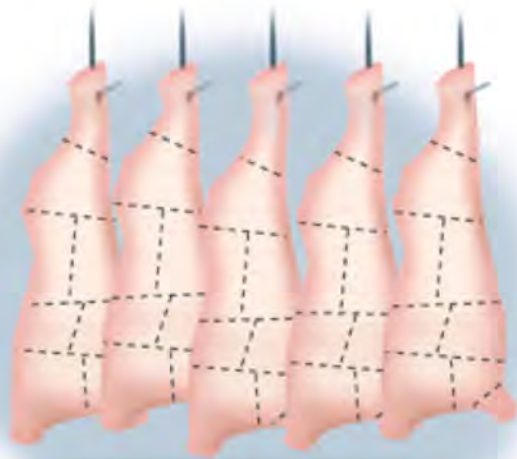
36°18'46.59" N 102°02'02.68" W elev 3648 ft

Eye alt 4096 ft



# Significant Difference Between Grain and Forage Finishing Systems

- Cattle are transported to better growing environments and/or resources on a seasonal basis in most grain finishing programs.



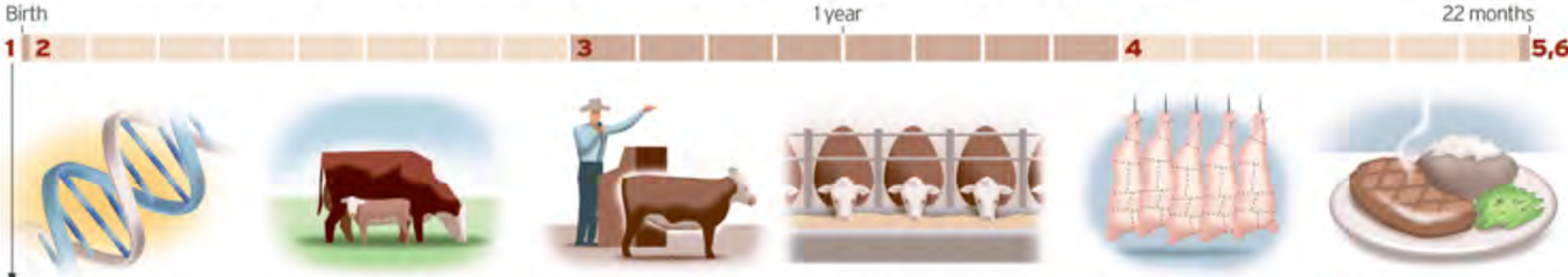
**5 Processing** Cattle are transported to a packing plant to be slaughtered between 18 to 22 months, when they weigh 1,100 to 1,300 pounds. USDA inspectors oversee the process and grade the carcass based on marbling. The meat is then cut, boxed and sent to retail outlets.



**6 Supermarkets and restaurants** Retailers package the meat for consumer purchase and sell it either in restaurants and hospitals or in supermarkets and grocery stores.

# A timeline of beef from the pasture to your plate

Beef production starts at the pasture and ends at the grocery store or restaurant. Most operations specialize in one or two of these steps.



**1 Birth-seed-stock producers** Genetic traits are bred into U.S. cattle herds and sold to cow-calf operators. Cattle have a nine-month gestation period, and many are born in the spring so they'll be strong enough to endure a harsh winter.

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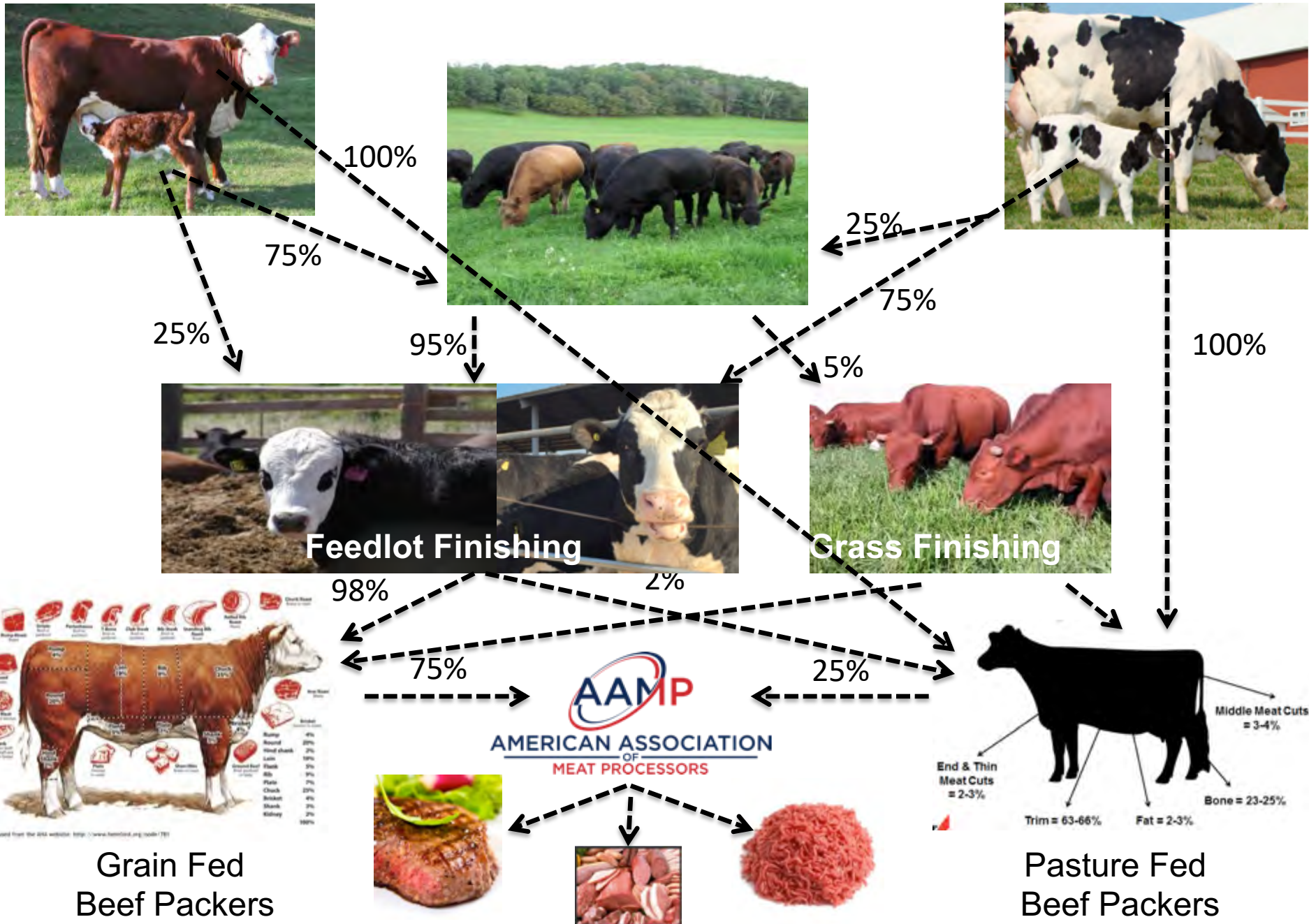
Source: National Cattlemen's Beef Association

