

Dual Purpose Breeding Strategy

Czech Fleckvieh Breeders Association 

Dr. Josef KUČERA

Topics

- ✓ **Dual purpose in figures**
- ✓ **Breeding programmes /Genetic evaluation**
- ✓ **Photogallery**
- ✓ **Crossbreeding in dairy herds**
- ✓ **Future vision / THM**



✓ **Dual purpose in figures**



Dual purpose FV in figures (2004)

- ✓ Important breed in Europe
- ✓ Registered 120 000 farms with 12 000 000 animals
- ✓ Germany, France, Austria, Czech Rep, Swiss – about 80 % of all HB cows in Europe
- ✓ Herd size from 3 (Rumania) up to 220 (Slovakia)
- ✓ Average milk production about 6000 kg of milk, higher variability between the countries
- ✓ Highest share of FV: Austria (80 %), Serbia (80 %), Croatia (75 %), Slovenia (54 %)

Breeding programs

and philosophy of the Fleckvieh breed

- ✓ Dual purpose breed
- ✓ Excellent milk production (milk content)
- ✓ Very good beef production/ beef quality
- ✓ High growth rate
- ✓ High feed intake & feed conversion
- ✓ Fertility, Calving ease
- ✓ Vitality & health
- ✓ Metabolic stability
- ✓ Adaptability

Balance and performance!





Dual purpose FV in figures (EVF 2002)

2002 <i>Country</i>	<i>Fleckvieh-Simmental population</i>		<i>Herd book breeding</i>		
	<i>Total number of Simmental Fleckvieh</i>	<i>Fleckvieh part in %</i>	<i>Herd book cows</i>	<i>Sim/FV breeders</i>	<i>Ø cows per herd</i>
<i>Germany</i>	3 996 450	28%	655 860	21 428	31
<i>France MON</i>	700 000	16%	181 723	4 555	40
<i>France SIM</i>	27 000	0,3%	7 630	892	16
<i>Italy</i>	140 000	5%	44 186	4 189	11
<i>Serbia-M.</i>	1 550 000	80%	40 000	17 000	5
<i>Croatia</i>	162 748	75%	72 915	19 405	4
<i>Austria</i>	1 720 000	80%	252 000	18 200	14
<i>Romania</i>	1 305 300	36%	72 000	20 000	3
<i>Switzerland SIM</i>	70 000	5%	25 900	1 700	15
<i>Switzerland FT</i>	250 000	16%	90 800	6 000	15
<i>Slovakia</i>	180 000	30%	48 000	250	220
<i>Slovenia</i>	235 101	54%	32 768	4 021	14
<i>Czech Republic</i>	863 000	52%	184 650	1 296	148
<i>Hungary</i>	72 000	18%	7 800	3 140	23
Total ca.	11 375 000		1 720 000	121 000	14



Dual purpose FV in figures (EVF 2002)

