



**3RD INTERNATIONAL BOLOGNESE & MALTESE SYMPOSIUM
FCI JUDGES MEETING
HELSINKI, FINLAND 7.8.2014**

**THE FINNISH BOLOGNESE CLUB & THE FINNISH MALTESE CLUB
IN COOPERATION WITH
THE FINNISH TOYDOG ASSOCIATION & IL CLUB DEL BOLOGNESE E MALTESE**

WITH SUPPORT BY



THE FINNISH SHOW JUDGES' SOCIETY

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BOLOGNESE

STATISTICS

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COMMENTS ON THE STATISTICS

First of all I would like to say a thank you to everyone who has contributed to this part of the symposium. The gathering of information and statistics is very interesting and fun to do and tells us the facts. What you want to use the statistics for and how you interpret them is up to everyone as an individual and I will just be presenting them in a context so it will be easy to compare the different countries we have gotten figures on.

In Scandinavia (Sweden, Norway, Finland and Denmark), we are quite spoiled when it comes to gathering statistics. We have open data systems where anyone can get access to almost everything. In Sweden we have Hunddata, in Finland Koiranet etc.

It's not this easy in most countries and we are grateful to all the kennel clubs, breed clubs and breeders who have contributed to this compilation. Let's hope this will inspire more people to collect data and that by the next symposium we will be able to demonstrate more statistics and cover more countries.

Lotten Rönquist

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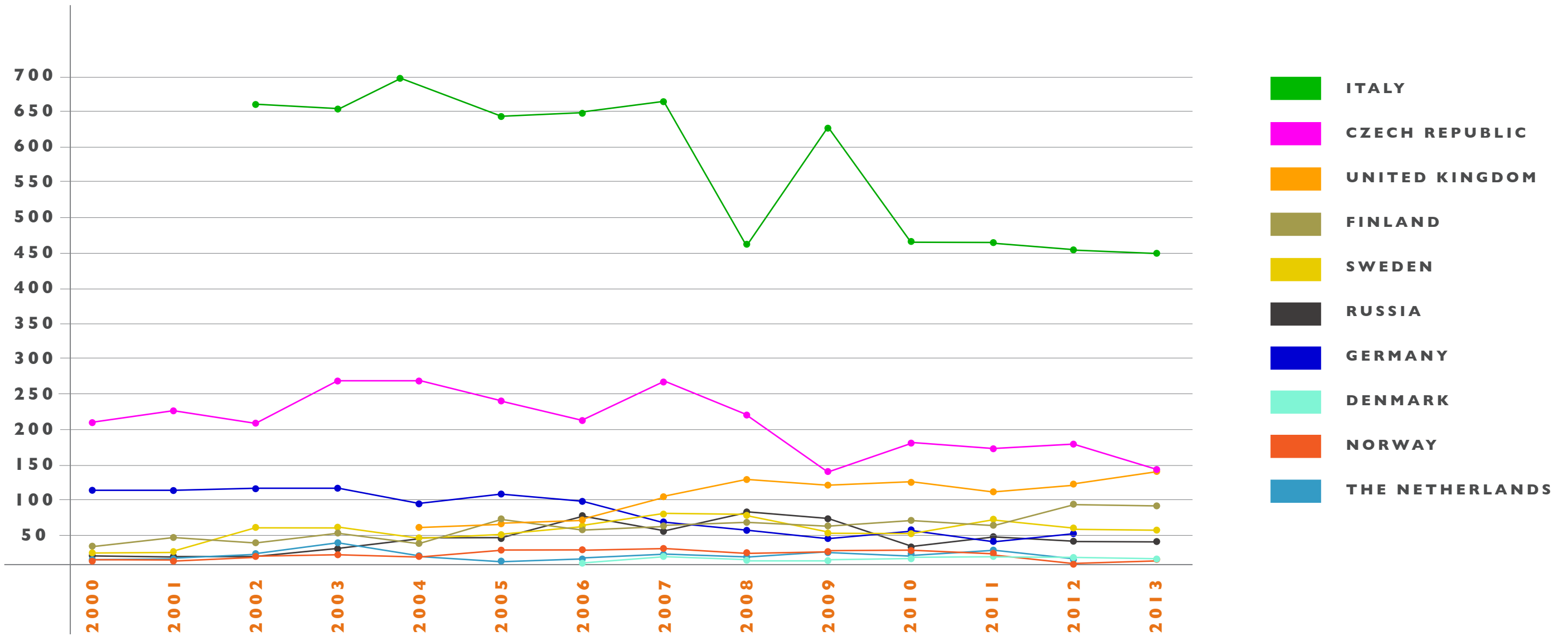
REGISTRATION OF PUPPIES

This is a chart of how many Bolognese puppies that are born and registered every year. On page 2 there is a close up of all countries excluding Italy and the Czech Republic to show the details on the “smaller” countries.

