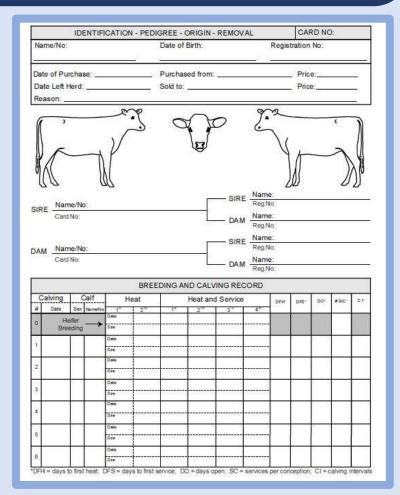
Theme 5: Fertility and Breeding

RECORDING Level 2

Торіс	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



1. You will learn about (learning objectives):

- How to keep records in a dairy farm from calving
- How to choose a suitable recognition/identification system for your animals



2. Introduction

- Well-kept data are the key to future success. A proper Recording system will help you do better in the future, because you can learn from what you did/recorded
- Administration of the daily milk production will help to adjust rations in time, very often the loss of milk is caused by nutritional issues.
- It is very important to train farm workers how to recognize certain cow signs and convince them about the importance of administration of cattle signs and abnormal observations.



3. Starting point

Where does it all start?

- Recording starts with <u>recognition/identification</u> of the animal
- Immediately after the calf is born, basic information can be documented. E.g.
 - Day of birth
 - Pedigree
 - Abnormalities
 - Gestation period
 - Proposed farm number/name.

	R	egistrati	on Chart		
Owner;	D . Farmer	Date of Birth. 15-08-2018	Gestation 278 days	Seks. Female	Reg number 642805458
Adress;	Cattleroad 73s3	Name;			
City.	Bulltown.	Farm Number. 545	Breed 100% HF	Colour B&W	Registration Yes
		Sire; Silverid	ge Album	22211159	
Remarks.	Twins Red & White.	Dam; 211 Pri	nses	87452113	
		054	کر الک 15		2

4. Recognition/identification of the animal: Choosing a Recording System

How;++++/-----Ear tagsCan get lost.
Only nearby.
One colored animals.

Will remain. <mark>Can get lost.</mark> Cheap Seen from Distance

Picturing

Sketching

Reliable. Can get lost Cheap. Seen from Distance.

Unreliable.

Branding

Naming

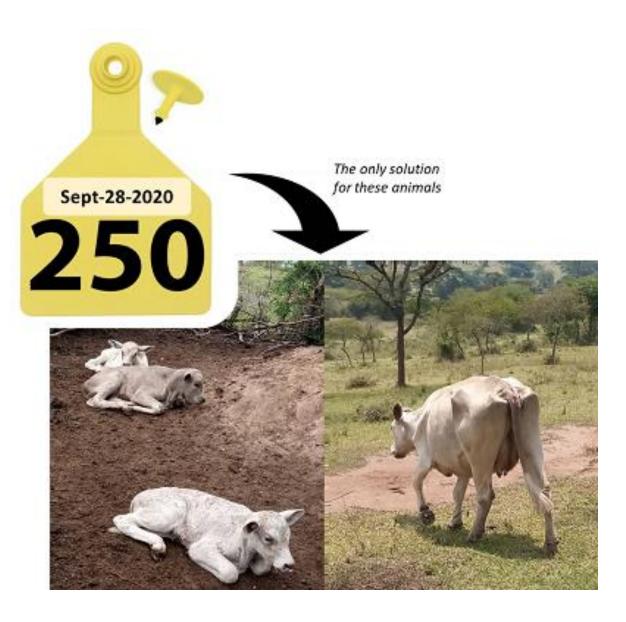
Permanent Expensive. Hardly visible on light colored animals.

	R	egistrati	on Chart		
Owner;	D . Farmer	Date of Birth. 15-08-2018	Gestation 278 days	Seks. Female	Reg number 642805458
Adress;	Cattleroad 73s3	Name;	I	I	
City.	Bulltown.	Farm Number. 545	Breed 100% HF	Colour B&W	Registration Yes
		Sire; Silverid	ge Album	22211159	
Remarks.	Twins Red & White.	Dam; 211 Pri	nses	87452113	
		054	15		

Combination of Ear tag (0545) and picturing + basics = Passport.

