

Imported genetics as a basis of a sustainable development of beef cattle sector in Poland

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Content

- ❑ Cattle sector in Poland in the last 20+ years
- ❑ Initiation of the National beef cattle development programme: goals and assumptions

- ❑ Main breeds and import directions
- ❑ Development of purebred and crossbred population
- ❑ Current breed structure and regional distribution

- ❑ Key elements of the genetic improvement programme
- ❑ Performance of the most numerous five breeds

- ❑ SWOT analysis of the sector
- ❑ Strategy of the Polish Association of Beef Cattle Breeders and Producers

Cattle sector in Poland in the last 20+ years

1989

- ❑ Introduction of the market economy
- ❑ Breakdown of a public sector (state and cooperative farms)
- ❑ Withdrawing of milk subsidies – low profitability in dairy sector
- ❑ Substantial decrease in cattle population size

- ❑ As a result – substantial agricultural land became fallow

Beef cattle breeding programme in response to:

- ❑ Need to cultivate fallow lands
- ❑ Need to produce a high quality beef (consumption 16kg/capita)

Cattle sector in Poland in the last 20+years

Since 1989
substantial changes in dairy active population

- ❑ dual purpose black and white and red and white cattle systematically crossed with HF
- ❑ continuous increase of HF share in active population



- ❑ Since 2005 – new herd books for Polish Holstein-Friesian black and red varieties established

Further limitation to produce
high quality beef from a dairy herd

Cattle sector in Poland in the last 20+years

Need to develop beef cattle population

Obstacles:

- ❑ No single native Polish beef cattle breed
- ❑ Unsuccessful attempts to develop a synthetic beef line
- ❑ Lack of suitable breeding stock to initiate development of beef sector (bulls and semen used for commercial crossing in dairy herds)
- ❑ **No experience in managing beef herds**

National beef cattle development programme:

- Initiation of work by Prof. Henryk Jasiorowski
- 1994 establishment of the National Society of Beef Cattle Breeders
(at present Polish Society of Beef Cattle Breeders and Producers)
- First founder members:
 - Several dozen of breeders already involved in beef cattle

Official adoption of the programme by the Ministry in 1994



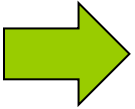
**Substantial financial support
for importing live animals, embryos and semen**

Goals and assumptions of the programme

In 1994

- 7.3 M cattle 40 heads/ha; no beef population

After 2000

- 1 M of cattle in a beef type (500.000 cows)
 - 10.000 purebreds (5.000 purebred cows)
- 
- Imports
& extensive
backcrossing**
- At least 20% of dairy population under commercial crossing
(700.000 of 3.5 M cows in 1994)

Assumption

- Continous support for suckling system in the EU

Main sources of imported genetics: world

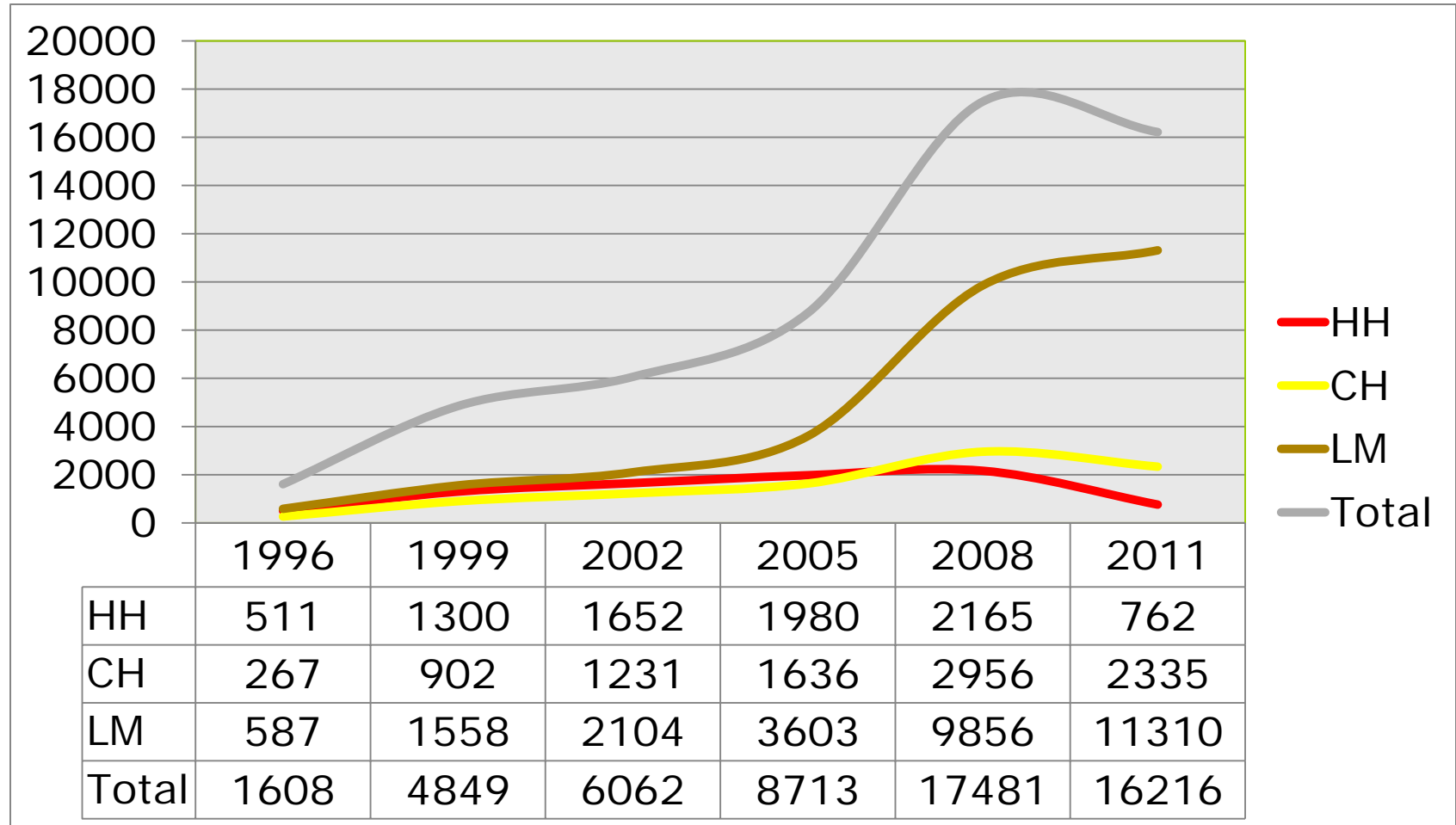
Political Map of the World, November 2011



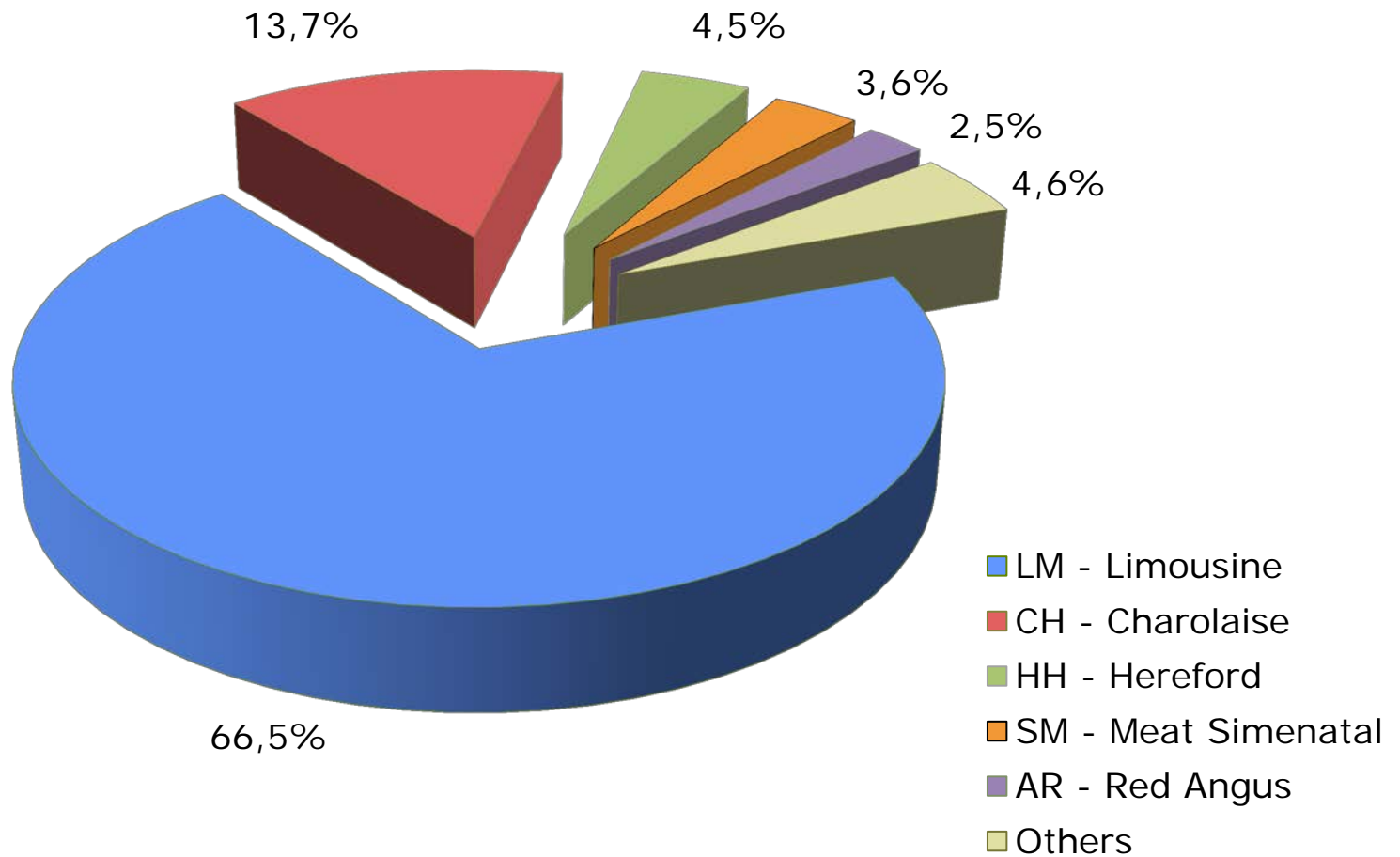
Main sources of imported genetics: Europe



