### The Swedish Warmblood presented by Margo Brady

#### Sweden

- -has the highest density horse population in the world!
- size of California with a populatoin half the size of Los Angeles.



#### The Swedish Warmblood

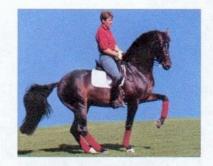
- -Flyinge began in 1661
- -only warmblood breed that has always been selected and bred for riding (over 4 centuries)
- -known for gaits, rideability, temperament, intelligence, and athleticism
- 1874 Swedish Warmblood studbook published
- 1918 began open studbook to improve breed with Trakehner, Thoroughbred, Arabian, Hannoverian
- -ASVH (Swedish Warmblood Association) began in 1928
  - -In 1912, at the FIRST Olympic Games, Swedish horses took home all three individual medals in dressage.
  - no piaffe and passage
  - 5 jumps up to 1.10 meters
  - last jump was barrel rolling toward horse!

#### Breeding program

- young horse testing of gaits and temperament
- rigorous stallion testing over 8 days at age 4
- stallion license for only 6 years to see how progeny develop
- stallion ratings increase in proportion to testing results of offspring
- Premium A is very difficult to acheive
- horses with over 40 points in conformation tend to live longer
- canter is the most important gait for jumping horses
- choose only the best horses for breeding
- use best mares available: mares give 51% of genetics to offspring
- BLUP: Best Linear Unbiased Prediciton



Jan Brink on Bjorsells Briar Briar is the world's highest ranked dressage stallion for the years 2001-2007.



#### Kyra Kyrklund on Master

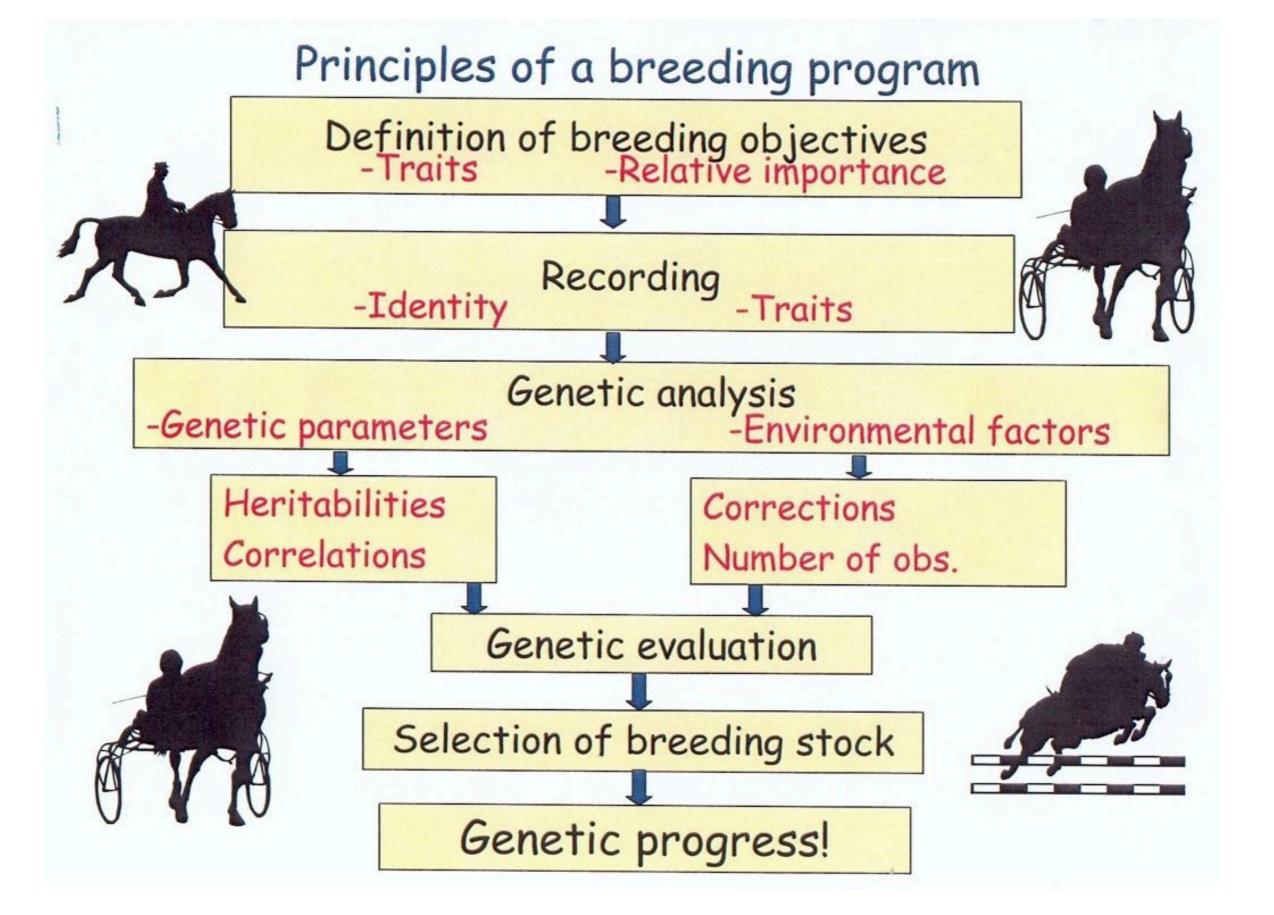
- never beaten in first 17 starts in dressage, including Intermediare 1
- won or placed in all Grand Prix starts