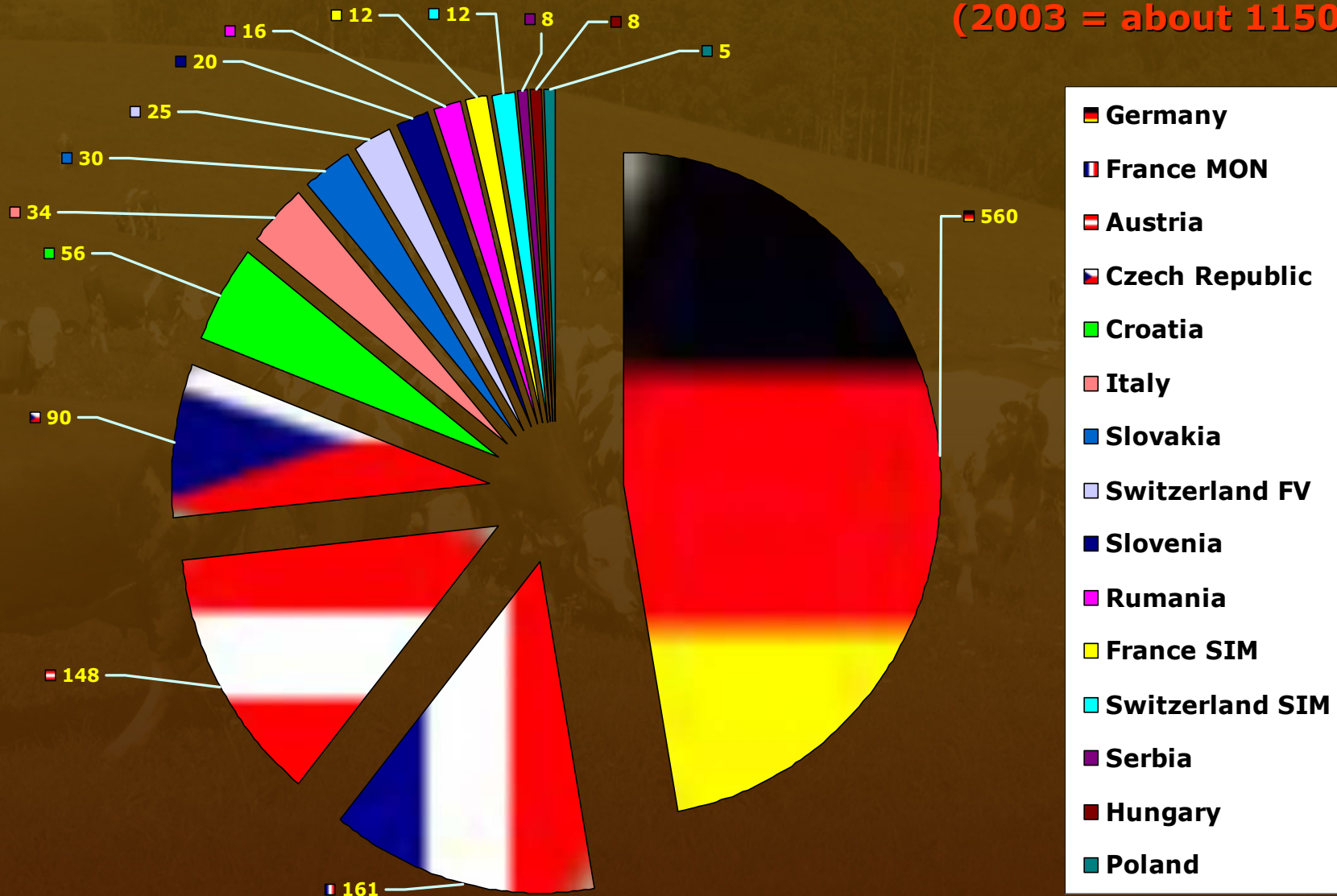
2002 country	DIM	Milk kg	Fat %	Fat kg	Protein %	Protein kg
Germany	315	6 469	4,16	269	3,51	227
France MON	292	6 527	3,87	253	3,44	225
France SIM	290	6 131	4,00	245	3,34	205
Italy	299	6 173	3,88	240	3,42	211
Serbia-M.	305	4 750	4,00	186	-	-
Croatia	305	4 175	3,91	163	3,36	140
Austria	305	6 074	4,18	254	3,44	209
Romania	319	3 541	3,82	135	3,16	115
Switzerland SIM	297	5 439	3,82	208	3,29	179
Switzerl. FT/MON	298	6 595	3,95	261	3,23	213
Slovakia	294	4 509	4,06	183	3,33	150
Slovenia	305	4 689	4,26	200	3,39	159
Czech Republic	305	5 642	4,22	236	3,40	190
Hungary	292	5 136	4,00	206	3,45	177



✓ **Breeding programmes / Genetic evaluation**

Number of young bulls yearly tested

(2003 = about 1150)



Breeding programm – Dual purpose FV

FV population – cows

TOP 5 % - sire dam

Male calf – own performance test

Young sire – progeny testing

(800 – 1000 ID per bull)