Development of a purebred population

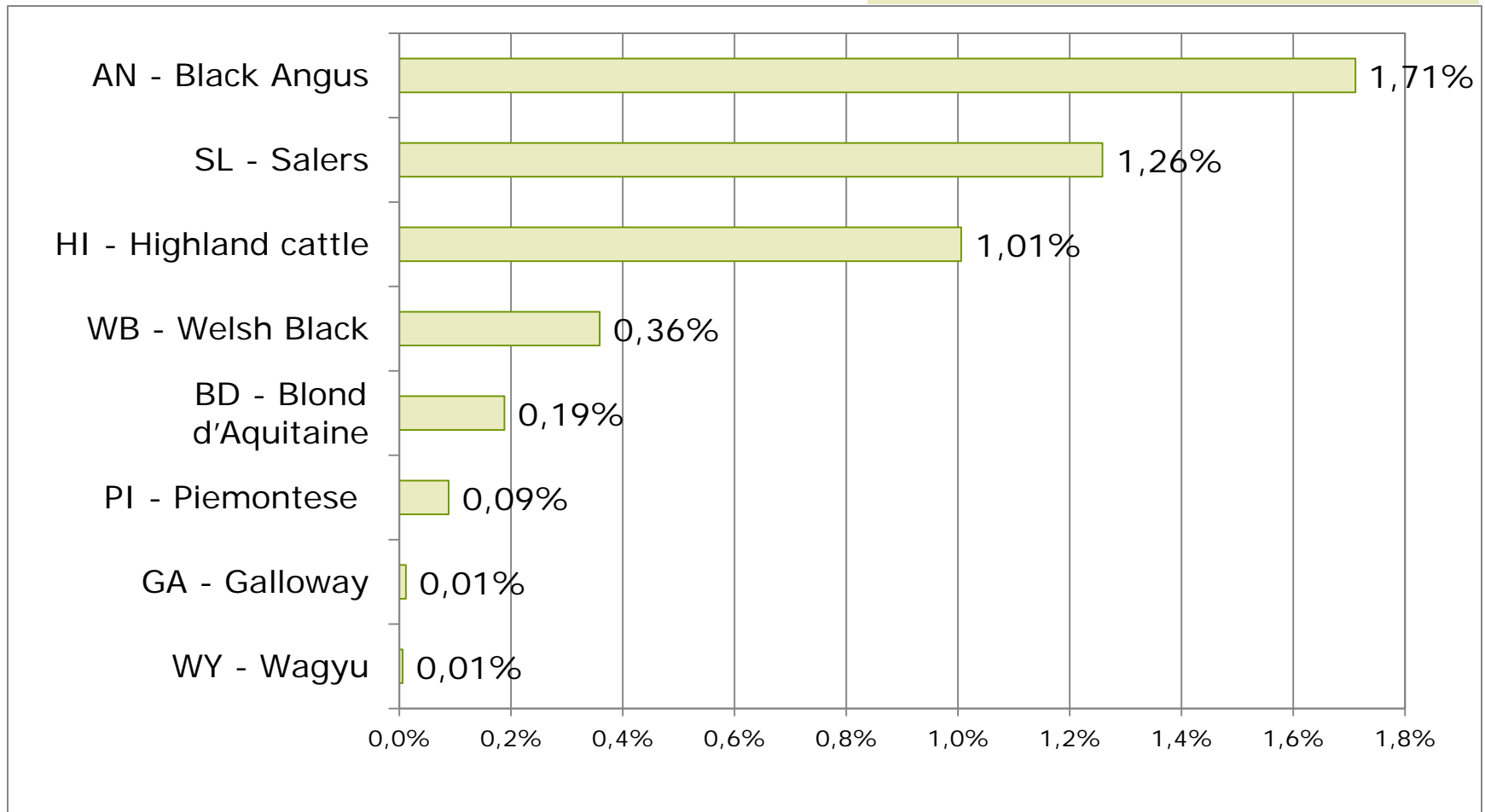


Structure of purebred population in 2011

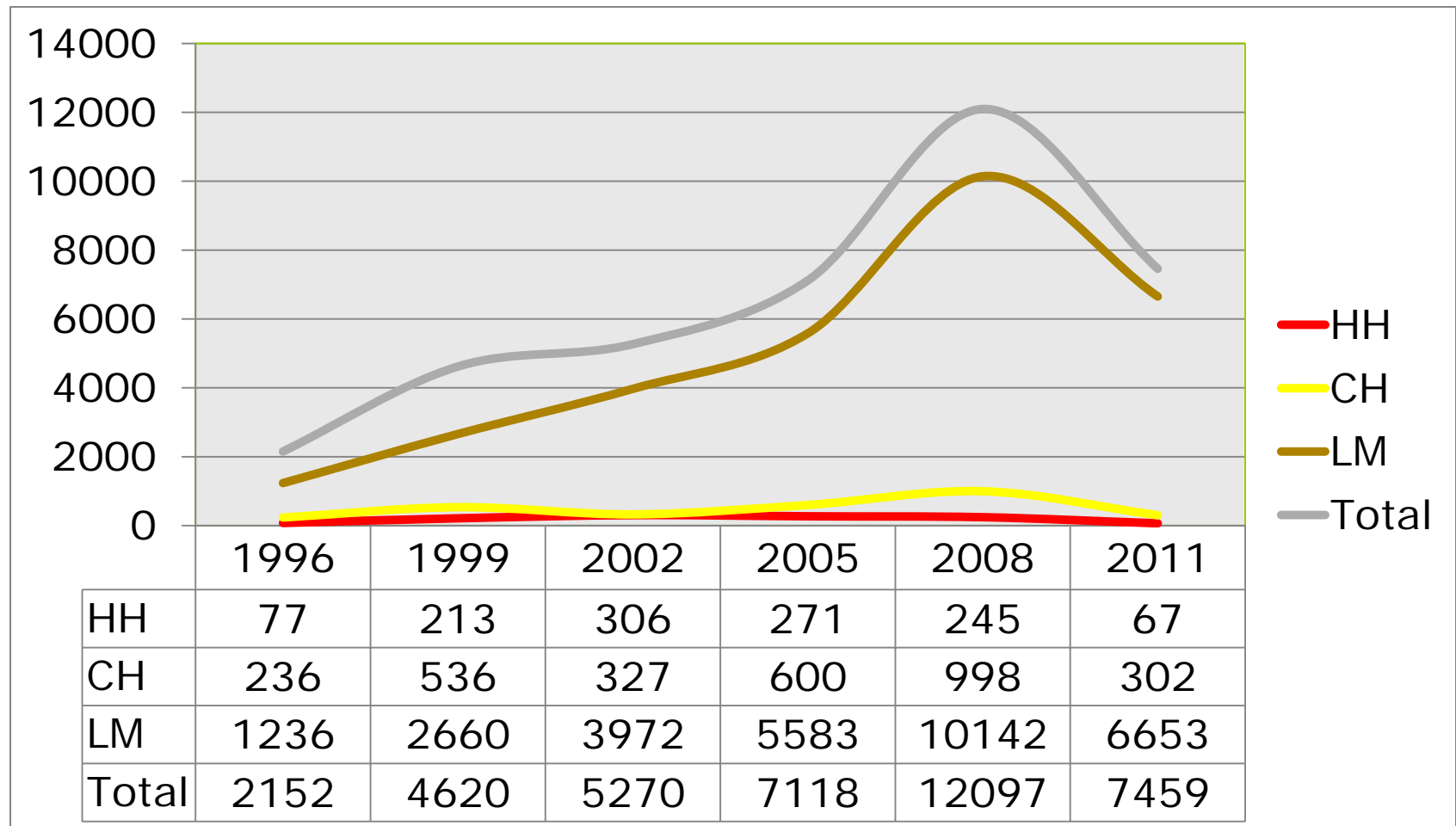


Structure of purebred population in 2011

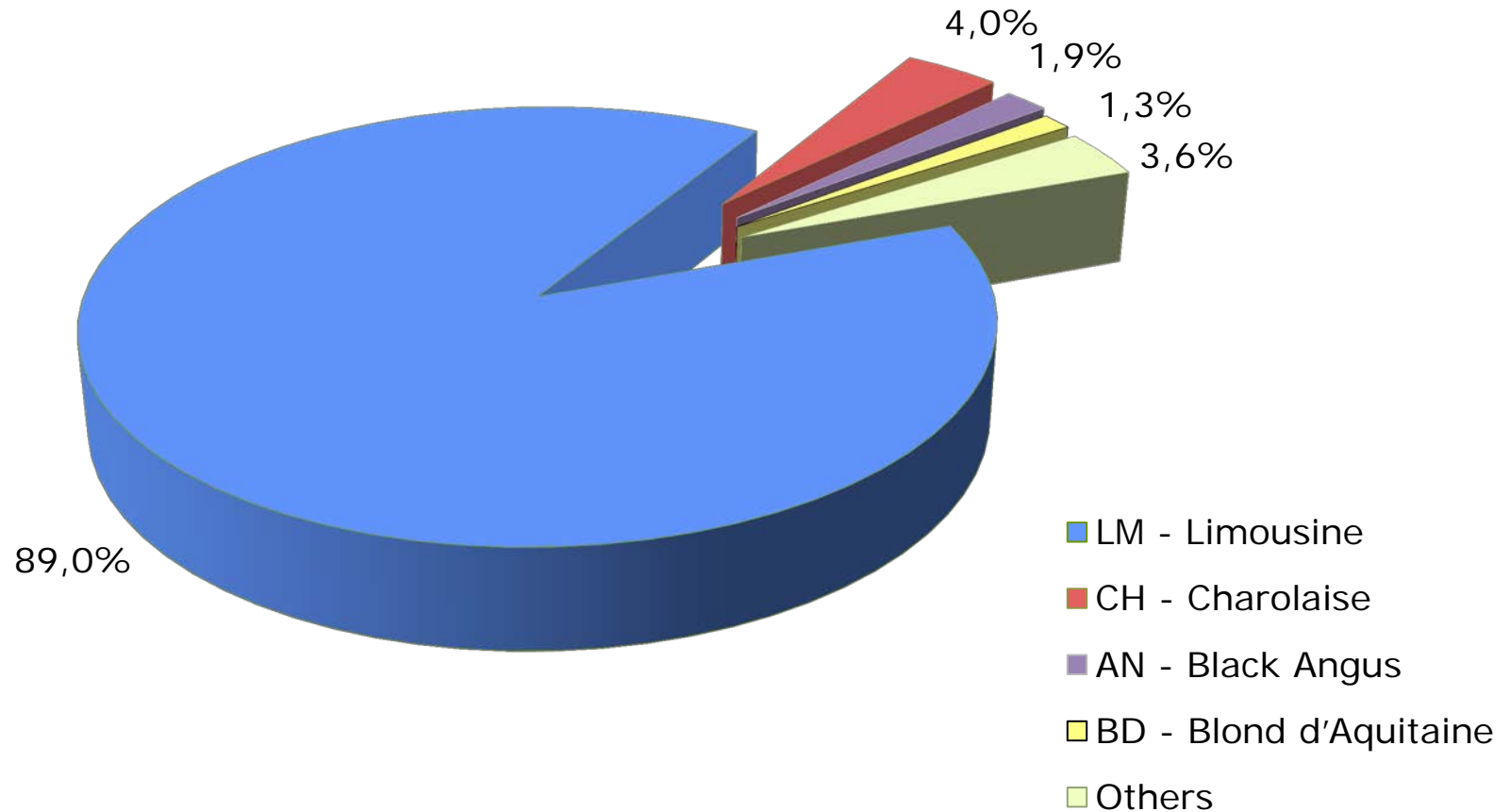
Other breeds: in total 4.6%



Development of crossbred population

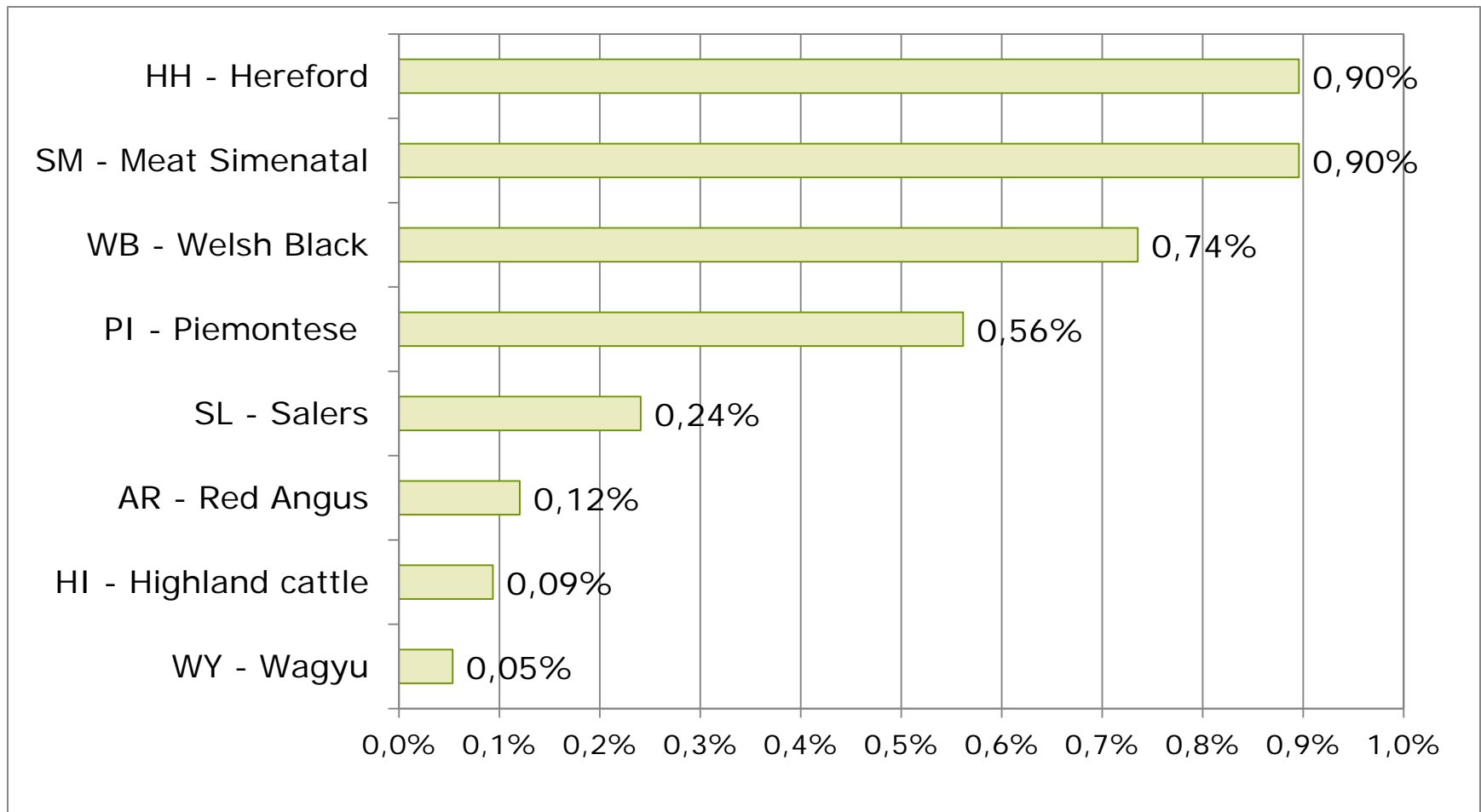


Structure of crossbred population in 2011

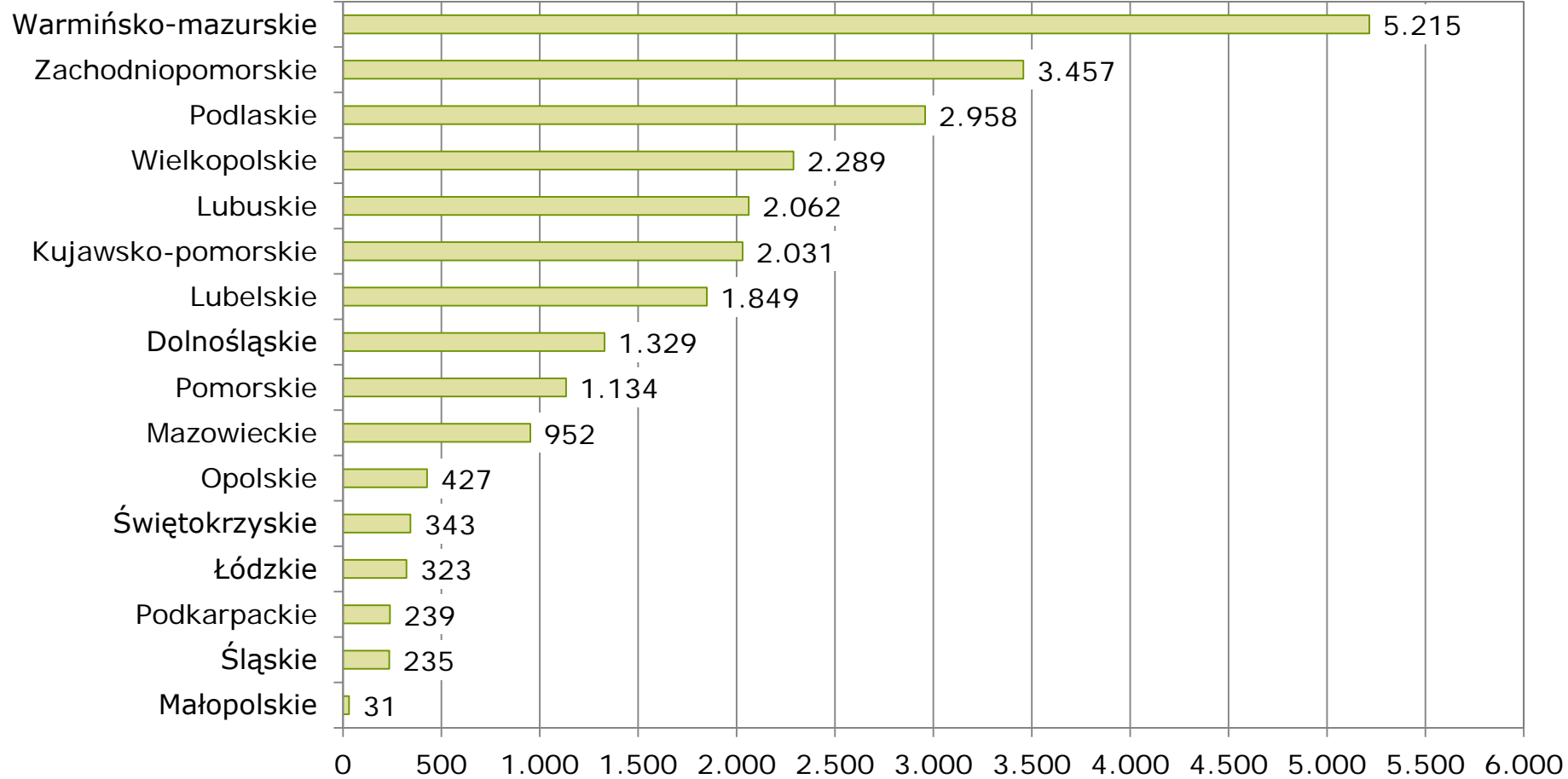


Structure of crossbred population in 2011

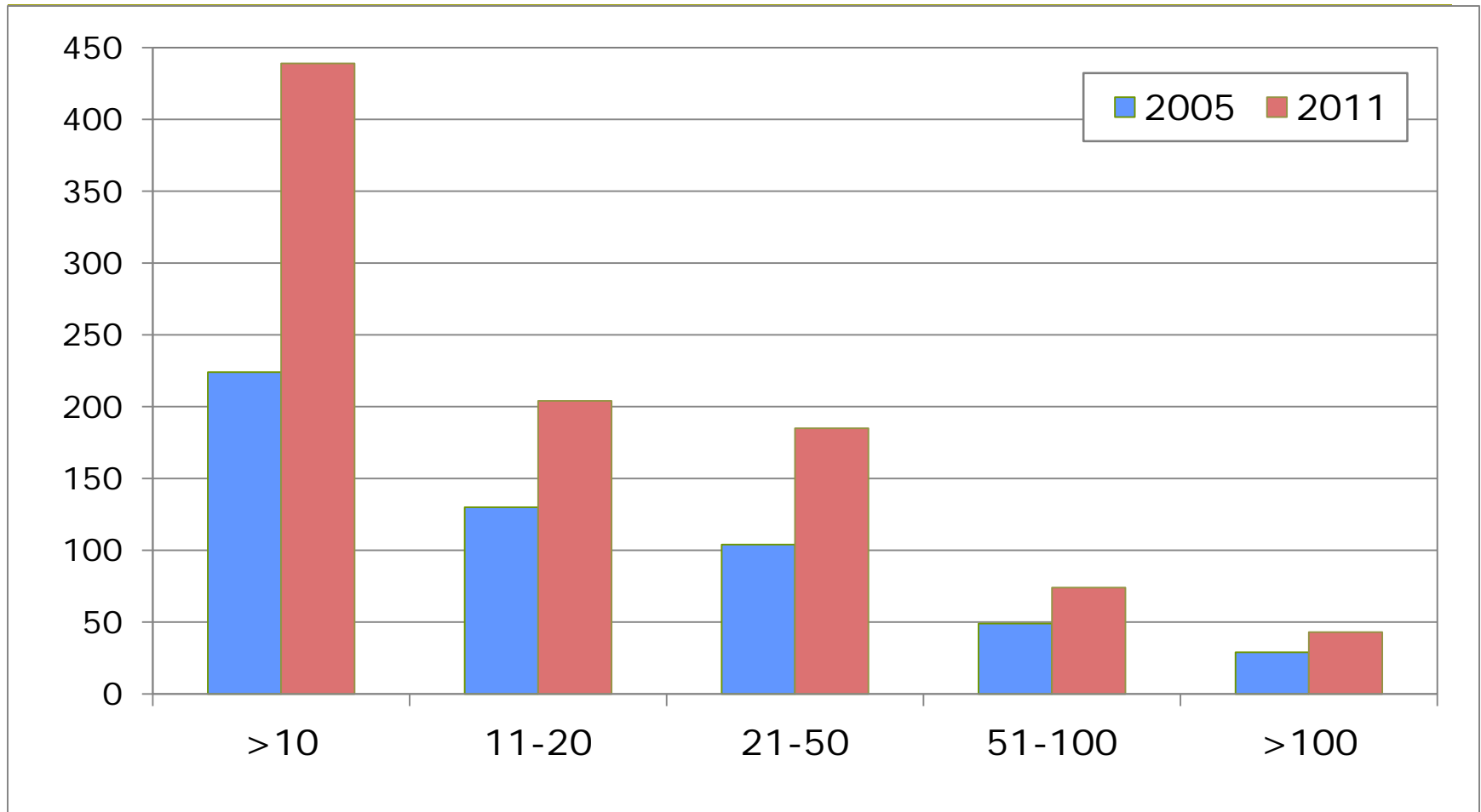
Other crossbreds: in total 3.6%



Regional distribution of beef cattle

