



A case study

Background

The group of cows studied includes a fixed group about 40 cows entering and leaving the lactation group, with heifers entering the group and cows leaving the group at they are slaughtered mainly for animal health reasons.

The study was conducted at the pilot farm of the University of Szeged at Hódmezővásárhely, 6800 Hungary, a farm managed by the University of Szeged and overseen by Agricultural Faculty of the University of Szeged.

In August 2106 Surepulse inserts and liners were fitted together with pulsation adjustments. At the start the cows had high somatic cell counts, teat health problems and an average of 2.2 lactations per cow at an average production of more than 10,000 litres per cow.

The results in terms of teat scores can be seen from the data summary from 1st August 2016 until 27th March 2017. In the same period the somatic cell counts stabilised and steadily reduced, however mastitis cases continued in certain periods.

On 27th March 2017 the Calf 35 system was installed.

As of 27th March 2017 comprehensive data has been collected for

1. Teat Scores of each individual cow,
2. Cell counts of each individual cow,
3. Mastitis records of each individual cow,
4. Kick offs for each individual cow.

The figures on the following page represent a summary of the performance in Surepulse inserts and liners were introduced, and after using Surepulse liners and inserts with the Calf 35 system.

The study continues.

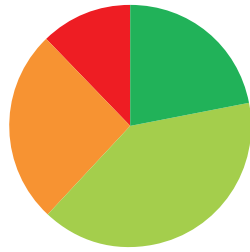
Teat health improvements using Surepulse inserts and liners

A 12-month case study with a test group of 40 cows entering and leaving lactation.



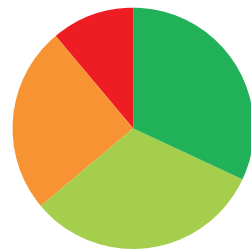
1 August 2016

Score	1	2	3	4	=
# teats	26	59	35	17	137
%	19	43	26	12	100



1 September 2016

Score	1	2	3	4	=
# teats	29	51	33	16	129
%	22	40	26	12	100



1 October 2016

Score	1	2	3	4	=
# teats	43	43	33	15	134
%	32	32	25	11	100



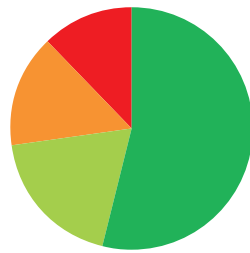
2 November 2016

Score	1	2	3	4	=
# teats	47	43	29	15	134
%	35	32	22	11	100



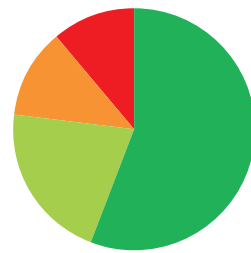
2 December 2016

Score	1	2	3	4	=
# teats	48	43	28	15	134
%	36	32	21	11	100



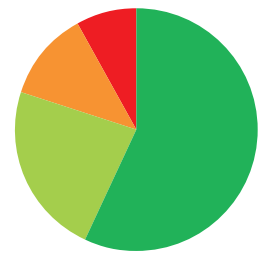
13 January 2017

Score	1	2	3	4	=
# teats	77	27	21	17	142
%	54	19	15	12	100



19 February 2017

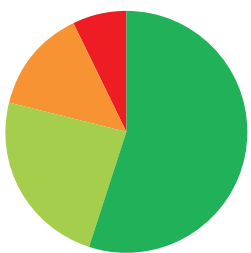
Score	1	2	3	4	=
# teats	82	31	17	16	146
%	56	21	12	11	100



18 March 2017

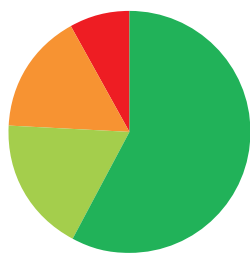
Score	1	2	3	4	=
# teats	75	30	16	10	131
%	57	23	12	8	100

Teat health improvement using Surepulse liners and inserts combined with Calf 35 from 27th March 2017