Prooven bull

Milk performance

Milk, fat, protein, SC,
persistency

Beef performance

Daily gain, carcass value
carcass classification

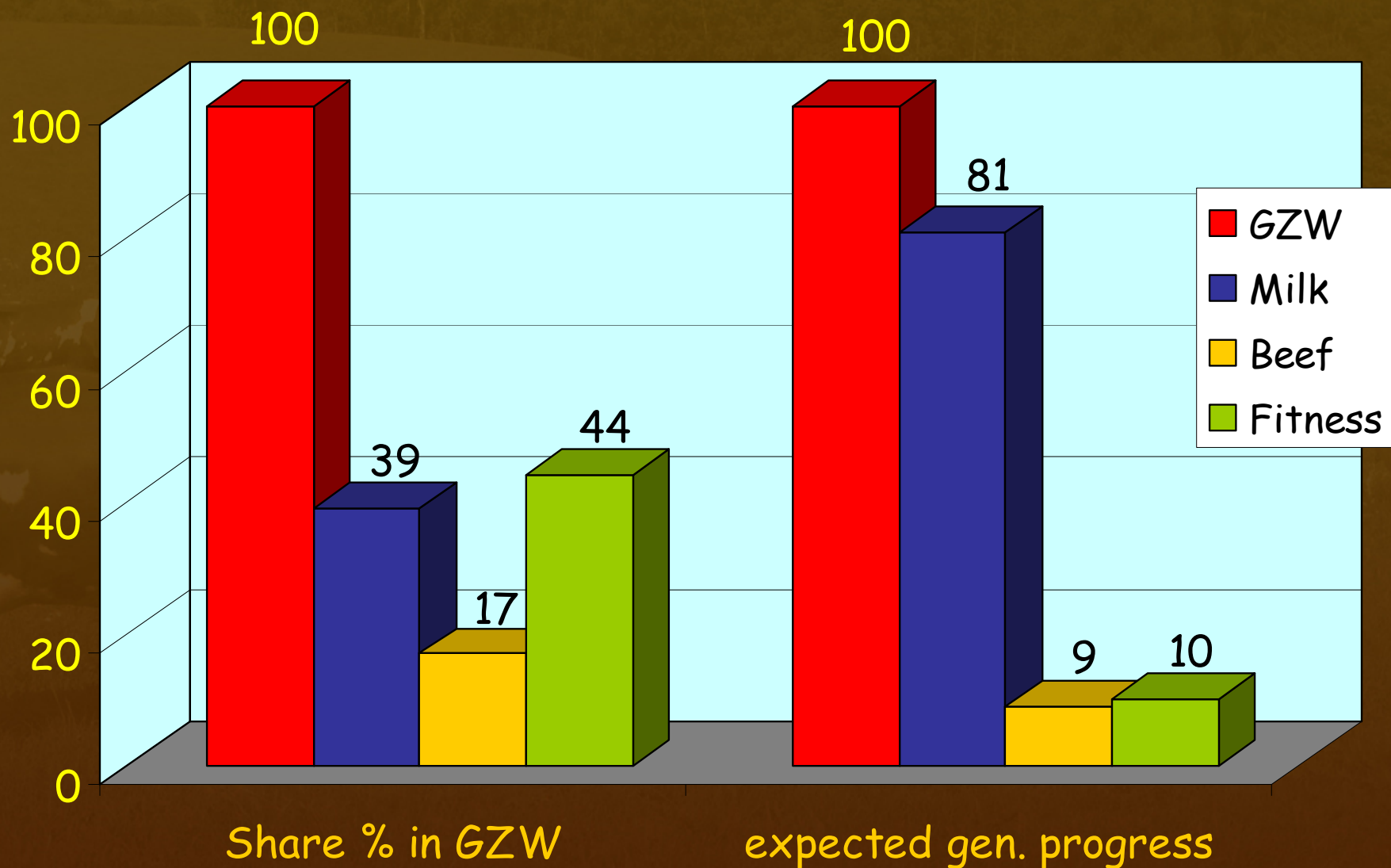
Fitness

calvin easy, stillbirth,
longevity, fertility,
health status,
hereditary diseases

