Denmark's big exports of Lurpak butter

At the World's Fair in London in 1879, Danish butter was judged to be of the highest quality. This led to a growing demand in shops and rising prices all over Britain. Over the following decades, the Danish dairy industry laid the foundations of welfare in Danish society: in 1900 the butter export represented almost half of total Danish exports. In 1950, it still represented 20% of Denmark's export earnings, so it became profitable to milk cows in Denmark.

Joergen Larsen was the first to bring Jersey cattle to Denmark. He built the northernmost estate in Denmark, Gaardbogaard, by drying out a lake and planting trees on sandy areas. The great esteem achieved by having transformed his land into fertile fields and green woods, was of considerable help in his introduction of the new breed.

In the spring 1896, Larsen visited the new-established Jersey herds in Sweden. At Torreby Estate he bought a total of 12 animals. On his return home, he made up his mind to establish a complete herd of Jersey cattle at his new estate, and British government adviser Mr. Faber in London put him in contact with the RJA&HS in Jersey.

The outcome of this contact was that in the autumn of 1896, Larsen took passage on the steamer Jyden, and in the company of professor Oesterby of Copenhagen, who acted as his interpreter, he travelled to Jersey and bought 81 cows and three bulls, which arrived in Denmark in October 1896 and were subsequently taken to Gaardbogaard.

In May 1898, the next shipment amounted to a total of 122 head; 45 heifers and two bulls were taken to Gaardbogaard and the remaining animals were distributed to different estates and farms in Denmark. (Source: Mejeribrugets Dronning, 1996)

Country	Denmark 
First importation of purebred Jersey cows	1896
Name of the national Jersey association (in English)	Dansk Jersey (Danish Jersey)
Year of formation (possibly end year) of association	1902
Date of 1st herd book (1st edition or earliest)	1918
Size of Jersey population, latest figures (registered and total)	66,500 milk-recorded cows 143,000 Jersey animals registered
Jerseys as a % of the national dairy cattle population	12.5%
Average herd size	148 cows
Average production	N/A
Average 305-day yield	6,657kg milk 395kg fat 273kg protein
Breeding program with bull testing?	Yes
Number of bulls tested per annum	55
General management	Total mixed ration with maize and grass silages, concentrate (wheat/ barley, soybean, rape seed), straw. 60% graze in the summer Housing is free stall (cubicles) with beds
% of organic herds	Approx. 20%
Use of sexed semen	7.5% of all semen
Names of the oldest herds	Landsledgaard, established 1902 Steensgaard, established 1903

Jerseys from Sweden to Denmark

Denmark was still supplied with animals from Sweden. A herd at Sauntegaard Manor near Helsingor was established in 1900, using Jerseys from Torreby, primarily for delivering drinking milk to Copenhagen. This Manor bought three high-class animals in 1922, imported from England. Sauntegaards Jerseys and the herd of Borupgaard established in 1907 undoubtedly helped to raise the popularity of the Jersey cow among the more wealthy residents located north of the Danish capital. The renowned Danish writer Isak Dinesen f.e. once received a Jersey calf as a birthday gift!

In 1901 the Danes bought 251 head on the island so cheap: 'that it was not within the recollection of the oldest breeders to have seen such a large number of cattle offered for sale at so low a price'. (RJA&HS Annual Report, 1906). Jersey Island's small farmers in particular had been so anxious to sell, that almost any figure offered was accepted. They feared a lack of straw fodder in the coming winter, as imports from France were not allowed. In Denmark it is told that Larsen offered the farmers hay in return for cattle.

Larsen informed his agent on the island, Francis le Brocq, that the profits ob-

Jersey cattle at Gaardbogaard born on the Island of Jersey between 1894 and 1896.

tained from his Jerseys had been so satisfactory: 'that these results had convinced several of his neighbours of the value of Jerseys, and he, on their behalf, bought this lot of cattle to replace their native cows'. (RJA&HS Annual Report, 1906).

It is quite obvious that the Danes purchased a different type of cattle than the English and Americans. Mourant has recorded that cattle for export at that time were classified as 'Ordinary, Good-Ordinary, Fair, Good, Very Good, and Special' (Mourant, 1907). Larsen also bought some prize animals, but some of them did not turn out any better than the ordinary cows.

