


Top 5 reasons for Culling Bulls



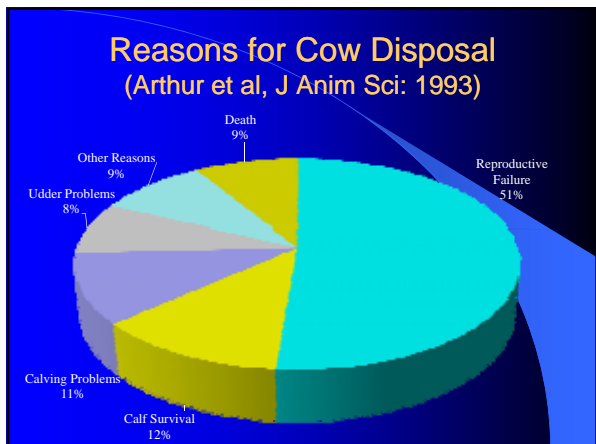
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Culling Cows

- Most cows are not in herd for longer than 11 years
- Average is 5-6 calves in cow's lifetime
- Minimum of 15% of cows are usually replaced yearly
- Primary reason = reproductive failure
- Other reasons: age, cancer eye, udder problems, lameness, worn teeth, prolapses, temperament
- Voluntary culling based on genetic merit is difficult to accomplish

Longevity is important in the cow herd!

- Raising heifers is expensive
- More calves per cow's lifetime = higher profitability
- Fewer replacements needed = more calves to sell
- Longevity is moderately heritable (16-28%)

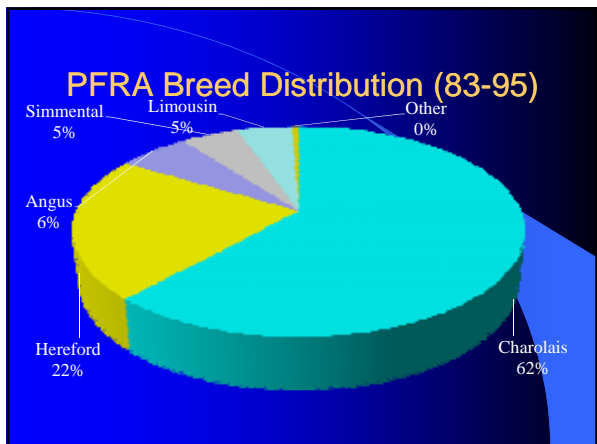


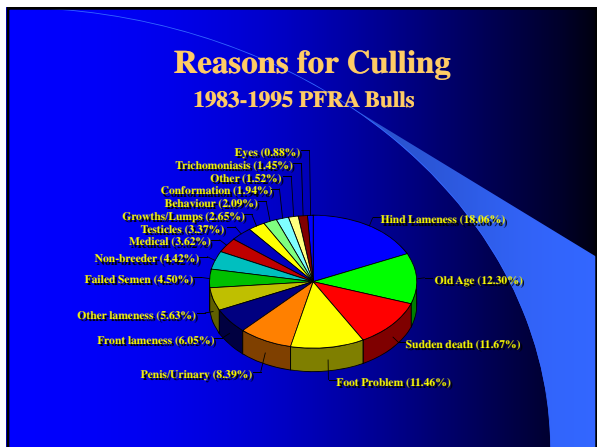
Longevity is important in bulls too!

- They represent 50% of the genetics of the herd
- Bulls represent a significant economic investment

PFRA Bulls (1983-1995)

- Maintaining a database on bulls in their breeding herd since 1983
- Total of 10, 532 bulls in total (7739 culled)
- Annual culling rate of 23.6%
- Average age at culling = 5.2 years





Top 5 Reasons for Culling Bulls (After they've made it to the breeding herd!)

#5. Miscellaneous Injuries

- Accounted for only 1.5% of all culling
- Injured fighting
- Broken Jaw
- Broken Nose
- Broken Ribs

#4 Voluntary Culling Reasons

- Accounted for 16.3% of all culling
- Conformation 1.9%
- Old Age 12.3%
- Behaviour 2.1%

#3 Death/Medical Reasons

- Accounted for 18.8% of all culling
- Sudden death 11.7%
- Medical 3.6%
 - Hardware
 - Pneumonia
 - Losing weight
 - Cancer eye

#2 Reproductive Reasons

- Accounted for 22.1% of all culling
- Broken penises 8.4% (especially younger bulls)
- Poor libido (ie: Non-breeder) 4.4%
- Testicles 3.4%
- Failing semen tests 4.5%
- Trichomoniasis 1.5%

#1 Lameness

- Accounted for 41.2% of bulls culled during this time period
- Hind leg lameness 18.1%
- Front leg lameness 6.0%
- Other lameness 5.6%
- Foot problems 11.5%
 - Bad feet 6.2%
 - Foot rot 2.3%
 - Corns 1.0%
 - Sand Cracks 0.7%

Costs Associated with Lameness

- Treatment costs
- Culling and salvage losses
- Weight loss and production losses in affected animals
- Reproductive losses if bull is lame can be considerable

Causes of Lameness in Beef Cattle

- Infectious disease
 - Foot rot
 - Digital dermatitis (dairy cattle)
 - Polyarthritis
- Hereditary
 - Corkscrew claw
 - Corns (interdigital fibroma)

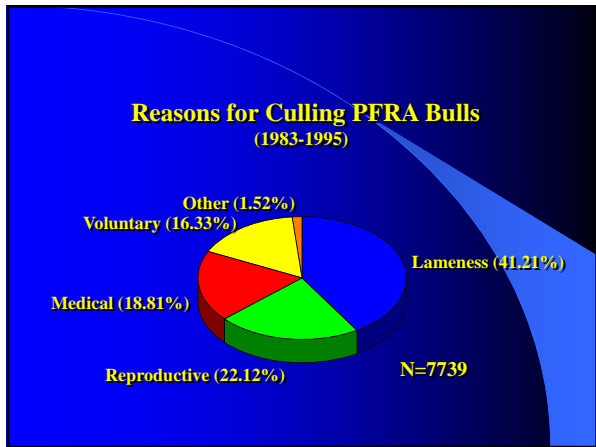
Causes of Lameness in Beef Cattle

- Traumatic
 - Stifle injuries and Fractures
 - Toe abscesses
 - Nerve injuries
- Laminitis complex
 - Laminitis (founder)
 - Sole ulcer
 - Sand Cracks?

Stifle Injuries: Cruciate ligament







What did we learn?

- Lameness is the number one killer of bulls!
- Preventing lameness should be a significant priority
 - Foot trimming
 - Selecting good conformation (feet and legs)
 - Preventing foot rot
- Many of these lameness diagnoses probably arose from injuries
 - Grouping of bulls to prevent injuries

What did we learn

- One of the important reasons for culling in young bulls is penile injuries
- Average age at culling (3.8 years)
- Is this unavoidable?
- Can we manage this by how we group bulls?

The Ultimate Goal: Maximizing reproductive efficiency and increasing the amount of Voluntary culling