As of April 2007, the Swedish Warmblood was ranked #2 in the World Breeding Federatoin of Sport Horses in Dressage, #7 in Eventing, and #8 in Jumping

- 1) Hannoverian 2) Swedish Warmblood 3) Dutch Warmblood
- 4) Danish Warmblood 5) Oldenburg

**Quality vs. Quantity**: In Sweden, there are approimately 5,000 mares covered each year as opposed to 50,000 covered in Germany.

Sweden had 6 horses competing in the 2007 World Cup!



# What affects the rate of genetic improvement?

- ·Heritability
- ·Correlation with breeding goal
- ·No. of observations (records)
- ·Pedigree and no. of progeny

Test many
- choose the
best!

Annual genetic progress

Accuracy in selection

Selection intensity

Generation interval

X

The genetic variation (S.D.)

Put young horses in breeding!

Biologically determined

## Testing methods

- Young horse tests
  - 3-year-olds (Young Horse Test)
  - 4-year-olds (Riding Horse Quality Test)



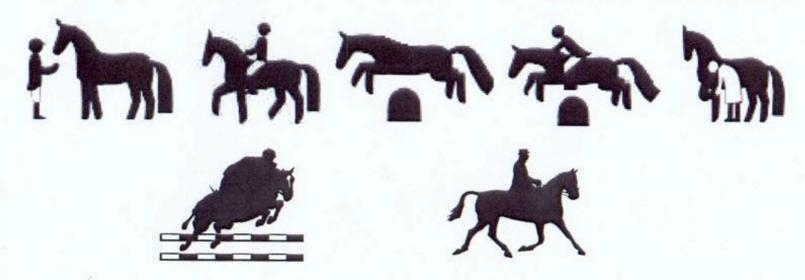
- Stallion performance test
- Competitions
  - Dressage
  - Show jumping



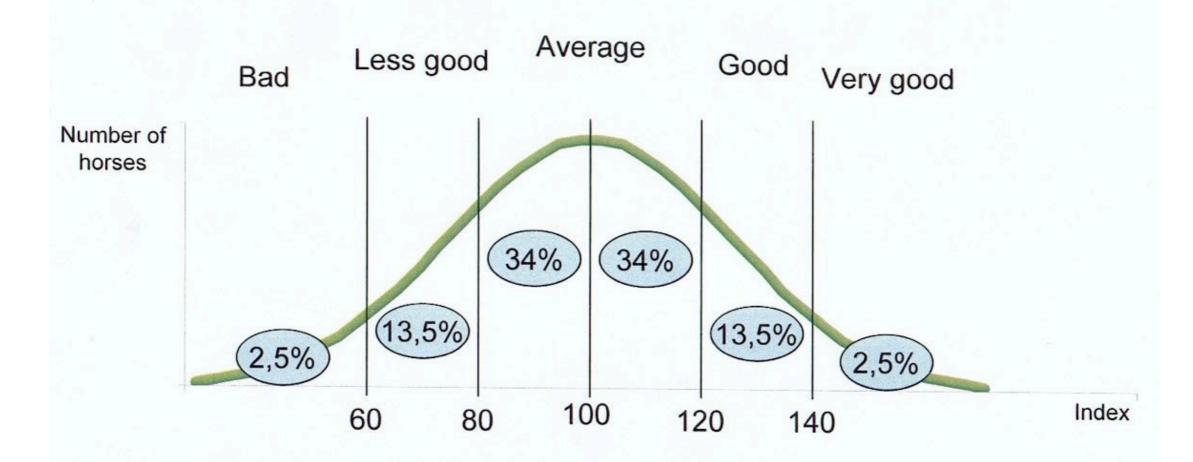


# Breeding values 2006-

- Breeding values based on
  - Riding Horse Quality Test (RHQT), 17,741 horses
  - -Test for 3-year-olds (YHT), 7,019 horses
  - -Competition data from 37,727 horses