After the charts you can see the actual figures on the registrations.

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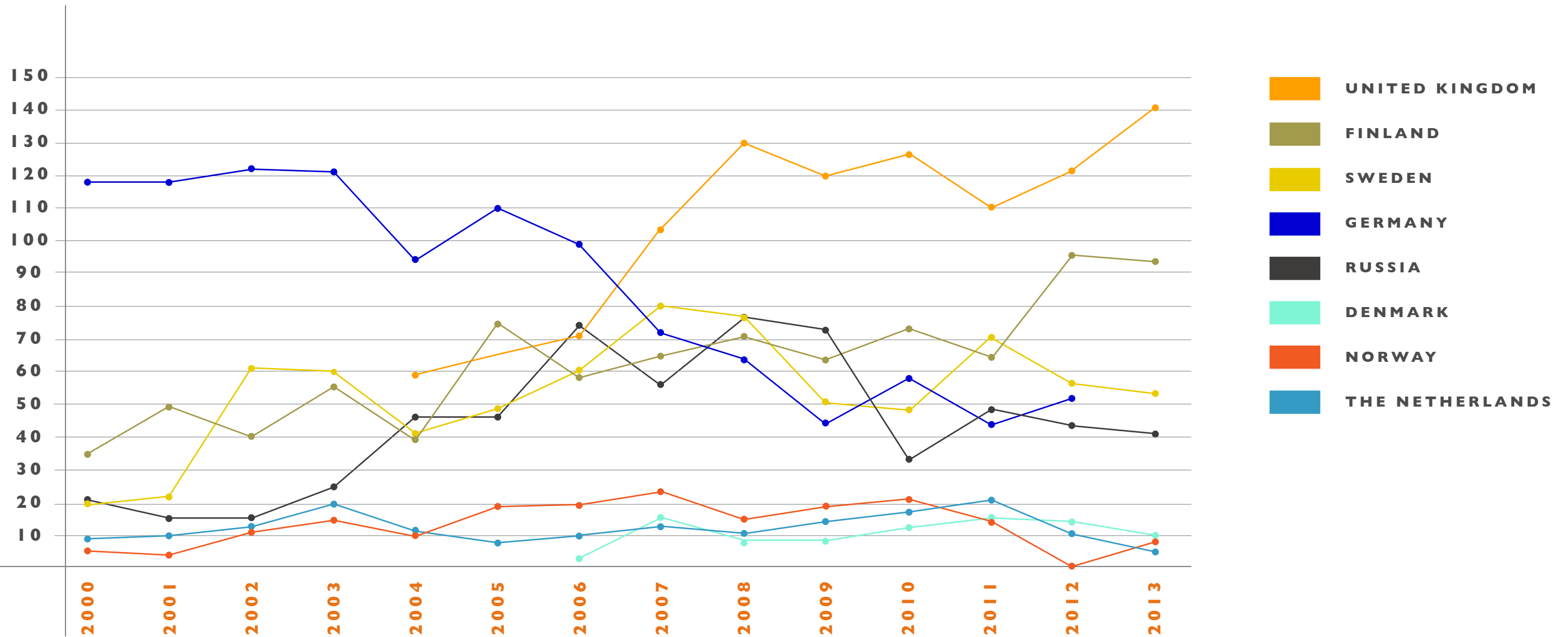
REGISTRATION OF PUPPIES



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REGISTRATION OF PUPPIES

CLOSE UP EXCLUDING ITALY AND CZECH REPUBLIC



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REGISTRATION OF PUPPIES

2000		208		35	20	118	21
2001		230		49	23	118	17
2002	662	212		40	61	122	17
2003	659	271		56	60	121	26
2004	698	272	59	39	41	94	47
2005	641	240	66	75	48	110	47
2006	648	218	71	58	60	99	74
2007	669	268	104	65	80	72	56
2008	460	225	130	71	77	64	78
2009	628	144	120	64	50	44	74
2010	466	184	127	74	48	58	33
2011	463	174	110	65	71	43	48
2012	454	180	122	95	57	52	43
2013	450	148	141	93	54		41
	ITALY	CZECH REPUBLIC	UNITED KINGDOM	FINLAND	SWEDEN	GERMANY	RUSSIA