STEVE COWDEN, AMY HSUAN/THE OREGONIAN

*the Beef Industry ...*



# “Path-to-the-Plate”



# Beef Industry Jargon

- Beef Cattle (Primary Use Meat)
  - Non Dairy Breeds
    - Angus
    - Red Angus
    - Hereford
    - Charolais
    - Simmental
    - Brahman
    - Brangus
    - Beefmaster
    - Etc.





*nancy*





*Focus  
Kyla Copeland*



TC



























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# Beef Industry Jargon

- Novelty Cattle (Primary Use Meat)
  - Longhorn
  - Galloway - Belted
  - Devon
  - White Park
  - Dutch Belted
  - Dexter
  - Miniature Herefords
  - Low-line Angus







*Linde*













WAYNE JENKINS



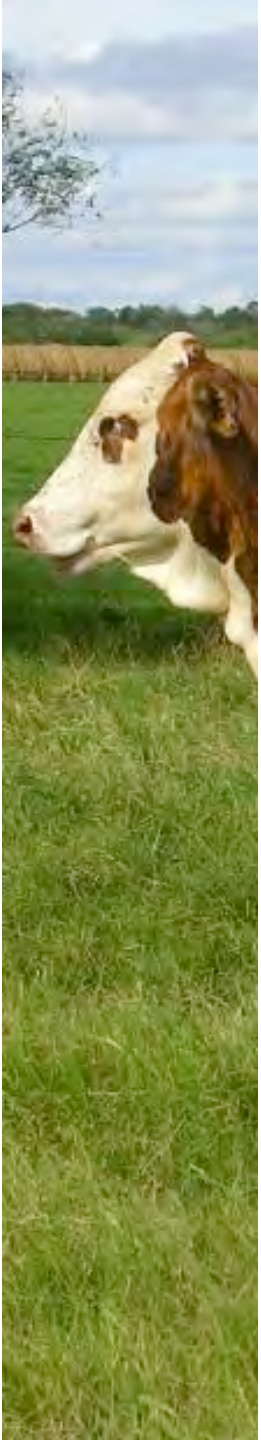
# Beef Industry Jargon

- Sport Cattle (Primary Use “Rodeo”)
  - Longhorn
  - Corrientes
  - Bucking Stock



# Beef Industry Jargon

- Dairy Cattle (Primary use is Milk)
  - Holstein
  - Jersey
  - Brown Swiss
  - Guernsey
  - Ayrshire







# Beef Industry Jargon

- Change of Career Cattle
  - Dairy Breeds
    - Market Cows
  - Sport Cattle
  - Novelty Breeds



