

Holstein Benchmarks By Production Level, Revised January 1, 2018

Averages						
Rolling Herd Average Milk	< 17000			17-21000		
	205			519		
	80th		20th	80th		20th
	Percentile	Average	Percentile	Percentile	Average	Percentile
Cows/Herd	58.9	58.9	58.9	82.2	82.2	82.2
Production Measures						
RHA Milk	16226	14388	12637	20357	19292	18198
RHA Fat	646	575	503	814	768	703
RHA Protein	506	447	389	635	600	564
RHA Cheese Yield	1688	1498	1327	2118	2007	1894
Management Level Milk (MLM)	58	50.4	42	72	66.2	60
Daily Milk	52.6	44.7	37	65.6	60.4	54.4
RHA Fat %	4.2	4	3.7	4.2	4	3.7
RHA Protein %	3.2	3.1	3	3.2	3.1	3
Mature Equivalent Production						
1st Lactation ME Milk	18969	16649	14263	23032	21537	19829
1st Lactation ME Fat	750	658	553	941	857	767
1st Lactation ME Protein	570	498	425	702	650	592
2nd Lactation ME Milk	17826	15818	13656	22425	21028	19485
2nd Lactation ME Fat	729	638	544	910	840	748
2nd Lactation ME Protein	533	476	410	678	635	586
3+ Lactation ME Milk	17909	15873	13671	22050	20736	19282
3+ Lactation ME Fat	733	636	549	891	825	738
3+ Lactation ME Protein	534	478	405	665	623	579
Stage of Lactation Production						
1st Lactation Peak Milk	62	55.4	47	73	68.1	63
2nd Lactation Peak Milk	75	66.7	58	91	84.7	79
3+ Lactation Peak Milk	80	71.7	62	96	90.5	85
1st Lact 1-100 Days Milk	58	48.8	39	66.8	59.9	53
1st Lact 101-240 Days Milk	50	42.1	33.3	62.6	56.5	50.4
1st Lact 241+ Days Milk	42	35.3	28.3	54	47.7	41.7
2nd Lact 1-100 Days Milk	67.5	57.9	45.5	84	75	66.4
2nd Lact 101-240 Days Milk	55.2	46.4	36	71.6	63.4	55.7
2nd Lact 241+ Days Milk	42	34.7	27	54.5	47.3	39.8
3+ Lact 1-100 Days Milk	71.4	61.5	52.8	89.6	81.1	72.2
3+ Lact 101-240 Days Milk	58.4	49.3	40.3	73.1	66.8	59.7
3+ Lact 241+ Days Milk	41.8	34.5	26.7	53	46.6	39.2
Days In Milk Measures						
Herd Average Days In Milk (DIM)	165	206.4	245	162	189.4	216
Lactation Days In Milk (LDIM)	327	312.9	300	328	317	308
% Days In Milk (%LACD)	89	85.2	82	89	86.4	84
Accuracy Measure						
% of Bulk (DHI Wt / Bulk Tank Wt) (+ or -) 1		103	(+ or -) 9	(+ or -) 1	103	(+ or -) 8
Herd Age Measure						
1st Lact Age at Calving	24.6	28.4	31.2	24.4	27	29.1
Herd Avg Age at Calving (Month)	56.7	49.2	40.9	51.1	46.1	41.1
Reproductive Analysis - Cows						
Annual Pregnancy Rate %	13	8.9	5	17	12.1	8
Annual Service Rate %	32	24.8	19	42	31.4	23
Annual Pregnancy Loss %	0	2.8	7	0	3.1	6
Calculated Voluntary Waiting Period (Days)	35	47.7	57	40	50.5	59
Average DIM at 1st Breeding	89	106.8	121	75	92.2	106
Calving Interval Projected	12.8	14.3	15.5	13	14.1	14.9
Calving Interval Historic	13.4	14.6	15.7	13.2	14.1	15