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REGISTRATION OF PUPPIES

2000		5	9				
2001		3	10				
2002		11	13				
2003		16	20				
2004		10	11				
2005		19	8				
2006	3	20	10				
2007	16	24	13				
2008	9	16	11				
2009	9	19	15				
2010	12	22	18				
2011	16	15	22				
2012	15	0	11				
2013	10	8	6				
	DENMARK	NORWAY	THE NETHERLANDS				

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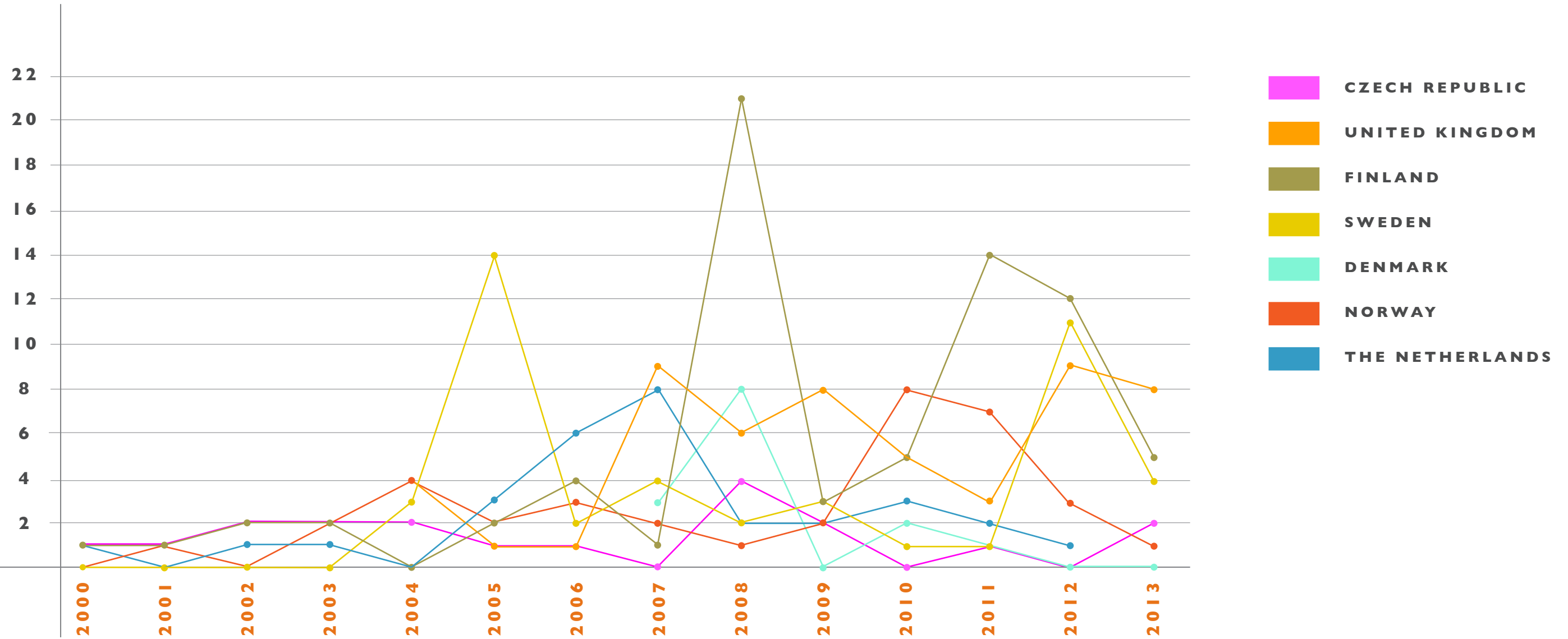
IMPORTS

This is the chart for how many imports that are registered in each country every year. It's very nice to see that we have a large international cooperation and are exchanging dogs across the borders as this helps enhance the genetic diversity.

After the chart you can see the actual figures on the number of imports.