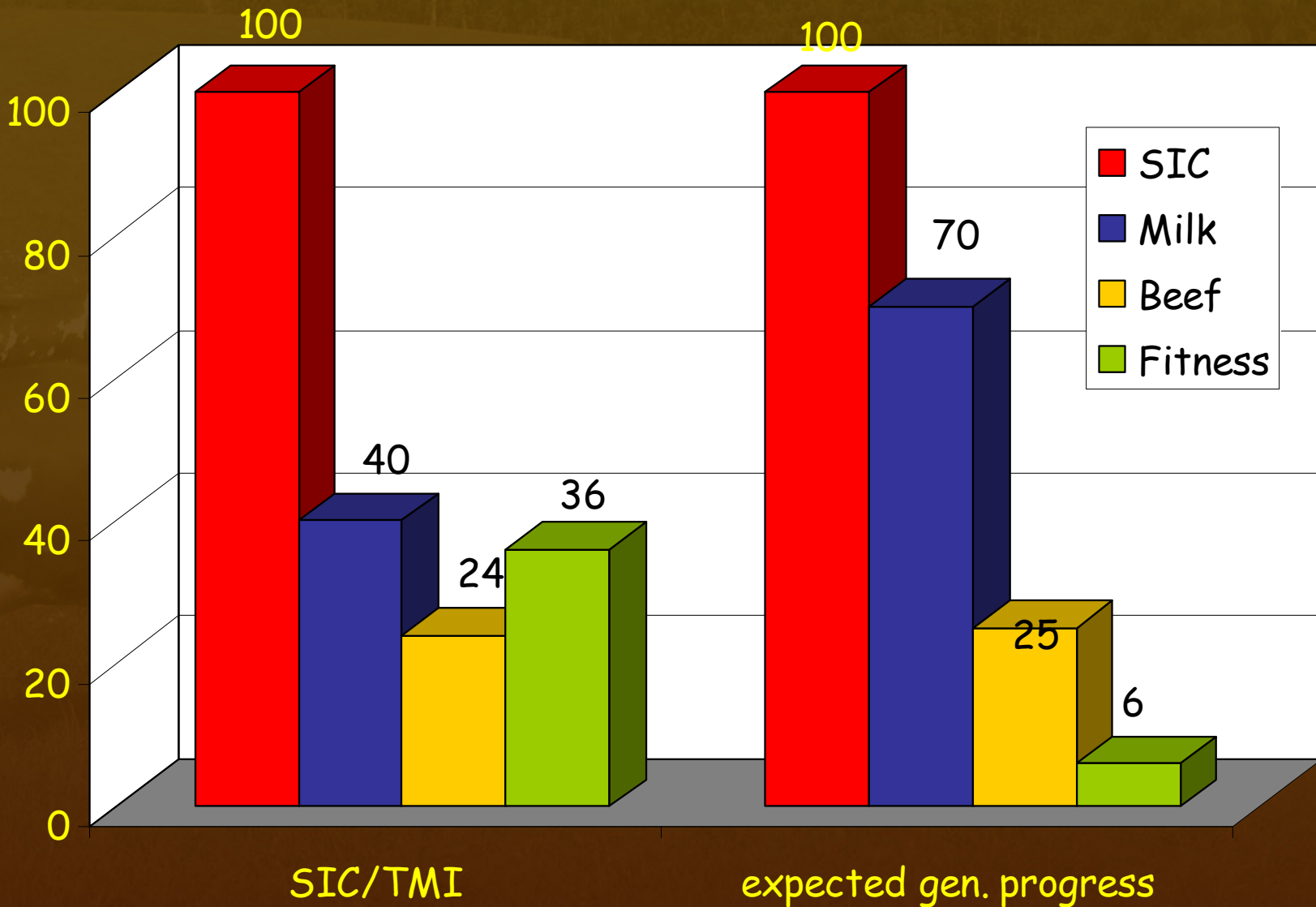
Type

type classification

GZW(TMI) Fleckvieh – Austria+Germany



GZW(TMI) Fleckvieh – Czech Republic



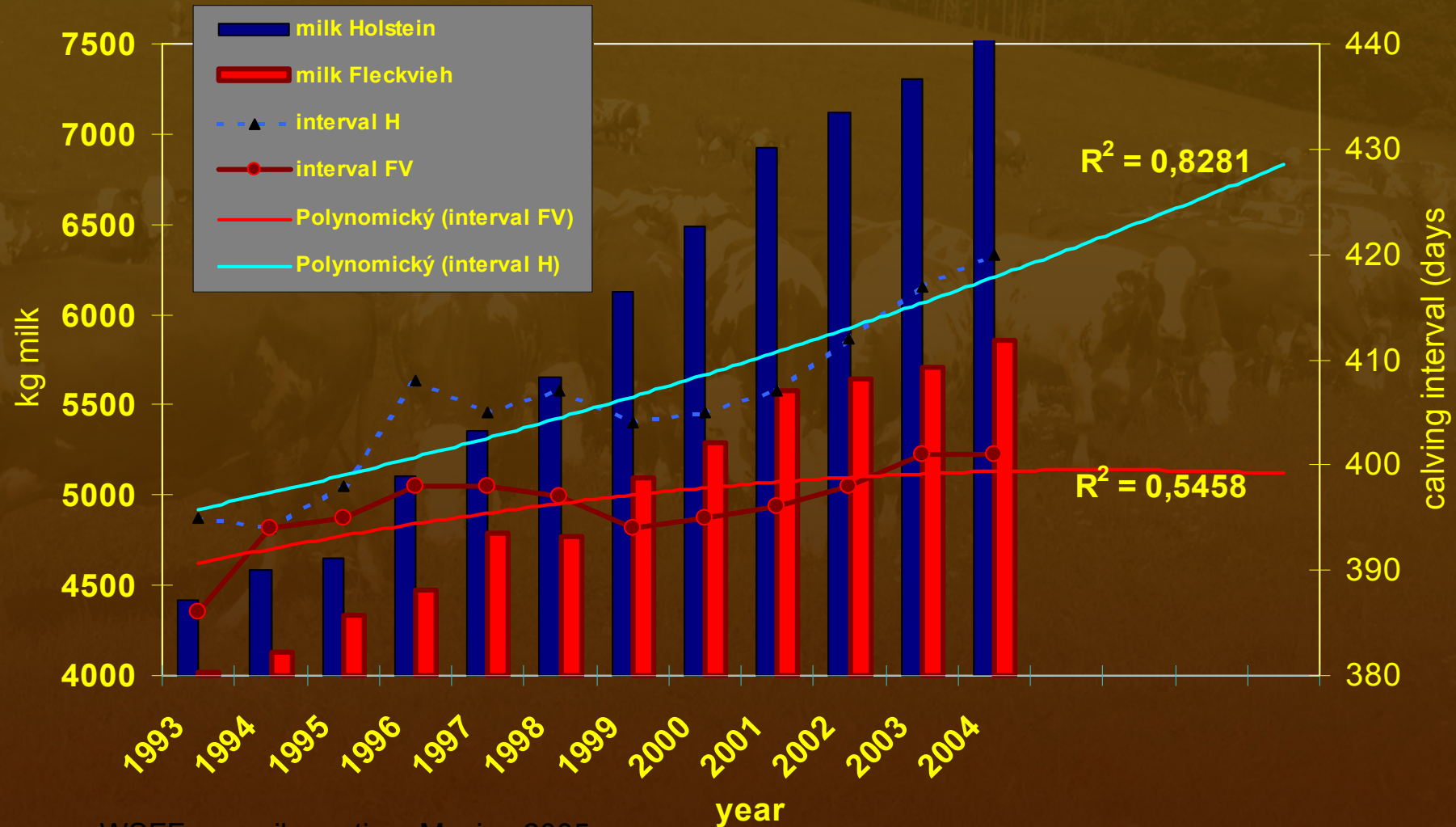
Total merit index – relativ weights of traits

	AT/DEU	FR - Mo	IT	CH - SIM	CH-FT/MON	CZ
Milk	39	50	53	35	45	40
Beef	17	-	27	20	10	24
Fitness	44	37,5	10	25	25	36
Type	-	12,5	10	20	20	