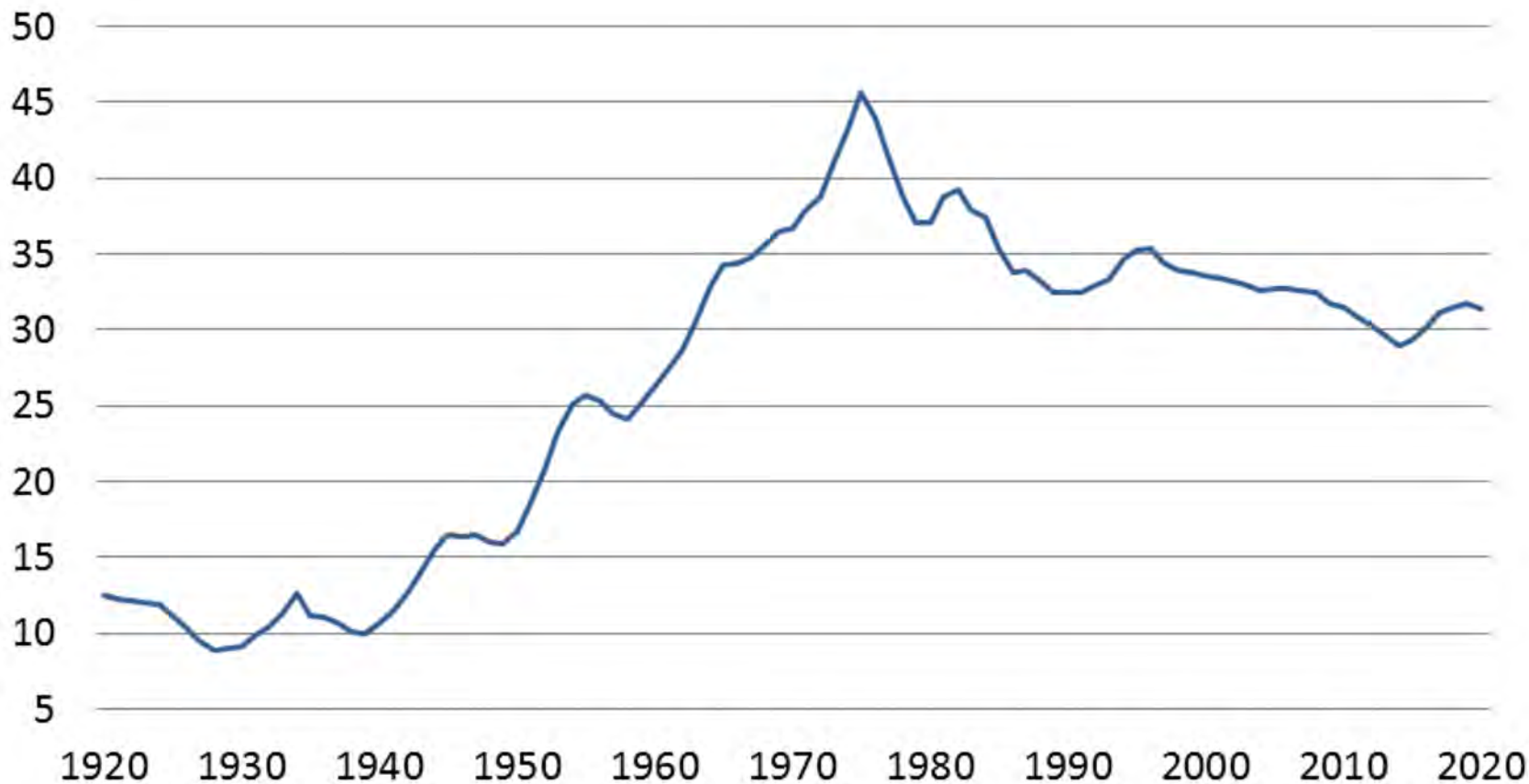




# Beef Cow Inventory – United States: January 1

2020 Inventory: 31,316,700

Million head



USDA-NASS  
1-31-2020

## Cattle Inventory by Class and Calf Crop

Class	2018	2019	Difference
Cattle and calves	94,298,000	94,759,700	461,700
Cows and heifers that have calved	40,898,300	41,119,100	220,800
Beef cows	31,466,200	31,765,700	299,500
Milk cows	9,432,100	9,353,400	-78,700
Heifers 500 pounds and over	20,217,800	20,230,000	12,200
For beef cow replacement	6,108,200	5,924,900	-183,300
Expected to calve	3,763,000	3,543,900	-219,100
For milk cow replacement	4,768,300	4,701,500	-66,800
Expected to calve	3,036,400	3,005,700	-30,700
Other heifers	9,341,300	9,603,600	262,300
Steers 500 pounds and over	16,528,200	16,632,700	104,500
Bulls 500 pounds and over	2,252,300	2,263,000	10,700
Calves under 500 pounds	14,401,400	14,514,900	113,500
Cattle on feed	14,146,000	14,370,900	224,900

Source: NASS/USDA (head)