A comparative analysis conducted by Woodland Toms (circa 1890) of milk from 25 randomly selected cows in Jersey and an elite group of cows, shows that the milk fat content of the ordinary cows was 0.2 percentage points higher than the milk from the elite cows. (Source: Cornu, 1890) John A. Perrée also stated: *"Anyone who has witnessed the departure of a consignment of cattle to Denmark knows full well that they are not specially selected, of any particular strain or of any individual point of merit, but bought, registered or not, from every farmer, whether prominent or unknown as a breeder, in every parish in the Island." (Jersey Bulletin, 1907)*

The Danish breeders form their own association

In 1902, the Danish Jersey breeders formed their own cattle breeding and husbandry association 'Jersey'. The new association also took care of cattle imports from 1903 until they were prohibited in September 1909. Larsen, who was chairman of the association from 1902 until 1927, had become a well-known person on the island.

Mourant has recorded: "Denmark cannot be supplied with all *she would take. Twice a year Mr. Jørgen Larsen has been coming across for whole loads of Jerseys – 613 head in three shipments being the 1903 record – and this because the Danes, than whom none are more practical, have discovered that Jerseys produce butter at 15 per cent less cost than their own cattle." (Mourant, 1907)*

On his visit in Denmark 1906, Perrée had the opportunity to study the herd of Gaardbogaard Estate a few years after the first importation: *"Mr. Larsen's herd consisting of 107 head in milk (1898-99), mostly heifers, produced an average yield of 252 lbs butter per cow, and although the herd still included a large percentage of heifers in 1905-06, the annual yield average 307 lb. per cow.*

"I took the following notes from Mr. Larsen's 'Control' book, which in his case is under Government super-vision: Dewdrop, now 10½ years old, has given 2,000 lbs butter in 5 years; Darkey, now 10 years old, has given 2,666 lbs butter in 7 years; Faithful Maid 2d, now 10 years old, has given 2,987 lbs butter in 8 years; Rose (bought from a lot originally sent to Sweden), now 12 years old, has given 3,269 lbs butter in 9 years." (Jersey Bulletin, 1907).

According to the herd register Dewdrop (DHB No. 13) was 'buried with honours'. Larsen once claimed: "When we have had a strong lactating cow for several years, we also can give her a decent burial."

Perrée next visited Mr. Hasselbalch, where 'workmen were busy building new barns, fixing machinery etc – on the profit of the Jerseys, as Mr. Hasselbalch took care to remark'. (Jersey Bulletin, 1907). Next Larsen took them to Kjærgaard Manor near Hjørring, where the owner asked Perrée to select the best show cow in the stable.

He chose No. 12 and found out that she was a daughter of the famous Golden Ferns Lad. She gave 443 lbs fat and at the Horsens Cattle show in 1905 she also had won first prize*). After a second round of the stable, he exclaimed: "I could scarcely

*) *No. 12. The Queen (DHB No.37); Sire: John Glory (DHB No. 6); G. Sire: Castors Glory (JHB No.1341). Dam: Lady II (DHB No. 22); Dam's sire: Chutto (JHB No. 2020).*

The current owner of Gaardbogaard, S.A. Christiansen, pays great attention to preserving the memory of the Danish Jersey pioneer, Jørgen Larsen.

believe my eyes and my only regret is that 20 Island breeders are not with me to see this herd and the books showing irrefutable facts." (Jersey Bulletin, 1907)

Danish veterinarians stop the importation

At one time the American importers had been concerned about the number of Jerseys being purchased by the Danes. In 1909, however, this flourishing development suddenly came to an end, when the Danish veterinary authorities found Johne's disease in some of the purchased animals from Jersey Island. So the number of imported animals ended at a total of 5,212. (Source: Jerseybladet, 1909)