5. Sample of a Recording System

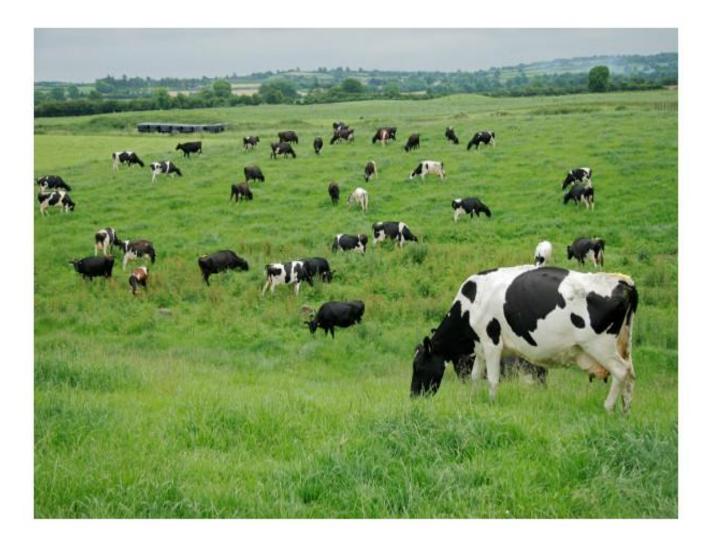
• This is a sample of a recording system



6. Naming alone is Unreliable

• It is not easy to locate Judith in this grazing herd/group of many cows

Where is Judith ??



7. Locating Judith in the herd

 Combination of Ear tag and picturing/sketching + basics

Where is Judith ??

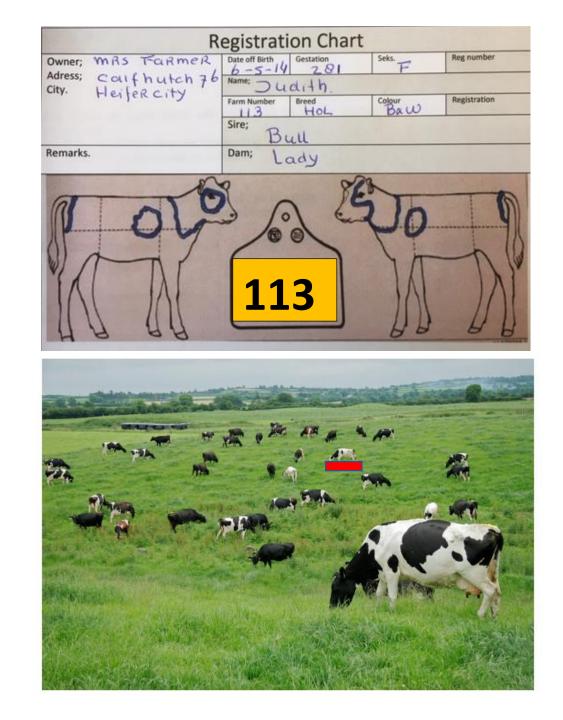
R	legistration Chart		
Owner; MRS FARMER Adress; Calfhutch 76 City. Heifercity	Date off Birth Gestation	Seks. F Colgar Baw	Reg number Registration
Remarks.	Dam; Lady	20	N
A TRACE MORE CELEBRATE MARKED	THE STATE OF A TOX 2010	Section States	CULTURE STORES

7.1 Locating Judith in the herd Cont'd...

• With the sketch (made on 6-5-2014) it is still possible for everyone to find the cow in a group of many other cows.

Where is Judith ??

Judith is here



8. Why recognition/identification is important

• <u>Without</u> recognition/identification, you can take measurements but not monitor the calf

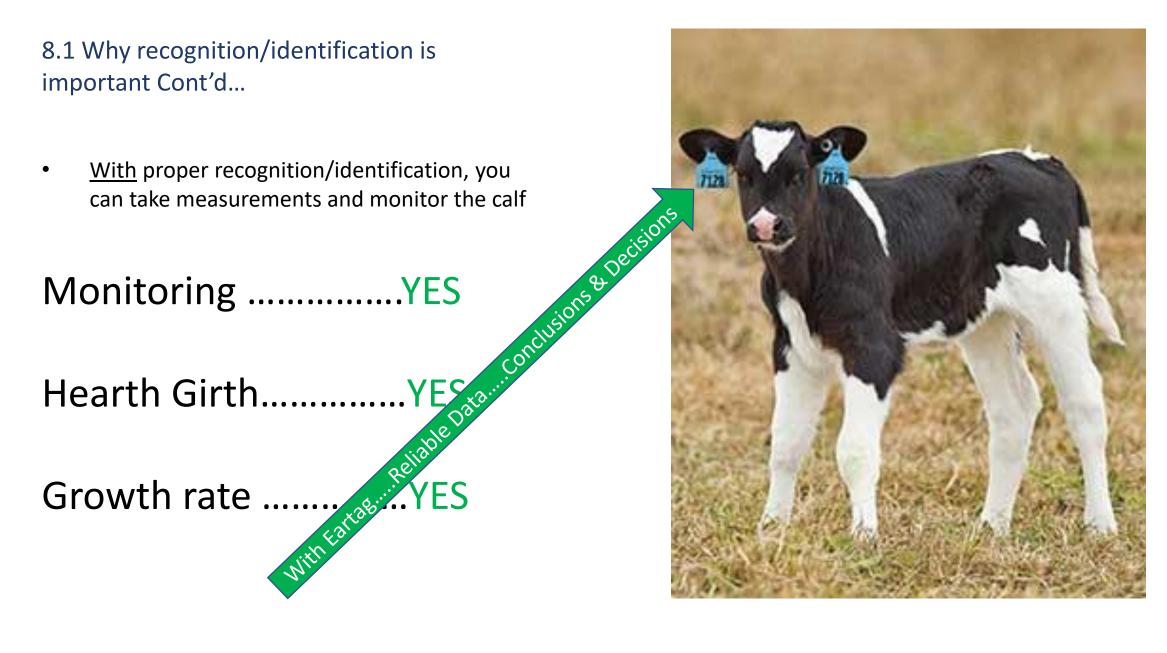
MonitoringNO

```
Hearth Girth.....YES
```

