

Beef Production 101

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Where do beef cows fit?

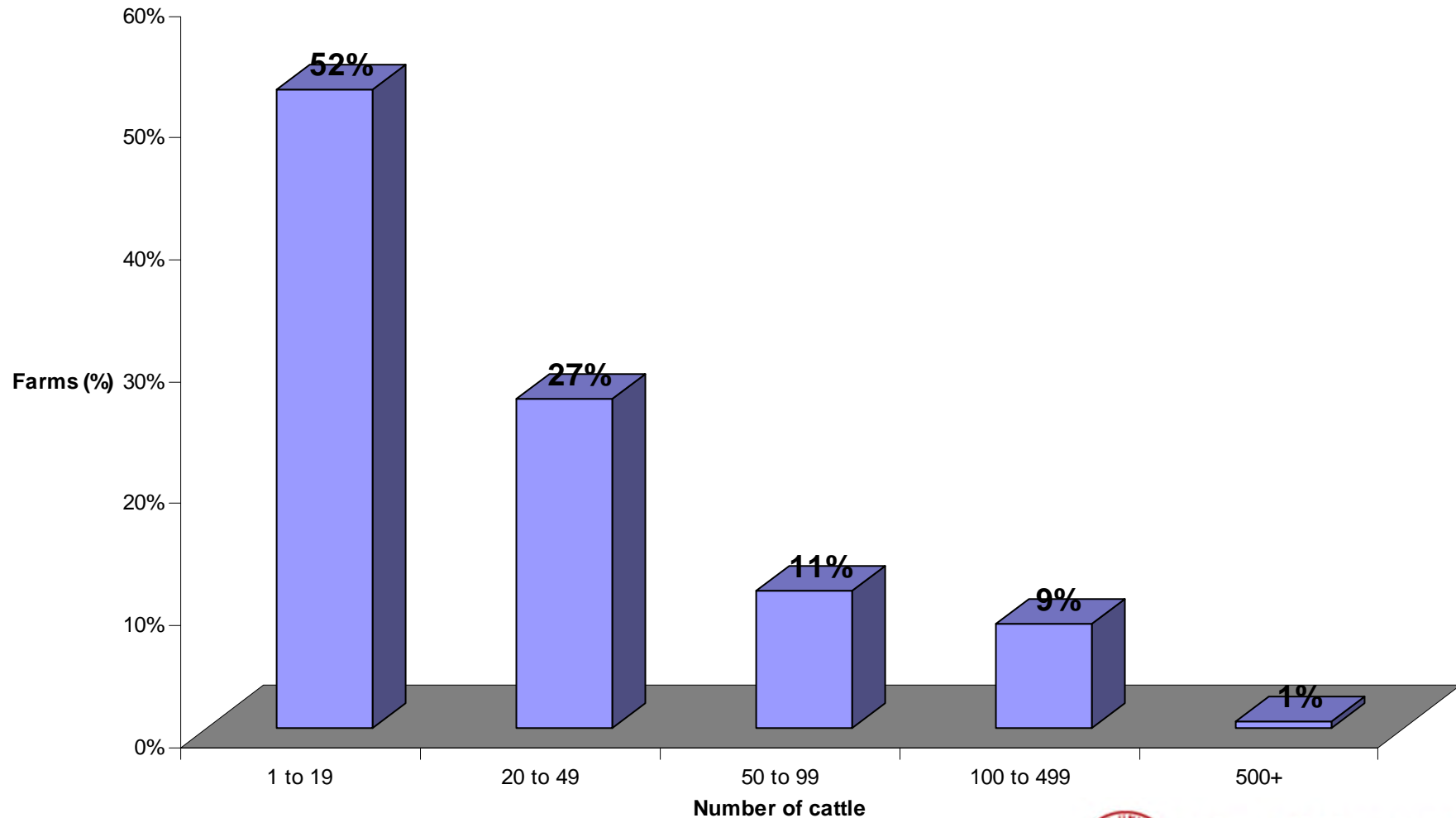
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Where do beef cows fit?

2002 Beef Cattle Inventory



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Factors Favorable For Cow-calf Production

- Utilizing land not suitable for grain production
- Utilize low-quality forage
- Outlet for by-product feeds
- Sustainable on homegrown feeds
- Recycling nutrients



Where do beef cows fit?

1. Lifestyle
2. Surplus resources
3. Full time



Markets

1. Commodity

2. Specialty

a. Freezer trade

b. “Natural”

c. Pasture finished

d. Organic



Registered or commercial?

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Registered or commercial?

Item	Purebred	Commercial
No. of breeds	Usually one	Can be several
Product	Seedstock	Feeder cattle
Capital investment	Large	moderate
Selection	Intensive	Less intensive
Farmstead	Neat and tidy	Not important
Labor	Most	less



Full or Part-time?

- Depends on the market: commodity or specialty
(Specialty: freezer trade, natural, pasture finished)

Full time: 150+ head

Part-time: <150 head





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Which breed?



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TABLE 1.
Breed crosses grouped in biological type on the
basis of four major criteria^a

Breed Group	Growth rate & mature size	Lean:fat ratio	Age at puberty	Milk Production
Jersey	X	X	X	XXXXXX
Hereford-Angus	XX	XX	XXX	XX
Red Poll	XX	XX	XX	XXX
Devon	XX	XX	XXX	XX
South Devon	XXX	XXX	XX	XXX
Tarentaise	XXX	XXX	XX	XXX
Pinzgauer	XXX	XXX	XX	XXX
Brangus	XXX	XX	XXXX	XX
Santa Gertrudis	XXX	XX	XXXX	XX
Sahiwal	XX	XXX	XXXXX	XXX
Brahman	XXXX	XXX	XXXXX	XXX
Brown Swiss	XXXX	XXXX	XX	XXXX
Gelbvieh	XXXX	XXXX	XX	XXXX
Holstein	XXXX	XXX	XX	XXXXXX
Simmental	XXXXX	XXXX	XXX	XXXX
Maine-Anjou	XXXXX	XXXX	XXX	XXX
Limousin	XXX	XXXXX	XXXX	X
Charolais	XXXXX	XXXXX	XXXX	X
Chianina	XXXXX	XXXXX	XXXX	X

^aX lowest XXXXXX highest.
 Cundiff, 1986.