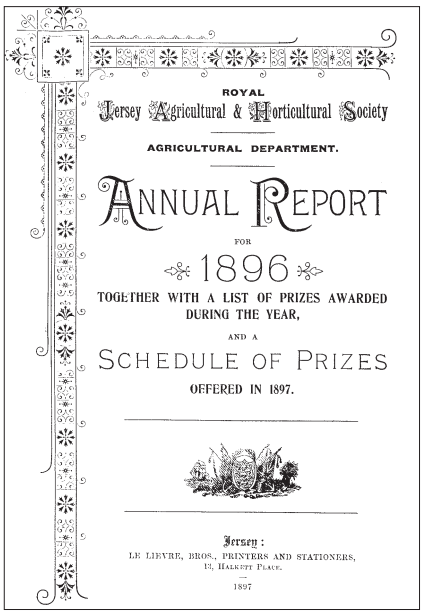
Denmark numbered 1,955 milk recorded Jerseys in 1909, but due to this setback the first two decades after the importations had come to end, the rate of numerical progress was moderate. In 1923 there were 6,000 purebred Jersey cows in milk and 1,500 crossbreds and in 1933, respectively 8,000 and 3,200. Three herds established during this early period still exist: Landsledgaard, Steensgaard Estate and Malling agricultural college.

Landsledgaard Manor is the oldest Jersey herd

On October 6, 1902 eight Jerseys arrived by the steamer Stege to Landsledgaard Manor located in south-east Denmark. The animals were bought by the gentleman farmer A. Henriques, 'who intended to see how the small-framed Jersey cow – which yields almost pure butter – would thrive on the Island of Moen'. (Danish Newspaper, 1902)

One bull was, according to the newspaper, bred on Gaardbogaard. But otherwise Ettie Henriques states the animals were imported from Sweden; more imported stock from the island later on arrived by train.

After the arrival of 25 females in 1923 from two herds in the neighbouring area, no more heifers or cows entered Landsledgaard, while bulls from good herds continued to be purchased. Landsledgaard belonged to the Henrique family for three generations from 1888 until 1989, when Ettie Henriques sold the manor to Charlotte and Finn Jorgensen.


ROYAL
Jersey Agricultural & Horticultural Society
AGRICULTURAL DEPARTMENT.
ANNUAL REPORT
FOR
1896
TOGETHER WITH A LIST OF PRIZES AWARDED DURING THE YEAR,
AND A
SCHEDULE OF PRIZES
OFFERED IN 1897.
Jersey:
LE LIEVRE, BROS., PRINTERS AND STATIONERS,
13, Halkett Place.
1897

The annual reports of the RJA&HS contain much information about the importation of Jersey cattle by Denmark which took place from 1896 to 1909.

A new barn is now home to their 130 Jerseys. (Source: Jerseybladet, 2002)

By selling live animals the Landsledgaard Jerseys influenced the development of the breed in the eastern part of Denmark and many new herds were founded. On March 17, 1928 Mr. Blach, the owner of Taastrupgaard Manor in Jutland sold a yearling bull to V. Henriques for 1,000 Danish Sterling. Blach himself accompanied the bull by train to Landsledgaard.

The cows there already were out at grass and Blach welcomed 'the lovely, delicate and high-performance crew' he witnessed. The dam of the bull, Tommy (DHB No. 319), was Nanette (DHB No. 232), who in 1929 produced 12,819 lbs milk with 8.89% fat and 1,140 lbs butterfat. And although these figures have since been questioned, Nanette was for years to come the most famous Danish Jersey cow.

Tommy sired a cow born in 1926 at Landsledgaard, originating from that stock achieved from Nybøllegaard Manor in 1923, which gave birth to cow No. 44. She was bred to Bølle (DHB No. 385) whose dam was No. 28, Nybøllegaard (DHB No. 409), the recipient of Danish Jersey's 1937 gold medal for high yields and a sister to No. 39, Nybøllegaard (DHB No. 230) which was the first Danish Jersey cow to be awarded Danish Jersey's gold, as well as silver and bronze medals for high yields. Several sons of No. 39, Nybøllegaard and of her daughter No. 12 (DHB No 410) were used extensively for stud, and all their descendants have been very high-yielding animals.

