



Animals in Extensive Production Systems

VETS30031 / VETS90123



Animal husbandry procedures 2



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Bull management

- Even when farmers use A.I. – need “mop up bulls”
- Bulls may be needed for >50% of the pregnancies (average A.I. conception rate?)
- Need to be “sound” – not lame, fertile, no penile dysfunction
- Need enough for the number of cows to be mated
- Because cows walk every day, need “teams” of bulls that can be rotated



Bull management – number of bulls

Seasonal / split calving herds

- 3 bulls for every 100 cows (AI used)
- 4 bulls for every 100 cows (AI + synchrony)
- 6 bulls per 100 cows (no A.I.)

Year – round calving herds

- 2 bulls for every 100 milking cows



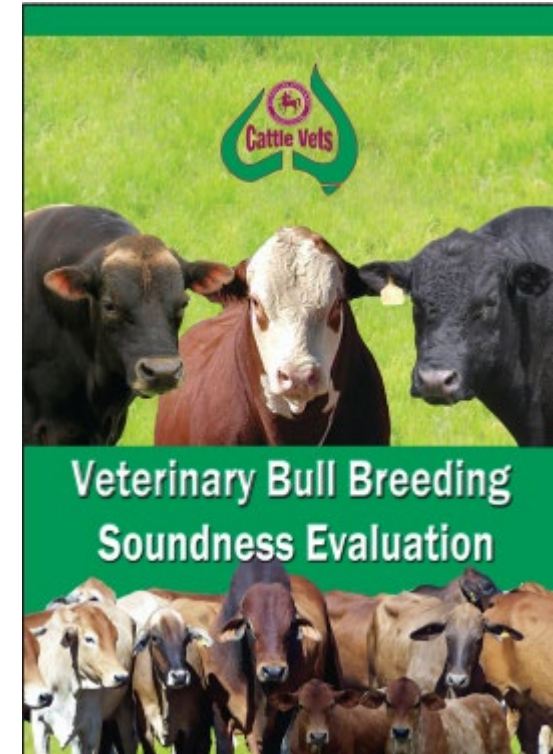
BullCheck® - Fertility testing

The 5 components

1. Scrotum
2. General Physical Examination
3. Crush Side Semen Evaluation
4. Serving Ability Testing
5. Sperm Morphology Testing

A measure of RISK

- Tick
- Qualified
- Cross
- Not Tested



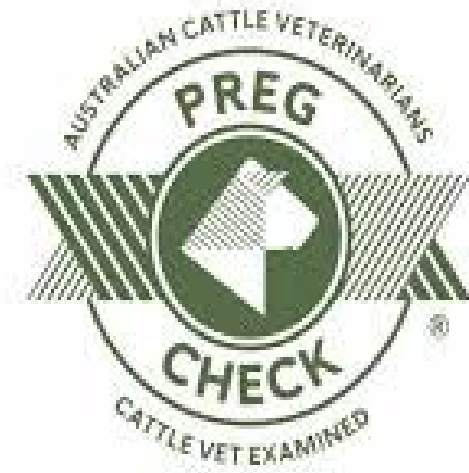
Pregnancy diagnosis in dairy herds

- Essential to monitor reproductive performance
- Allows identification of “empty” cows
- Differentiates between A.I. and natural service pregnancies
- Foetal ageing allows farmer to plan “dry off” date



Pregnancy diagnosis in dairy cattle - methods

- Manual (rectal) – palpation or ultrasound
 - Most accurate
 - Can determine foetal age (most accurate between 5-15 weeks pregnancy (6 weeks for ultrasound))
- Laboratory (Blood or milk) –
 - Quite accurate at identifying pregnant cows
 - Less accurate at identifying empty (non pregnant) cows
 - Unable to age foetus



Source: AVA

Condition scoring cattle

Cows can change weight rapidly

- Eg – 30kg milk, 10 litres urine, 10 kg faeces = 10% change in body weight in a milking!

