



# Red Holstein in the Czech Republic

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# Holstein in the Czech Republic

- **1960 - 70 - 19 thousand B & W heifers imported. low genetic level and low management**
- **1970 - crossbreeding Czech Fleckvieh with B & W or R & W and later Holstein bulls**

- **Two crossbreeding methods were used**

**Different objectives and future usage of crosses**

**a) Two rotation crossbreeding programme**

**Goal – crosses with good milk production and carcass characteristics**

**b) Grading up programme**

**Goal – developing the national Holstein population**

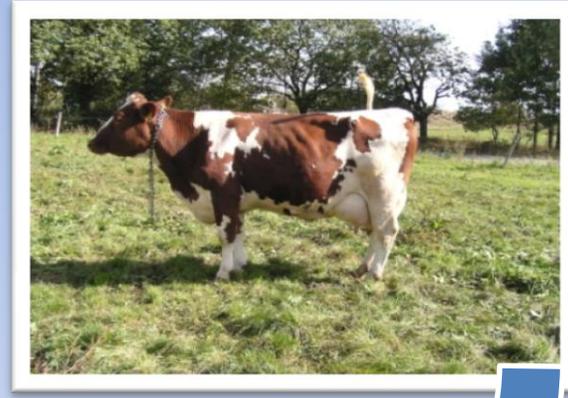
# From Fleckvieh to RED Holstein



F1 Generation



F2 Generation



Czech Fleckvieh



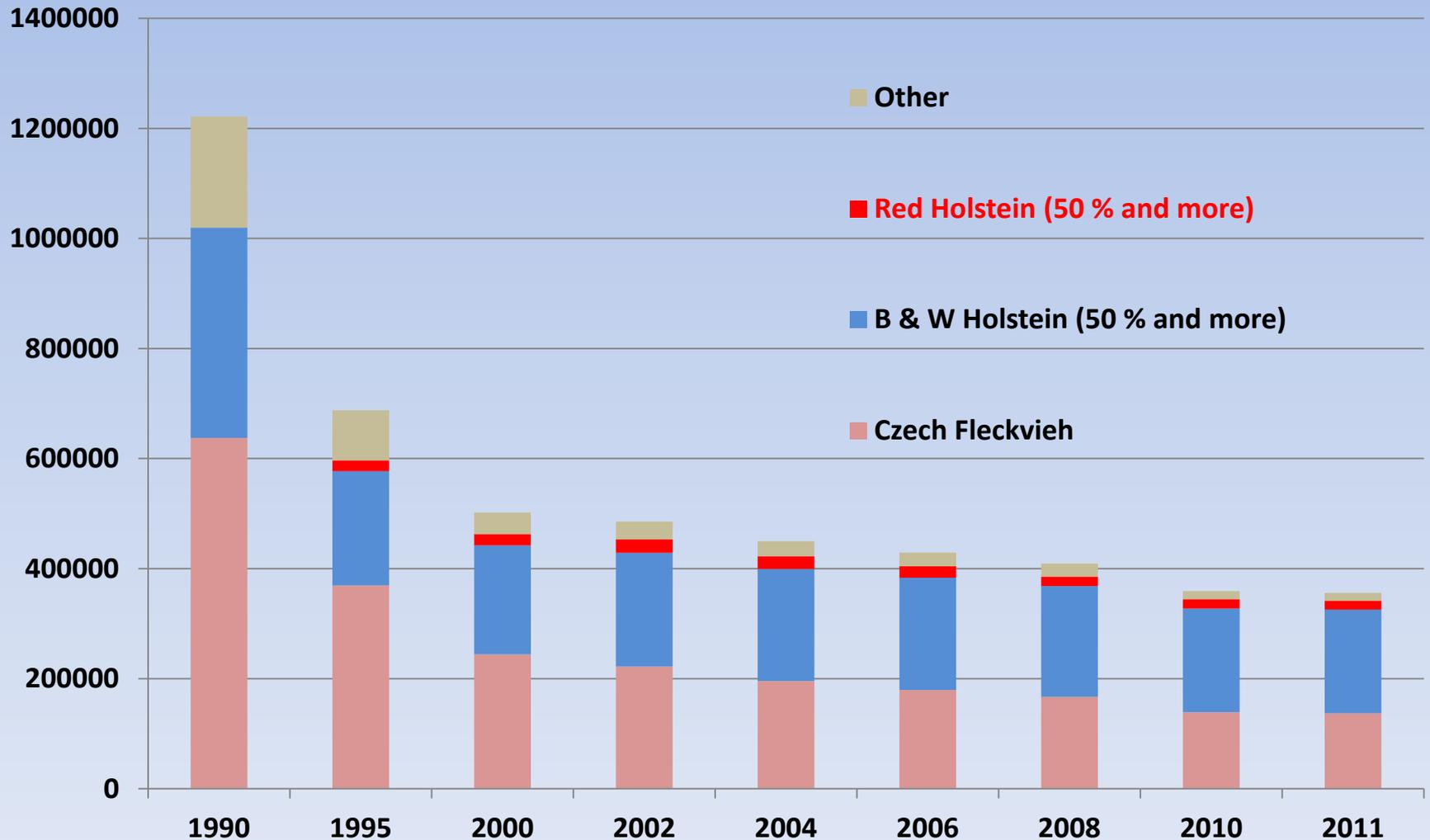