A granddaughter out of No. 44 and by Bølle, was Cow No. 22 born in 1939 and later on sold to Ole Jensen, Fårevejle, who founded his herd in 1932 by purchasing three heifers from Landsledgaard. However, in 1941, he sold his farm to Edvard Hansen, who took the Jerseys with him when the family moved to Jutland in 1945. A calf out of No. 22, was sired by Jens Lyn (DHB No. 638), which gave birth to Cow No. 45, Vestergaard (DHB No. 2339) – the recipient of the Danish Jersey's silver cup for high yields in 1963. A descendent of No. 45 Vestergaard, is the dam of Funen Tved, Cow No. 192 (DHB No. 11423). (Sources: Henriques, Stendal).

Steensgaard Estate has its own dairy

Steensgaard Estate located on the Island of Funen has the second oldest Jersey herd in Denmark. The first animals from Jersey Island arrived in October 1903. And after the last consignment in June 1907, only a few animals have since entered Steensgaard. The herd register shows a purchase of a total of 309 animals. In 1908 Steensgaard exported some animals to another Swedish estate Hjuleberg.

The sale of live animals laid the foundation of several herds on the Island of Funen, such as Hans Joergen Jensen, Kværndrup who established a Jersey herd in 1912 with cattle from Steensgaard. (Sources: Steensgaard's Herd Book, 1903)

When his son Nicolaj Jensen established a Jersey herd at Hestehavegaard in Gislev, in 1939, one of the animals also originated from Steensgaard. She was born in 1936 and bred to a son of Nybøllegaard 39 (DHB No. 17). That resulted in Cow No. 21 in 1939, from which descends Cow No. 23, Hestehavegård

(DHB No. 7186) born on December 18, 1956 – one of the best ever cows in Denmark. The cow was nearly 20 years before she died on December 12, 1976 and was buried in the middle of Hestehavegaard's scenic surroundings. An average of 17 years showed that cow No. 23 yielded 4,929 kg milk at 6.50% fat and 325 kg butterfat – a total of 5,778 kg butterfat.

This was the third highest lifetime yield worldwide, second only to a Finnish Ayrshire and an American Jersey. Cow No. 23 is the great grand-dam of Funen Tved. (Sources: Stendal, 1986)

Malling agricultural college celebrates its 100th year

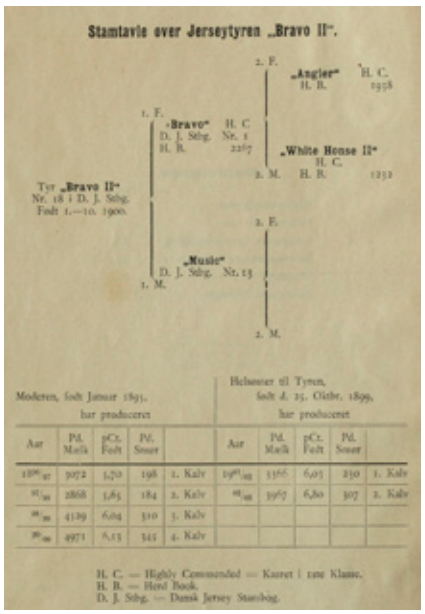
In 2011 the Jersey herd at Malling agricultural college near Aarhus in Jutland will celebrate its centenary. The decision to replace the native breed with Jerseys was taken partly at the instigation of Gaardbogaard's herd manager. The sire of Funen Haug's dam, ØJY IB (DHB No. 4074) was born here. The dam of ØJY IB, cow No. 18, traces back to cow No. 29, Birthe, born in 1919 and purchased for the agricultural college.

From gentleman's cows to small-scale farmer's cows

Denmark had 12,516 milk recorded Jersey cows in 1,600 herds in around 1943. The increase in the number of Jerseys occurred mainly in smaller groups. From having been primarily the gentleman's cow, the Jersey now turned out to be the smallholder's cow. And the centre of Jersey breeding in Denmark moved to the Island of Funen.

From 1910 until 1944 the number of milk recorded Jerseys on Funen rose from 547 to 4,573, while the number of herds rose from 22 to 686. The first Jerseys arrived in Nørre Aaby parish in May 1906 and in the following 40 years, Jersey breeders gained a majority compared with the breeders of the Danish Red in the local milk recording association and at the local dairy company.