British Breeds



Northom Association



- Maternal
- Milk
- Small mature size
- Light muscle
- Slow growth
- Marbling



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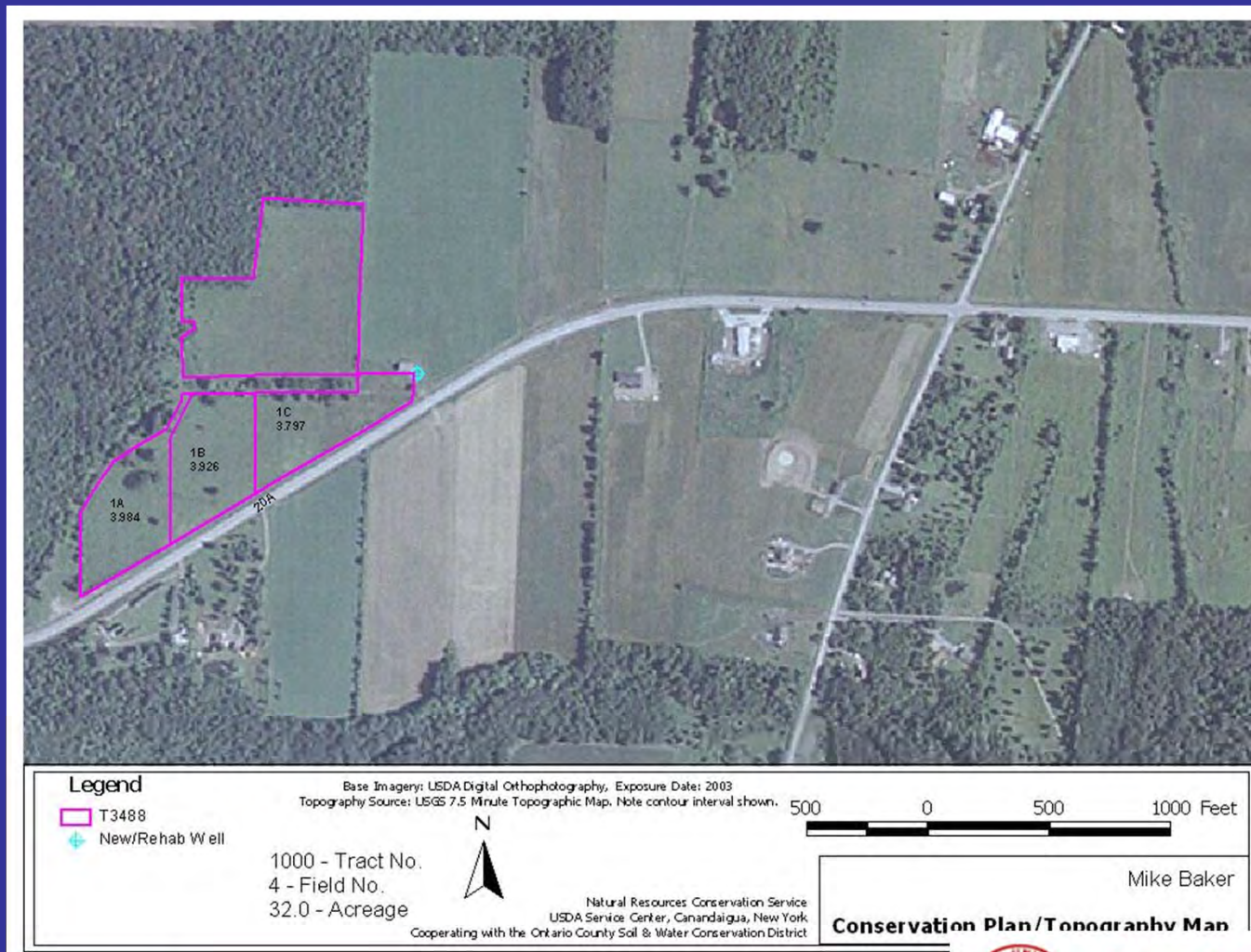
Continental Breeds

- Paternal
- Growth rate
- Large mature size
- Heavy muscle



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How much land?



$$1300 \text{ lb} \times 0.02 = 26 \text{ lb/day}$$



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26 lb x 365 days = 4.8t



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Other requirements.



Fence

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SPECIFICATIONS



Conductors: GoldCote or GreenCote Barbed Wire

Line Posts: Steel or Wood

Corner/End Posts: Steel or Wood

Tools Needed: Hand or power driver for posts; chain wire stretcher; wire cutters; hammer(s).

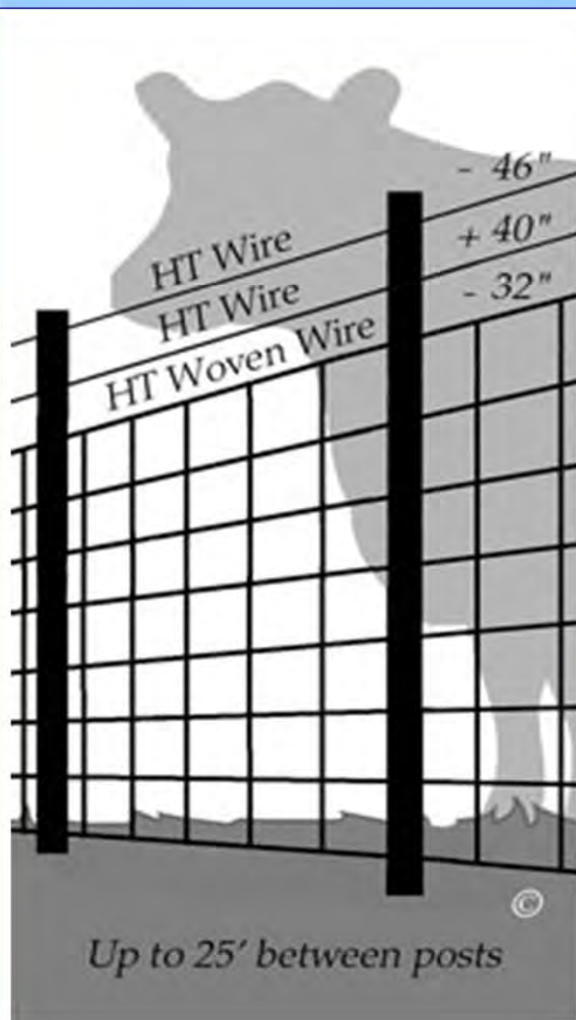
Skill Level: Moderate. Pounding posts, stringing barbed, tensioning it and stapling it to posts is hard work but not technical.