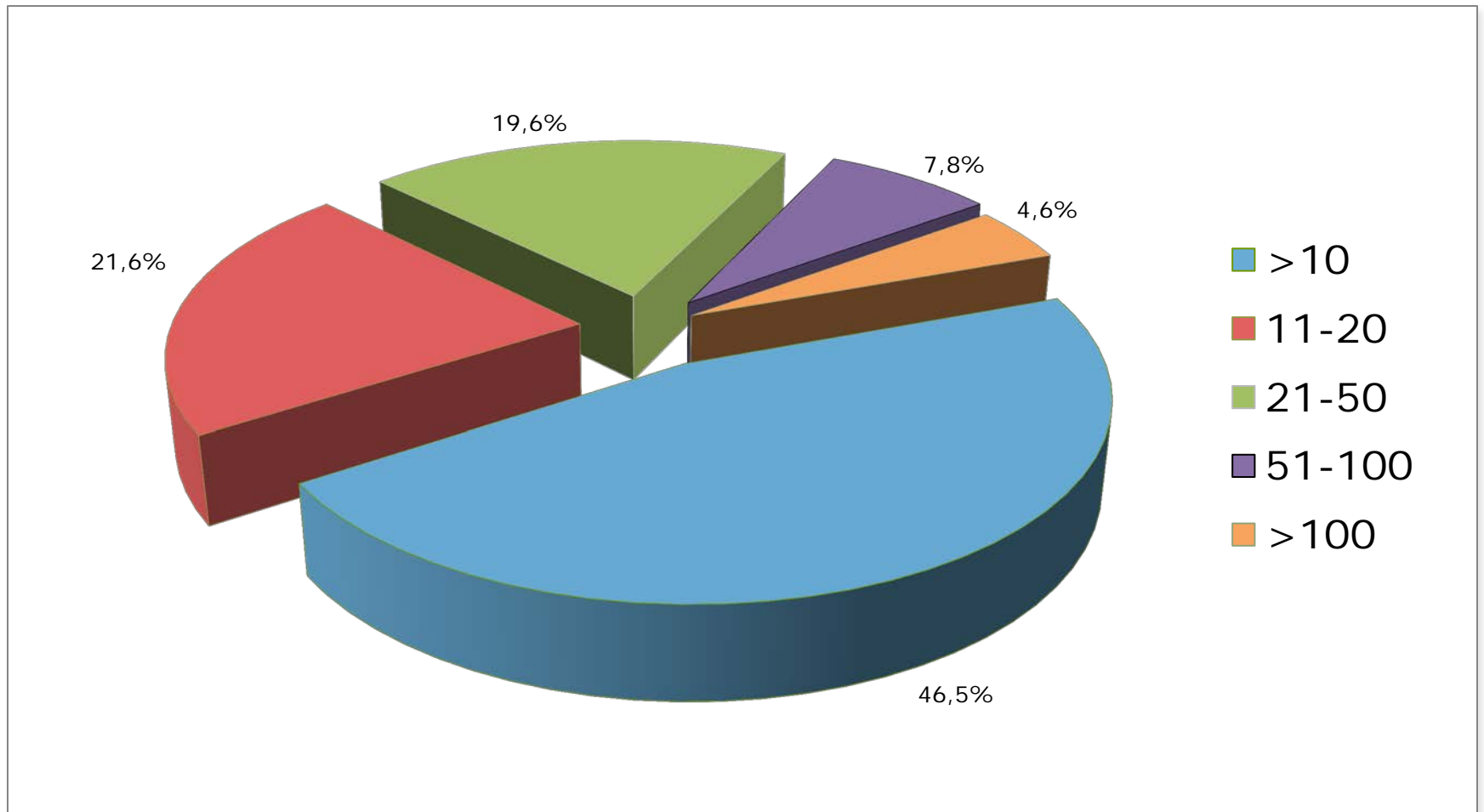


Herd size structure in 2005 and 2011



Average herd size: 2005 - 29,43 cows
2011 - 26,09 cows

Herd size structure in active population in 2011



Key elements of the genetic improvement programme



Genetic
improvement

mainly
through selection
of young bulls

Genetic improvement programme

Initially – genetic improvement via imports

2007 based on French system

- Individual performance evaluation based on an index including five traits:
 - Height in withers
 - Chest circumference
 - Standardised body weight at 210 days
 - Standardised body weight at 420 days
 - Muscle depth (ultrasound)