In 1909 Jerseys were introduced at the local cattle show, which became the most important Jersey show in Denmark in the mid-1930s. From 1910, the Jersey breeders of Nørre Aaby and surrounding parishes established a network through


Stamtavle over Jerseytyren „Bravo II".

2. F. „Angler" H. B. H. C. 1958
1. F. „Bravo" D. J. Stbg. Nr. 1 H. B. H. C. 2207
„White House II" H. C. H. B. 1232
2. M.
Tyr „Bravo II" Nr. 18 i D. J. Stbg. Født 1.—10. 1900.
2. F.
„Music" D. J. Stbg. Nr. 13
1. M.
2. M.

Moderen, født Januar 1891, har produceret

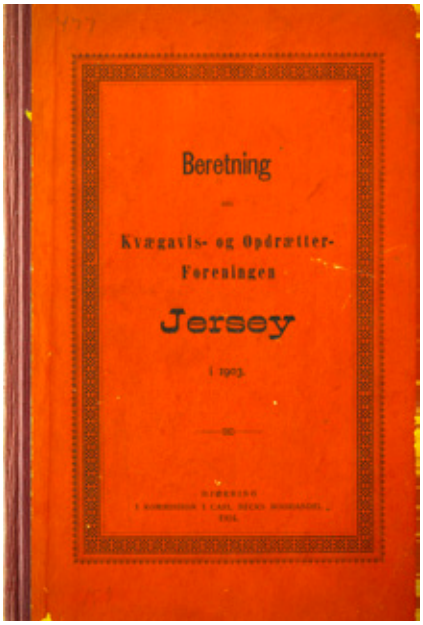
Aar	Pd. Malk	pCt. Fedt	Pd. Smør	
1899/1900	3072	5,70	198	1. Kalv
1900/01	3868	5,65	184	2. Kalv
1901/02	4139	6,04	310	3. Kalv
1902/03	4971	5,13	345	4. Kalv

Helsoster til Tyren, født d. 25. Oktbr. 1899, har produceret

Aar	Pd. Malk	pCt. Fedt	Pd. Smør	
1901/1902	3366	6,03	230	1. Kalv
1902/03	3967	6,80	307	2. Kalv

H. C. — Highly Commended — Kuret i 1ste Klasse.
H. B. — Herd Book.
D. J. Stbg. — Dansk Jersey Stambog.

The first bull entered in the Danish Jersey Herd Book was Bravo.



The first yearbook of the Danish Jersey Society.

an insurance association against foot and mouth disease, a bull association and a sales association for livestock. (Sources: Mejeribrugets dronning, 1996)

Kaerbyholm made prominent breeding and an award

Some of the most prominent Jersey breeders came from this region such as Mr. Hansen at Kaerbyholm, whose created a Kaerbyholm award for younger Jersey breeders who have proven their ability and desire to work with Jerseys.

Hansen, line-bred his herd based on a son of Bravo (DHB No. 1). From this herd numerous breeding animals went to other Danish Jersey herds, most of which proved excellent sires. And in the 1930s, the two brothers Carl and H.G. Jensen were the owners of two very influential bulls Nybøllegaard 39 (DHB No. 17) and Indslev Ellekær (DHB No. 393). The latter was a highly esteemed bull in Denmark who sired all sons of Cow No. 25, Indslev (DHB No. 425). In the course of 15 years she produced 153,395 lbs milk at 5.67% and 8,697 lbs butterfat. This was the Danish record for lifetime yield for some years. Indslev Ellekær traces back to one of the famous bulls in the Island, Flying Fox (JHB 2729).