### What is a good index?



68 % of the horses can be found within +/- one standard deviation= Average



## **BLUP INDEX**

NAME	NO EVAL OFFSP RING	TYPE	EXTR	JUMP TECH N	JUMP TEMP	JUMP COMP	WALK	TROT	CANT	GAITS TEMP	DRES SAGE COMP	HEIG HT
TIP- TOP	50	114	96	96	89	95	127	148	140	154	135	0,6
FELIC IANO	164	94	126	122	121	143	107	93	106	96	99	-2,1

### Rank Dressage index (top 10) 2006

Of all

**Don Primero** 

Don Schufro

Chagall

De Niro

Bolero

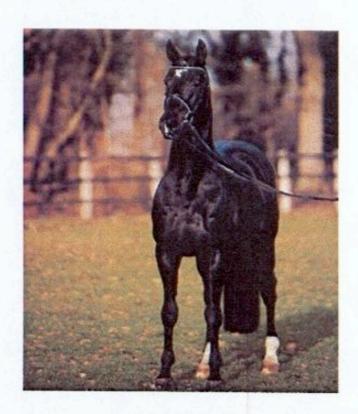
Bernstein

Chapman

Tip-Top

Ravell

Master





Of stallions currently active

**Don Primero** 

De Niro

Tip-Top

Ravell

Master

Rambo

**Bayron** 

Rubinrot

Briar

Cortez

### Rank Show jumping index (top 10) 2006

#### Of all

Irco Mena

Irco Marco

Cardento

Camaro M

Feliciano

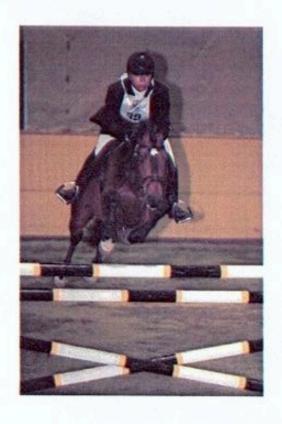
Cortez

Cagliostro

**Lucky Light** 

Aerline H