Growth rateNo No conclusions

8.1 Why recognition/identification is important Cont'd...

With proper recognition/identification, you • can take measurements and monitor the calf



9. Records make Management easy

 Records are useful and necessary to evaluate how several management decisions/objectives worked out

Female calves bor	m in 2012													
Calf Nu; Sire	Dam	Date of Birth	Birth Weight	Weaning Date	Weaning Weight	Age in days	Growth/day	1st A.I.	Interval birth/1st A.I.	Calving Date	Interval birth/calving	Interval1st A.I/Calving	BCS 1st calving	ody weight 1st calving
801 Mike	558	4-1-2008	40	28-3-2008	90	84	595	5-3-2009	426	3-12-2009	699	273	2,5	565
803 Classic	239	7-1-2008	40	28-3-2008	78	81	469	3-3-2009	421	23-11-2009	686	265	2,8	576
804 Canvas	602	10-1-2008	38	28-3-2008	100	78	795	8-3-2009	423	29-12-2009	719	296	3,2	570
805 Olympic	552	15-1-2008	44	28-3-2008	100	73	767	5-2-2009	387	3-12-2009	688	301	3,5	643
806 Paramou	n 519	24-1-2008	44	4-4-2008	100	71	789	14-5-2009	476 •	1-4-2010	798	322	3	554
807 Dominato	r 454	26-1-2008	43	4-4-2008	86	69	623	9-4-2009	439	20-1-2010	725	286	3,2	608
808 Dominato	r 458	26-1-2008	48	4-4-2008	94	69	667	18-5-2009	478	29-6-2010	885	407	4	632
809 Talent	50	4-2-2008	43	4-4-2008	90	60	783	21-5-2009	472	25-2-2010	752	280	3	586
810 Dominato	r 510	13-2-2008	42	18-4-2008	80	65	585	22-4-2009	434	21-10-2010	981	547	4,5	647
811 Talent	332	15-2-2008	43	18-4-2008	92	63	778	21-5-2009	461	22-4-2010	797	336	2,8	628
813 Lightning	420	24-2-2008	40	16-5-2008	110	82	854	16-5-2009	447	23-2-2010	730	283	3	578
814 Mike	612	28-2-2008	39	16-5-2008	94	78	705	6-5-2009	433	6-3-2010	737	304	2,8	568
815 Olympic	525	6-3-2008	44	16-5-2008	82	71	535	12-5-2009	432	11-2-2010	707	275	2,8	573
817 Mike	613	11-3-2008	40	16-5-2008	80	66	606	12-6-2009	458	17-3-2010	736	278	3,2	598

- Four(4) Management aspects are targeted:
 - 1. Weaning within 85 days
 - 2. Growth from birth till weaning > 650 gr/day
 - 3. 1st insemination within 430 days
 - 4. Body weight at first calving 575 kg

Note: For these <u>four (4) management targets</u>, the data above will tell us whether we did okay/on the right track

10. Records: Treatment

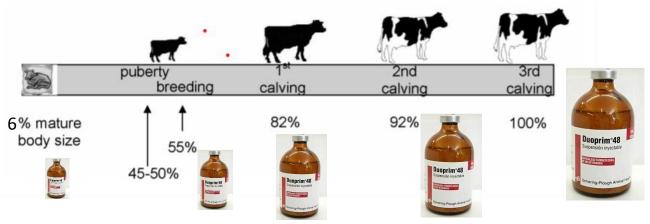
- Records are also useful during <u>treatments</u>
- Example:

Small calves require low dosage

• The Dosage increases by size ,weight & age.

Where there's No data?