Time To Install: 1,000 ft. in 4 hrs. in easy conditions if power post driver for wood posts is used. Twice that when ground is hard, fence line is irregular, etc.

Cost Per Foot: \$0.11 – \$0.18. The actual cost of a barbed wire fence is driven by number of strands and posts, cost to ship it too you, how long it lasts and the relative experience of those who install it.



SPECIFICATIONS



Conductors: Wire - Combinations of GreenCote, GoldCote HT Smooth Wire, HT woven or Barbed wire.

Line Posts: Steel or wood.

Corner/End Posts: 6" x 8' wood posts driven/set 42 – 48" deep and braced well.

Energizer: 0.2 joule of output per 2000 ft if wire is a 30

Gates: Steel or wood.

Tools Needed: Post driver or post hole auger, woven wire straining clamps, wire cutters, HT wire dispensers, hammer, pliers.

Skill Level: Not difficult for those with fencing experience. First-timers will need help.

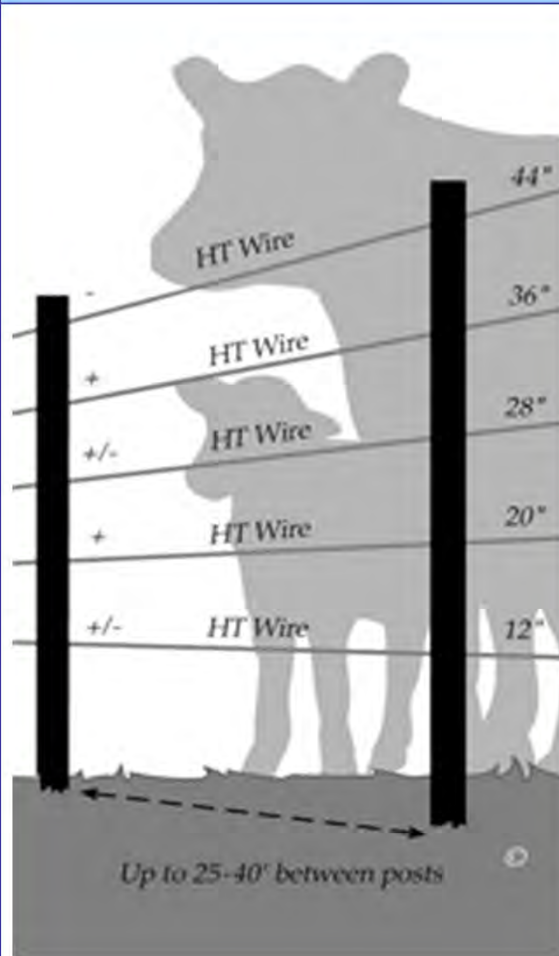
Time To Install: 1000 ft. in 2 days with two men in easy conditions with a powered post driver. Add a day for rougher terrain.

Cost Per Foot: \$0.45 – \$0.95. While this seems high when compared to barbed and HT wire fences made entirely of smooth wire you won't find a less expensive, longer lasting, more reliable multi-specie livestock fence than this design.

Life (yrs.): Up to 50 years.

Other: Avoid damage to surface of wire during installation.

SPECIFICATIONS



Conductors: GoldCote, GreenCote or Regular HT galvanized wire.

Line Posts: Insulated steel T posts or 4" dia. wood posts, every 25 – 40'.

Corner/End Posts: 6 in. x 8 ft. wood posts driven/set 42 ins. deep and braced well.

Energizer: Allow 0.3 joule of output per 2000 ft.

Gates: Steel framed bar gates.

Tools Needed: Post drivers, wire cutters, HT wire dispensers, hammer, pliers.

Skill Level: Moderate. If you have the tools and pay to have the posts driven. More difficult and much more sweat if you don't.

Time To Install: 80% to install posts. 1000 ft. in 4 hrs. in easy conditions with a power driver. Will take 2 days if you set the posts.

Cost Per Foot: \$0.20 – 0.55. Actual cost is affected less by the number of wires than the quantity of end, corner and line posts and time needed to install them.

Life (yrs.): 30 to 50 years

Other: Concerns - Wires without insulators will be grounded if steel T posts are hot-dip galvanized.

Animal Housing Feed storage

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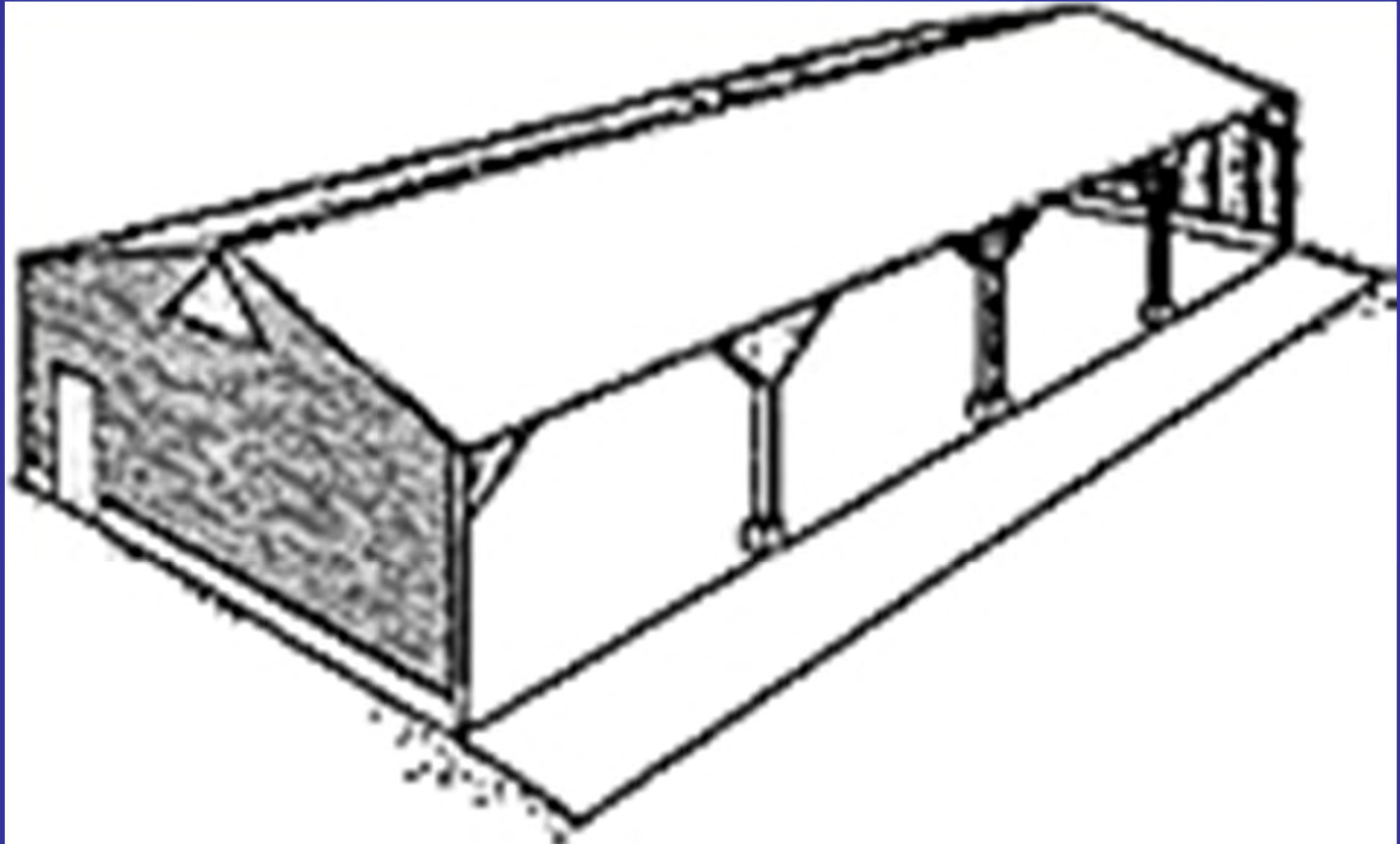
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625-825 ft³ per cow on 30 ft barn,
need 1ft of length per cow