- Performance recording on farm

- Establishment of testing station considered too expensive at that time (capacity for 50 bulls; cost 10.000 PLN/bull)

Genetic improvement programme

2011

- Introduction of Mobile Exterior Evaluation System (digital)
- In total 19 traits in four groups:
 - Musculature (6)
 - Skeleton (7)
 - Functional traits (4)
 - Additional traits (2)

- At present performance evaluation and exterior evaluation considered independently

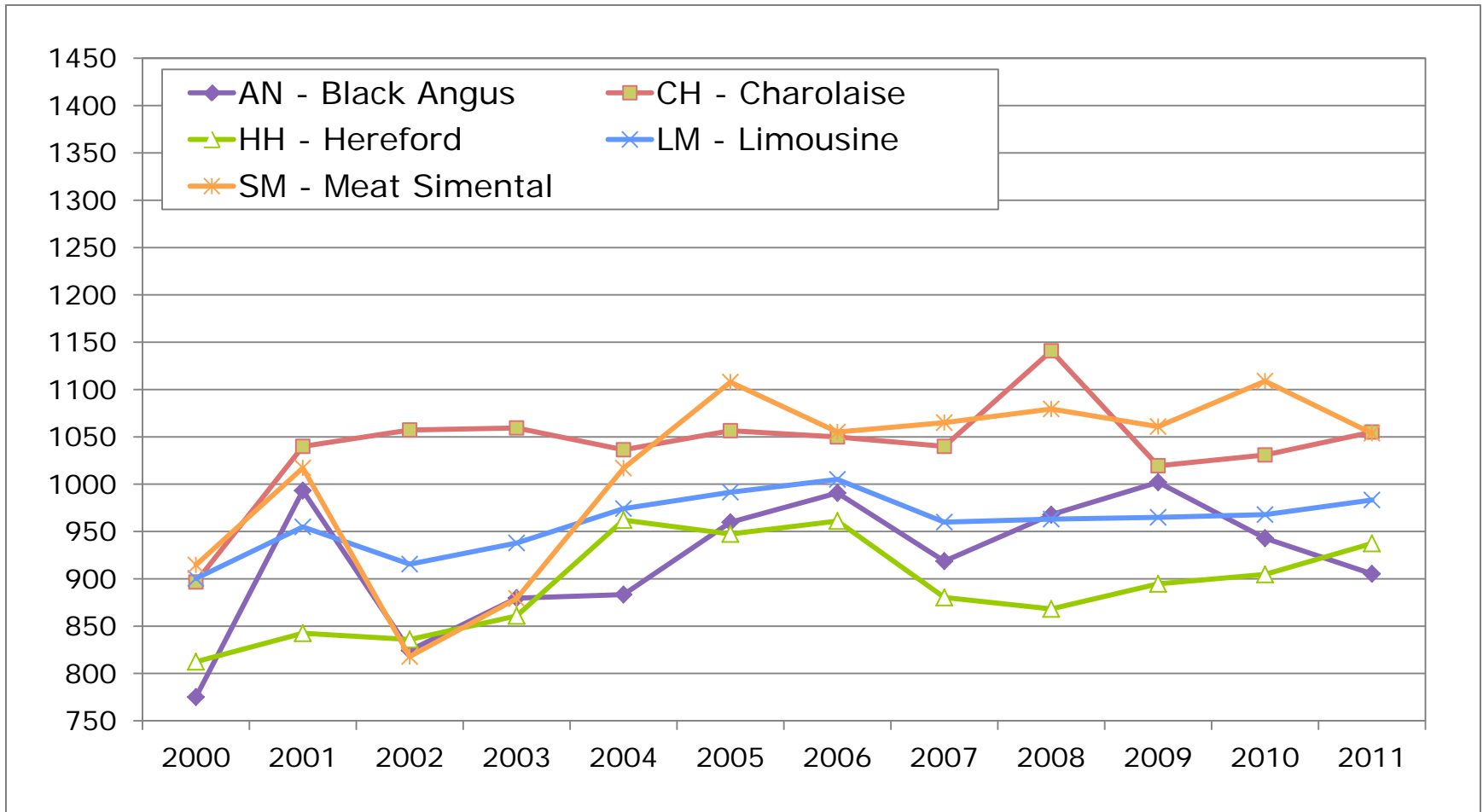
In future genetic improvement system will be the same as in France to allow better comparison of bulls

Performance of the most numerous five breeds

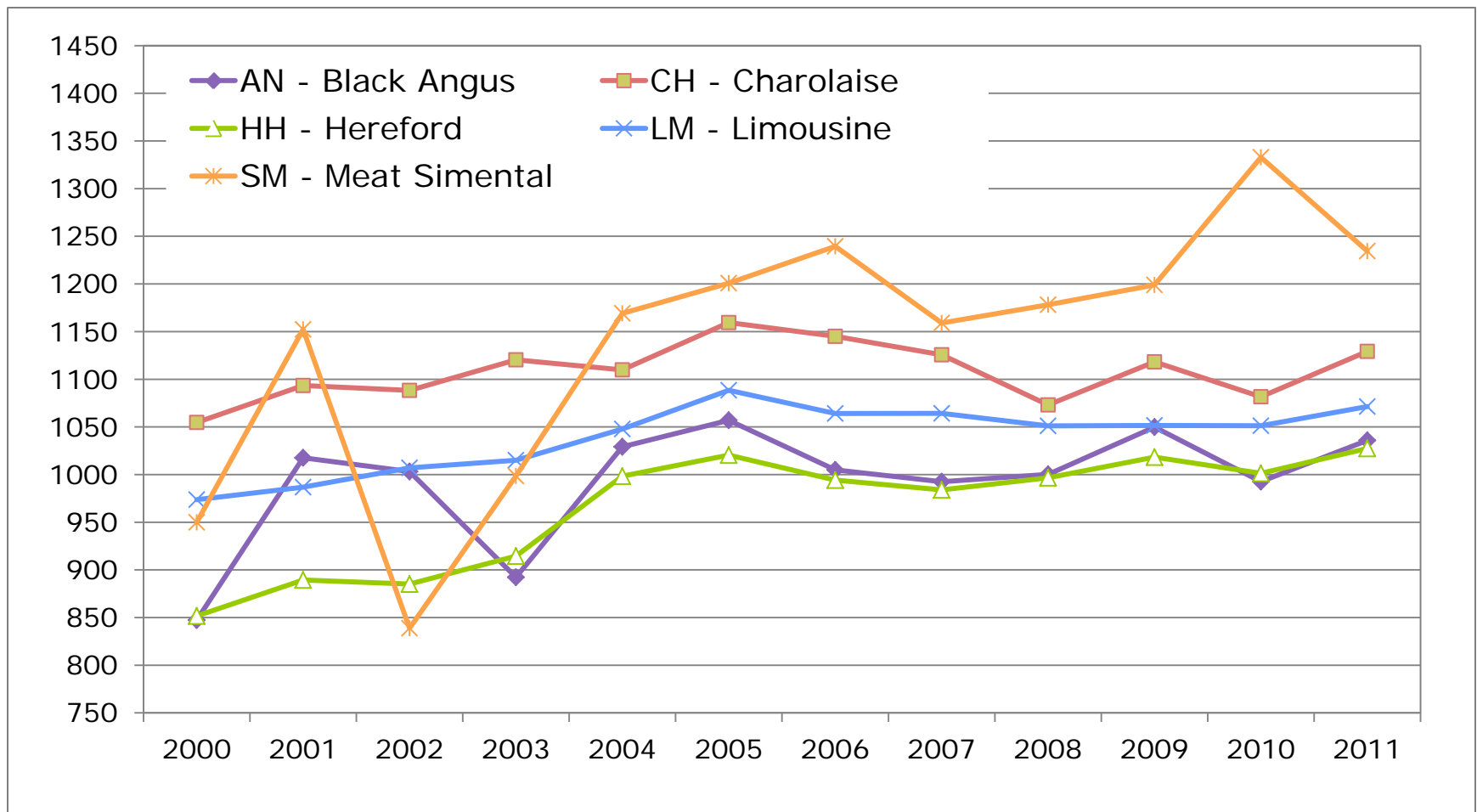


- Body weight and gain
- Reproduction performance
- Age structure in cow herd

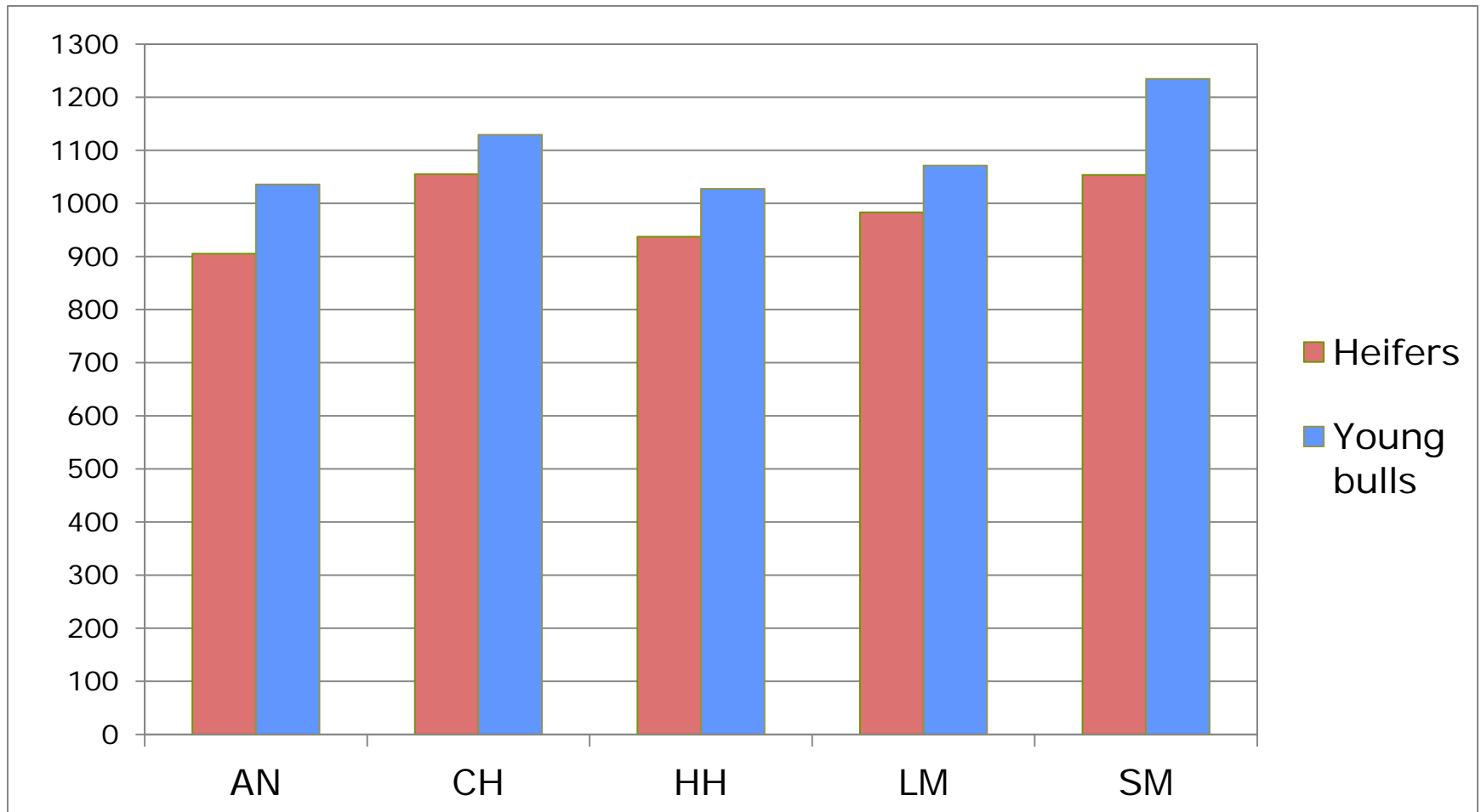
Growth rate till 210 days: purebred heifers



