The InterHerd+blog

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1: Block calving herds: Benchmarking fertility in a block calving herd

In a block calving herd, it may be sensible to change some of the parameters used to assess fertility performance. In particular, parameters that measure the time taken to serve cows after calving are less relevant when there may be a delay due to non-service periods.

The herd shown below has changed from all round to block autumn calving. A non-service period was introduced from 1st July 2016 to 24th October 2016. While previously the aim was to serve cows from 42 days after calving, the non-service period means any cow calving in July-September also has to wait until 25th October. For a cow calving on 1st July this would mean no service until 25th October, so a minimum calving to 1st service interval of 86 days.

This will clearly affect three key parameters that rely on measuring the time between calving and service/conception, namely the % cows served by 80 days, the % cows pregnant by 100 days and the calving to 1st service interval. In the KPI report below you can see the % served by Day 80 is well below target, even though the conception rate and heat detection of returns and other parameters are in the top 25% nationally.



How soon are cows served after the end of the non-service period?

If using a non-service period, the emphasis needs to change to the % cows that are served "at the first available opportunity" after calving. This "Start of Breeding (SoB) Period" is when the non-service period ends. After that date any cow that is over 42 days calved (or whatever value is defined as the minimum days calving to 1st service) should be served at the next available oestrus, so a maximum of 21 days.

Registering the non-service period and changing the parameters highlighted below gives a much clearer picture of the current fertility performance of this herd. As the cows that calved early in the

non-service period were only expected to be served at the start of the breeding period (25/10/16) we can see that the performance in this herd is outstanding:

😵 Key performance indicators at a glance													
KPI Standards: Imported from HolsteinFriesian-500HerdsAug16.kpi 01/03/17.													
🚽 Favourites	Population	Fertility	Production	Mastitis	indicators	Other health indicato	rs Young stock						
(T)±(R)	(T)			Curren	t	(T)arget ± (R)ange	^						
-	-			27%	Cull / death r	ate (%)	22% ± 11%						
-	-			3.7	Age at exit (lact)	4.2 ± 1.0						
				5.7	Age at exit (y)	6.9 ± 1.3						
	-		/	7%	% cows cal	ving sold or died within 100) days 4% ± 4%						
	-	a 📕		61%	% cows ser	ved 24 days after SoB	52% ± 25%						
	-	—		46%	% cows pre	gnant 48 days after SoB	36% ± 17%						
-				389	Calving inter	val (d)	393 ± 29						
				2.0	Age at first o	alving (y)	2.2 ± 0.3						
		>		55%	% cows elig	ible for service served	49% ± 23%						
				40%	Conception r	ate (%)	40% ± 13%						
		-		22%	% cows elig	ible for service conceived	17% ± 9%						
		-		44%	% service in	tervals 18 – 24 d	41% ± 13%						
		>		12%	% service in	tervals > 50 d	16% ± 17%						

Has the move to block calving improved the overall fertility?

If you then click on a parameter to show the trend over time you can compare this winter's performance against the previous year. In the example below the % cows served within 24 days of the start of the breeding period has risen from around 44% in the winter of 2015/16 to the current 60% in the same period of 2016/17.



How to change the KPIs and introduce a non-service period

This is a three-step process to register a non-service period and adjust the KPIs displayed. Both are via the Data>>Herd details command. Make sure that the herd that is selected (highlighted yellow) is the herd that you want to define as block calving.

 Changing the KPIs displayed in the KPI Report: In the KPI options tab in the lower split of the screen, select the Fertility ytab to display all the available KPI parameters relating to fertility.

The "Visible" tick box determines which will be displayed in the Fertility tab of the KPI report, while the "Favourites" tick box determines which also appear in the Favourites tab which is the one displayed when you open the command.

In the example below all the fertility parameters are set to visible but the "% served 80 days

after calving", "% confirmed pregnant by 100 days after calving" and the "Calving – 1st service interval" are all unticked in the Favourites so will not appear on the opening page. The parameters relating to the use of the start of breeding (SoB) period are included in the Favourites page:



2. Setting the Non-service period: To set the Non-service period select the Management policy tab and within that the Reproduction tab. In the tab is a grid to record the start and end dates of non-service periods. Note also the Minimum days calving to first service which, in the absence of non-service periods, is the usual minimum calving to first service interval.

P Herd details								
New	herd							
Herd code Herd name	No. anima	als MRO	MRO herd number	Latest milk recording	Latest check for MRO data	Latest data download	Latest profile	Orga
49301 Herd B JG John G TERRY Teny K	The	selected h	erd	23/02/17 01/01/00 01/01/00	19/03/17 19/03/17 19/03/17	01/03/17 02/01/17	01/03/17 02/01/17	
KPI options Management policy Lots and gr Lactation Reproduction After birth Animal health Heifer start of breeding period by weigh Heifer default weight at first service (kg Heifer default weight at first service (kg Heifer age at first service (days Assume heifers pregnant if no PD and not barree Assume heifers pregnant if no PD and not barree	oups Profi ests Action it	le scenarios lists Vet list or From (01/07,	Download log iteria	iods (date) /10/16	rofile log Officia	al notifications	Parlours NMR lin	ks
Days after latest servic Miinimum days calving to first servic Assume cows pregnant if no PD and not barre Days after latest servic Assume non-pregnant cows barren if not serve Days after latest service or start of breeding perio	e 60 e 42 n e 60 d d 80	Th ca dc	The pe le length of lving when a bes not clash	riod when an the voluntary a cow should n with a non-s	imals are not waiting peric start being se ervice period	served od, the days a erved, provide	fter ed this	

3. Profiling the herd: When the values are changed in the non-service periods or minimum days to first service, the program needs to re-profile the current data to take account of these changes. To do this go to File>>Lactation analysis and profile. During profiling, InterHerd+ will always use the current settings in the Management policy so these new parameters will be used automatically in future profiles following the addition of new data.