RED Holstein



# The Developement of the Holstein Population

Year	Cows thous.	Holstein		Crosses	
		Cows	%	Cows	%
1970	1392.4	7.0	0.6	0.8	0.1
1975	1248.6	19.0	1.4	58.0	4.4
1980	1285.0	24.0	1.8	253.0	19.2
1985	1245.6	36.0	2.8	205.0	16.1
1990	1221.8	71.0	5.8	310.0	25.5
1995	667.0	80.0	12.2	170.0	25.6
2000	481.1	108.0	22.5	109.0	22.7
2007	399.0	141.0	35.3	80.0	19.5
2010	359.2	148.0	41.2	46.0	12.8
2011	355.7	150.0	42.2	43.0	12.1

# Breed Structure Development in Milk Recorded Cows



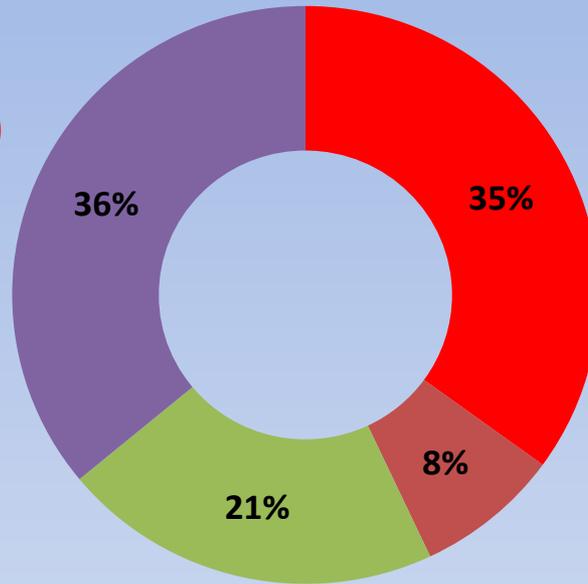
# Red and B&W Holstein Breed Structure in 11

■ Red Holstein (R 100 %)

■ Crosses R 88 %

■ Crosses R 75 - 87 %

■ Crosses R 50 - 74 %

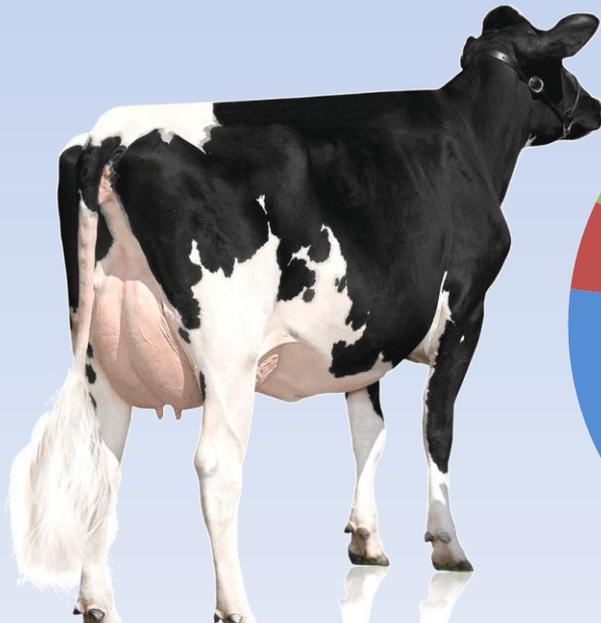
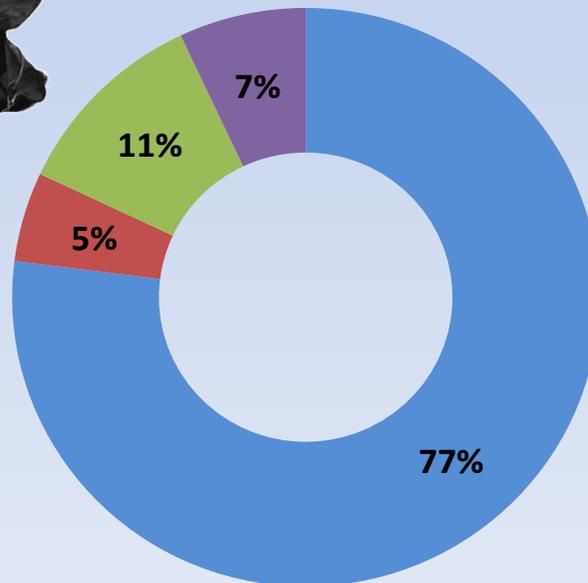


