DHI and Herd Management Goals - HOLSTEINS - July 2022 Prepared by David R. Winston, Extension Dairy Scientist, Virginia Tech

Milk and Components

Unit	Virginia Average	Suggested Goal	
lb	76.8	**	
lb	66.1	**	
lb	77.7	**	
lb	96.3	**	
lb	104.1	**	
lb	82	**	
lb	101	**	
lb	110	**	
lb	24,699	**	
lb	948	**	
lb	761	**	
%	3.8	≥ 3.7	
%	3.0	≥ 3.0	
%		~ 95	
%		~ 90	
%		0	
%		0	
	Ib I	Unit Average Ib 76.8 Ib 66.1 Ib 77.7 Ib 96.3 Ib 104.1 Ib 82 Ib 101 Ib 110 Ib 24,699 Ib 948 Ib 761 % 3.8 % 3.0 % % % % % %	

Production Rules of Thumb

First lactation peaks should be ~75% of older cows.

First lactation 305 day ME milk should be within 500 pounds of second lactation.

Standardized 150 day milk declines > 5 pounds are indicative of a problem.

Reproduction

Parameter	Unit	Virginia Average	Suggested Goal
Pregnancy rate	%	19	≥ 24
Days open	days	143	≤ 130
Projected calving interval	months	13.9	≤ 13.6
Average days to 1st service	days	93	≤ 75
Percent of all 1st services < VWP	%	12	≤ 10
Percent of all 1st services > 100 days	%	28	≤ 10
Heats observed	%	47	≥ 65
Yearly successful services	%	***	≥ 40
Successful 1st services	%	43	≥ 45
Services per pregnancy	number	2.7	≤ 2.5
Percent of herd confirmed pregnant	%	***	≥ 50
Difficult births - 1st lactation (scores 4+5)	%	1.8	≤5
Cows culled for reproduction	%	19	≤6
Abortions (actual + apparent)	%	***	≤5

Genetics

Parameter	Unit	Virginia Average	Suggested Goal
Percent of herd bred AI	%	72	100
Percent of herd bred with AI genomic tested sires	%	***	≥ 30
Percentile rank - service sires	percentile	71	≥ 90
Cows with sire ID	%	75	100
Heifers with sire ID	%	79	100

Udder Health

Parameter	Unit	Virginia Average	Suggested Goal
Average SCC score	score	2.3	≤ 3.0
Weighted average actual SCC	cells/ml	224,000	≤ 200,000
1st lactation SCS, days 1-40	score	***	≤ 2.0
Cows culled for mastitis	%	***	≤3
Incidence of clinical mastitis (monthly)*	cases/100 cows		≤3

Desirable Herd Distribution of Somatic Cell Scores

	Somatic Cell Score			Average
Lactation	0-3	4-5	6+	SCS
1	> 80%	~ 20%	0%	≤ 2.5
2	> 70%	~ 25%	< 5%	≤ 2.8
3+	> 65%	~ 30%	< 5%	≤ 3.1
Total Herd	> 65%	~ 30%	< 5%	≤ 3.0

Replacements

Parameter	Unit	Virginia Average	Suggested Goal
Average age at first calving	months	26.4	22-24
Calves dead at birth	%	***	≤5
Mortality, birth to 3 months*	%		≤5
Mortality, 3 months to calving*	%		≤2
Average daily gain*	lbs/day		1.6-1.8
Bodyweight at 1st breeding*	% mature BW		≥ 55
Average age at first breeding*	days		~ 420
Average age at first conception*	days		~ 450
Services per pregnancy*	number		≤ 1.8
Postcalving bodyweight*	% mature BW		≥ 82

Culling

Parameter	Unit	Virginia Average	Suggested Goal
Cows left herd	%	42	≤ 30
Voluntary cull rate	%	***	10-20
Involuntary cull rate	%	***	≤ 15
Cow mortality	%	15	≤2
Cows left herd, 1-30 days in milk*	%		≤ 4
Cows left herd, 1-60 days in milk*	%		≤6

Parameter	Unit	Virginia Average	Suggested Goal
Average days dry	days	***	55-60
Dry periods < 40 days	%	9	0
Dry periods > 70 days	%	17	< 10
In milk on test day	%	86	85-88
Average days in milk	days	193	~ 150

Data obtained through DairyMetrics (DRMS) on July 27, 2022.

- * Information is not found on a Herd Summary DHI-202.
- ** Goal depends on the herd's production system. *** Averages not available through DairyMetrics.