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IMPORTS



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IMPORTS

2000	1		1	0		0	1
2001	1		1	0		1	0
2002	2		2	0		0	1
2003	2		2	0		2	1
2004	2	4	0	3		4	0
2005	1	1	2	14		2	3
2006	1	1	4	2		3	6
2007	0	9	1	4	3	2	8
2008	4	6	21	2	8	1	2
2009	2	8	3	3	0	2	2
2010	0	5	5	1	2	8	3
2011	1	3	14	1	1	7	2
2012	0	9	12	11	0	3	1
2013	2	8	5	4	0	1	
	CZECH REPUBLIC	UNITED KINGDOM	FINLAND	SWEDEN	DENMARK	NORWAY	THE NETHERLANDS

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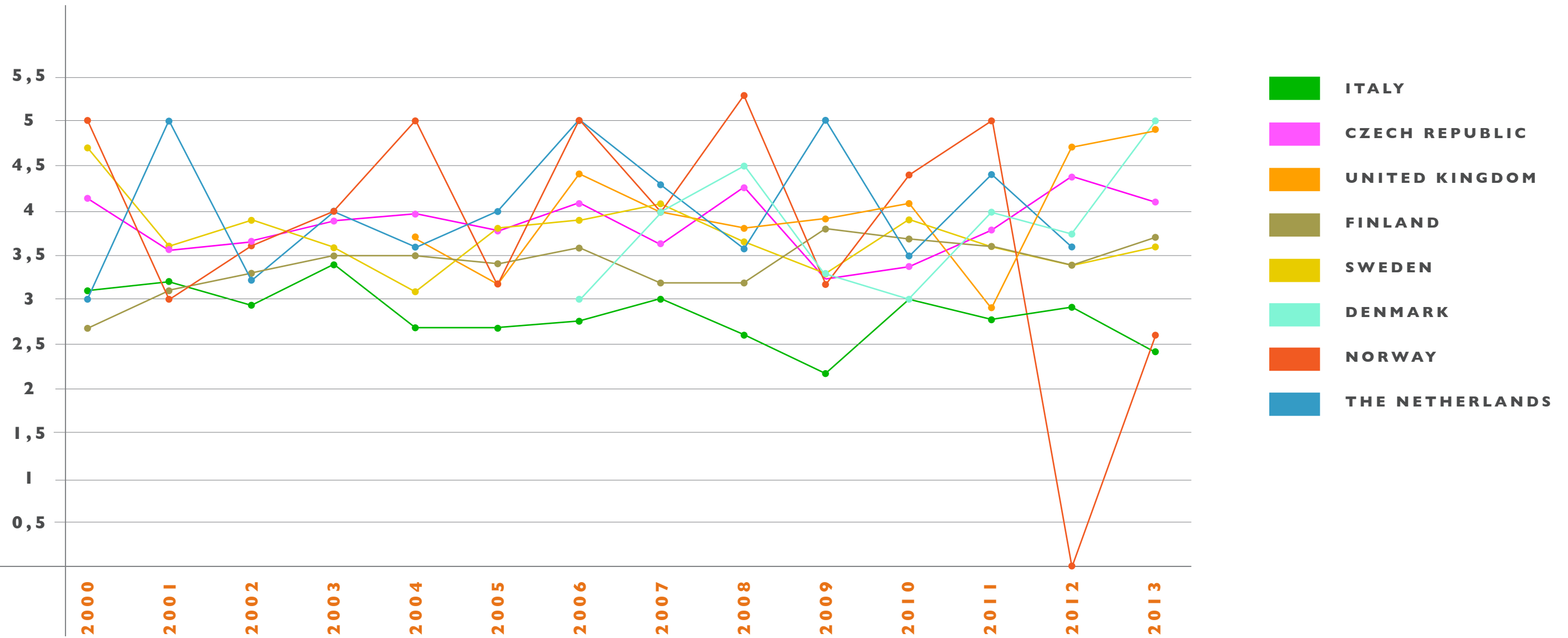
AVERAGE LITTER SIZE

These figures let us know what the average litter size in each country is. As you can see it's almost the same in each country, it's usually between 2,5 – 5 puppies. In Norway 2012 there were no litters so that's why that figure stands out.

After the chart there are the actual figures on average litter size.