■ B & W Holstein (H 100 %)

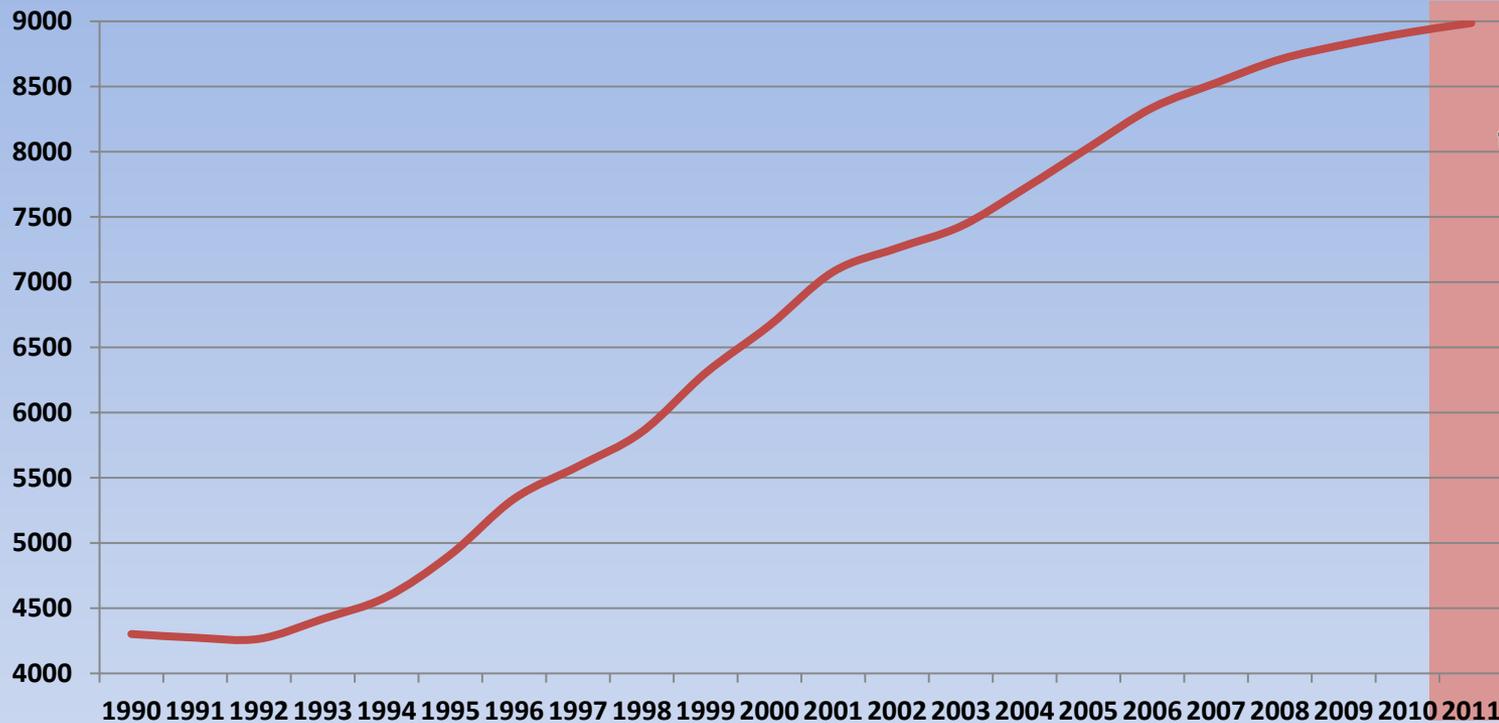
■ Crosses H 88 %

■ Crosses H 75 - 87 %

■ Crosses H50 - 74 %



# Milk Production Development BW Holstein



## Milk Production development of RED H

Year	No. lac.	Kg M	F %	F Kg	P %	P Kg
2009	15 528	7 625	3.99	304	3.34	255
2010	14 238	7 689	4.00	307	3.37	259
2011	13 355	7 772	4.04	314	3.41	265

