THE UNIVERSITY OF MELBOURNE

Melbourne Veterinary School

6.1 From calving to weaning

Stuart Barber
Associate Professor

srbarber@unimelb.edu.au

VETS30030 / VETS90123

Management practices

What management practices occur from calving to weaning time varies from one farm to another

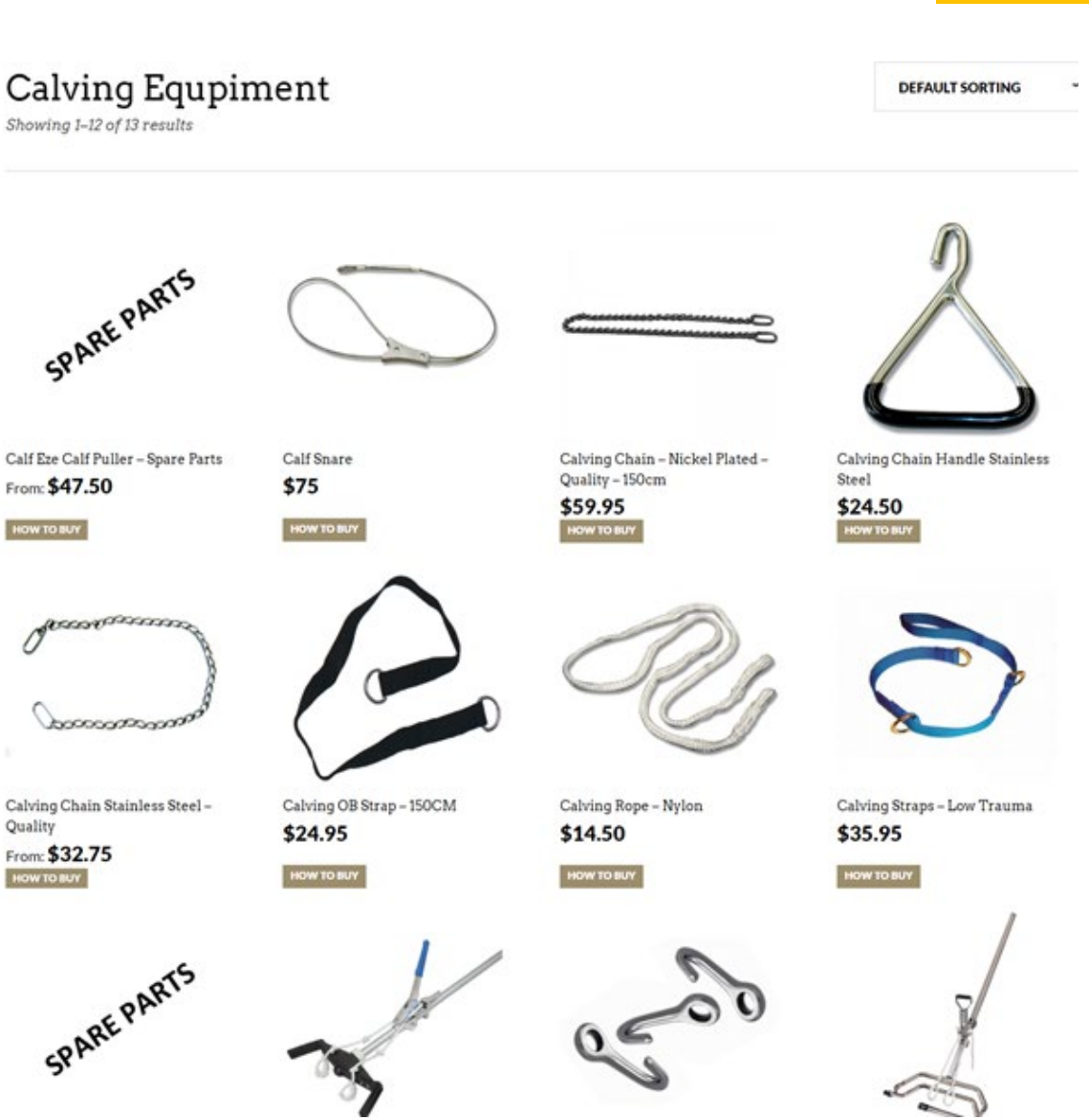
Different for extensive N Australian beef farm (maybe rounded up 2-3 times per year) to S Australian beef enterprise where able to regularly round up herd to yards