Source: Fürst, 2002

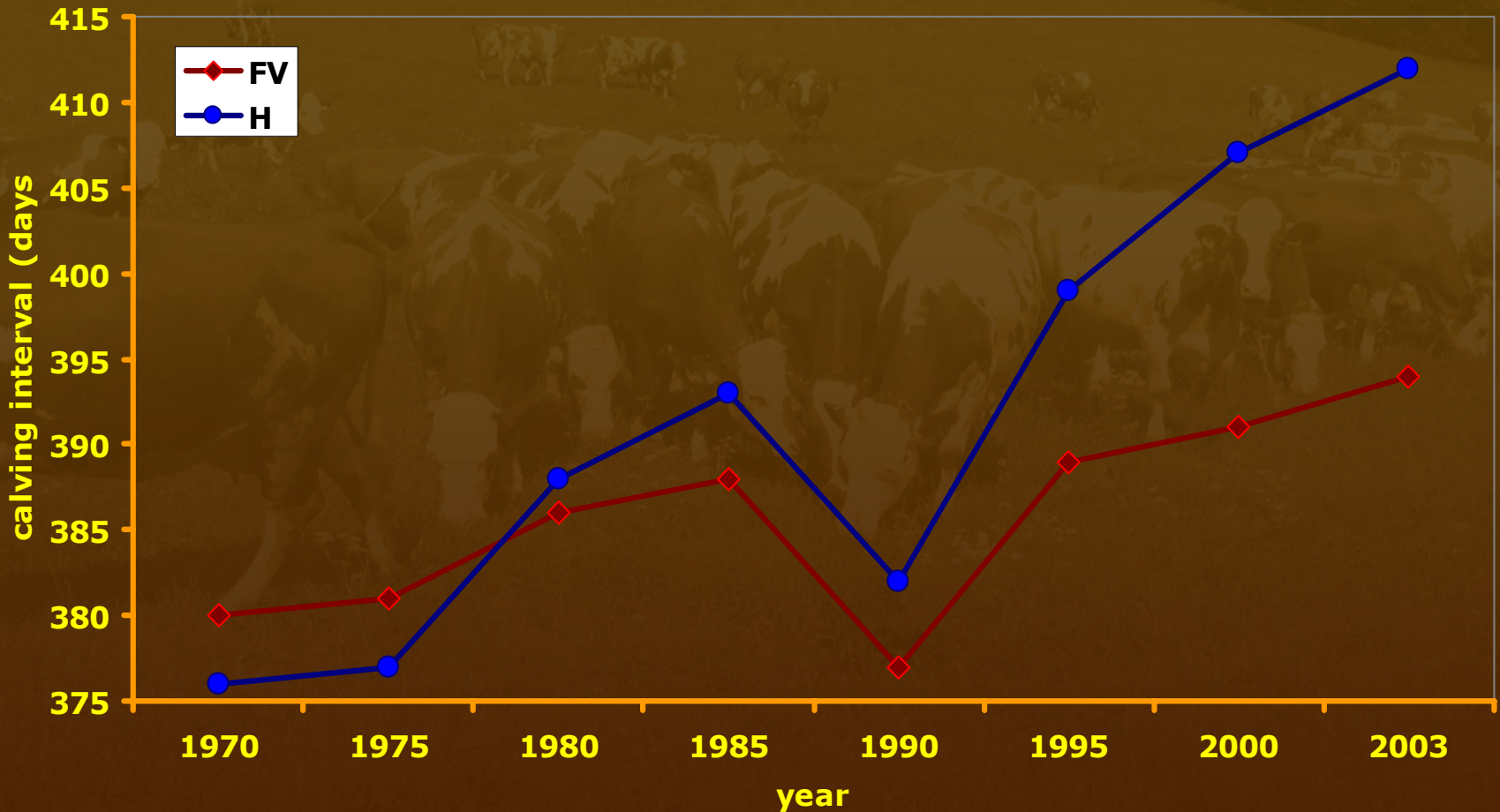
Milk production and calving interval

in Holstein and Fleckvieh (Czech Republic 1993-2004)



Calving interval in Fleckvieh and Holstein

(Germany, source: LKV Munich 2004)



Common projects

- ✓ **EURO Test**
- ✓ **System 97 – type classification**
- ✓ **DE-AT genetic evaluation**
 - ✓ **Type with Italy**
 - ✓ **Beef with Hungary**
 - ✓ **working on implementation of CZ do the common gen. evaluation**
- ✓ **BOVMAS - MAS incorporation**

A photograph of a herd of black and white cows grazing in a field. The background shows a line of trees under a hazy sky. The image is overlaid with a semi-transparent brown filter.