Fat cover is much more consistent

Condition score is related to disease and fertility

One Condition score = approx. 3000MJ (or 270kg feed)

BCS – Pre Calving	21 day Submission Rate	Conception Rate
4.5 or less	66%	40%
4.5-5.4	76%	54%
Higher than 5.4	75%	51%



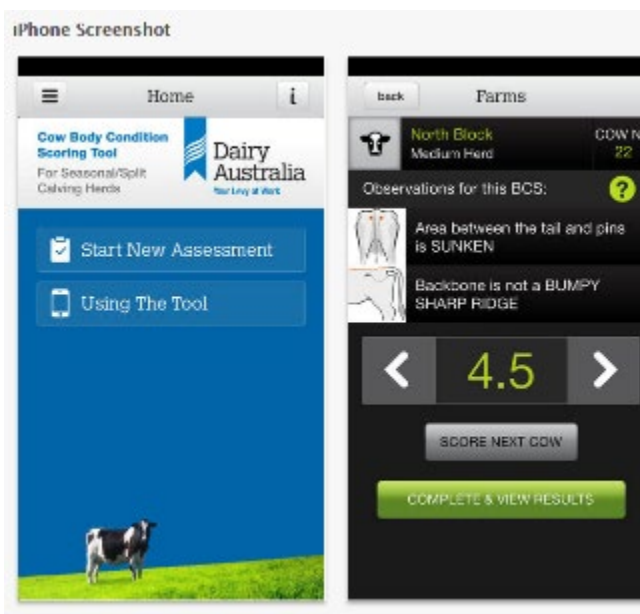
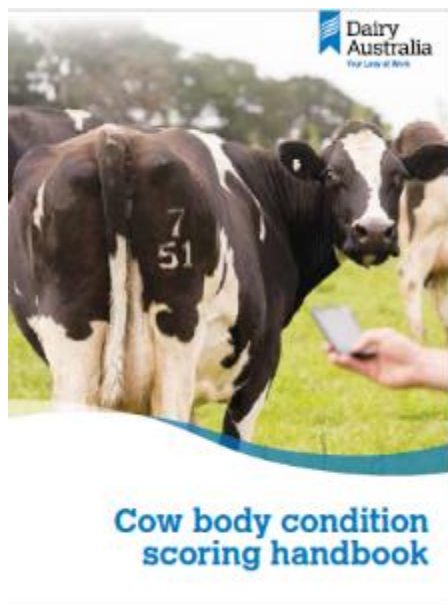
Condition Scoring Cattle