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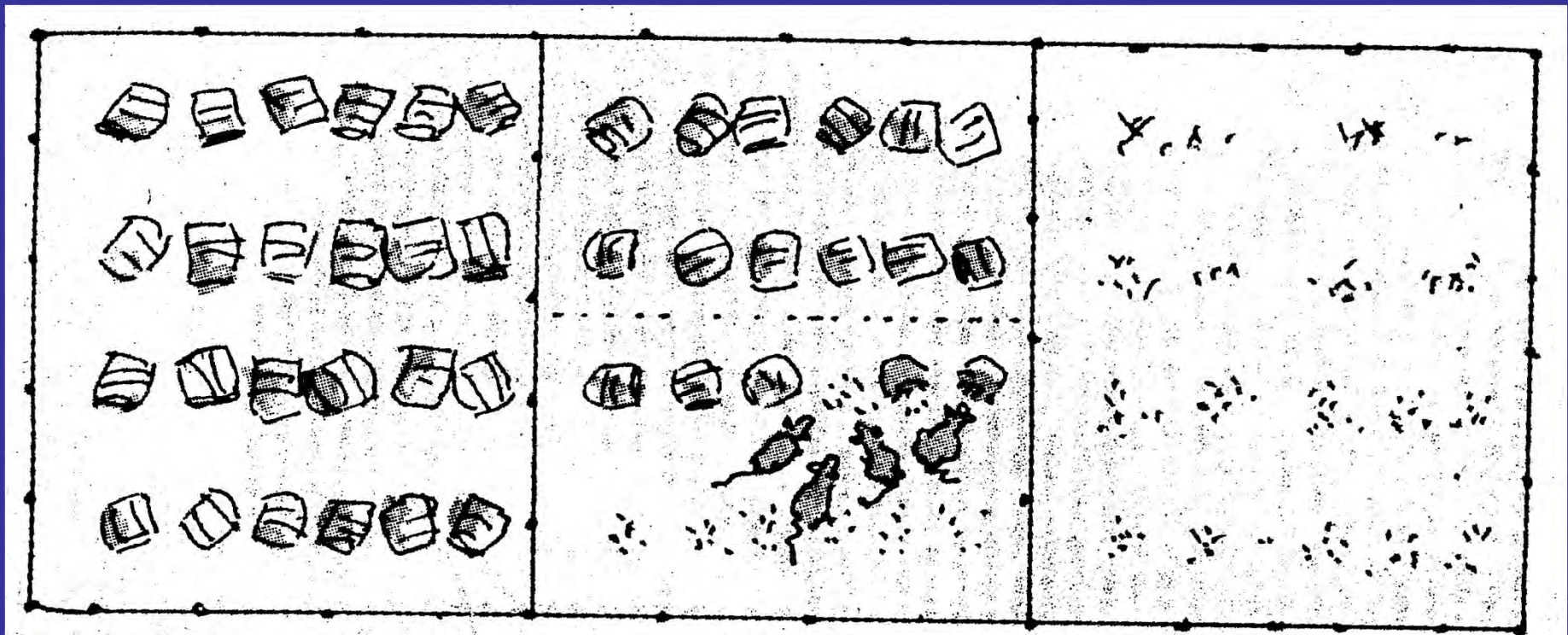


Figure 1: Round bales of hay are placed uniformly across the paddocks, with a temporary electric fence (dotted line) to control access to the feed.