- There are possibilities of;
- overtreatments ...(*leading to*).....-/- effect
- undertreatments...(*leading to*).....resistance





DAIRY COW HISTORY CARD



- Recording of farm facts will help you to make better decisions about your farm management. Without reliable data it is very difficult to make decisions.
- Information from barn records must be transmitted to "office" records.
- Dairy Cow History Card is an example of "office" recording

KSB No. DRSK No.		Name	Ear Tag No.	Born
	GRAND SIRE			SIRE
SIRE	GRAND DAM		GRAND [DAM

BREEDING RECORD

BIRTH WEIGHT......DAYS AGE AT FIRST SERVICE......DAYS

AGE AT CONCEPTION......DAYS WEIGHT AT FIRST SERVICE......KGS

HEAT DATES	SERVICE BULLS	P.D. DATE	GENTAL EXAMINATION	DRY OFF DATE	EXPECTED CALVING DATE	DATE CALVED	CA SEX	LF NO	CALVING INTERVAL	REMARKS

MILK PRODUCTION RECORD

LACTATION	DAYS	MILK (KGS)	BF%	LACTATION	DAYS	MILK (KGS)	BF%	LACTATION	DAYS	MILK (KGS)	BF%

GENERAL HEALTH AND TREATMENT RECORD

DATE	DISEASE	TREATMENT] [DATE	DISEASE	TREATMENT
			1 [
			1 [
			1 [
			1 [

VACCINATIONS RECORD

DEWORMING RECORD

DISEASES	DATE	DRUG						
F.M.D.								
BQ / ANTHRAX								
RIFT VALLEY FEVER								
L.S.D.								
BRUCELLOSIS								

DRUG USED	DATE

12. "Barn" Recording

- Entails records taken <u>in the barn</u> and <u>close to the cows</u>.
- This recording is often adequate and immediate
- It is therefore Very efficient.

Production/R	eproduction /Health Chart .	Cow number /name; 113Judith Calving date;25-07-2020. Remarks;			
Date;	Milk Production	Reproduction	Health issues		
01-08-2020	Mo; 9,8 litres Eve; 8.1 litres	Pink discharge	Tempr 38,3°C		
02-08-2020	Mo;9,5 litres Ev; 7.4 litres	Discharge a bit whitish	<u>Tempr</u> 38.9°C		
03-08-2020	Mo; 9,3 litres	Discharge more white	Low appetite . poor rumen filling < 2.		
	Ev ;7,2 litres		Tempr; 39.4°C Endometritis !!!		
			Antibiotics 5ml rypzho		

Example chart; "Direct administration" of the "Observation" close to the cows.

12.1 "Barn" Recording: Fertility chart

- The <u>fertility chart</u> is a very important example of a barn record.
- Recording is done <u>immediately</u> after an observation is made

KeedenstCampace	FEF	RTILI	TY	сна	RT;							/202									
	Calving date	Calving details	Calf sex+ nnumber	Milkfever	Retained- placenta	Reproductive Disorder. 1,Endometritis 2.CysticOvaries 3.Others.	1st Heat	2nd Heat	Bull name	AI technician	1 st Service date	2 nd Service date	3th Service date	4 th Service date	5 th Service date	6 th Service date	PD Date +/-	Exp Calv date	Dry off date	Remarks	

13. Records are important in Cattle Breeding



01-10-2019



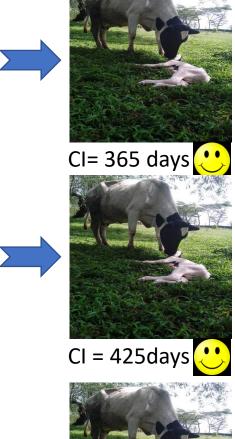
01-10-2019



01-10-2019



400 days



CI = 465days 😲



Shortening the calving interval will increase the profit/day.

- More calves.
- More milk/day.





14. Financial records

- Financial records are Not unimportant part of recording
- They are used to tell what "comes in" and what "goes out."
- Alongside is an example of financial record; monthly overview

	sep	okt	nov	dec	jan	feb	mar	apr	may	jun	jul	aug	remark
Income/Revenue													
sales of milk													
sales of animals													
Bull service													
Sales of dung/slurry													
Sales of feed/seeds													
Total income/revenue													
Feed.													
Veterinarian costs													
Breeding Services													
Hired Labor.													
Construction													
Interest payment													
Total Expenditure													

15. Take Home Messages

- 1. <u>Reliable</u> recording depends a reliable identification system
- 2. Records are necessary to <u>manage/improve</u> your farm results
- 3. Every farm <u>must</u> try to select a registration system that fits into the management system. This depends on the people working in the farm
- 4. It's the <u>farmers task</u> to make the workers aware of the importance of all the agreed recording aspects

Remember: It's all about efficiency!