Source: Beef2Live

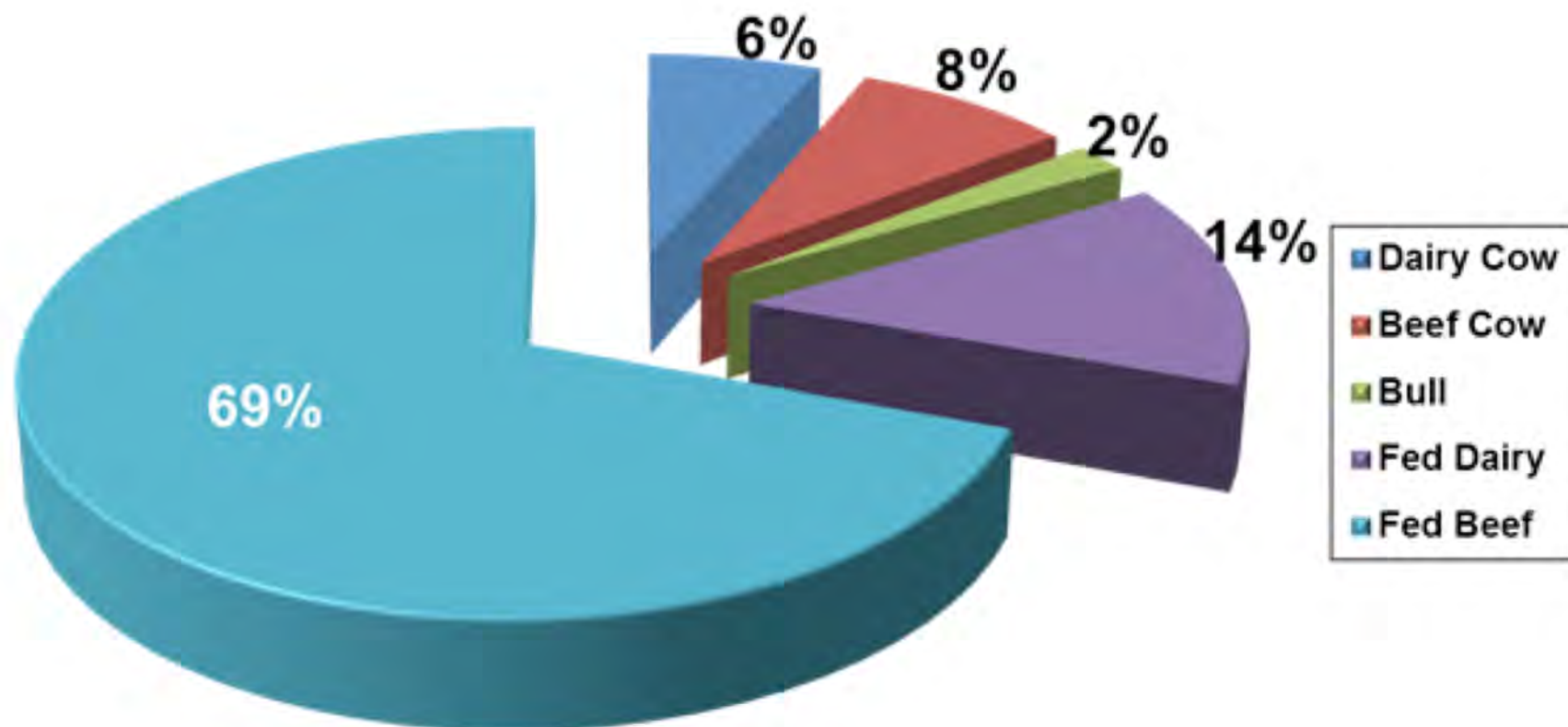
# Beef Production System (94,759,000 head) (2020)

- Beef Cattle (31,765,700)
  - Calf Production (27,000,845)
  - Market Cows and Bulls (4,765,000)
- Dairy Cattle (9,353,000)
  - Male Calves (4,500,000)
  - Market Cows (2,550,000)
- Stocker Cattle (30,000,000)??
- Feedlot Cattle (14,370,000)