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AVERAGE LITTER SIZE



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AVERAGE LITTER SIZE

2000	3,1	4,16		2,7	4,7		3	3	
2001	3,2	3,54		3,1	3,5		3,6	5	
2002	2,9	3,66		3,3	3,9		4	3,25	
2003	3,4	3,87		3,5	3,6		5	4	
2004	2,7	3,94	3,7	3,5	3,1		3,2	3,6	
2005	2,7	3,81	3,2	3,4	3,8		5	4	
2006	2,8	4,11	4,4	3,6	3,9	3	4	5	
2007	3	3,67	4	3,2	4,1	4	5,3	4,3	
2008	2,6	4,33	3,8	3,2	3,7	4,5	3,2	3,6	
2009	2,2	3,27	3,9	3,8	3,3	3,33	4,4	5	
2010	3	3,41	4,1	3,7	3,9	3	5	3,5	
2011	2,8	3,78	2,9	3,6	3,6	4	0	4,4	
2012	2,9	4,39	3,7	3,4	3,4	3,75	2,6	3,6	
2013	2,4	4,11	3,9	3,7	3,6	5			
	ITALY	CZECH REPUBLIC	UK	FINLAND	SWEDEN	DENMARK	NORWAY	THE NETHERLANDS	

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QUOTA - PARTICIPANTS AT DOG SHOWS

This is a very interesting chart; it shows the number of participating dogs at each dog show in comparison with the number of registrations. As you can see, we only have information covering 5 countries for this chart.

I should mention that the quota is so high in Norway and Denmark because they have a low number of registered puppies each year and the Swedish breeders often go to their shows with several dogs and thus increase the number of entries significantly.

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QUOTA - PARTICIPANTS AT DOG SHOWS

QUOTA AVERAGE NUMBER ENTERED AT SHOWS 2013 - REGISTRATIONS 2013

0,5
0,45
0,4
0,35
0,3
0,25
0,2
0,15
0,1
0,5

	ITALY	FINLAND	SWEDEN	DENMARK	NORWAY
ATTENDING 2013	3	3,94	5,05	3,22	4,43
REGISTERED 2013	450	98	58	10	9
QUOTA	0,007	0,04	0,09	0,32	0,49

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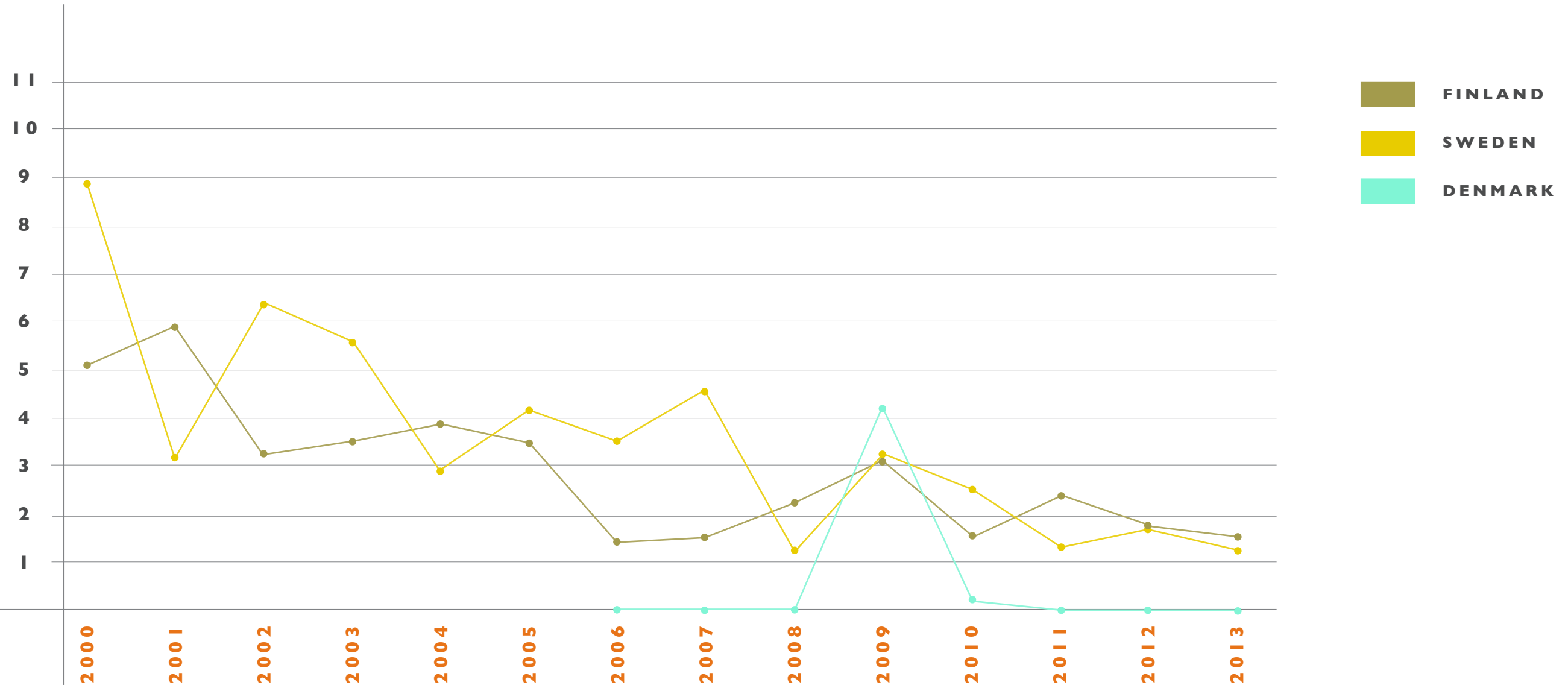
INBREEDING