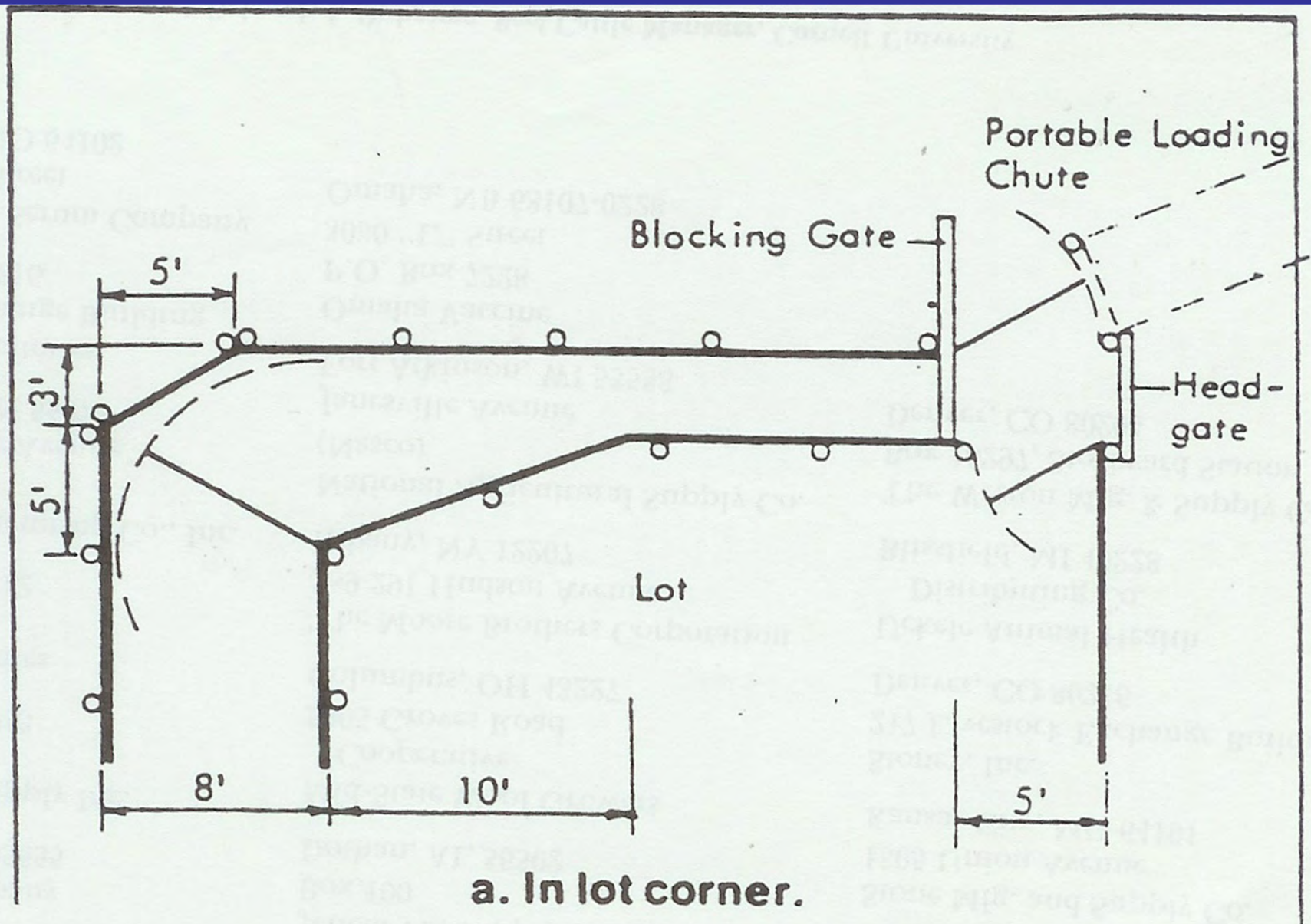
01/16/2004



Handling



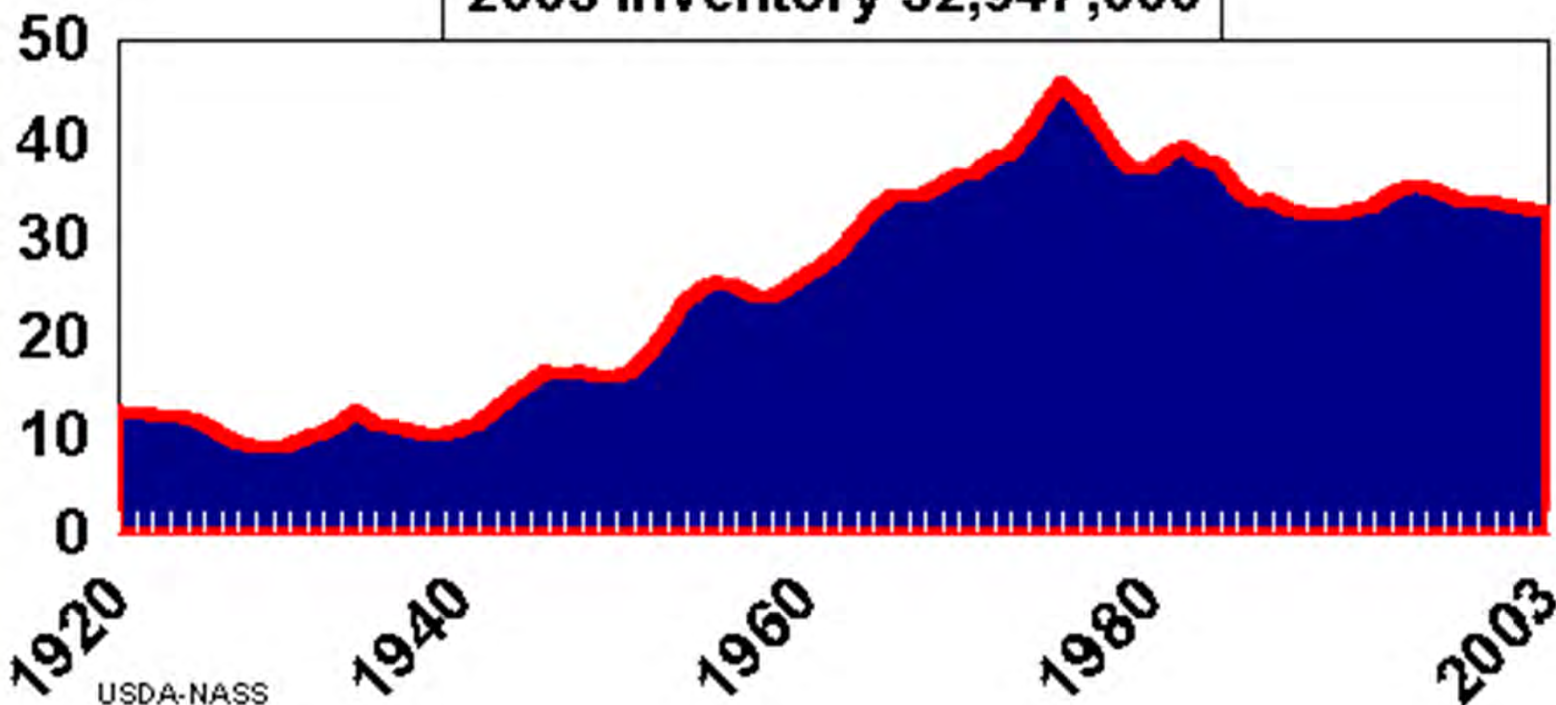
Facilities



January 1 U.S. Beef Cow Inventory 1920-2003

Million

2003 Inventory 32,947,000

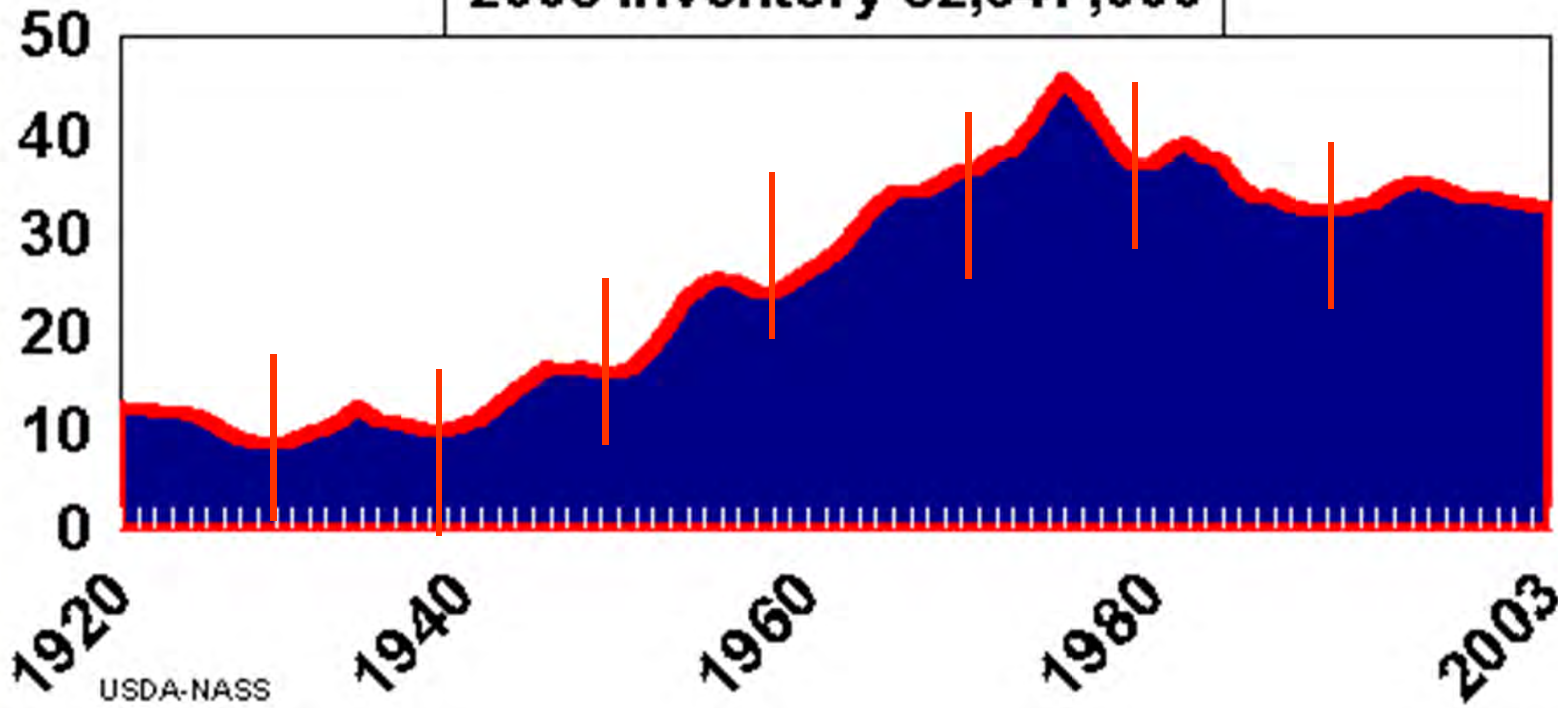


USDA-NASS
1-31-2003

January 1 U.S. Beef Cow Inventory 1920-2003

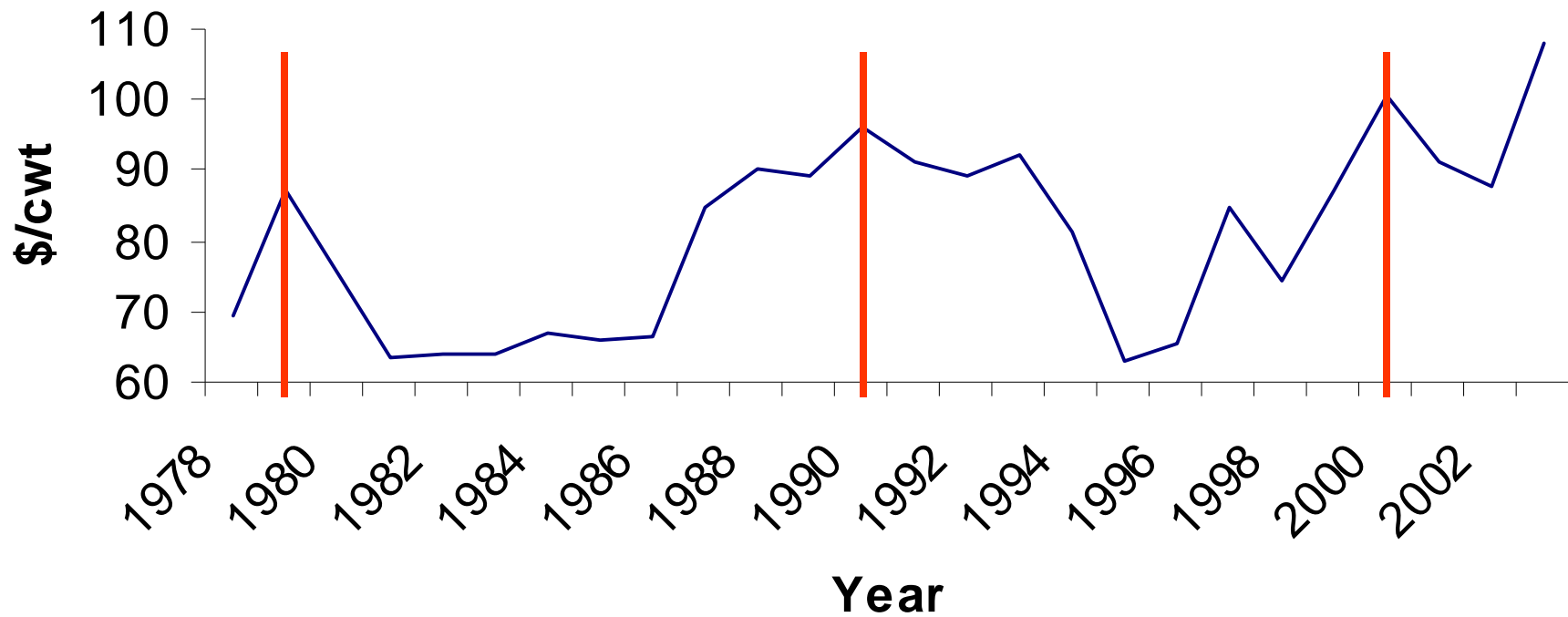
Million

2003 Inventory 32,947,000



USDA-NASS
1-31-2003

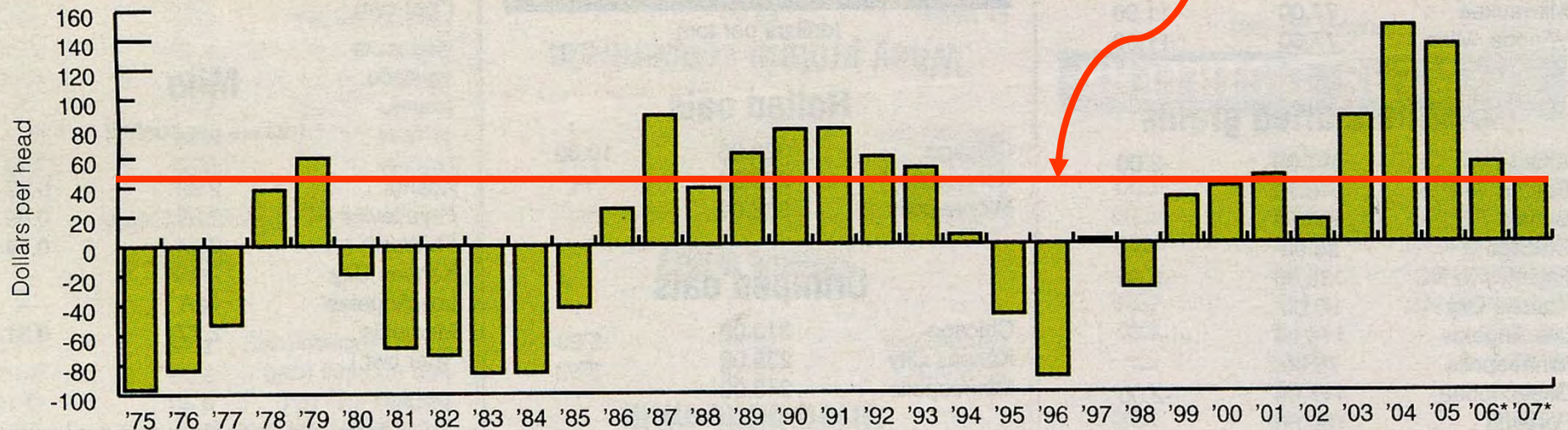