# U.S. Beef Production Breakdown

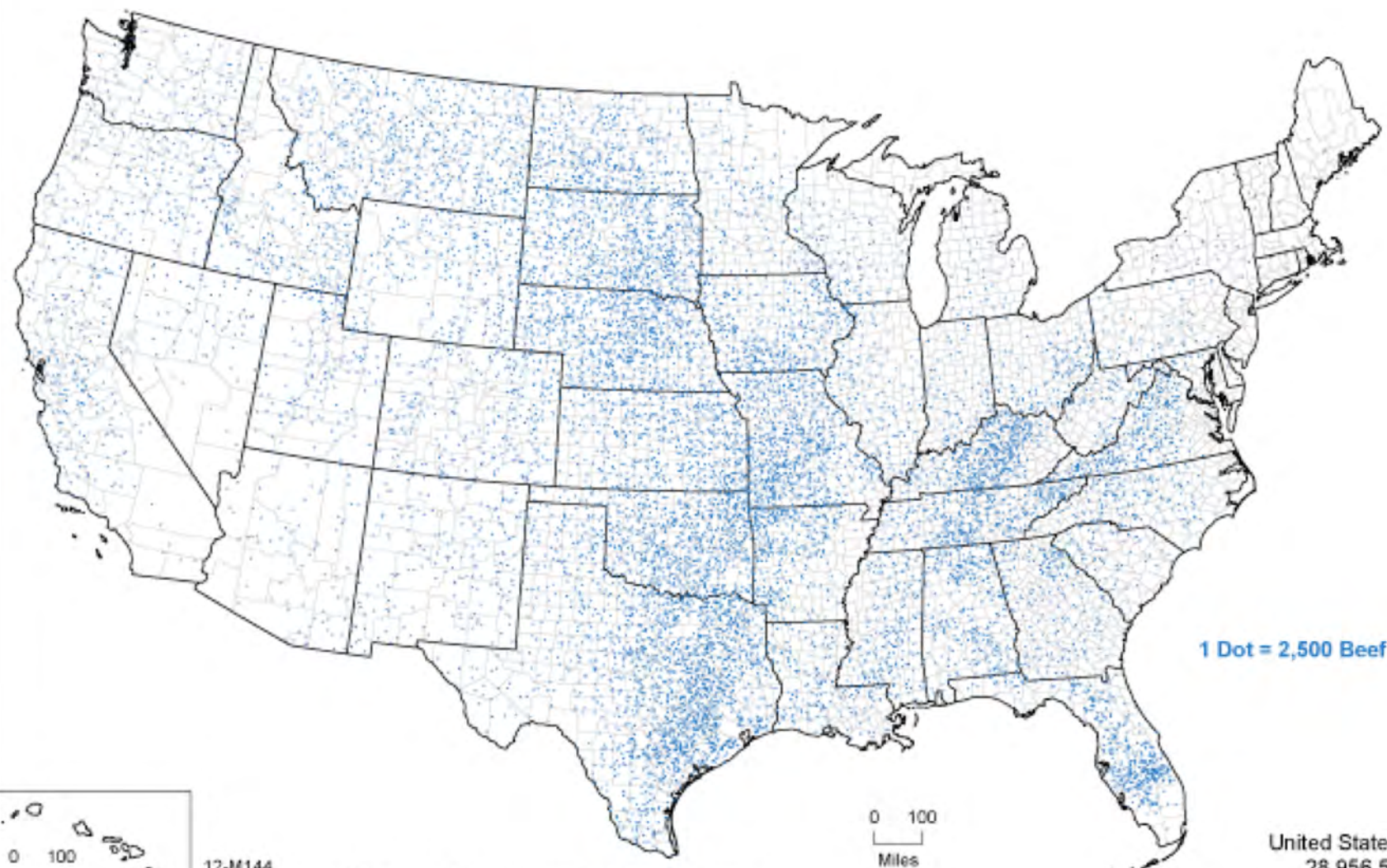
2009-2013 Avg



0 200  
Miles

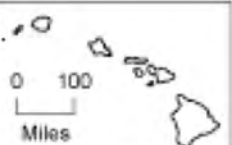


# Beef Cows - Inventory: 2012



1 Dot = 2,500 Beef Cows

0 100  
Miles



12-M144  
U.S. Department of Agriculture, National Agricultural Statistics Service  
Dots for Alaska and Hawaii are omitted from the map.

0 100  
Miles

United States Total  
28,956,553

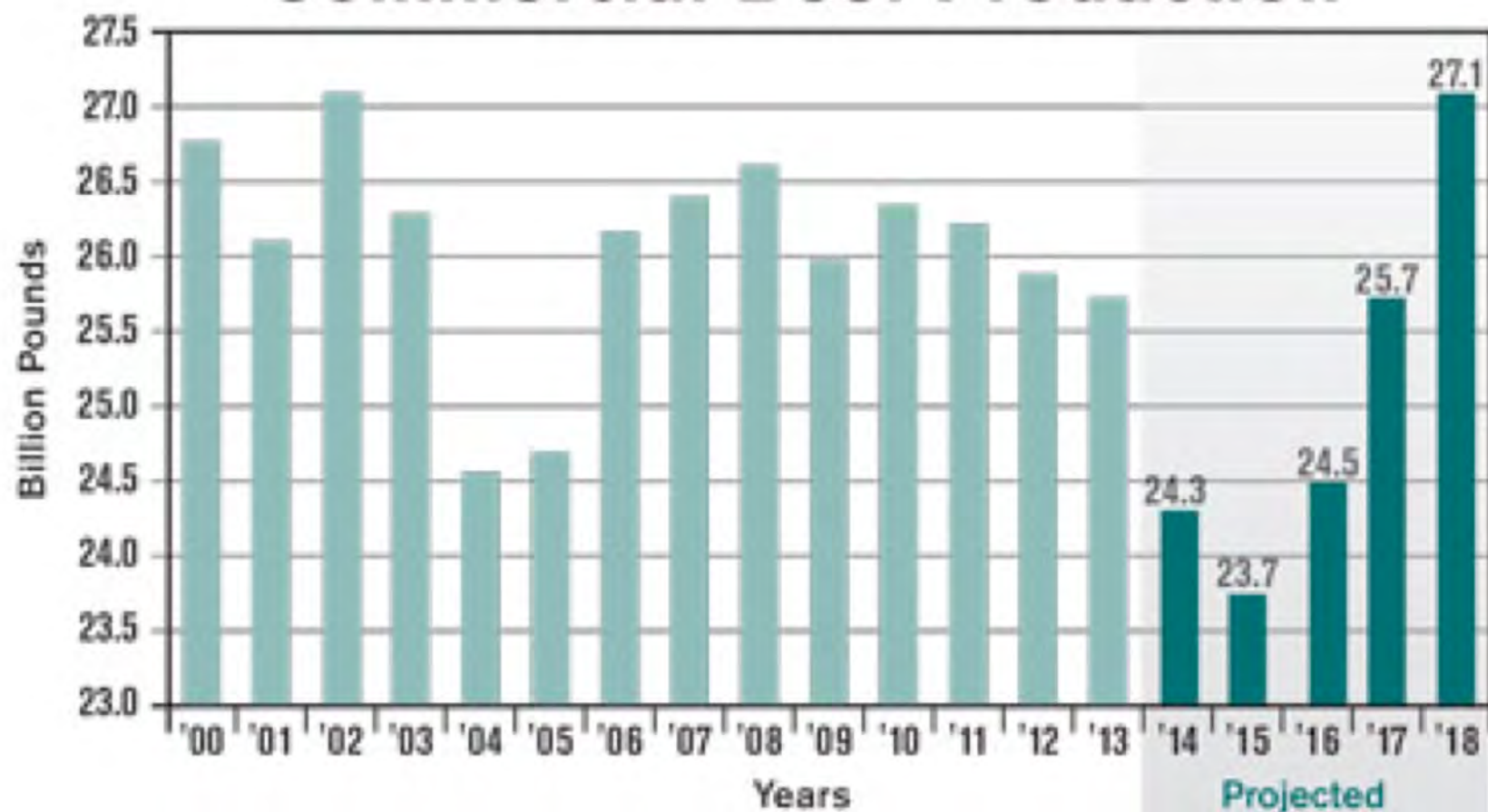
## Ranking Of States With The Most Beef Cows