This chart shows the average inbreeding percentage in the litters that have been registered during the year. Inbreeding can be calculated by counting the mutual ancestors of a dog in its pedigree and how far they are apart. This is a good tool for breeder's to use when they are planning their combinations as we want to keep the inbreeding at a low level and increase the genetic diversity.

As you can see on the chart, we only have inbreeding statistics from Sweden, Finland and Denmark. The level of inbreeding has decreased and stabilized in all three countries.

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INBREEDING



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INBREEDING

2000	5,11	8,9					
2001	5,89	3,1					
2002	3,21	6,4					
2003	3,64	5,7					
2004	3,91	2,9					
2005	3,44	4,2					
2006	1,45	3,6	0				
2007	1,66	4,7	0				
2008	2,28	1,2	0				
2009	3,04	3,2	4,16				
2010	1,67	2,6	0,78				
2011	2,44	1,3	0				
2012	1,86	1,8	0				
2013	1,73	1,3	0				
	FINLAND	SWEDEN	DENMARK				

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FROM THE FCI INTERNATIONAL BREEDING STRATEGIES

“The goal in dog breeding is functionally healthy dogs with a construction and mentality typical to the breed, dogs that can live a long and happy life for the benefit and pleasure of the owner and the society as well as the dog itself. Breeding should be carried out in such a manner that it promotes the health and well-being of the progeny, as well as the welfare of the bitch. Knowledge, honesty and cooperation, both on national and international level, is basic in healthy dog breeding.”

“Education of breeders is to be recommended rather than strict breeding regulations and stringent demands in breeding programmes, which can easily result in reduced genetic diversity in the breed”

“Only functionally and clinically healthy dogs, with breed typical conformation, should be used for breeding; i.e. to only use dogs that do not suffer from any serious disease or functional disabilities.”

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FROM THE FCI INTERNATIONAL BREEDING STRATEGIES

“To preserve, or preferably extend, the genetic diversity of the breed, matador breeding and heavy inbreeding should be avoided.”

“Screening should only be recommended for diseases and breeds where the disease has major impact on the dogs’ functional health.”

“As a general rule, a breeding programme should not exclude more than 50% of the breed; the breeding stock should be selected from the best half of the breed population.”

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ABOUT HEALTH

In general the Bolognese is a healthy breed.

There are no exaggerations in construction that lead to problems with breathing, movement etc. Usually there are no problems with fertility, matings, pregnancies, births and puppies thrive well.

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PATELLA LUXATION TESTS

NUMBER OF DOGS EXAMINED	220	122	21			
4	0	0	0			
3	5	0	0			
2	10	3	0			
1	34	21	1			
0	170	98	20			
	FINLAND¹	SWEDEN	DENMARK			

¹In Finland, the patella luxation test is valid for two years if the dog is younger than three years when examined. If the dog is older than three years, the result is valid for the whole life. This is a quite new procedure (from the beginning of the year 2012). Out of the 220 dogs examined, 25 dogs have been examined twice (in the figures, every dog is counted only once, so all the 220 dogs are different specimens). 5 dogs out of these 25 dogs have gotten a worse result in the second patella test. The worse result is the one counted.