Average November Price of 550 lb. Feeder Calves



Source: Cattle-Fax

Cow/calf Returns

1990-2007, average \$45/cow



*2006-07 are projections.

Source: Livestock Marketing Information Center.

Cost-Return Projection -- Beef Cow-Calf Enterprise (Per Cow)

AVG Min Max

VARIABLE COST PER COW:

Feed costs

Summer Pasture	86	45	125
Hay--Forage	116	92	174
Other feed	8	6	10
Protein and Mineral	18	8	37

Total Feed Costs **\$227** **\$166** **\$264**

Hired Labor, Custom Hire	20	0	50
Veterinary, Drugs, and Supplies	17	9	25
Utilities, Fuel, and Oil	9	0	21
Facilities and Equipment Repairs	7	0	27
Breeding Charge	8	0	15
Marketing	14	8	20
Miscellaneous	12	7	19
Interest	6	0	12

TOTAL VARIABLE COSTS **\$321** **\$232** **\$392**

Cost-Return Projection -- Beef Cow-Calf Enterprise (Per Cow)

	AVG	Min	Max
FIXED COSTS PER COW			
Depreciation	13	8	19
Interest, insurance	83	17	140
Miscellaneous	10	0	41
TOTAL FIXED COSTS	\$106	\$29	\$163
TOTAL ALL COSTS	\$426	\$388	\$482