This section covers common management practices from birth to weaning (noting age of weaning can be variable)

Dystocia (calving problems)

- Can be a common problem (varies with genetics and nutrition and sometimes disease)
- Mismatch between calf size and cow pelvis (feto-pelvic disproportion)
- Can also be how the calf is presented in utero e.g. coming backwards
- Common reason for a veterinarian to be called, range of tools that can be used to assist the calving process
- Sometimes calves are too big to be born naturally so may require a caesarean (done standing under local anaesthetic)
- Generally dystocia in cattle should be low (less than a few %), more problems in first calving heifers (less than 10%)

- Connect ropes/chains to legs (possibly to head)
- Some method to apply force (windlass/jack etc)



https://www.bainbridgevet.com.au/product-category/cattle-breeding/calving/

Calf fostering

- In any enterprise there can be loss of calves in the birthing process, or loss of cows
- About 1 cow in 100-200 may also give birth to twins
- Sometimes may need to foster a calf onto another cow using skin of calf that has died or potential adding a strong smell to the foster calf and cows nose
- Once calf suckled a few times cow more likely to accept
- Ideally use calves from in own herd – otherwise biosecurity risk increased

Ear tags

- NLIS tags
  - Breeder
  - Post breeder (orange)
- Visual tags
  - Single piece
  - Dual tag (male and female)
- Apply in correct position
- Use correct applicator
- Several different companies
- Preprinted versus marker pen

NLIS breeder tag

NLIS post-breeder tag

Australian Year Colours

2016 = BLACK, 2017 = WHITE, 2018 = ORANGE, 2019 = GREEN, 2020 = PURPLE, 2021 = YELLOW, 2022 = RED, 2023 = BLUE Colours above repeat on an eight year cycle. Post Breeder = PINK (Please note, the year colour guide above is not compulsory when tagging cattle)

Colours* Red Blue Black Orange Yellow White Pink Purple Green

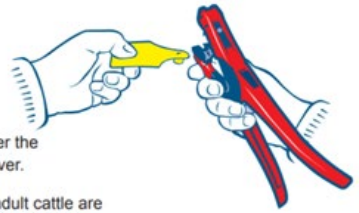
*This Colour representation may vary in real products

Universal (Red)

1

Ensure that the black insert is removed from the jaws of the Universal applicator.

2



Place the visual tag under the clip by depressing the lever.

It is recommended that adult cattle are restrained in a head bail for tagging.

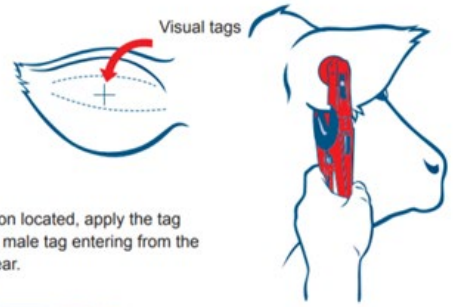
3

Slip male tag completely onto the application pin.

4

Dip jaws of applicator holding tag into antiseptic or disinfectant solution.
NB: Use disinfectant at recommended dilution ratios. Failure to do so may cause irritation.

5



With the correct position located, apply the tag firmly, always with the male tag entering from the back (outside) of the ear.