United States		31,765,700	
Rank	State	2019	% Of U.S.
1	Texas	4,655,000	14.65%
2	Oklahoma	2,150,000	6.77%
3	Missouri	2,059,000	6.48%
4	Nebraska	1,941,000	6.11%
5	South Dakota	1,818,000	5.72%
6	Kansas	1,529,000	4.81%
7	Montana	1,448,000	4.56%
8	Kentucky	1,017,000	3.20%
9	North Dakota	985,000	3.10%
10	Iowa	950,000	2.99%
11	Arkansas	935,000	2.94%
12	Florida	914,000	2.88%
13	Tennessee	914,000	2.88%
14	Colorado	797,000	2.51%
15	Wyoming	714,000	2.25%
16	Alabama	705,000	2.22%
17	California	650,000	2.05%
18	Virginia	631,000	1.99%
19	Oregon	545,000	1.72%
20	Idaho	506,000	1.59%
21	Georgia	499,000	1.57%
22	New Mexico	480,000	1.51%
23	Mississippi	477,000	1.50%
24	Louisiana	459,000	1.44%
25	Illinois	415,000	1.31%



12 states  
60% of total

# Commercial Beef Production



What does the mix look like?

How uniform are our cattle?























# Beef Production



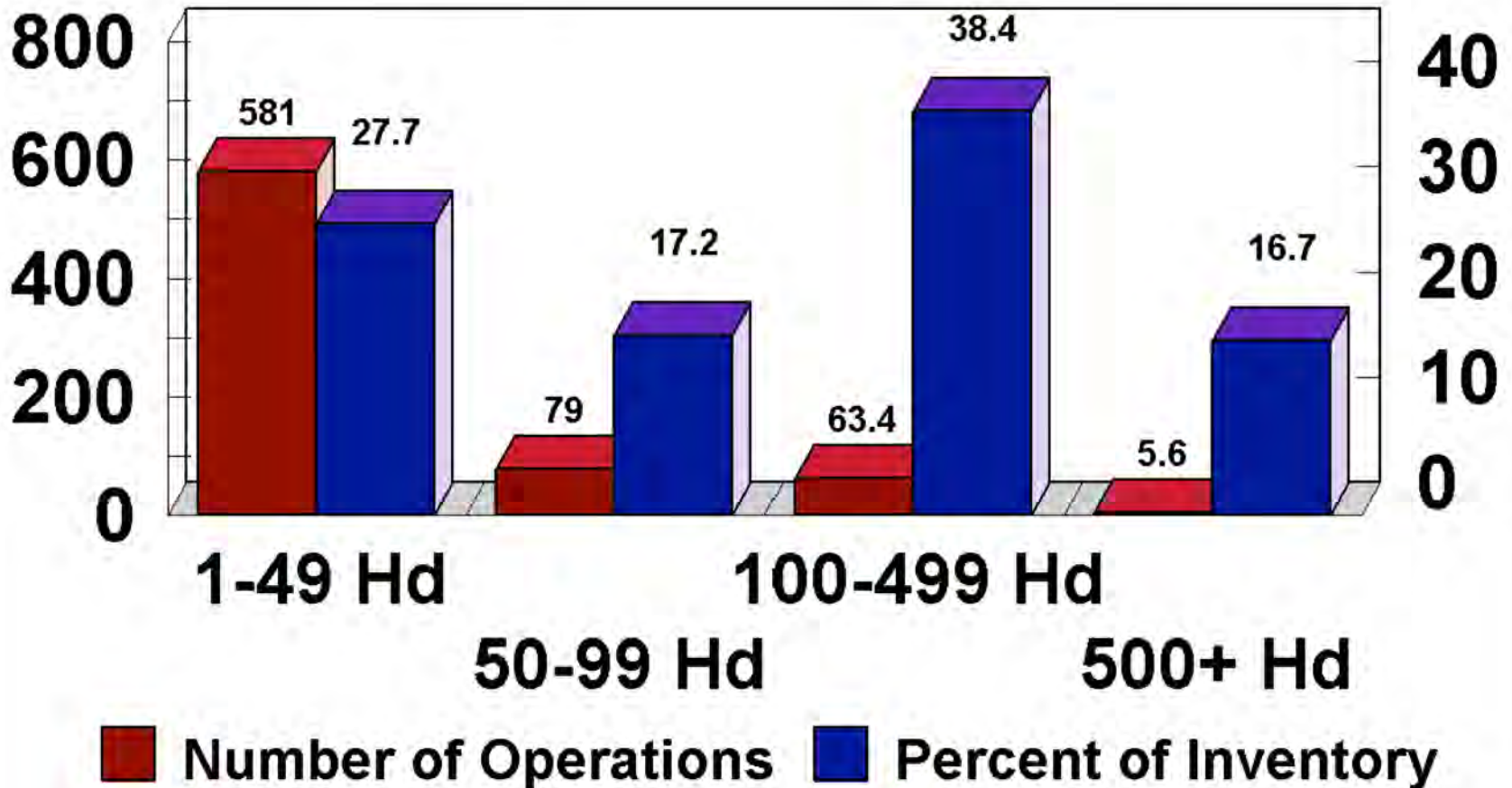
# Beef Production



## U.S. Beef Cow Operations & Inventory Total Operations during 2012 - 729,000

# of Operations (000)

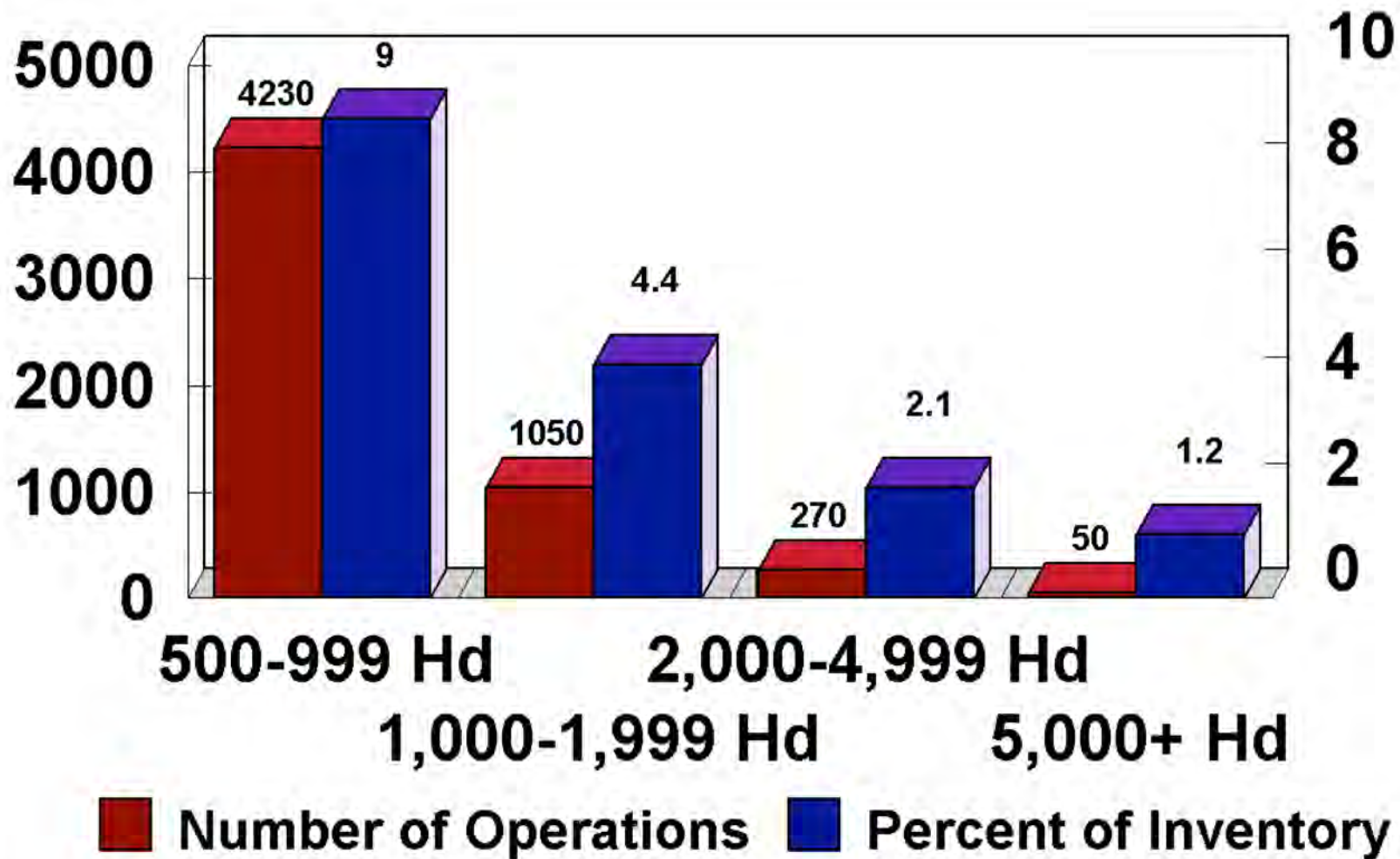
% of Inventory



# 2012 U.S. 500+ Beef Cow Operations & Inventory

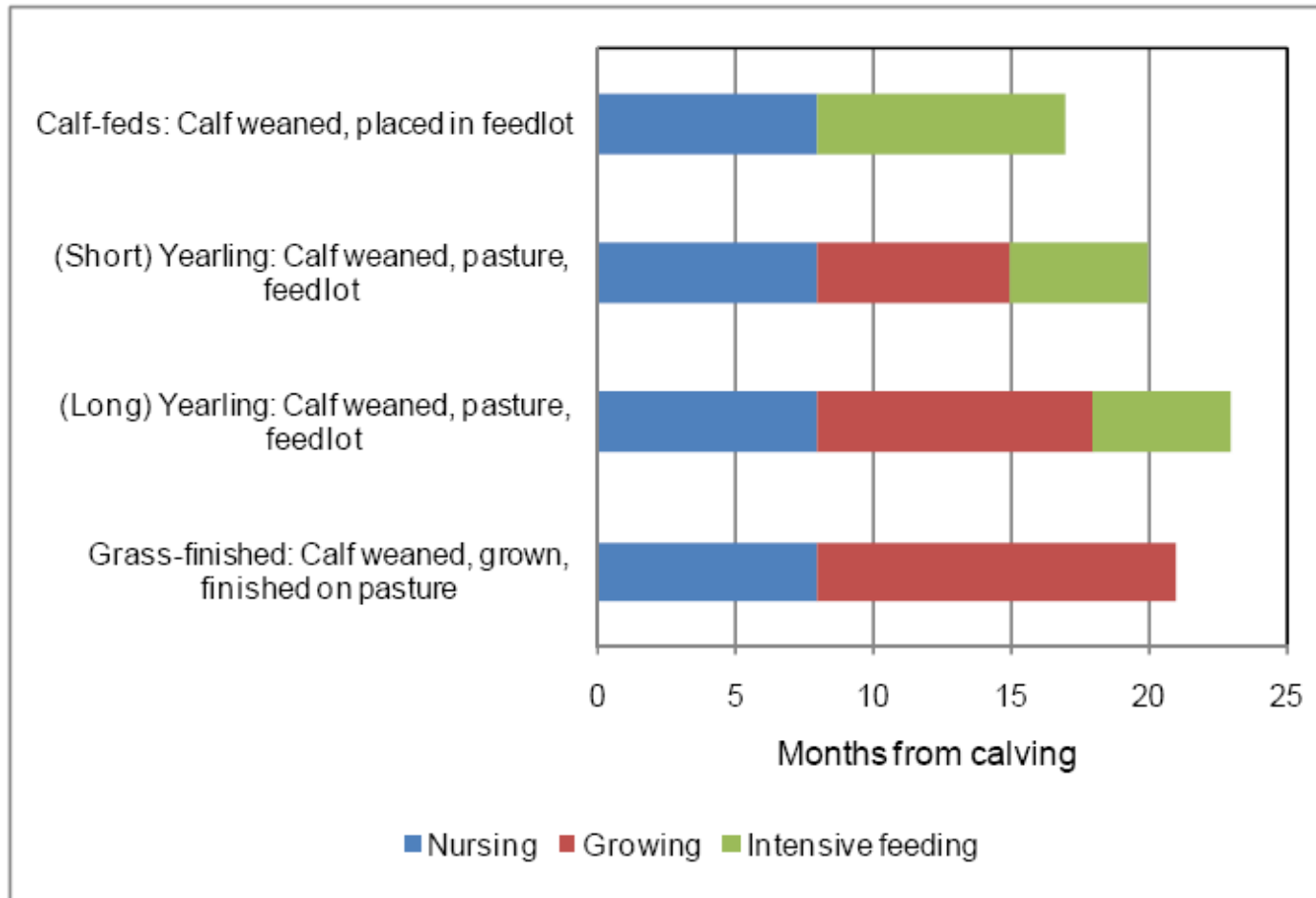
# of Operations

% of Inventory