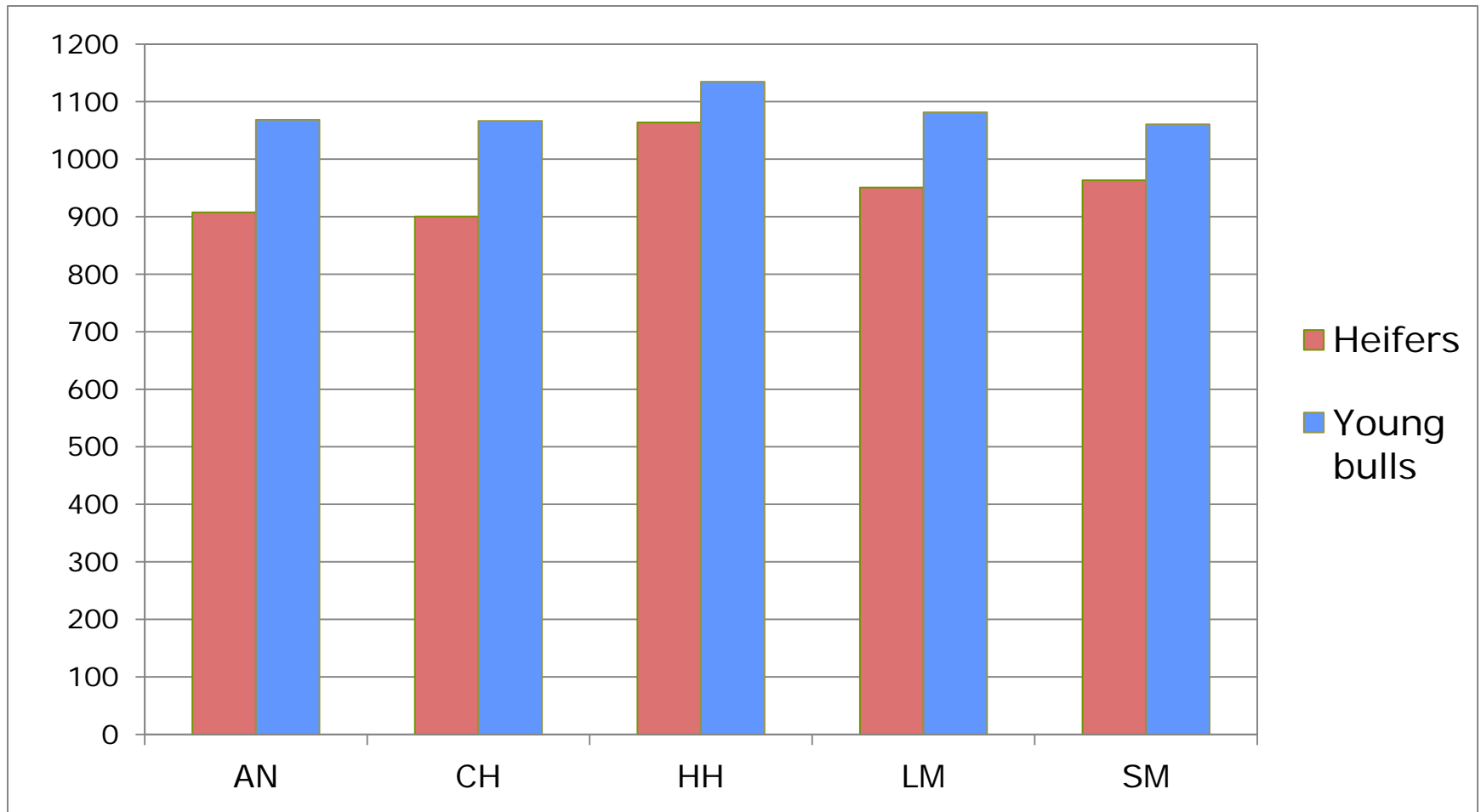
Growth rate till 210 days: purebred bulls



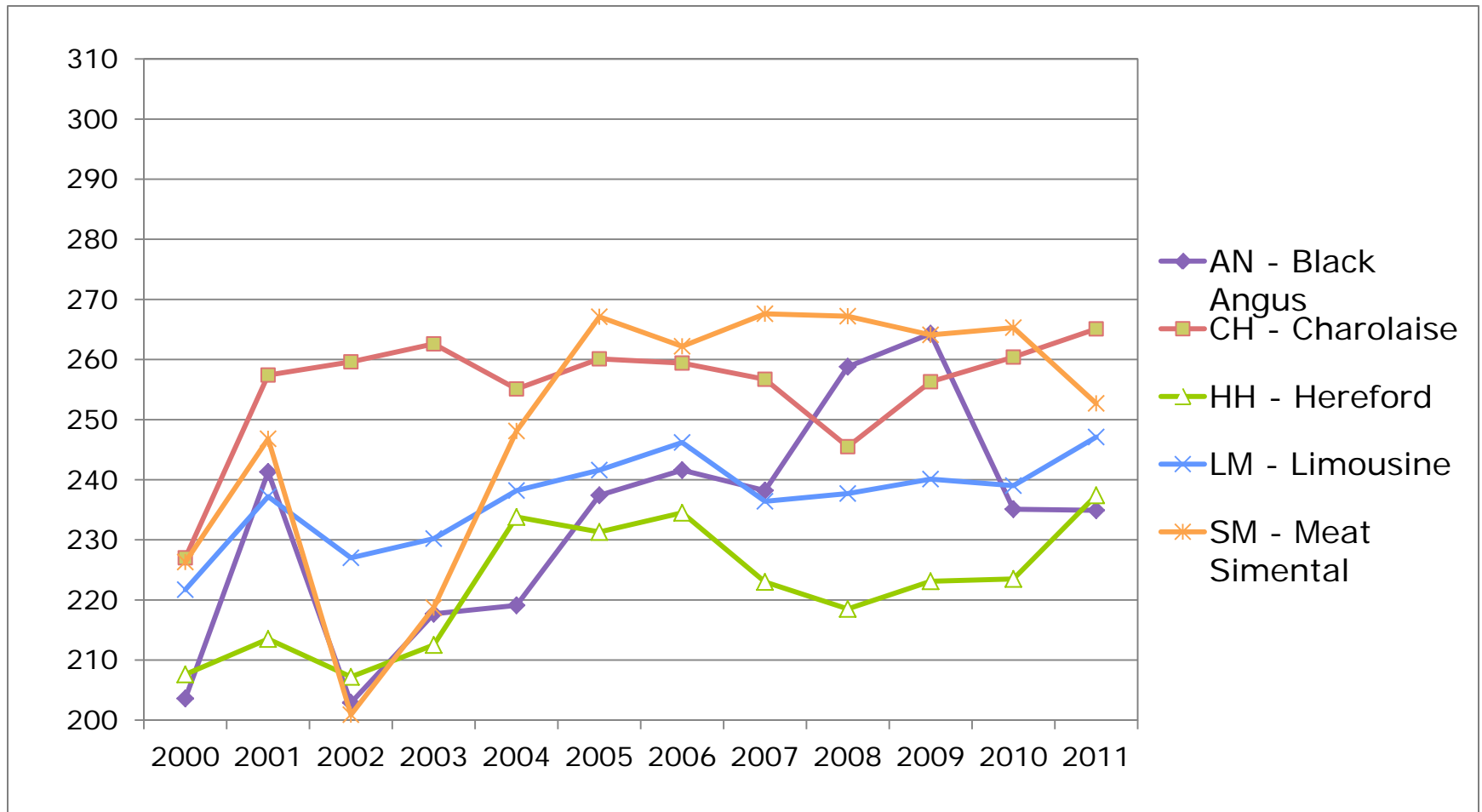
Growth rate till 210 days: purebreds in 2011



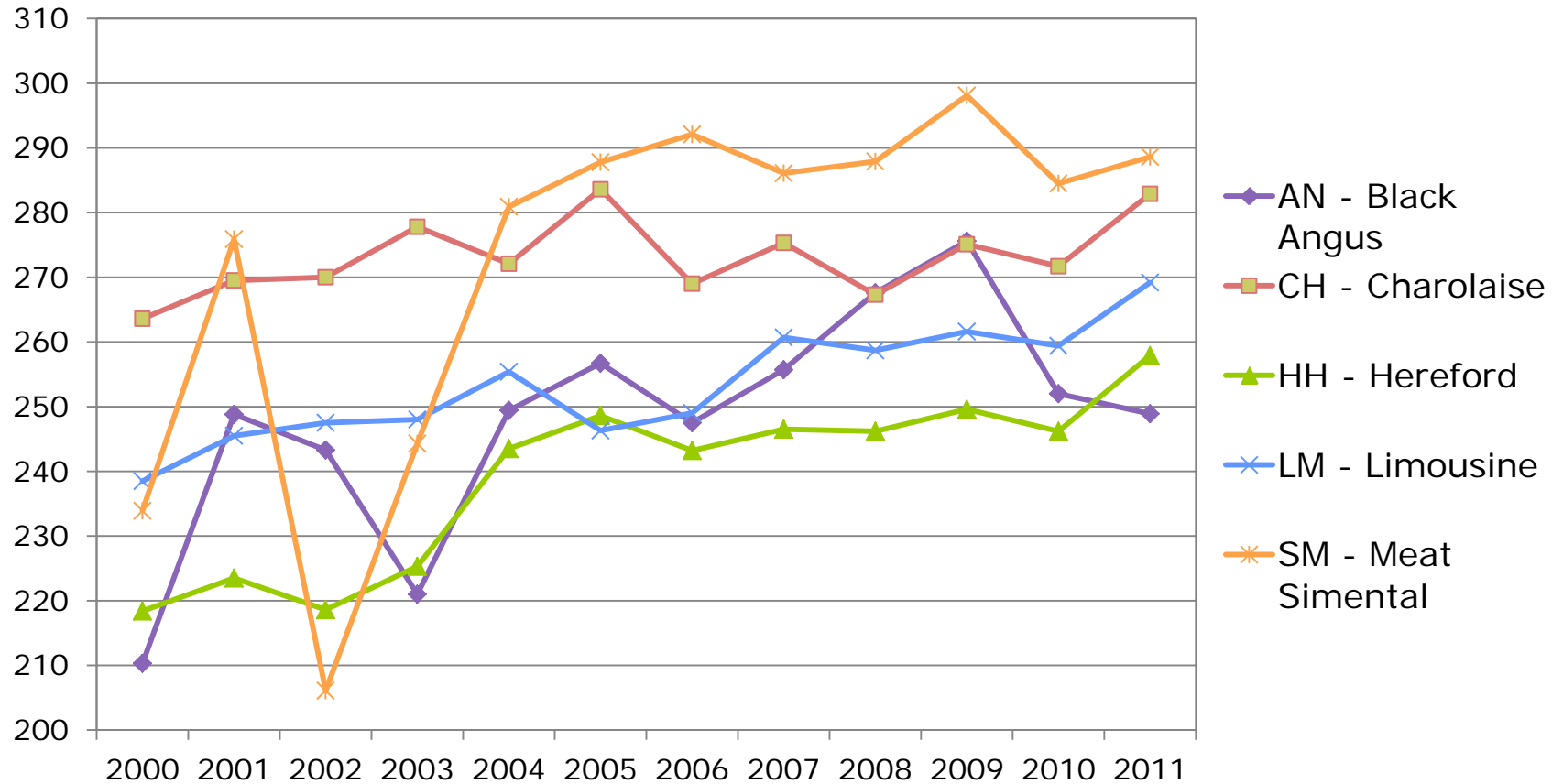
Growth rate till 210 days: backcrosses in 2011