SUPER MAXI FEMALE 14

MAXI FEMALE 08

MAXI MALE 07

LARGE FEMALE 06

LARGE MALE 05

MAXI A-TAG 48

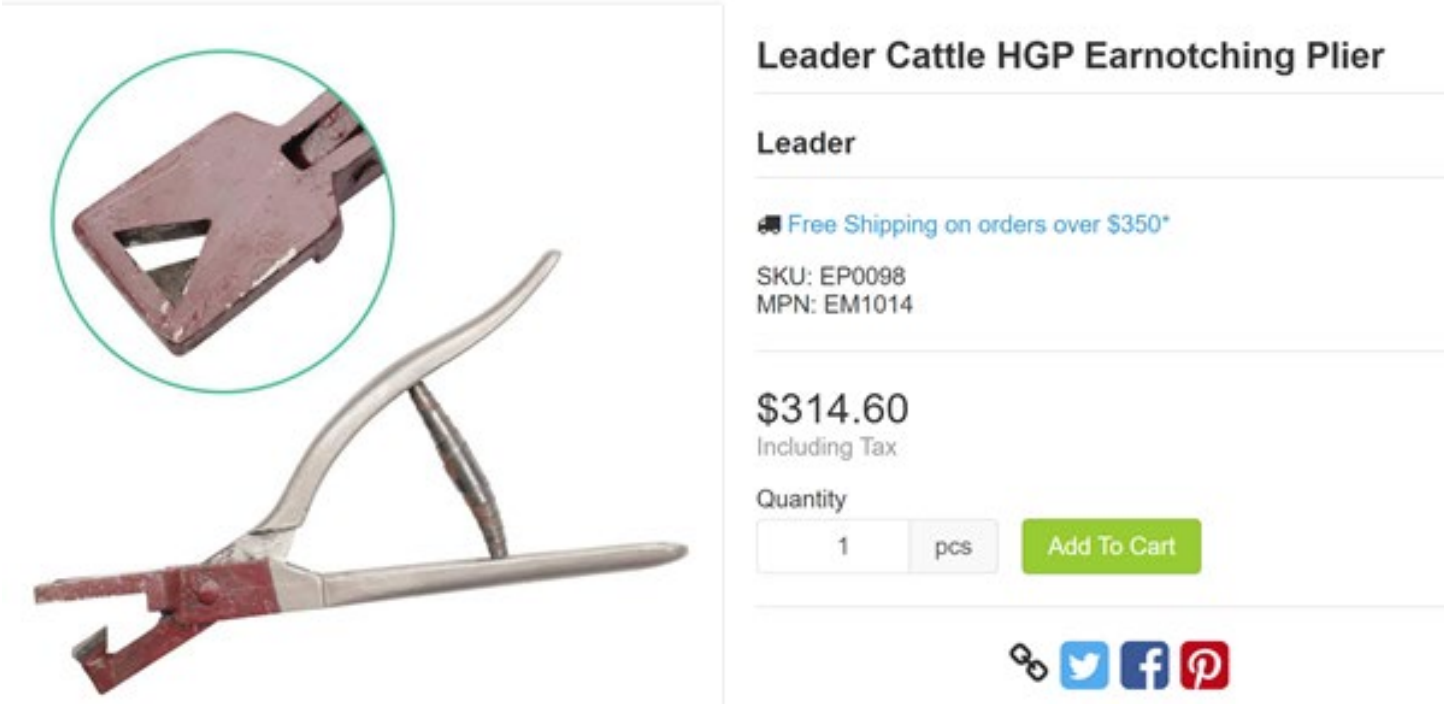
LARGE A-TAG 46

A-TAG FEEDLOT

FEEDLOT TAG 40

Ear notch

- Becoming less common
  - HGP
  - Spey
- Still required in WA



https://www.everythingid.com.au/animal-husbandry-c-11/earmarking-branding-c-26/leader-cattle-hgp-earnotching-plier-p-136

Ear tattoo

- Still relatively common in studs (lifelong ID)
- Used in addition to NLIS & frequently visual tag and sometimes branding
- Animal must be yarded to visualise tattoo (unless incredibly tame!)