✓ Photogallery

Austria



Czech Republic



WSFF council meeting, Mexico 2005

Germany



Hungary



Italy



Giorgio Sordi

Slovak Republic



Swiss - Simmental



WSFF council meeting, Mexico 2005

A photograph of a herd of dairy cows grazing in a field. The cows are scattered across the foreground and middle ground, some facing the camera and others with their backs to it. The background shows a line of trees under a hazy sky. The entire image is overlaid with a semi-transparent brown filter.

✓ Crossbreeding in dairy herds

When you realize ...

you are riding a dead horse, get off..



Red Cloud
Ogalala Sioux

© Bavarian Fleckvieh Genetic

Prof. Leslie Hansen



Dairy Cattle Genetics
Department of Animal Science / University of Minnesota

Holstein International 2004/8

„Holsteins are too inbred, too large, don't reproduce well enough and don't live long enough. A smaller, easier-to-maintain cow is needed. Future Holsteins may look more like they did in the 1960's, with a little more roundness and flesh than today's model.“

He predicted that in 10 years time, a majority of Holstein calves would be crossbred.

Crossbreeding around the world ...

- ✓ First info: Germany (northern part)
- ✓ Prof. Hansen – USA – ongoing research
- ✓ South Africa – Thys Swarth (RI Elsenburg)
- ✓ Izrael (crossing with Montbeliarde)
- ✓ Canada (Nyhof farm – 12 000 herd average)
- ✓ Czech Republic (first cow in milk)
- ✓ Holland (Wageningen UNI started research)

South Africa



FV x
Jersey

Germany



FV x
HF
(FV50%)

Germany



FV x
HF
(FV 75%)



✓ **Future vision – take home message**

Take home message

- ✓ Dual purpose philosophy – the right way, even not in Europe only
- ✓ Excellent adaptability (AT-13 cows – SK-220 cows per herd)
- ✓ Milk-beef-fitness in one breed → „troublefree cow“ (prof. Krausslich)
- ✓ Future: more emphasis on fitness traits, beef quality, MAS
- ✓ Increasing demand for crossing in dairy herds



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News



- A new presentation from prof. Krausslich in download section!
- First Fleckvieh calf born at Nij Bosma Zathe, University of Wageningen, Holland
- FEDERAL FLECKVIEH SHOW

[more >>>](#)

E-journ@l



- Exporting Elsenburg into the dairy world 27.9.2005 by Dr. Carel Muller
- Crossbreeding research with Fleckvieh 27.4.2005 by Thys Swart
- Production comparison between crossbred and pure Jersey for 160 days in milk 25.2.2005 by Thys Swart

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Favourite Links of the Month



- Der fortschrittliche Landwirt...ON-LINE
- Zentrale Arbeitsgemeinschaft österreichischer Rinderzüchter (ZAR)
- Bayerische Landesanstalt für Landwirtschaft - Bavarian State Research Center for Agriculture
- Das moderne Rindvieh
- AFO Schau Traunstein 2005 - Waterberg progeny

[more >>>](#)

calendar

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Aktuell

Bundesfleckschau 2005 m... | 6.09.2005



Bundesfleckschau 2005 mit 200 Elitetieren 6. bis 10. September in Ried/Innkreis Es wird die Hauptrasse der österreichischen Rinderzucht (80% Rassenanteil) in ihrer gesamten V

[weiter](#)

PRAGA-AGRO ladet ein. | 6.09.2005



Die Züchter und Freunde des Tschechischen Zuchtverbands für Fleckvieh sollten sich das Oktobertreffen in Prag nicht entgehen lassen. Im Verlauf der diesjährigen Schau wird das Beste zu sehen sein, was

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E-journ@l

Züchterfest im Bezirk Gries... | 25.08.2005



Züchterfest im Bezirk Grieskirchen beim Kallhamer Kirtag Die von der Erzeugergemeinschaft Fleckviehzuchtverband Inn- und Hausruckviertel und von der Gemeinde Kallham organisierte Fleck

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Crossbreeding research with... | 27.04.2005

An intensive research with Simmentaler/ Fleckvieh on both Jersey and Holstein will be done officially by the Dept. Agriculture of Western Cape(South Africa). This decision was tak

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Werbung



Vota

100-Punkte Skala bei der Exterieurbeurteilung

Ja (17)

Nein (6)

Später (4)

**Thank you for your
attention!**

kucera@cestr.cz 