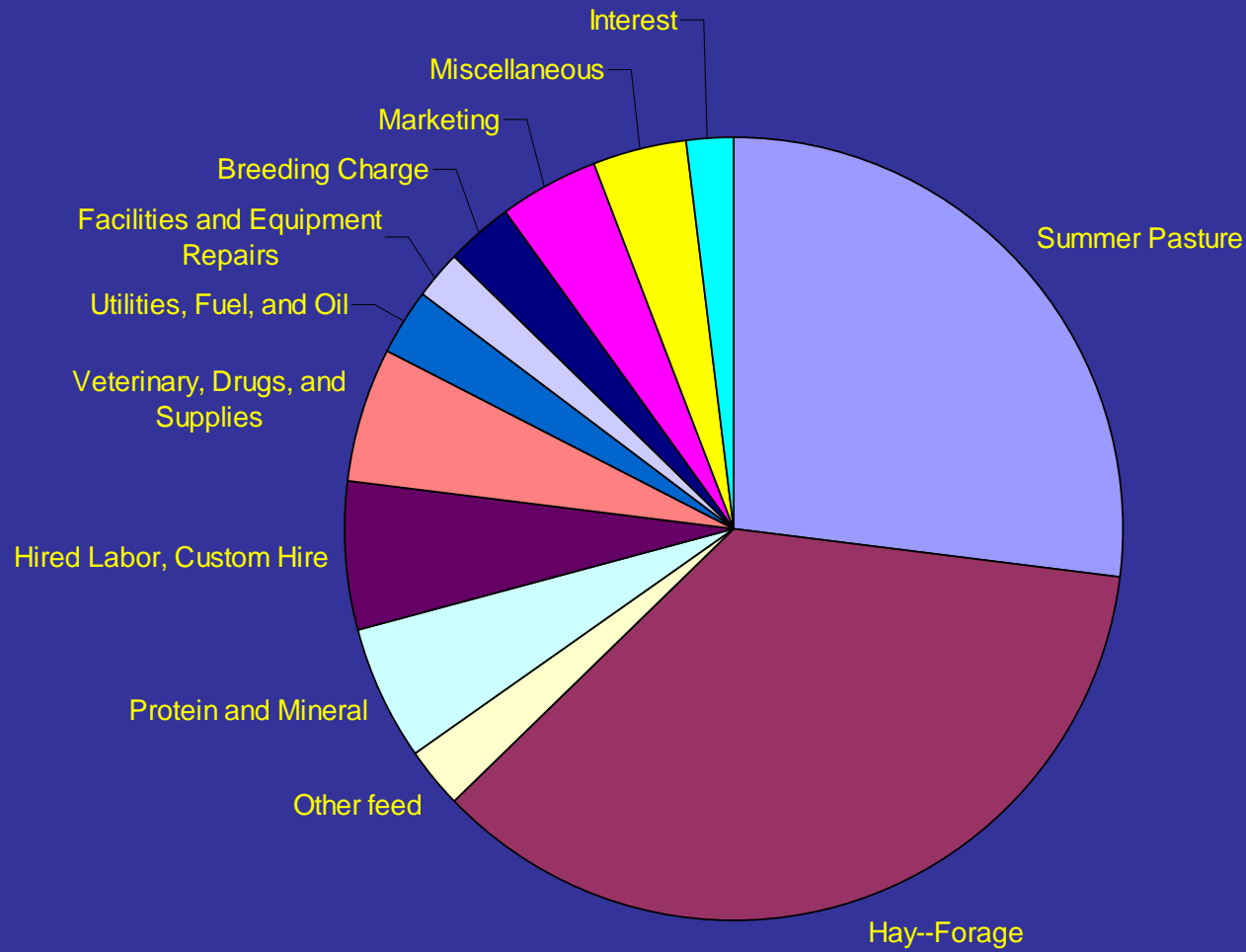


Cost-Return Projection -- Beef Cow-Calf Enterprise (Per Cow)

RETURNS PER COW	AVG	Min	Max
Steers	238	218	248
Heifers	122	117	125
Cull cows	69	53	94
Cull heifers	35	34	35
TOTAL RECEIPTS	\$463	\$450	\$486
RETURNS OVER TOTAL COSTS	\$36	\$4	\$78

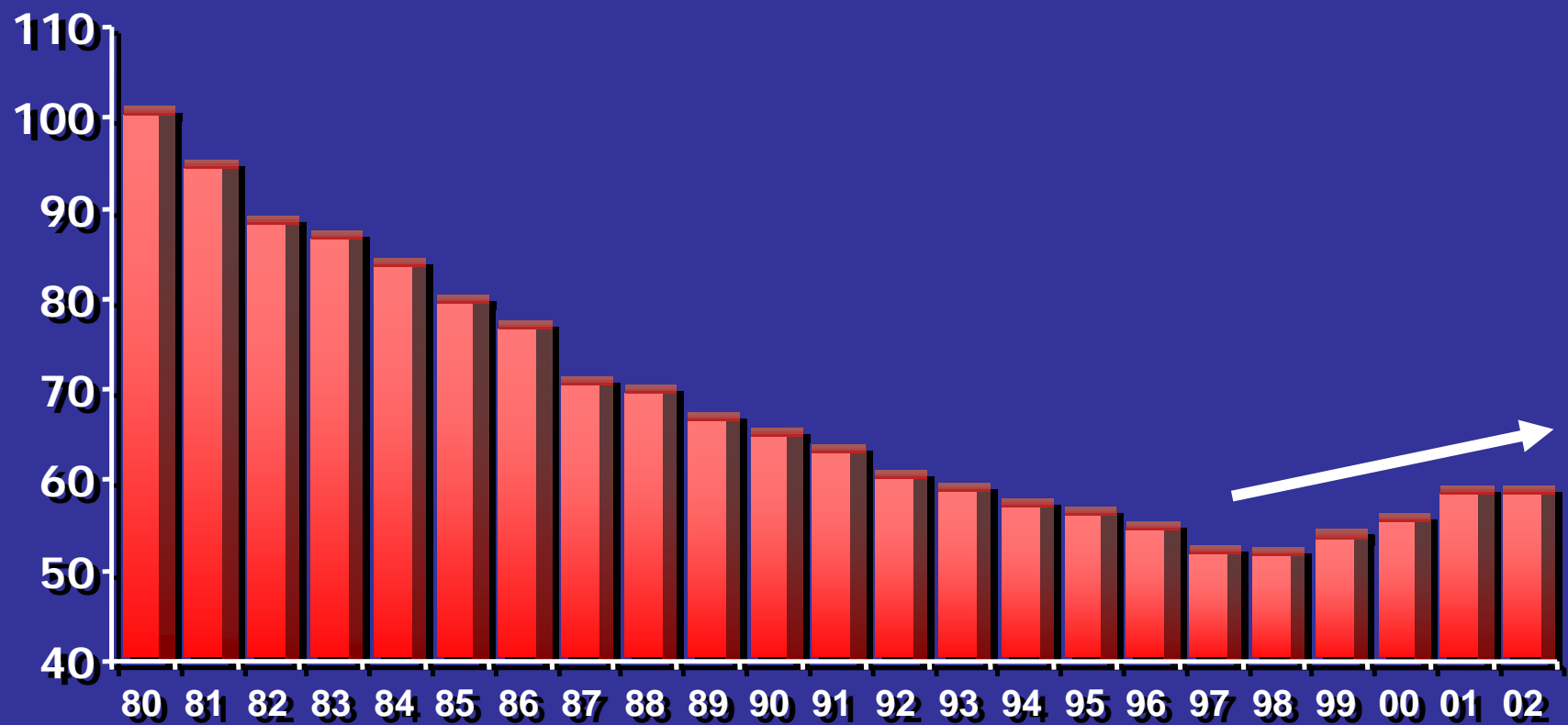


Cash Costs-Cow calf enterprise



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Sources of Information

1. Cooperative Extension
2. Beef producer organizations
3. Internet
4. Trade magazines
 - a. Drovers Journal
 - b. Beef Today
 - c. BEEF