# Most feeder cattle, whether finished with grain or forages, spend at least half of their lives on pasture of some sort

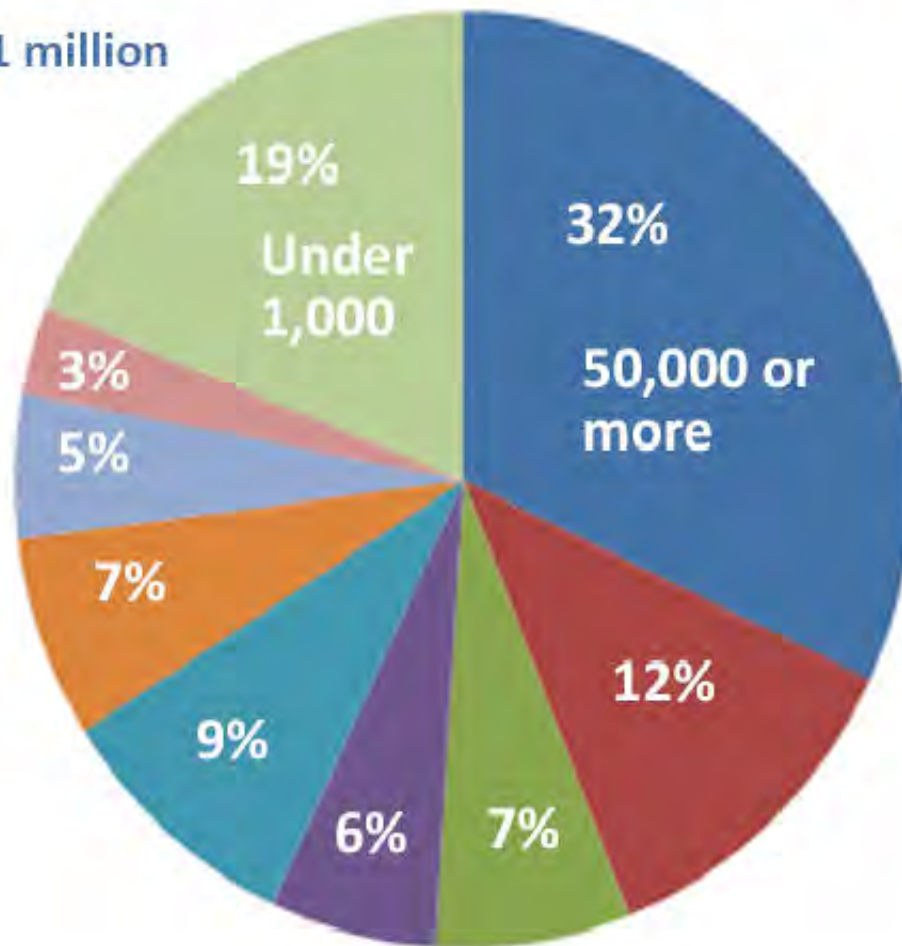
**Figure 1--Alternative production cycle timelines for grass-finished versus conventional grain-fed beef production.**



Source: Produced by USDA, Economic Research Service.

# Inventory of cattle in feedlots on Jan. 1, 2015 by size

Total of 13.1 million head



Number of cattle in feedlots

- 50,000 plus
- 32,000-49,999
- 24,000-31,999
- 16,000-23,999
- 8,000-15,999
- 4,000-7,999
- 2,000-3,999
- 1,000-1,999
- Fewer than 1,000

Source: USDA

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