There are many systems of assessing BCS

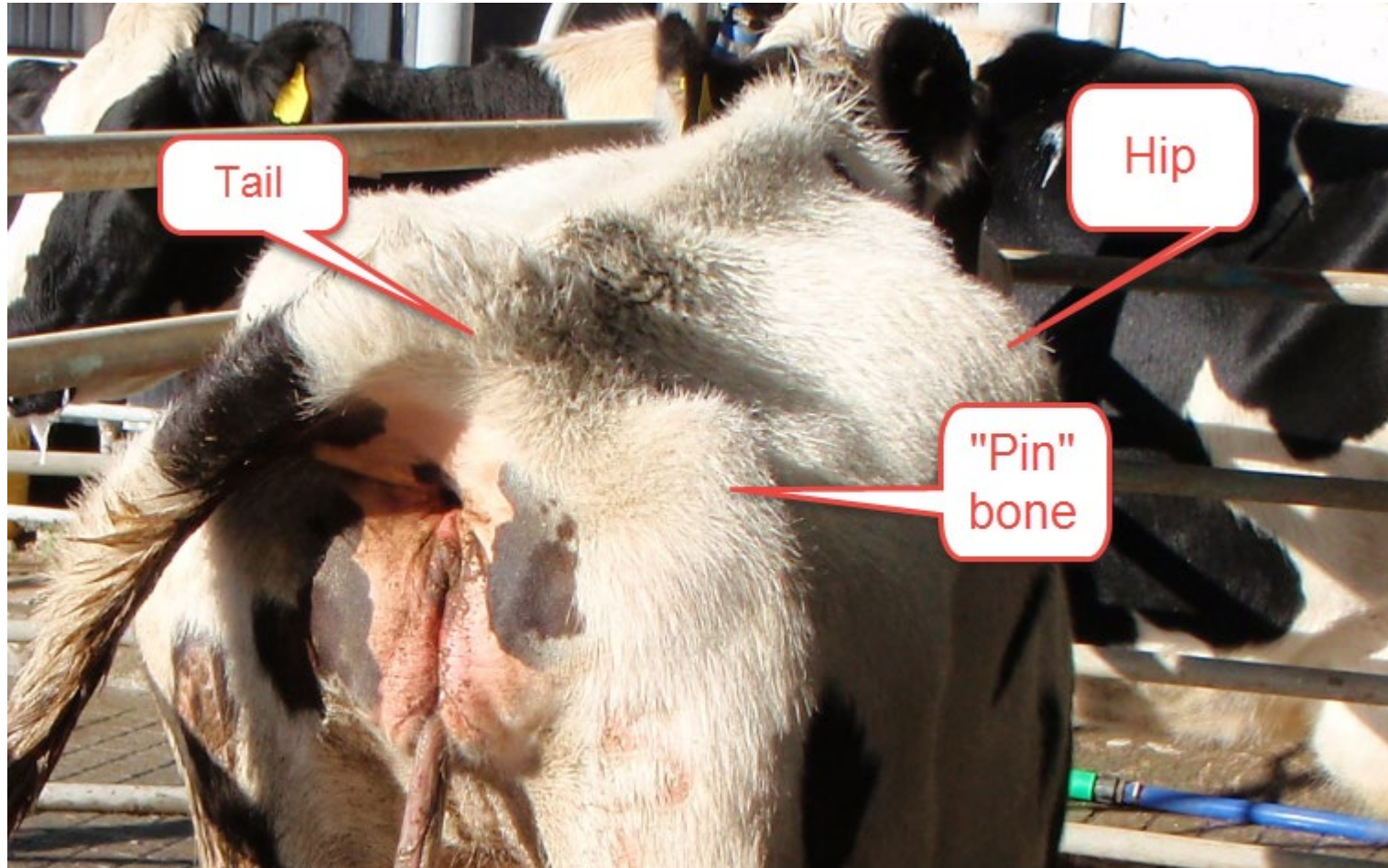
Dairy Cattle score 1-8 in Australia

But very few 1,2,7,8 so in practical terms scores are between 3 and 6

2-step “hands-off” scoring method only takes seconds



How to body condition score a cow



Key points to look at

1st Observation



Look closely at area between tail and pins:

Is it deeply sunken, sunken, slightly sunken or filled in?

Step 1:

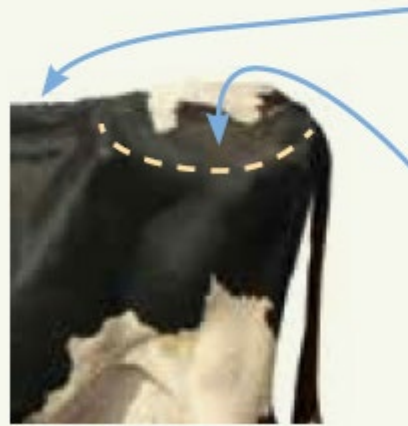
- a) Deeply sunken
- b) Sunken
- c) Slightly sunken
- d) Filled in

2nd Observation



If area between tail and pins is deeply sunken:

Look at insides of pins. Are they hollow?



If area between tail and pins is sunken:

Look at backbone. Is it flat or a bumpy sharp ridge?

If area between tail and pins is slightly sunken or filled in:

Look at depression between hip and pin.
Is it U-shaped, shallow or flat?