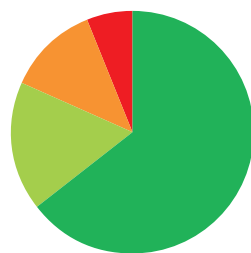
14 April 2017

Score	1	2	3	4	=
# teats	63	27	16	8	114
%	55	14	14	7	100



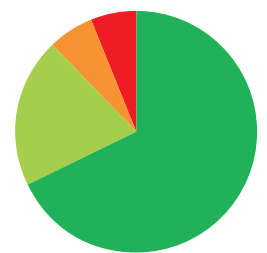
14 May 2017

Score	1	2	3	4	=
# teats	67	23	16	8	114
%	59	20	14	7	100



14 June 2017

Score	1	2	3	4	=
# teats	92	25	17	9	143
%	64	17	12	6	100



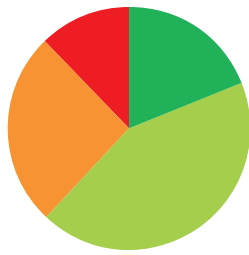
14 July 2017

Score	1	2	3	4	=
# teats	90	26	8	8	132
%	68	20	6	6	100

Teat Condition:

- 1 Good
- 2 Fair
- 3 Bad
- 4 Very Bad

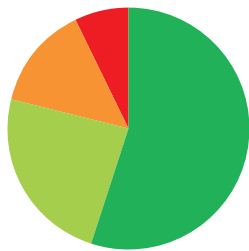
Summary



1 August 2016

Score	1	2	3	4	=
# teats	26	59	35	17	137
%	19	43	26	12	100

Initial test results



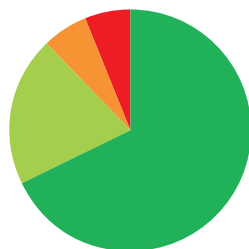
14 April 2017

Score	1	2	3	4	=
# teats	63	27	16	8	114
%	55	14	14	7	100

8 months passed

- 1 Score 1 (good) moves 19% to 55%
- 2 Score 2 (fair) moves 43% to 14%
- 3 Score 3 (bad) moves 26% to 14%
- 4 Score 4 (very bad) moves 17% to 7%

Results achieved using



14 July 2017

Score	1	2	3	4	=
# teats	90	26	8	8	132
%	68	20	6	6	100

Further 4 months passed

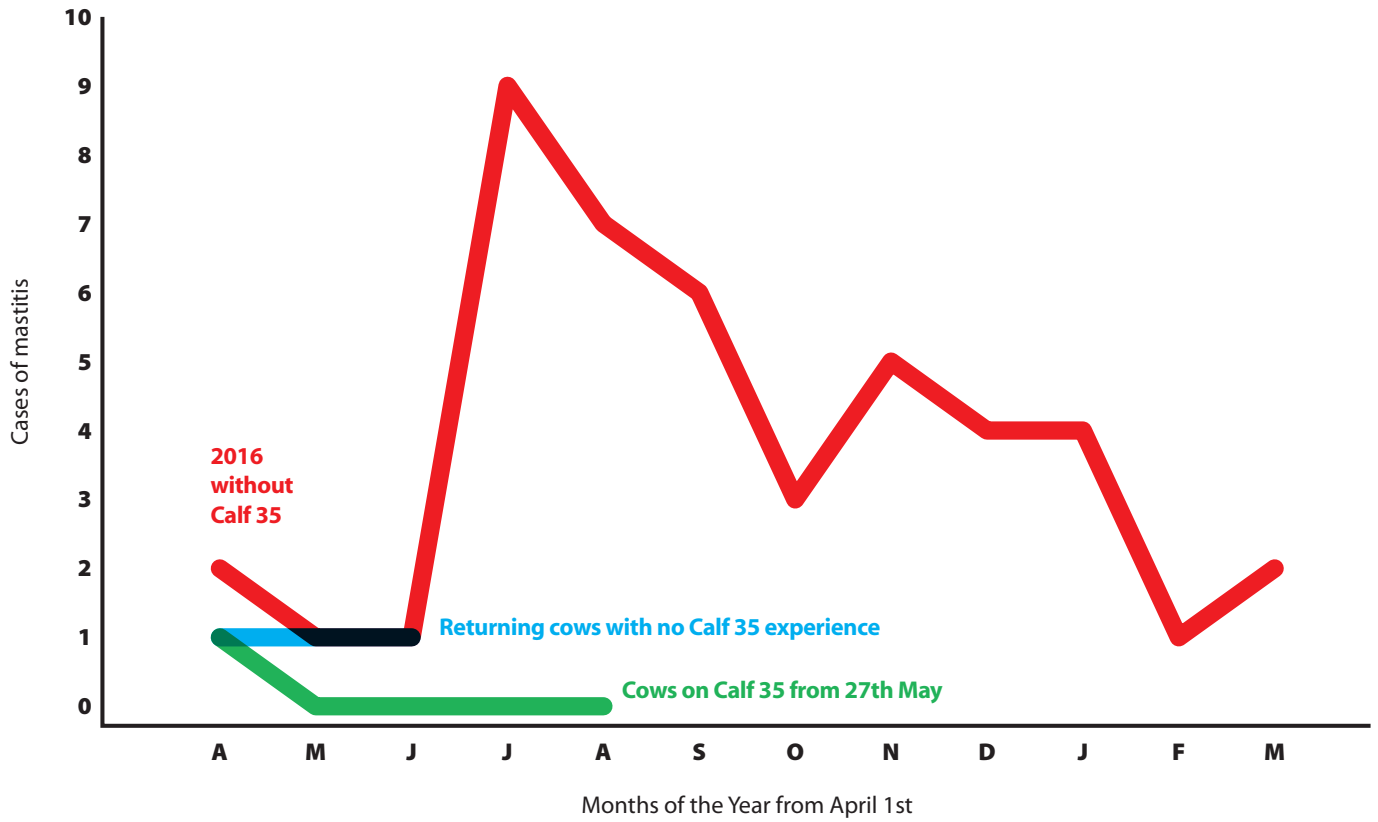
- 1 Score 1 (good) moves 55% to 68%
- 2 Score 2 (fair) moves 14% to 20%
- 3 Score 3 (bad) moves 14% to 6%
- 4 Score 4 (very bad) moves 7% to 6%