Vaccination

- Large range of vaccines around the world
- Lesser number in Australia as some not needed (e.g. FMD)
- Most vaccinations are given under the skin (subcutaneous), most commonly using 16 or 18G needle
- Vaccination needles are generally short (about 1cm), whereas needles for intramuscular injection tend to be more than 2cm long – note that needle length often reported in imperial measure
- The gauge that reports the width of a needle comes from wire gauge measuring system

Common vaccinations

- Clostridial (often 5 in 1)
- Adding in Leptospirosis = 7 in 1
- Others
  - BRD
  - Johnes disease
  - Pestivirus
  - Pinkeye
  - 3 day sickness
  - Vibriosis
- Generally injected high in neck, under skin – but give according to label directions!
- Vaccine generally comes in a “pillow pack”
- Commonly given to calf 4-6 weeks apart and then yearly (but follow directions)

Castration

- Reduce aggressive bull behaviour
  - Bull injury
  - EHS
- Reduce infrastructure damage on fences etc
- Bulls grow more quickly than steers and less fat at same weight
- Good guide on process at https://futurebeef.com.au/resources/castration/
- Pain relief now available (registered)
- Ring/knife (+/- emasculator)/Burdizzo are options

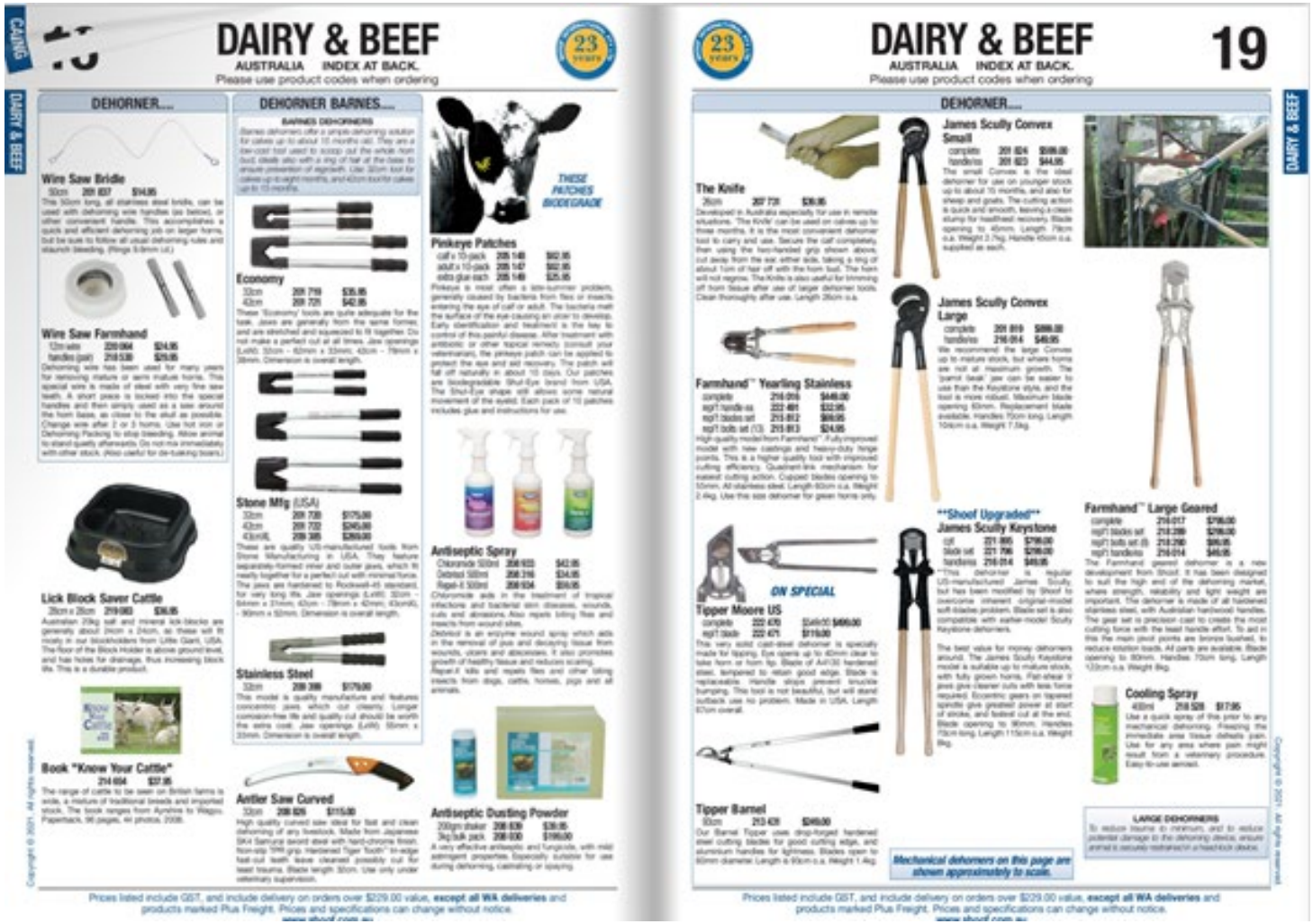
S6.1	A person castrating or dehorning cattle must have the relevant knowledge, experience and skills, or be under the direct supervision of a person who has the relevant knowledge, experience and skills.