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PATELLA LUXATION TESTS

In the Nordic countries many dogs are examined for patella luxation, which is a condition often found in small and/or square dogs.

The mode of inheritance is not known.

The examination method is not entirely reliable as the same dog can get different results from one time to another. This is because the examination is done by palpation and the vet's experience and interpretation has impact on the result, as has the dog's muscle condition, too. The reason that the patella is more easily forced out of its position in square dogs is that these often have less turn of stifle which makes the groove where the patella lies more shallow.

Most dogs that have a patella that can be luxated at the examination never suffer from the condition, but some dogs need to be operated. There are probably several factors that act together to cause pain and/or impairment in movement – trauma, hormones and – first of all – biomechanical function of the hind legs.

As the result from the examination that is not reliable and because the mode of inheritance is not known the value of the examination procedure as a guidance when making breeding decisions is limited. We must also be careful in a breed with a small population to preserve genetic variation so we must act carefully and not exclude dogs from breeding for the wrong reasons.

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EYE EXAMINATIONS

NB! THE SYSTEM OF EYE EXAMINATION IS NOT THE SAME IN EVERY COUNTRY

NUMBER OF DOGS EXAMINED	91	203	228	19	14
PRA PRA-LIKE RETINOPATHIA	8	2	4 2		3
RETINOPATHIA			3		
CATARACTS CORTICAL CATARACT TOTAL CATARACT POSTERIOR POLE CATARACT	35	1	3	1	1 1
RETINAL DYSPLASIA			2		
PHTVL/PHPV		2			
CORNEAL DYSTROPHIA (EPITHELIAL)		3			
IRIS COLOBOMA	6				
KERATOCONJUNCTIVITIS SICCA	4				
VITREOUS DEGENERATION	5				
	ITALY	FINLAND	SWEDEN	DENMARK	NORWAY

NB! In these figures, the age of the dogs examined varies widely. Some dogs have been examined only once when young, some dogs many times. Nowadays it starts to be a common practice the repeat the eye examination with regular intervals. Many hereditary eye diseases only break out when the dog is a bit older. But, for example in Finland, this is a quite recent procedure. For many years, the dogs were examined only once when young.

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EYE EXAMINATIONS

In Sweden, Norway, Finland and Denmark all eye examinations are registered by the KCs and no dogs can be examined without the owners giving the permission that this is done. In the first three countries mentioned data (including the names of the dogs and their parents) is available to everyone. In Denmark you have to be a member of the KC for this.

In Italy there is a project carried out by ophthalmologist Dr. Adolfo Guandalini checking the eyes of the Italian breeds. The result for Bolognese and Maltese is on the CBM web site. It has not been possible to obtain statistics from other countries.

As you can see there are many dogs examined in Sweden and Finland, especially taking into consideration the registration numbers. Nowadays practically all breeding stock is examined with regular intervals, but please note that this is still quite recent practice. The numbers in the diagram are individual dogs. No dog has been counted twice.

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THE PRA PROJECT

In 2008 a Swedish Bolognese was found to be blind. Autopsy of the eyes revealed that she had PRA – Progressive Retinal Atrophy.

PRA is a disease of the retina in dogs that is a cause of blindness in several breeds and you can easily find more information. In short it is hereditary in a simple recessive autosomal way. This means that both parents are carriers of the defect gene. A dog needs to get a defect gene from both parents to get the disease. As a puppy the affected dogs have no problems and eye examinations are normal. There are different types of PRA in different breeds.

Thanks to her owners a contact with a research team in Uppsala was established and blood samples were collected for analysis and future research. The PRA gene tests that exist to reveal the disease in some other breeds did not match the samples from Bolognese with PRA.

A few more cases of PRA have been discovered in Sweden, Norway and Finland – most of them close relatives. More samples have been taken and put in the bio bank fridge in Uppsala. When blood samples from at least two different “families” (meaning an affected (sick) dog, its parents and one healthy sibling) researchers can TRY to find the gene responsible for PRA in the breed.

If you have a dog that you suspect has trouble with its eyesight please have an eye examination done by an ophthalmologist. If the dogs has PRA and you want to contribute to the research contact Mrs. Fredrika Rönquist or Dr. Tomas Bergström!

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THE PRA PROJECT IN A NUTSHELL

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Blood samples from

a) the affected dog b) both parents of the affected dog c) one healthy full-sibling

http://hunddna.slu.se/?page_id=159