Results achieved using



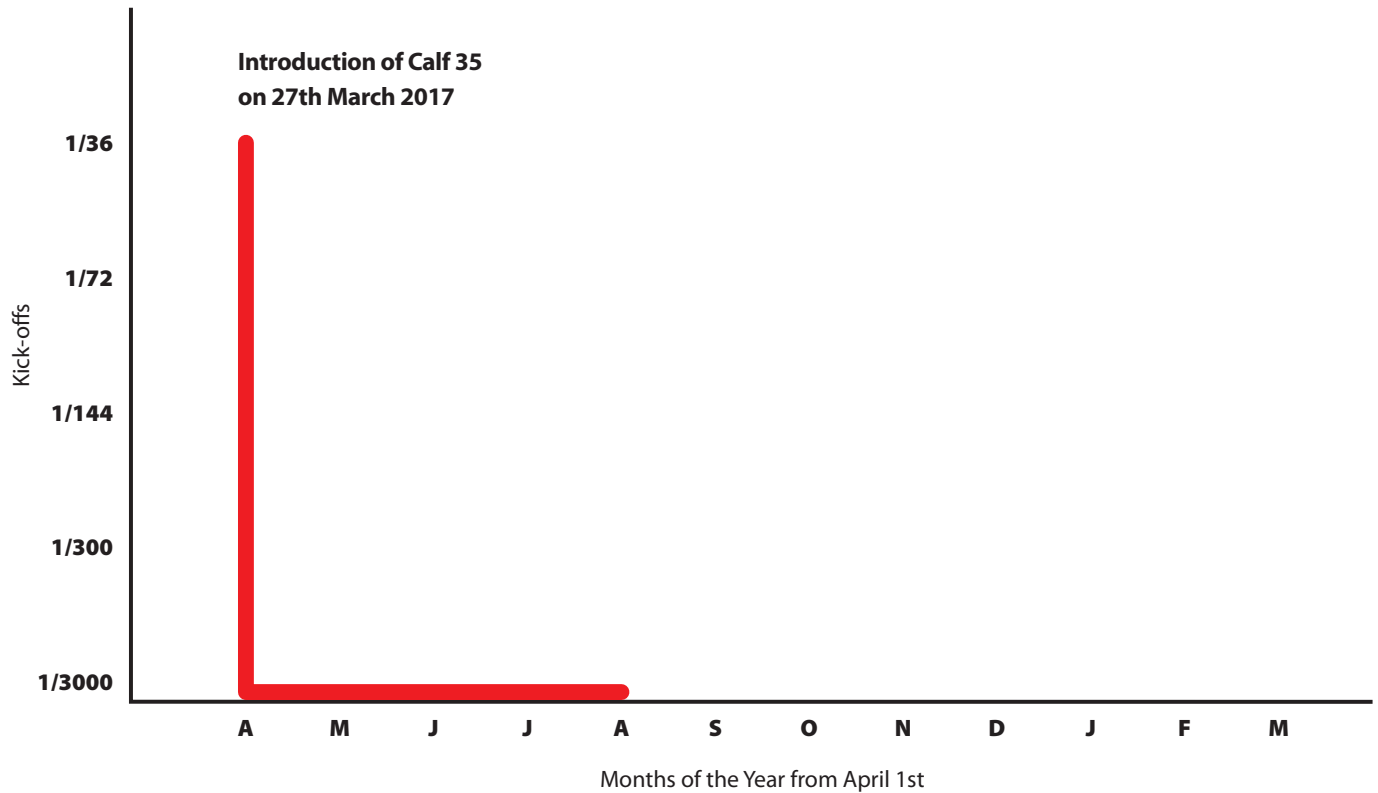
Monthly cases of mastitis

for a test group of 40 cows entering and leaving lactation, April 2016 - August 2017