Dehorning/disbudding

- Can check full MLA guidelines at https://futurebeef.com.au/resources/dehorning/
- Dehorning beef calves generally done later than dairy as dairy calves are already in sheds so can be done in small batches
- Usually done in conjunction with ear tagging, castration, vaccination etc
- Variable age, depending on calving period duration and if 1 or more musters
- More variable in Northern Australia compared to Southern (generally)

Dehorning/disbudding

- Young calves use heat to disbud (<2 months age)
- Dehorning knife
- Scoop or cup (<12 mth) dehorner
- Guillotine, surgical wire, saw
- Pain relief



Branding (fire)

- Mostly done in northern extensive systems – limited access to freeze brand equipment (dry ice or liquid nitrogen)
- Each property has own registered brand to allow lifelong identification
- Useful in extensive enterprises where stock may wander eg loss of fences during wet season

Cattle branding positions

The first brander on cattle may imprint the registered three-piece brand or symbol brand on any of the following positions:

a. neck

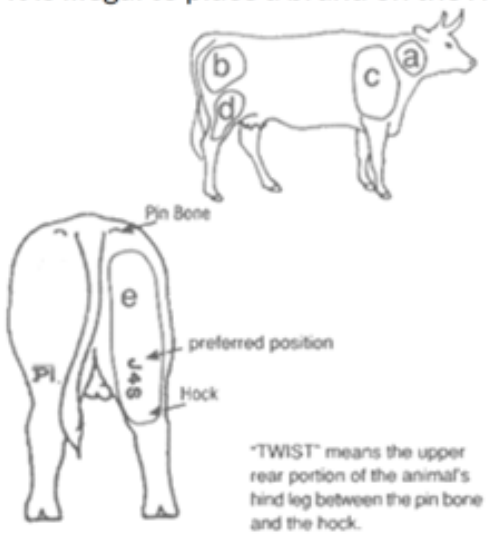
b. rump

c. shoulder

d. thigh

e. twist (the upper rear portion of the animal's hind leg between the pin bone and the hock).

It is illegal to place a brand on the ribs or cheek of cattle.



https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/livestock/animal-welfare/branding-livestock/three-piece-brands

Drench

- Drenching historically = giving product *per os*
- More recently associated primarily with parasite control (by mouth, injection or pour-on)
- Different “families” of anthelmintics
- Timing of drenching varies between environments, less likely on more extensive enterprises due to lower numbers of parasites
- Some anthelmintics short acting, some longer
- Generally given at weaning time (and not before)

Weaning weight

- Relatively common to collect weight at weaning, particularly in stud enterprises (EBV)
- Assess growth on dam and need for further growth
- Electronic scale now common using NLIS

https://am.gallagher.com/en-AU/Solutions/Weighing-and-EID-Solutions#case-studies

Weaning process

- Yard weaned versus non (weaned via a fence or weaned out of sight e.g. move to a different property away from dams)
- Yard weaning useful as an education process for young stock, feedlots prefer yard weaned stock as calmer in that environment
- Allows contact with people, vehicles, dogs etc
- Nanny cattle (older cattle) may be used