Days Open PG	137	166.7	185	121	147.6	174
Services Per Conception (SPC F	1.6	1.8	1.9	1.6	1.8	2
Conception Rate % 1st Lactatio	67	56.6	47	67	58.7	50
Conception Rate % 2nd Lactatio	71	63.2	50	67	57.7	47
Conception Rate % 3+ Lactation	64	58.3	50	63	55	45
% Total Repeats 3-17 Days	0	3.4	6	0	3.4	6
% Total Repeats 18-24 Days	10	16	24	9	16.3	22
Conception Rate % 3-17 Days	33	18	0	33	18.5	0
Conception Rate % 18-24 Days	43	24.9	0	37	24.5	12
Reproductive Analysis - Heifer						
Conception Rate % Heifers	67	57	50	67	56.5	50
Services Per Conception	1.5	1.8	2	1.5	1.9	2
% < 23 Months at Calving	0	3	4	0	5.8	10
% > 25 Months at Calving	13	53.5	94	16	49.9	85
Yearly Herd Turnover						
% Turnover (-) Sales for Dairy	21.1	34.4	44.7	24.4	35.3	43.6
% Total Herd Left/Died	21.4	37.7	50.3	24.4	39.6	48.6
% Total Herd Died	1.1	6	9.7	1.4	5.2	8.2
% Cows Leaving the Herd < 60 D	3	6.7	10	3	7	10
% Total Herd Sold for Dairy	2.1	2.2	0	2.9	3.7	0
% 1st Lact Left/Died	4.3	10.6	14.6	4.5	12.1	15.1
% 2nd Lact Left/Died	4.2	9	12.5	4.8	9.1	12.5
% 3+ Lact Left/Died	12.2	19.1	24.6	13.4	18.7	23.3
Udder Health						
Weighted Average SCC	207	326	440	166	264	350
Bulk Tank Weighted Average SC	205	315	413	165	260	351
% of herd >= 200000 SCC	20	29.5	38	16	23.7	30
% of Herd New Infections	10	15.7	21	8	12.3	16
% Infected Cows That are Chron	56	62	70	51	59	67
Herd Linear Score	2.6	3.1	3.6	2.3	2.7	3.2
1st Lact Linear Score	2.2	2.7	3.2	1.9	2.4	2.8
2nd & >Lact Linear Score	2.7	3.3	3.9	2.5	3	3.4
% Heifers Infected at First Test	0	23.7	40	8	21.4	33
% Fresh Cows - New Infections	10	27.1	40	11	23.5	33
1st Lact Weighted Average SCC	133	236	338	107	189	258
2nd & >Lact Weighted Average S	229	371	510	185	306	405
% Dry Cows Cured	72	56.1	37	77	60.7	45
% Dry Period Failure to Cure	28	44	63	23	39.4	55
Distribution of Herd by SCC or						
% of Herd < 100000 SCC	66	53.6	42	70	60.8	52
% of Herd 100000-199000 SCC	19	16.1	13	18	14.9	12
% of Herd 200000-399000 SCC	8	11.4	15	6	9.1	12
% of Herd 400000-799000 SCC	5	7.8	10	4	6.3	8
% of Herd >= 800000 SCC	6	9.5	13	4	7.7	11
Transition Cow Management						
Transition Cow Index	-347	-1026	-1703	354	-211	-765
% 1st Lact Fat/Protien Ratio > 1.	15	38	62	19	39.5	60
% 2nd & >Lact Fat/Protien Ratio	21	41.3	60	25	42.6	59
Dry Period						
Average Days Dry	54	66	76	52	62.6	70
% 0-39 Days	5	19.6	31	4	18.1	30
% 40-70 Days	66	48.2	32	75	57.2	39
% >70 Days	15	32.3	50	11	24.7	36
Alternative Dry Period Length						
% <30 Days	0	11.4	19	0	8.6	14
% 70-90 Days	7	16.3	23	6	14.5	21
% > 90 Days	4	17.4	26	4	12.9	21

Genetics (Net Merit Values Adjusted for Unidentified Sires)						
Service Sires Net Merit \$	610	379	75	637	405	83
Heifer Sires Net Merit \$	343	203	61	411	266	91
1st Lact Sires Net Merit \$	266	140	47	287	178	65
2nd Lact Sires Net Merit \$	184	103	47	231	139	60
3+ Lact Sires Net Merit \$	124	66	34	141	86	40
All Cows Sire Net Merit \$	171	97	47	210	130	59
Functional Trait Measures						
Service Sires DPR	2	0.9	0	2	1	0
All Cows Sire DPR	0.3	0	-0.3	0.5	0.1	-0.4
Service Sires SCS	2.82	2.89	2.97	2.81	2.87	2.97
All Cows Sire SCS	2.93	2.96	2.98	2.91	2.94	2.97
Service Sires Prod Life	5.9	3.5	0.8	5.9	3.7	0.8
All Cows Sire Prod Life	1.4	0.9	0.5	1.8	1.1	0.5
Identification Measures						
% Cow Sires Identified	92	40.9	0	95	57.6	3
Service Sires % AI	100	70.7	26	100	71.5	21
All Cows Sire % AI	93	48.1	0	96	62.4	15
Calving						
% Female Calves	55	45.2	37	55	46.8	40
1st Lact % Female Live	100	91	83	100	90.4	82
2nd Lact % Female Live	100	94.6	90	100	94.4	89
3+ Lact % Female Live	100	94.1	88	100	93.3	88
Management MUN Values						
	<10 Mg/Dl	10-14 Mg/Dl	>14 Mg/Dl	<10 Mg/Dl	10-14 Mg/Dl	>14 Mg/Dl
All Herds %	53.5	43.4	26.3	39.2	50.9	24.1
1st Lactation %	61.5	48.8	34.5	43.9	54.5	31.3
2nd & >Lactation %	55.9	44.4	30.3	42.3	50.7	26
Average MUN Values						
All Herds		10			11	
1st Lactation		10.3			11.2	
2nd & >Lactation		10			10.9	