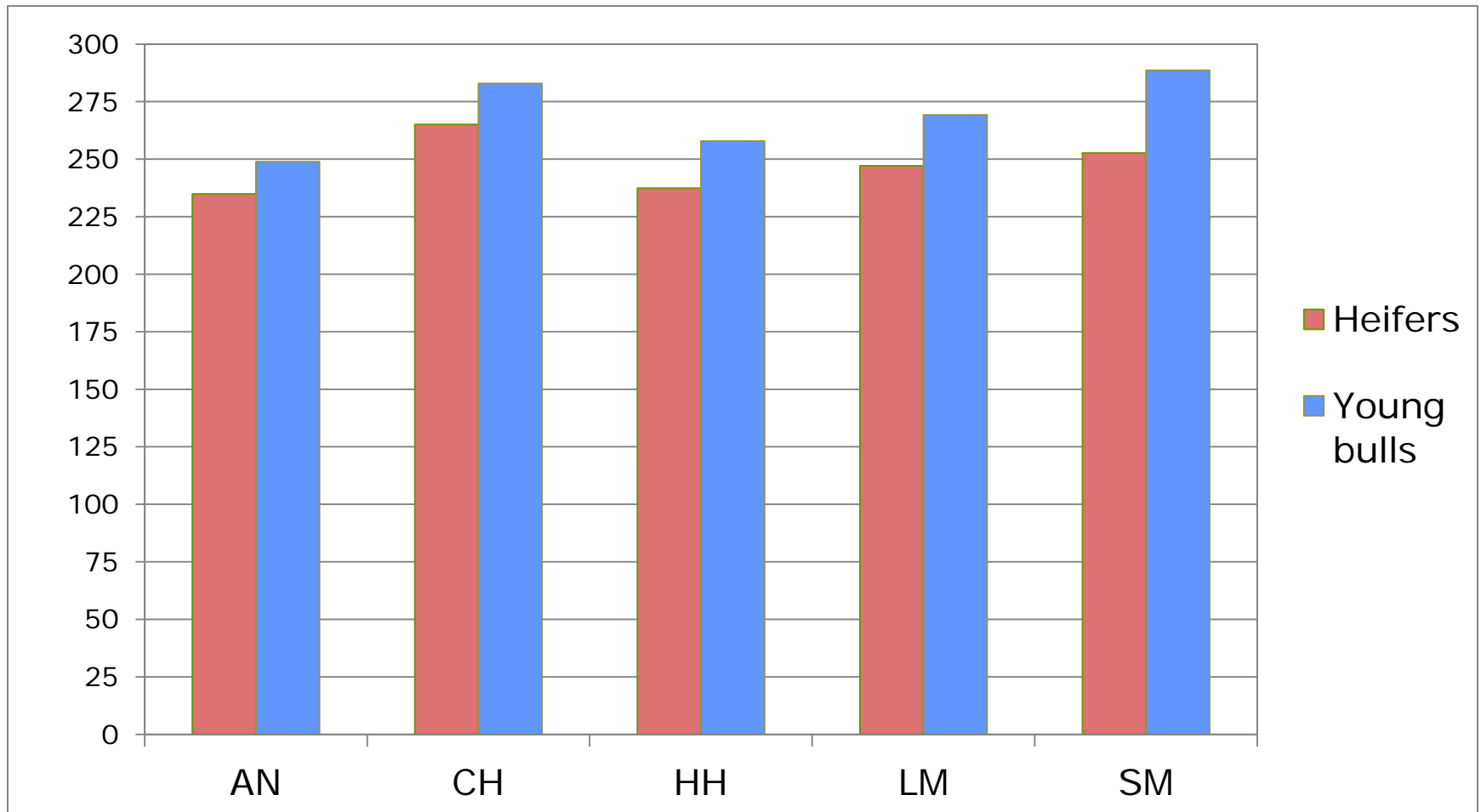
Body weight at 210 days: purebred heifers