# Proportion of first inseminations in Different Breed (2011)

Breed	I. ins.	%	All ins.	%
Czech Fleckvieh	191 846	39.0	384 748	37.3
<b>B &amp; W Holstein</b>	<b>241 239</b>	<b>49.1</b>	<b>539 235</b>	<b>52.3</b>
<b>Red Holstein</b>	<b>22 939</b>	<b>4.7</b>	<b>45 397</b>	<b>4.4</b>
Other Dairy Breeds	3 782	0.8	8 064	0.8
Beef Breeds	31 393	6.4	53 287	5.2
	<b>491 199</b>	<b>100.0</b>	<b>1 047 021</b>	<b>100.0</b>

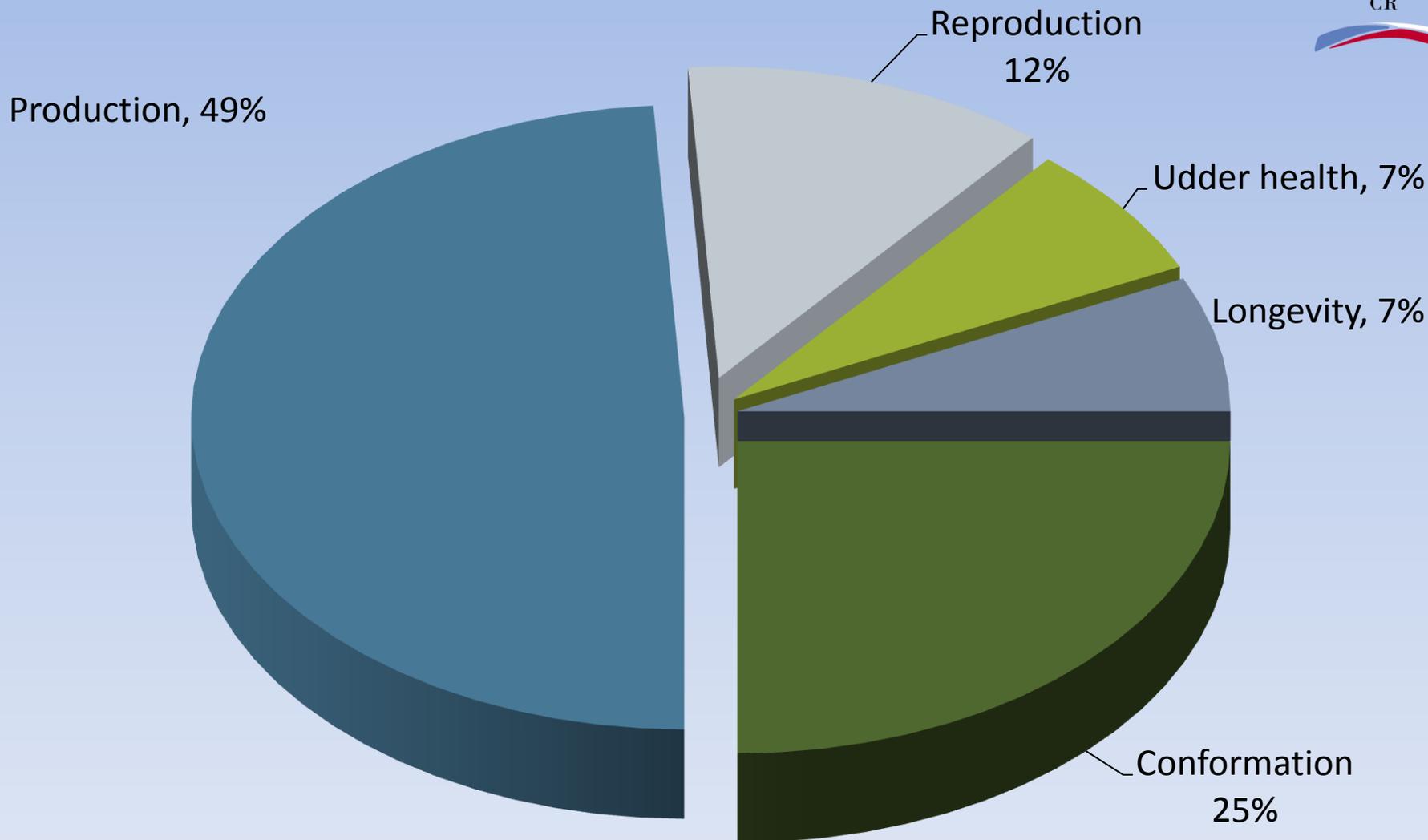
# Proportion of First Inseminations by RED Bulls Proven in Different Countries (2011)

