

Theme 5: Fertility and Breeding

PREGNANCY DIAGNOSIS

Level 2

Topic	Training & information Content
5.1	Dairy Cattle Breeds and Breeding
5.2	Breeding program for a dairy farm (medium & large)
5.3	Conformation, Type classification and judging
5.4	Cow handling
5.5	Milk production recording
5.6	Heat Detection
5.7	Artificial Insemination
5.8	Pregnancy Diagnosis
5.9	Fertility Management
5.10	Cows with abnormal discharge
5.11	Fertility disease recording
5.12	Calving recording
5.13	Use of Key Performance Indicators



Pregnancy Diagnosis (Level 2)

You will learn about:

- ❑ How to tell your cow is pregnant
 - Basic introduction to Pregnancy Diagnosis (PD)
 - (Methods of) Pregnancy Diagnosis in cows at different stages

Pregnancy Diagnosis (Level 2)

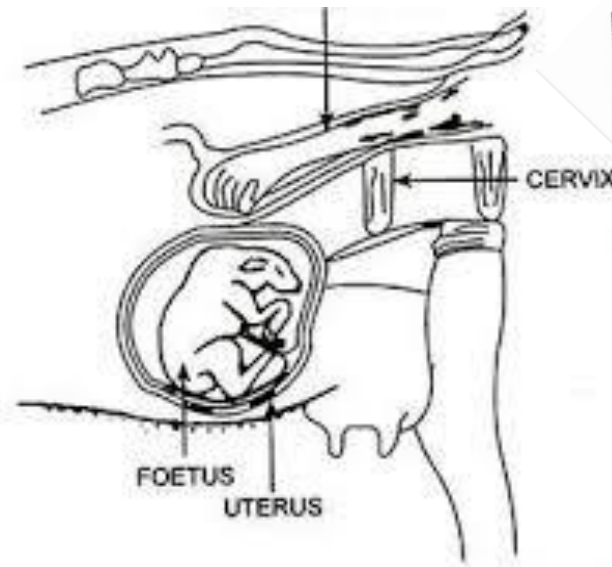
Pregnancy Diagnosis

Background

- Pregnancy diagnosis (PD) is an essential part of fertility management, done to tell if your cow is pregnant.
- PD can be done through;
 - Rectal palpation (manual)
 - Use of Ultrasound device
 - Punching



Ultrasound Device (USD)



Manual (rectal palpation)



Pregnancy Diagnosis (Level 2)



Let's go find
out if you
conceived

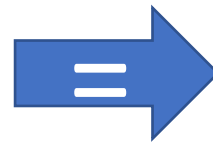


- PD done accurately and early enough can help a farmer identify cows that did not conceive (empty cows) for purposes of treatment (if necessary), and/or early re-breeding.

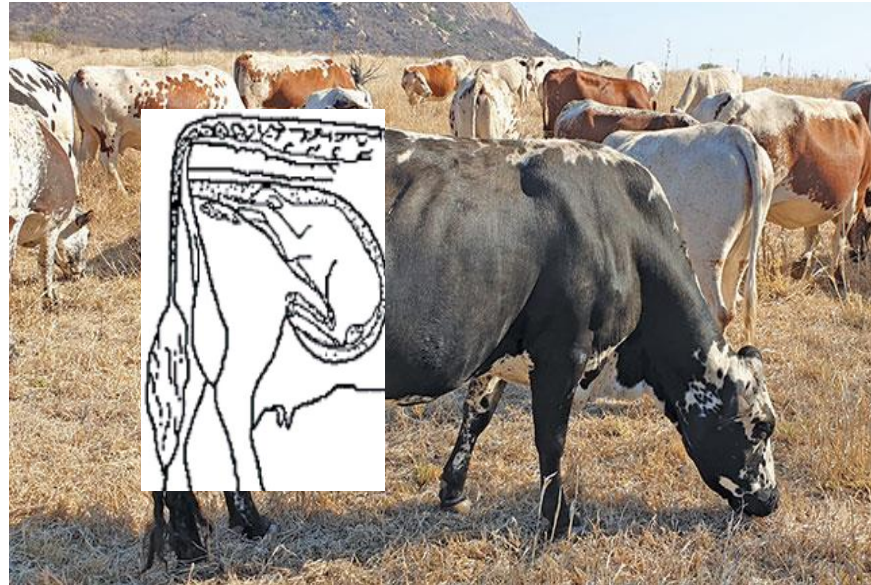
Photo: Felix, KE

Pregnancy Diagnosis (Level 2)

- After the cow has been served either by Artificial Insemination (AI) or bull, try to find out as soon as possible whether she conceived (is pregnant) or not.



*Does
AI/Natural
mating
automatically
lead to
pregnancy in
cattle?*



- In the first 19-23 days or averagely 21 days after service, we will not receive any information but after 21 days we can know for sure if the cow has been in heat or not. If there has been no heat signs, we may assume that the cow is pregnant (at that moment)

Pregnancy Diagnosis (Level 2)

Keep observing the cow after insemination

19-23 days later (after insemination)



The cow look relaxed and does not show any heat signs, she may be assumed pregnant/has conceived



The cow shows heat signs, she may not have conceived (not pregnant/open cow)

Pregnancy Diagnosis (Level 2)

19-23 days later (after insemination) Cont'd



- The cow shows No heat signs around the 21st day after insemination, she might be pregnant
- Keep observing the cow over the coming weeks as Early Embryonic Death (EED) may occur if it is true that she conceived. At this stage (day 17-day 30), the aborted embryos are usually not found.

Pregnancy Diagnosis (Level 2)

It is possible to do Pregnancy diagnosis:

Day 30 (after insemination)



- No heat signs 30 days after insemination? Call a qualified and/or experienced veterinarian to confirm pregnancy.
- Ultrasound Device (USD) is effective and reliable at this time.