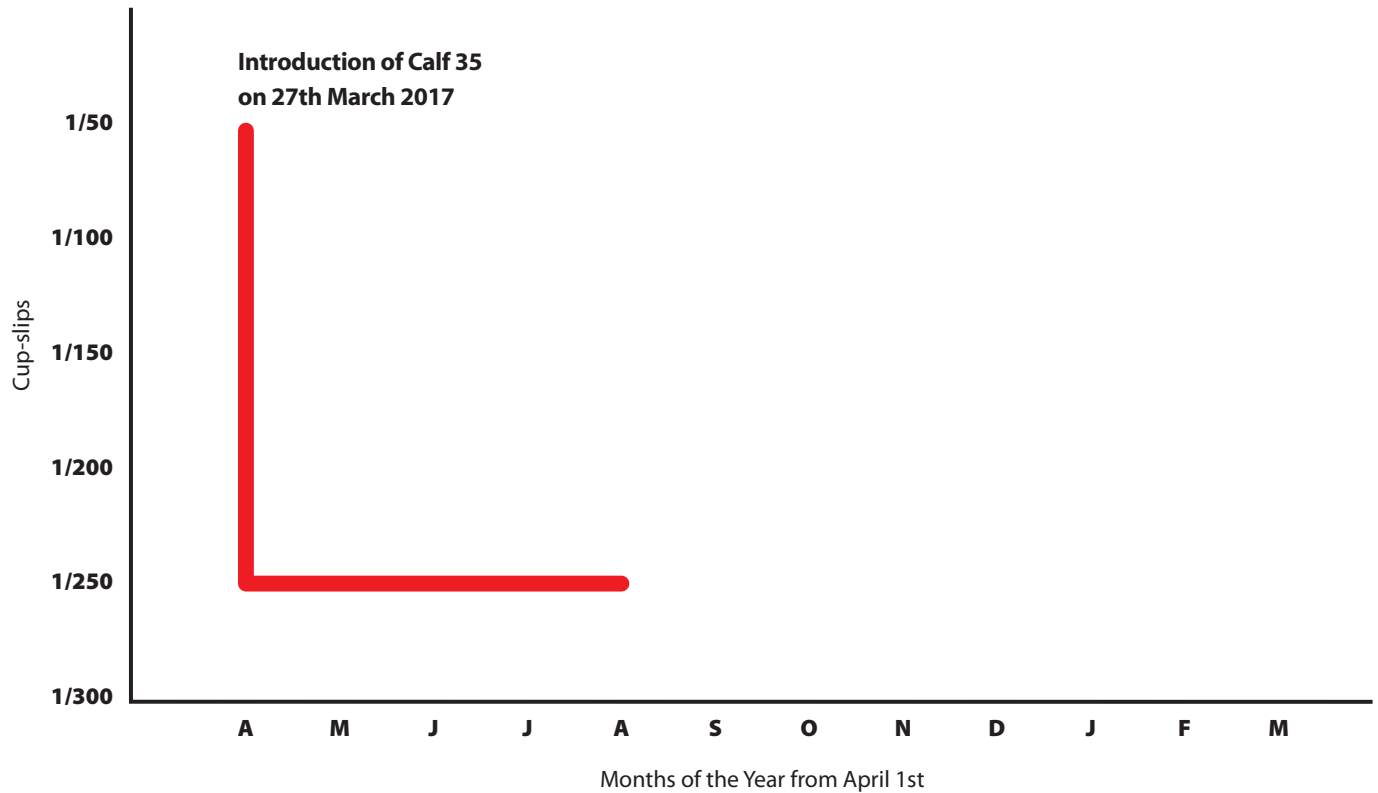
Kick-offs during the milking

for a test group of 40 cows entering and leaving lactation, April 2016 - August 2017
(measured as a fraction)



Cup slips during the milking

for a test group of 40 cows entering and leaving lactation, April 2016 - August 2017
(measured as a fraction)



Somatic Cell Counts represented over two years and intensely from 27th March 2017

for a test group of 40 cows entering and leaving lactation, April 2016 - July 2017