Country	Bulls	I. insem.	All insem.	% 1.st	% all
<b>Czech Republic</b>	<b>24</b>	<b>6 345</b>	<b>12 679</b>	<b>29.7</b>	<b>31.3</b>
Holland	40	10 767	19 928	50.4	49.2
Germany	30	3 489	6 634	16.3	16.4
Other (Swyss. Denmark. Italy. USA)	5	769	1 293	3.6	3.2
	<b>99</b>	<b>21 370</b>	<b>40 534</b>	<b>100.0</b>	<b>100.0</b>

# Breeding information

- There is one HB for B&W and R&W Holsteins
- 3-5 Red bulls tested every year (100 B&W)
- AI tested young bulls together with foreign AI
- Genetic evaluation for Black and Red Holstein
- There is Red H base – difference is 368 kg milk
- Red H bulls are published separately – Red TOP list

# Selection Index for Holstein Bulls

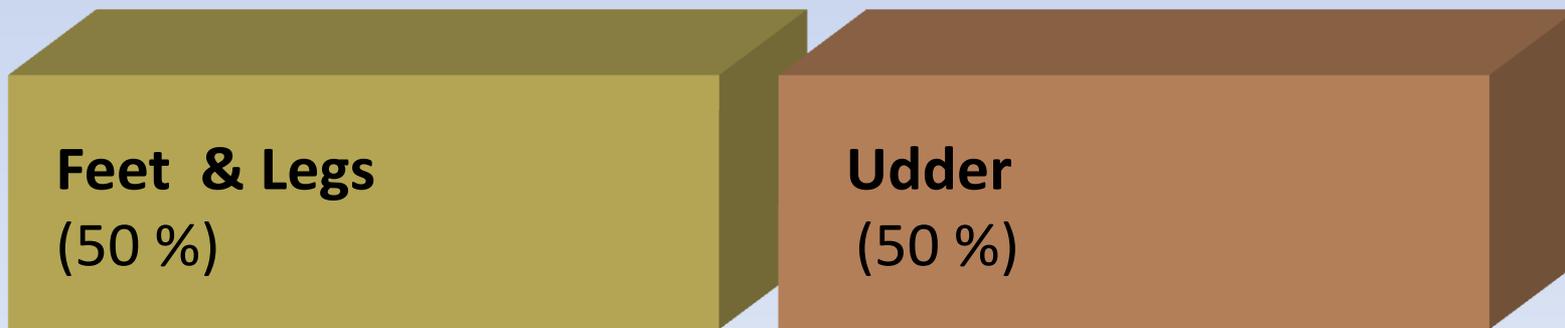




# Index of Production



# Conformation



# Red Bulls in TOP 100 according SIH (7/2012)

<b>No.</b>	<b>Bull</b>	<b>Sire</b>	<b>MS</b>	<b>BV Milk</b>	<b>BV % F</b>	<b>BV % P</b>	<b>Longevity</b>	<b>Feed &amp; Legs</b>	<b>Udder</b>	<b>SIH</b>
1	JERUDO ET	JEROM	RUDOLPH	672	0.32	0.18	127	123	108	135.0
2	SENIOR	MARTINUS	LORD LILY	598	0.48	0.30	142	87	84	130.4
3	TOCAR	REDFORD	LUCKY LEO	623	0.40	0.31	131	109	104	123.5

# The last 16 years

**Significant changes in the system of housing, nutrition (TMR), welfare and breeding**

- **The milk yield increase 263 kg per year (8869 kg BW+RW)**
- **The number of dairy cows decreased by 47 % (355 thous.)**
- **The share of H cows increase by 23% (H 57%, Fleckvieh 43%)**
- **The number of cows in one herd increased by 60 % (239 cows)**
- **The age of 1st calving reduced by 3 months (25 months 21 days)**
- **Calving interval is longer by 19 day (417)**
- **The number of lactation per live is same – 3 lact.**
- **The live production is 26560 kg M**

**Thank you for your kind attention**

[www.holstein.cz](http://www.holstein.cz)