Dirco Hästak





Of stallions currently active

Irco Mena

Cardento

Camaro M

Feliciano

Cortez

Cagliostro

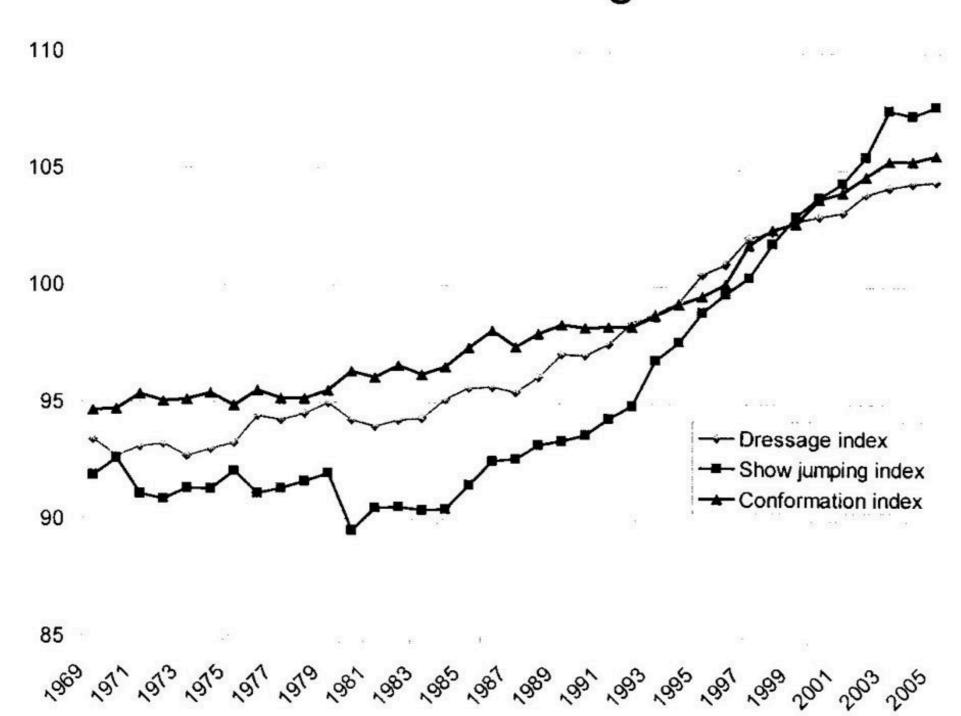
**Lucky Light** 

Aerline H

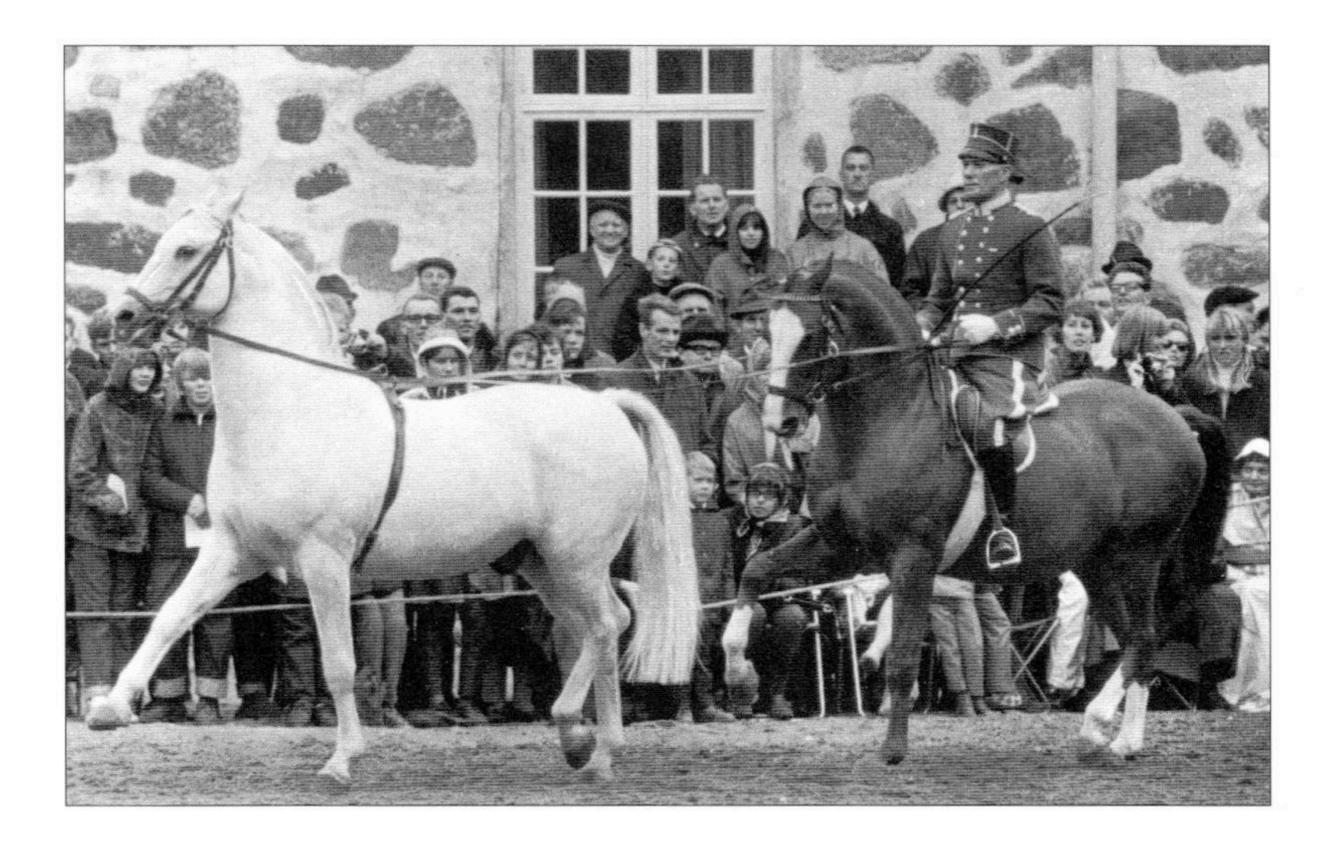
Dirco Hästak

Robin Z

# Genetic Progress in Swedish Warmblood breeding



















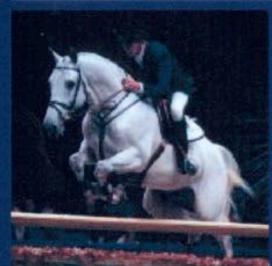
Irco Marco 662 e. Irco Polo - Sportman



Feliciano 823 e. Irco Marco 662 - Utrillo 432



Lafayette e. Allegretto 693 - Ceylon 454



Cardento 933 e. Capitol I - Lord



Irco Mena 763 e. Irco Marco 662 - Menelek xx



Jan-Erik Pålsson in action



Guiness 888 e. Dolomit 614 - Elizar



Karuso e. Krocket 651 - John Splendid

Many of the most successful horses of the last two decades can be traced back by pedigree to one of these legendary sires:

Drabant 315, Gaspari 340,
Ceylon 454 and Chagall 455.