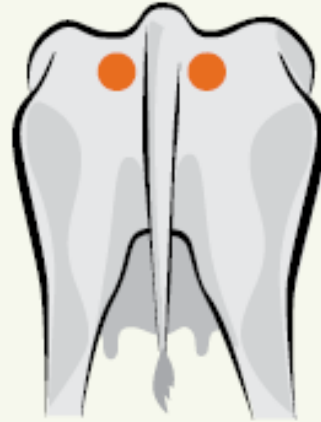
Step 2 (depends on step 1)

- a) Inside of pins
- b) Backbone
- c) Area between tail and pins

1st Observation

How sunken is the area between the tail and pins?

Deeply Sunken



Sunken



2nd Observation

Are the insides of the pins hollow?

YES



**Condition
Score 3**

NO



**Condition
Score 3.5**

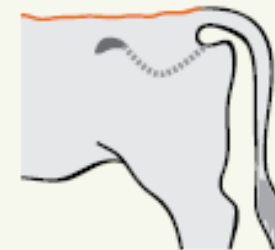
Is the backbone a bumpy sharp ridge?

YES



**Condition
Score 4**

NO



**Condition
Score 4.5**



Deeply sunken, but pins not hollow





Deeply sunken with hollow pins





Sunken





Bumpy ridge





Slightly sunken, no bumpy ridge

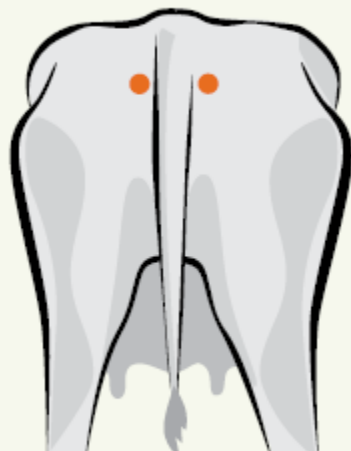




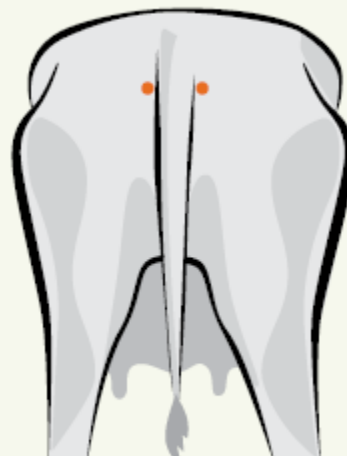
Slightly sunken, bumpy ridge



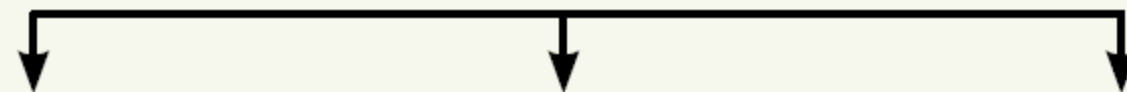
Slightly Sunken



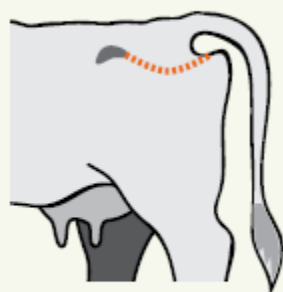
Filled In



The depression between the hip and pin is:

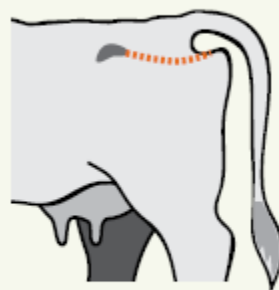


U-SHAPED



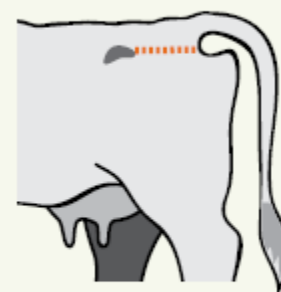
**Condition
Score 5**

SHALLOW



**Condition
Score 5.5**

FLAT



**Condition
Score 6**



Filled in



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AEPS – DAIRY WEEK 1