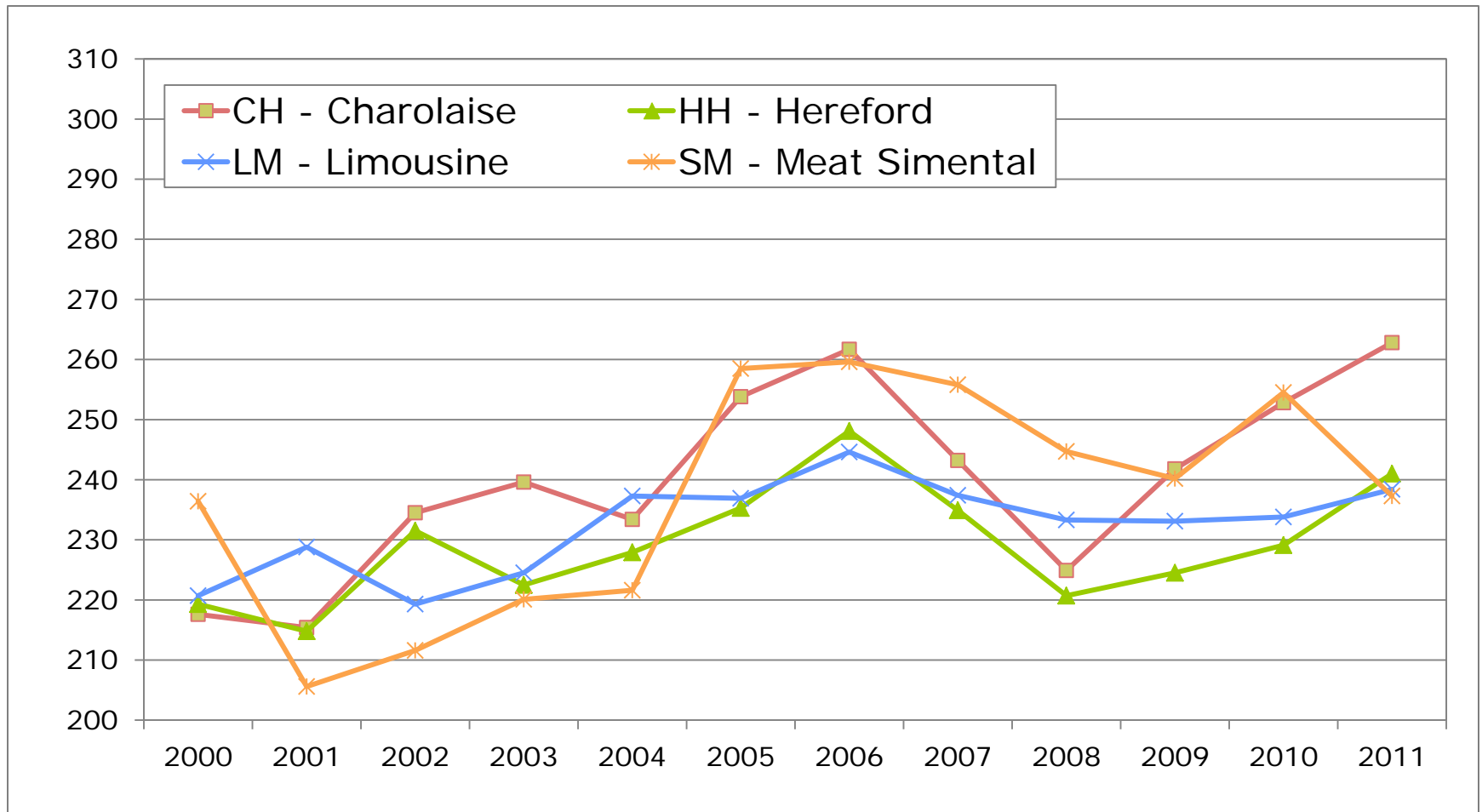
Body weight at 210 days: purebred bulls



Body weight at 210 days: purebreds 2011

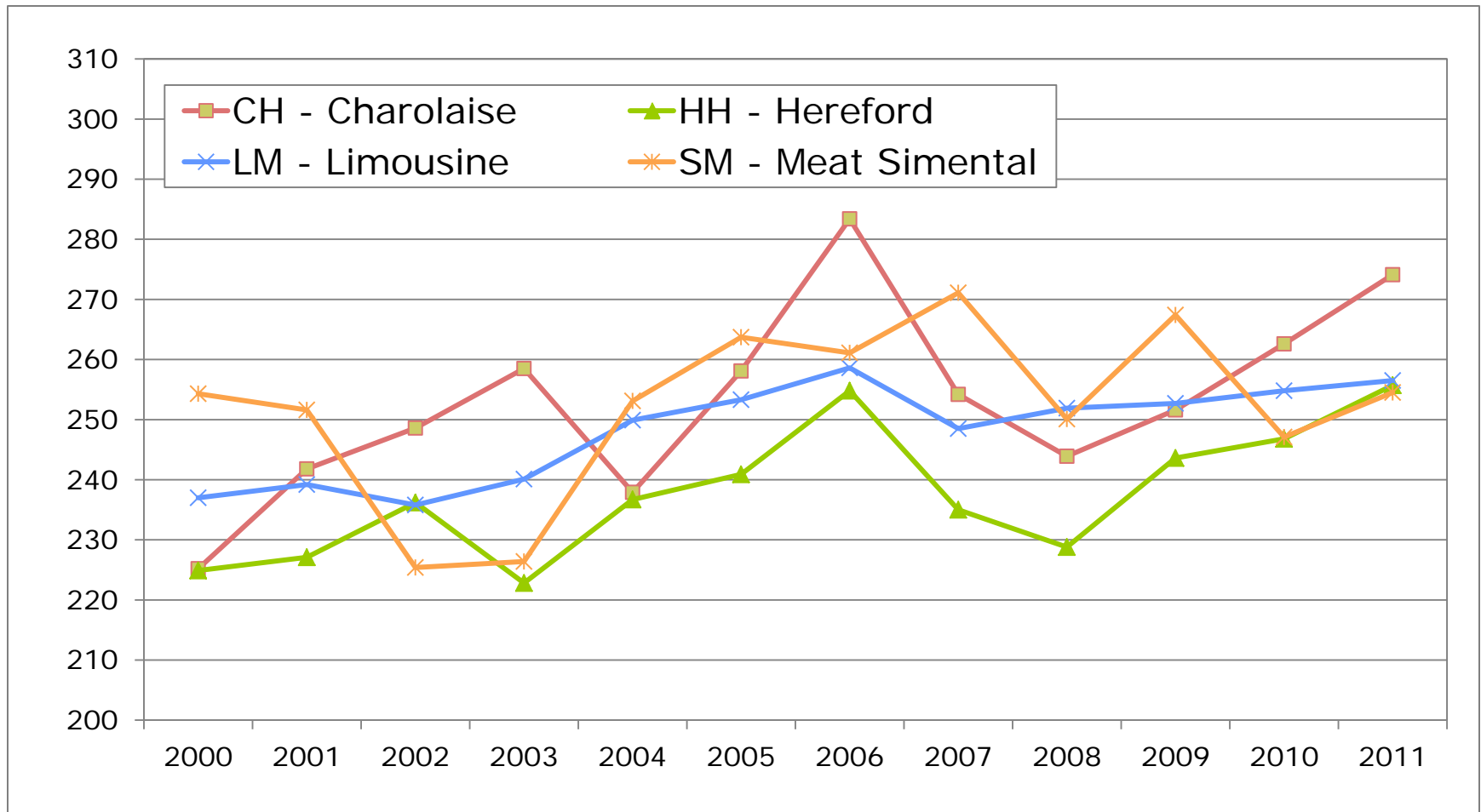


Body weight at 210 days: crossbred heifers



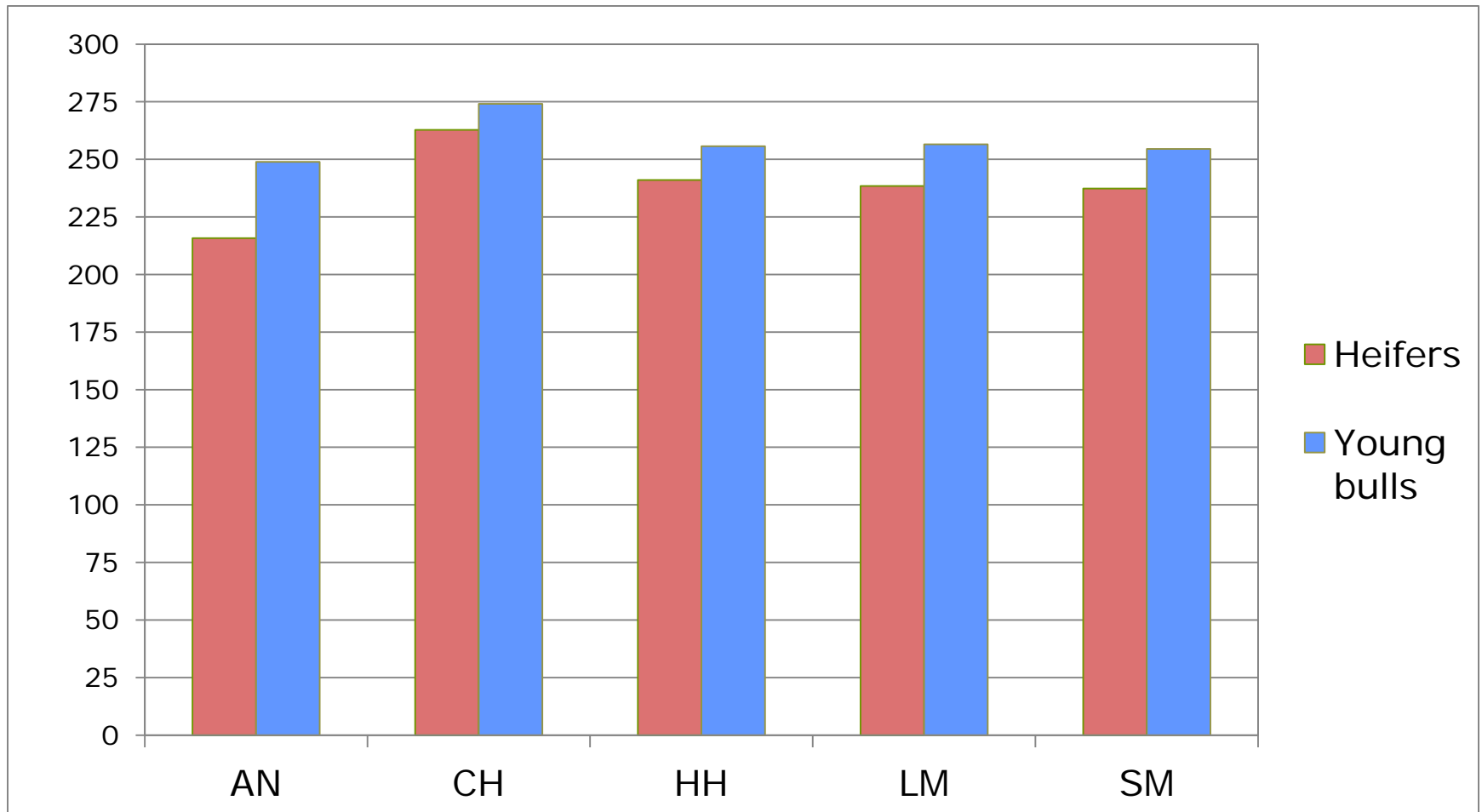
AN: data not available for all years

Body weight at 210 days: crossbred bulls

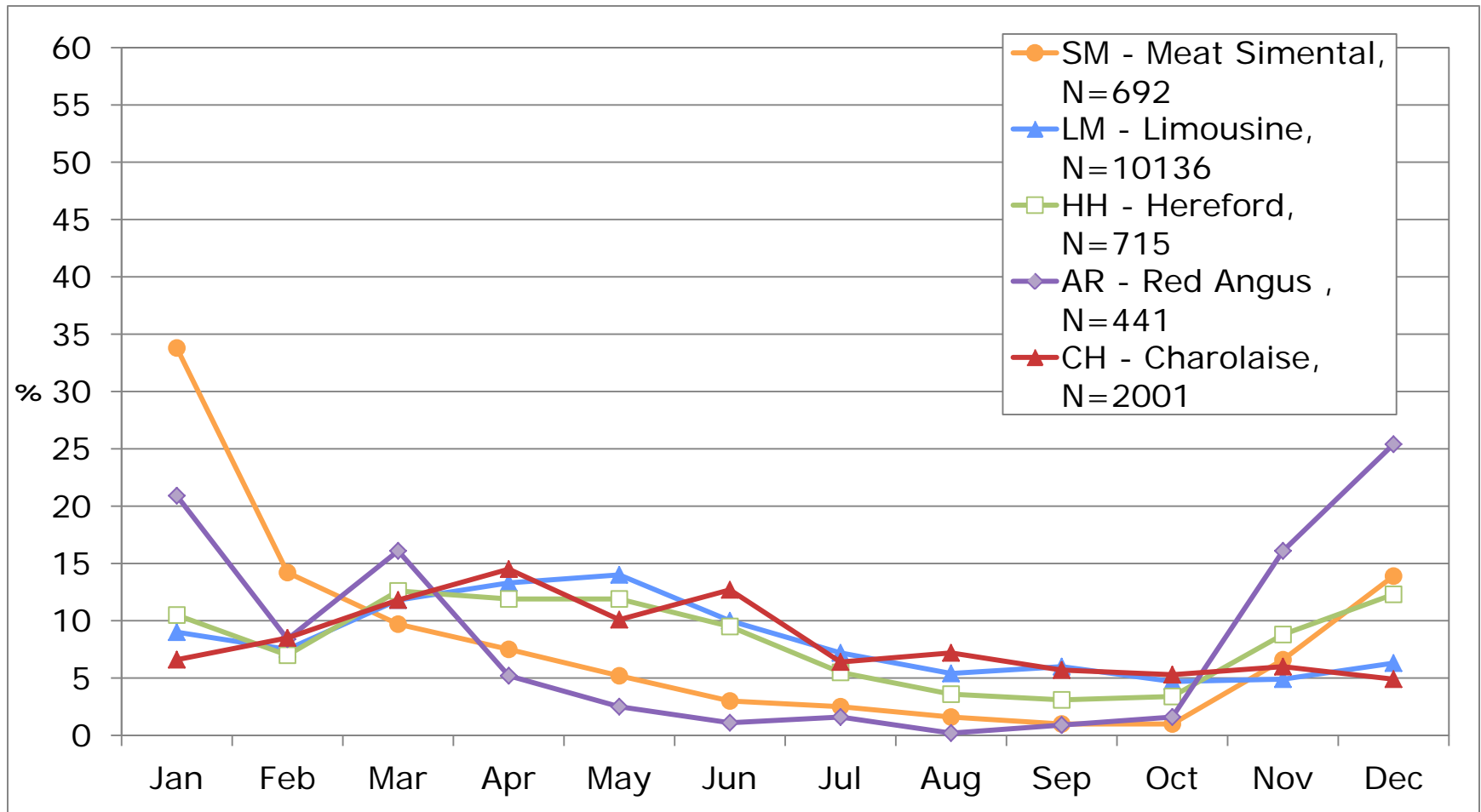


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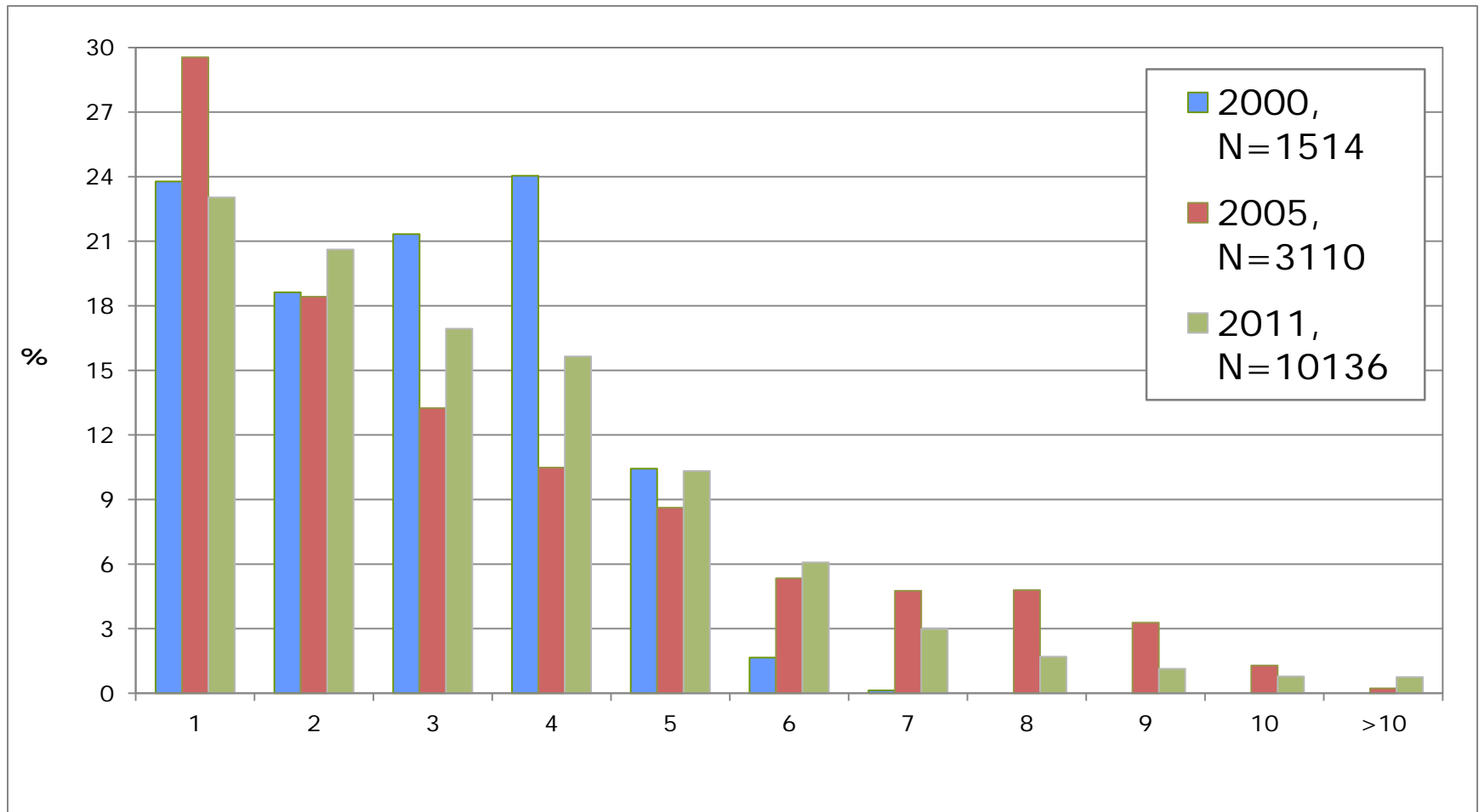
Body weight at 210 days: crossbred 2011