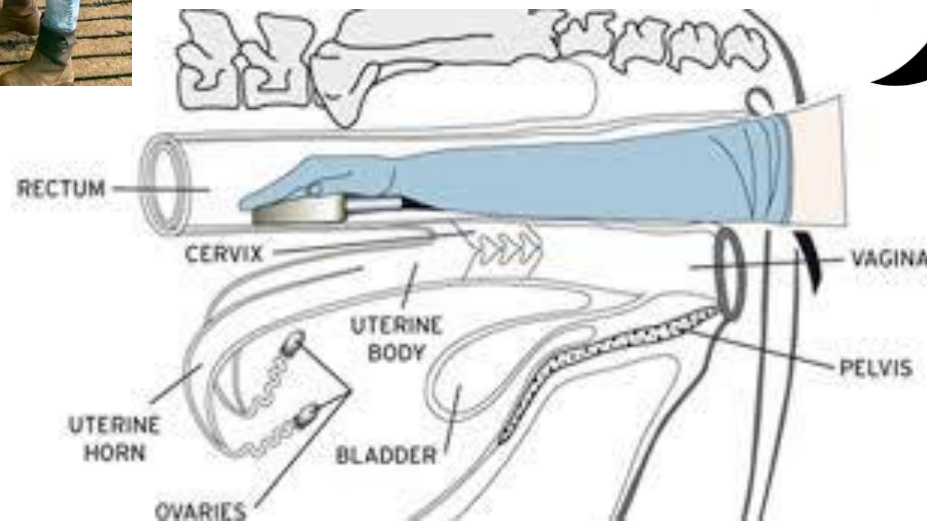
Pregnancy Diagnosis (Level 2)

Ultrasound Device method

- What is seen?: A ± 10 mm diameter embryo becomes visible on the screen. The cow is pregnant !!!



Pregnancy
(30 days)



Pregnancy Diagnosis (Level 2)

- Check all other cows that haven't shown any heat signs yet. Unless confirmed pregnant, they could be empty/open cows
- If confirmed empty, treat this cow to stimulate heat and have the cow inseminated as soon as possible



Pregnancy Diagnosis (Level 2)

40-45 days later (after insemination)



Showing heat signs could mean she is not pregnant/open cow



The cow should still look relaxed and does not show any heat signs

Photo: Felix, KE

Pregnancy Diagnosis (Level 2)

45-50 days later

- Call the veterinarian to repeat PD after 50 days i.e. fresh check all cows inseminated earlier, including re-confirming pregnancies detected at day 30.



Pregnancy Diagnosis (Level 2)

45-50 days later (after insemination) Cont'd

- For this second PD, the Ultrasound Device is still a reliable method. The USD check is best recommended to be executed between 45th and 50th day after insemination.



Pregnancy Diagnosis (Level 2)

- What is seen?: A 4 cm embryo visible, meaning that the embryo most probably remains to continue growing.
- Where the USD is not available/possible, a manual procedure can still be used e.g. rectal palpation (best from day 100) and punching (from day 200)



50 Day Pregnancy



Pregnancy Diagnosis (Level 2)

- Between day 30-50 after insemination, cows still loose between 5-15 % of the embryos; and show irregular heats.



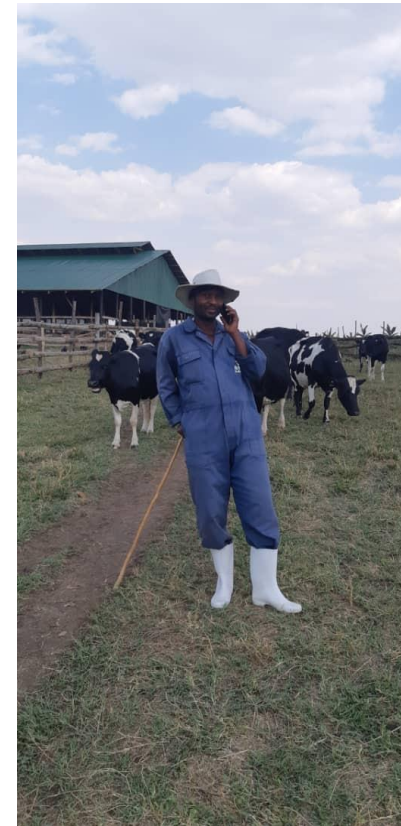
*Aborted embryo
(more than 50 days)*



Pregnancy Diagnosis (Level 2)

Day 100

- Some pregnancies get lost between day 45 and day 100. Hence, it is important the farmer calls the Veterinarian to re-confirm pregnancy



Pregnancy Diagnosis (Level 2)

- Note that Rectal Palpation by a qualified and/or experienced veterinarian is the most accurate way to confirm a 100 days pregnancy.



Pregnancy Diagnosis (Level 2)

Day 200

- Detecting pregnancy is a continuous practice. At around 200 days, **the farmer** will be able to detect pregnancy by Punching
- Punch in between the orange lines by using your fist. You will feel the calf by pushing the blue dots up/down



Pregnancy Diagnosis (Level 2)

Take Home Messages

1. Pregnancy diagnosis is an **essential part** of fertility management – helps identify those cows are not pregnant
2. An **early and accurate** PD is key to shorten days open in cows through timely treatment and/or insemination at the first opportunity
3. Rectal palpation and ultrasound palpation both require a veterinarian with **experience, skills and thorough knowledge** of a cow's reproductive system.



I **know** She's Not Pregnant
(I **have** confirmed)

I **don't know** She's Not Pregnant
(I **have Not** confirmed)

- Allows for treatment (if applicable)
- Plan re-breeding

- Increase in number of days open
Loss of Income!!

