

DHI and Herd Management Goals - HOLSTEINS - September 2019

Prepared by David R. Winston, Extension Dairy Scientist, Virginia Tech

Milk and Components

Parameter	Unit	Regional Average	Suggested Goal
Daily milk - milking cows	lb	69.5	
Daily milk - all cows	lb	59.5	
Summit milk - 1st lactation	lb	72	
Summit milk - 2nd lactation	lb	91	
Summit milk - 3rd+ lactations	lb	99	
Peak milk - 1st lactation	lb	76	
Peak milk - 2nd lactation	lb	97	
Peak milk - 3rd+ lactations	lb	105	
Rolling yearly herd average - milk	lb	22,394	
Rolling yearly herd average - fat	lb	859	
Rolling yearly herd average - protein	lb	689	
Fat percent	%	3.7	≥ 3.7
Protein percent	%	3.0	≥ 3.0
Persistence after peak - 1st lactation*	%		~ 95
Persistence after peak - older cows*	%		~ 90
% 1st lactation ≤ 40 lbs on 1st test day*	%		0
% older cows ≤ 50 lbs on 1st test day*	%		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	Regional Average	Suggested Goal
Pregnancy rate	%	19.4	≥ 24
Days open	days	142	≤ 130
Projected calving interval	months	13.9	≤ 13.6
Average days to 1st service	days	90	≤ 75
Percent of all 1st services < VWP	%	16	≤ 10
Percent of all 1st services > 100 days	%	27	≤ 10
Heats observed	%	47	≥ 65
Yearly successful services	%	**	≥ 40
Successful 1st services	%	41	≥ 45
Services per pregnancy	number	2.6	≤ 2.5
Percent of herd confirmed pregnant	%	**	≥ 50
Difficult births - 1st lactation (scores 4+5)	%	2.8	≤ 5
Cows culled for reproduction	%	7.2	≤ 6
Abortions (actual + apparent)	%	**	≤ 5

Genetics

Parameter	Unit	Regional Average	Suggested Goal
Percent of herd bred AI	%	75	100
Percent of herd bred with AI genomic tested sires	%	**	≥ 30
Percentile rank - proven AI sires	percentile	52	≥ 90
Percentile rank - AI genomic tested sires	percentile	**	≥ 90
Cows with sire ID	%	77	100
Heifers with sire ID	%	91	100

Udder Health

Parameter	Unit	Regional Average	Suggested Goal
Average SCC score	score	2.5	≤ 3.0
Weighted average actual SCC	cells/ml	238,000	≤ 200,000
1st lactation SCS, days 1-40	score	**	≤ 2.0
Cows culled for mastitis	%	4.8	≤ 3
Incidence of clinical mastitis (monthly)*	cases/100 cows		≤ 3

Desirable Herd Distribution of Somatic Cell Scores

Lactation	Somatic Cell Score			Average SCS
	0-3	4-5	6+	
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	Regional Average	Suggested Goal
Average age at first calving	months	25.3	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	Regional Average	Suggested Goal
Cows left herd	%	38.1	≤ 30
Voluntary cull rate	%	**	10-20
Involuntary cull rate	%	**	≤ 15
Cow mortality	%	5.0	≤ 2
Cows left herd, 1-30 days in milk*	%		≤ 4
Cows left herd, 1-60 days in milk*	%		≤ 6

Miscellaneous

Parameter	Unit	Regional Average	Suggested Goal
Average days dry	days	**	55-60
Dry periods < 40 days	%	**	0
In milk on test day	%	86	85-88
Average days in milk	days	184	~ 150

Data obtained through DairyMetrics (DRMS) on September 10, 2019.

* Information is not found on a Herd Summary DHI-202.

** Regional averages not available through DairyMetrics.

DHI and Herd Management Goals - JERSEYS - September 2019

Prepared by David R. Winston, Extension Dairy Scientist, Virginia Tech

Milk and Components

Parameter	Unit	Regional Average	Suggested Goal
Daily milk - milking cows	lb	48.0	
Daily milk - all cows	lb	39.8	
Summit milk - 1st lactation	lb	50	
Summit milk - 2nd lactation	lb	60	
Summit milk - 3rd+ lactations	lb	65	
Peak milk - 1st lactation	lb	54	
Peak milk - 2nd lactation	lb	64	
Peak milk - 3rd+ lactations	lb	69	
Rolling yearly herd average - milk	lb	14,602	
Rolling yearly herd average - fat	lb	709	
Rolling yearly herd average - protein	lb	529	
Fat percent	%	4.5	≥ 4.7
Protein percent	%	3.5	≥ 3.6
Persistency after peak - 1st lactation*	%		~ 95
Persistency after peak - older cows*	%		~ 90
% 1st lactation ≤ 40 lbs on 1st test day*	%		0
% older cows ≤ 50 lbs on 1st test day*	%		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	Regional Average	Suggested Goal
Pregnancy rate	%	20.1	≥ 24
Days open	days	142	≤ 130
Projected calving interval	months	13.9	≤ 13.6
Average days to 1st service	days	93	≤ 75
Percent of all 1st services < VWP	%	18	≤ 10
Percent of all 1st services > 100 days	%	30	≤ 10
Heats observed	%	44	≥ 65
Yearly successful services	%	**	≥ 40
Successful 1st services	%	44.7	≥ 45
Services per pregnancy	number	2.5	≤ 2.5
Percent of herd confirmed pregnant	%	**	≥ 50
Difficult births - 1st lactation (scores 4+5)	%	3.2	≤ 5
Cows culled for reproduction	%	5.5	≤ 6
Abortions (actual + apparent)	%	**	≤ 5

Genetics

Parameter	Unit	Regional Average	Suggested Goal
Percent of herd bred AI	%	76	100
Percent of herd bred with AI genomic tested sires	%	**	≥ 30
Percentile rank - proven AI sires	percentile	48	≥ 90
Percentile rank - AI genomic tested sires	percentile	**	≥ 90
Cows with sire ID	%	79	100
Heifers with sire ID	%	91	100

Udder Health

Parameter	Unit	Regional Average	Suggested Goal
Average SCC score	score	3.0	≤ 3.0
Weighted average actual SCC	cells/ml	274,600	≤ 200,000
1st lactation SCS, days 1-40	score	**	≤ 2.0
Cows culled for mastitis	%	4.3	≤ 3
Incidence of clinical mastitis (monthly)*	cases/100 cows		≤ 3

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3+	> 65%	~ 30%	< 5%	≤ 3.1
Total Herd	> 65%	~ 30%	< 5%	≤ 3.0

Replacements

Parameter	Unit	Regional Average	Suggested Goal
Average age at first calving	months	25.0	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
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Services per pregnancy*	number		≤ 1.8
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Culling

Parameter	Unit	Regional Average	Suggested Goal
Cows left herd	%	34.0	≤ 30
Voluntary cull rate	%	**	10-20
Involuntary cull rate	%	**	≤ 15
Cow mortality	%	4.3	≤ 2
Cows left herd, 1-30 days in milk*	%		≤ 4
Cows left herd, 1-60 days in milk*	%		≤ 6

Miscellaneous

Parameter	Unit	Regional Average	Suggested Goal
Average days dry	days	**	55-60
Dry periods < 40 days	%	**	0
In milk on test day	%	85	85-88
Average days in milk	days	180	~ 150

Data obtained through DairyMetrics (DRMS) on September 10, 2019.

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** Regional averages not available through DairyMetrics.