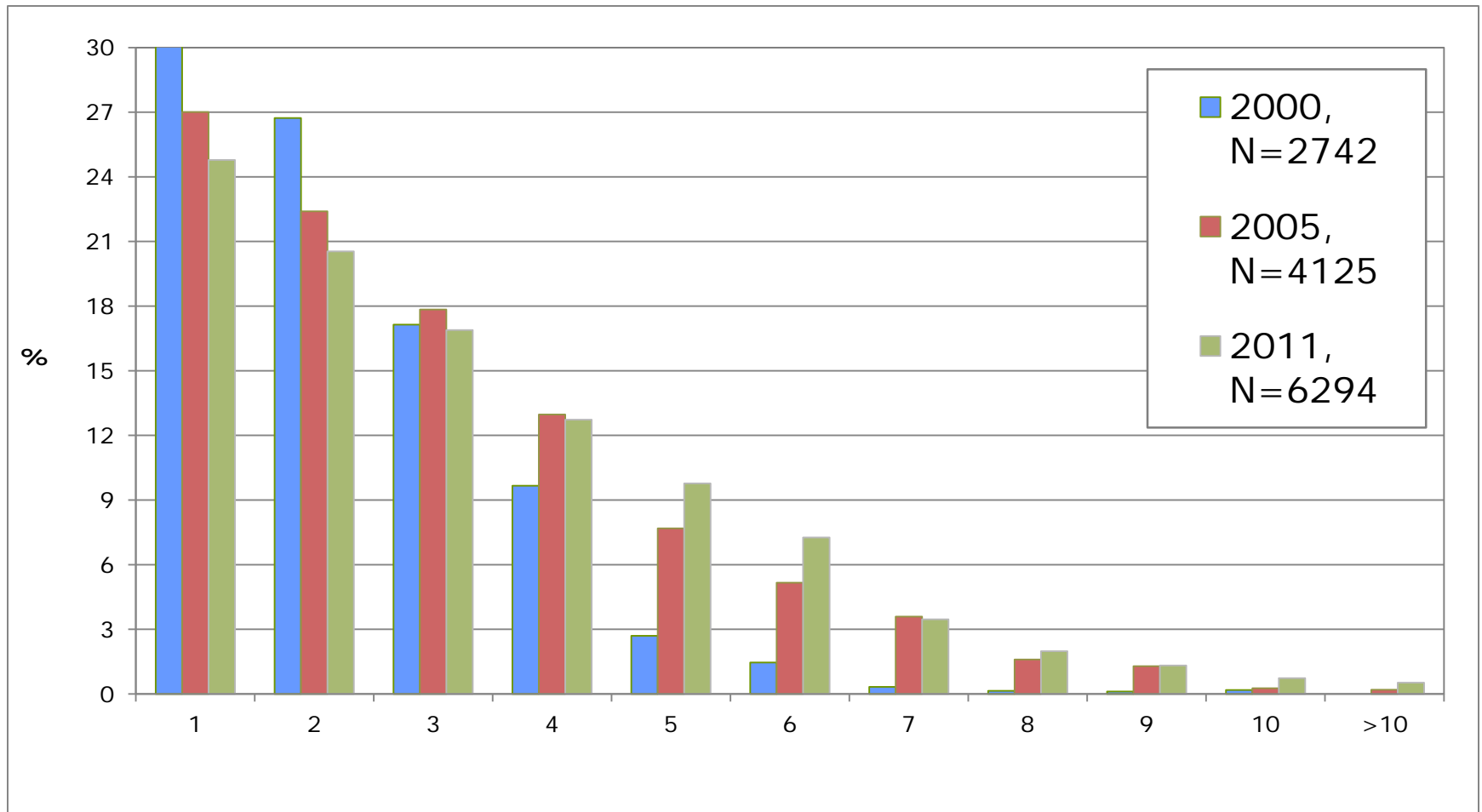
Calving distribution: purebreeds



Number of calving: purebred LM



Number of calving: crossbred LM



Cross check: what was achieved since 1994?

Goals:

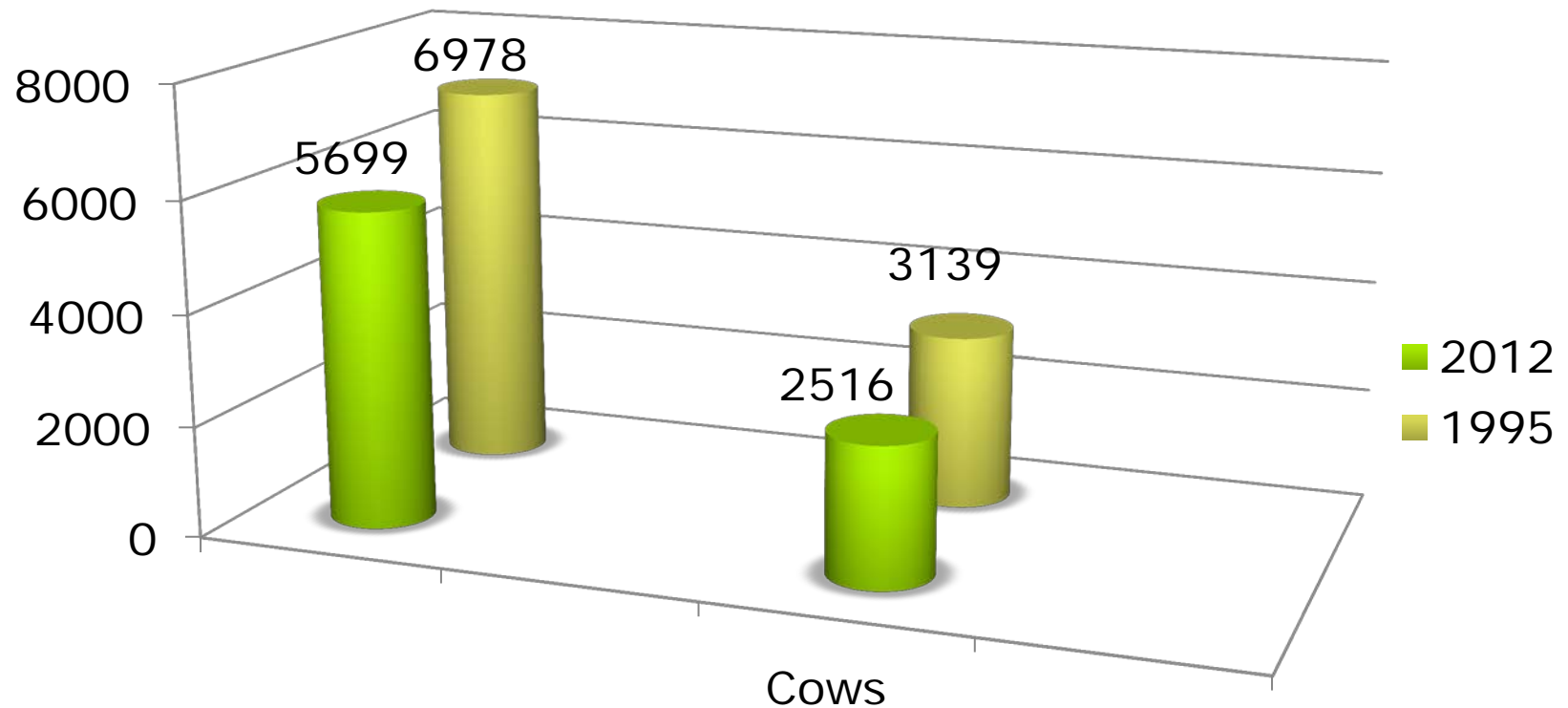
- ❑ Commercial population 10% of expected 1M
 - Wrong assumption: No continuous EU support for suckling system) – LESS

- ❑ Purebred and backcrossed cows: 16.000 + 9.000 under recording scheme – MORE

- ❑ Commercial crossbreeding YES BUT
 - Cow population decreased to only 2.5 M only

Changes in cattle and cow number

in thousands heads



SWOT analysis

What will make our beef sector sustainable?



Photo: Polish Association of Beef Cattle Breeders and Producers

Strenghts

- ❑ Substantial agricultural land and resource base for grazing
- ❑ Well established organizational structure of the Association and potential to improve service provided to breeders
- ❑ Close cooperation with the countries of origin of imported genetics (France, UK)
- ❑ Development and further improvement of the performance recording and breeding value estimation methods (work in progress in cooperation with research sector: NRIAP)

Weaknesses

- ❑ **No tradition to consume high quality beef (stew not steak!)**
- ❑ Inconsistent system to purchase stock for slaughter (WBW/EUROP)
- ❑ Long chain: from farmer through **middle man/men** to a slaughterhouse/meat processing plant
- ❑ Lack of independent service to grade carcasses in the slaughterhouses
- ❑ High number of breeds – breeding work more expensive
- ❑ Membership of the Association does not include all beef cattle breeders and producers
- ❑ Insufficient knowledge base of beef cattle farmers
- ❑ Lack of support system for development of the sector

Beef meat consumption kg/person

Country	2004	2006	2008	2011
Denmark	28,5	27,7	25,7	26,7
France	26,9	26,1	25,6	25,6
Nedherland	19,2	19,1	19,2	19,1
Germany	12,2	12,3	12,4	12,9
Czech Republik	9,7	8,8	7,8	7,6
Romania	8,6	10,9	7,3	6,1
Latvia	10,1	16,3	12,2	11,8
Poland	4,6	4,3	3,7	2,2

Opportunities

- Growth of the beef sector
 - Concentration of dairy herds
 - Impact of the release of milk quotas (?)
- Export opportunities for breeding stock, carcasses & meat
 - Market for the breeding stock: the Eastern Europe, beef: the EU
- Introduction of joint marketing of live animals and meet through producers' groups/the Association
- Possibility to obtain support for small beef producers within Rural Development Programme 2014-2021
- Potential internal market for high quality beef

Threats

- ❑ **Low profitability of beef production**
- ❑ **Low purchase prices for slaughter animals**
- ❑ High cost and low/inconsistent quality of beef meat further affecting domestic market and consumption
- ❑ Breakdown of the export
 - disease outbreaks
 - political factors affecting trade

The market prices of beef cattle

Euro/100kg (young bulls)

Country	2004	2011	%
Germany	261,3	360,4	116,3
France	271,8	343,3	110,8
UK	266,4	342,8	110,7
Poland	268,6	309,8	100,0



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Aktualności

- List Prezesa Zarządu PZHiPBM do Hodowców
- "W Ryczącej Perspektywie" - konkurs fotograficzny
- Walne Zgromadzenie Członków PZHiPBM. 18 maja

Polski Związek Hodowców i Producentów Bydła Mięsnego

Polski Związek Hodowców i Producentów Bydła Mięsnego jest jedynym pełnoprawnym reprezentantem środowiska hodowców i producentów bydła mięsnego w Polsce.

Reprezentujemy prawa i interesy hodowców i producentów bydła mięsnego. Stale współpracujemy z organizacjami powiązаныmi z hodowlą bydła w kraju i za granicą.



Legal basis

- Polish Association of Beef Cattle Breeders and Producers is the only legal representative of beef cattle breeders in Poland

- According to the Polish law – the Ministry of Agriculture and Rural Development entrusted our Association with responsibility for conducting breeding work:
 - Herdbook keeping and pedigree control
 - Performance recording
 - Breeding value estimation in cooperation with the National Research Institute for Animal Production

Way forward

Polish Association of Beef Cattle Breeders and Producers

- ❑ Organization of joined marketing: scope
 - about 1.000 breeders
 - 25.000 beef cattle under recording
 - 100.000 commercial crossbreds

- ❑ Improvement of breeding and extension services provided by the Association
- ❑ Extensive training for breeders and technicians

- ❑ Lobbying for introduction of support measures for small producers

- ❑ Promotion of beef consumption: generating demand at domestic market

Way forward

Polish Association of Beef Cattle Breeders and Producers

- Marketing of the breeding stock
 - Establishment of new herds in Poland
 - export to the Eastern Europe: Ukraine, Moldova, Russia

- Close cooperation to achieve uniformity in breeding methods with countries of origin of the breeding stock
 - France
 - United Kingdom

- Establishment of a testing station and introduction of performance recording to identify best bulls for AI



Aktualności

- Życzenia Świąteczne
- Książka kucharska z przepisami z wołowiny
- I Ogólnopolski Konkurs Kulinarny - 26-27.09.2012
- 15.09.2012 - Emisja programu z cyklu Alchemia zdrowia i urody
- 08.09.2012 - Emisja programu z cyklu Spiżarnia, dla TVP Warszawa

[więcej](#)



Z mięsem wołowym od A do Z

Dowiedz się więcej o obróbce wołowiny

Kupno - Przechowywanie - Przygotowanie - Przyrządzanie - Podawanie

[czytaj więcej](#)

Zapraszamy na:

8-9 września 2012

**Park Śląski w Chorzowie
Duża łąka**

**9 września NIEDZIELA godz. 12.00
CEREMONIA OTWARCIA
MIĘSNA PARADA**

ŚWIĘTOMIĘS Polski

W mięsie siła!

Organizatorzy



Znajdź nas na Facebooku



**ODKRYJ DOBRE
POLSKIE MIĘSO**

Lubię to!

Thank you for listening