The Jerseys outnumbered all but the Holsteins

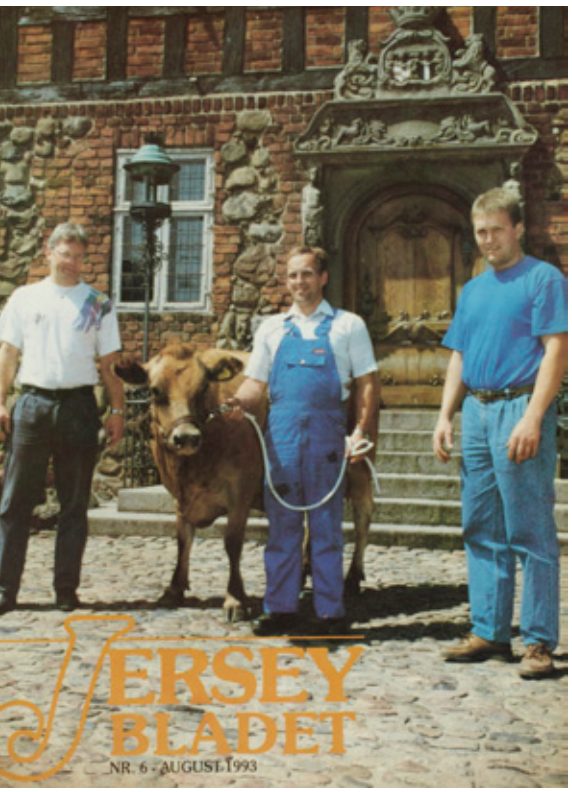
From the western part of the Island of Funen the breed spread rapidly throughout Denmark and in the early 1960s, there were 76,182 milk-recorded Jerseys representing 9% of all recorded cows.

This increase in numbers was accompanied by a marked rise in milk yields, particularly in butterfat content. In the mid-1970s the Jersey breed was represented in half of all herds on the Island of Funen.

In the 1972/1973 census, Jerseys represented 17.6% of the Danish population of dairy cows. Since 1983, the breed has been the second largest dairy breed with 115,773 milk-recorded Jerseys in 2010. (Source: Mejeribrugets Dronning, 1996; Stendal, 1983)

Resuming imports to increase production

In the year 1948 Denmark resumed imports. About 10 bulls were bought from Jersey and England, the aim being to improve conformation and increase milk volume. None of the imported bulls, however, had a major influence on breeding. In November 1965, the Danish Jersey magazine listed the Jersey cows whose



Jerseys at Steensgaard Manor, the second oldest Jersey herd in Denmark.

dam had been mated using imported semen. This revealed that Gem's Dandy Advancer, USA (AJCC No. 541866) had five daughters; Coralds Dream Boy, USA (AJCC No. 560800) five daughters; Winsome Viscount USA (AJCC No. 570723) five daughters; while the owner of Rosenfeldt Estate, E. Tillisch is recorded as having four daughters by Sable's Commando. This herd was founded in 1906, but dispersed within the early 21st century.

And finally Hans Jensen, who has owned Hestehavegaard in Gislev since 1954, has seven cows listed by New Zealand AI sires: Glenmore Gold Model (NZHB No. 220107) with two daughters and Glenmore Royal Guide (NZHB No. 202348) with five daughters.

The importation of Glenmore Royal Guide semen had a tremendous influence on Jersey breeding in Denmark. When used on Cow No. 148 (DHB No. 5432) it produced the bull Fyn Glen (DHB No. 160), who now has 138 sons and 129 daughters recorded in the Danish herd book. Fyn Glen was mated to Cow No. 23 (DHB No. 7186) and their grandson Brutus Syd (DHB No. 179) became the father of Funen Tved, the dam was Cow No. 192 (DHB No. 11423) owned by Edvard Hansen, Langetved in Jutland. (Source: Stendal, 1986)

The skeleton of Brutus Syd today can be viewed at the Danish agricultural university in Copenhagen. Funen Tved became the sire of Skae Hede and Fyn Haug.

The clear goal of breeding was butterfat

The breeding goal was always clear for Danish Jerseys: butterfat! This was reached and world records were broken with a 300 kg butterfat average. Payment for protein was introduced in 1983. While the fat percentage had reached 6.30%, the first test for protein percentage showed 3.97%. It was time to reconsider the breeding goal as more and more emphasis was put on protein in the milk payments. As an effect of changed milk pricing, the number of Jerseys in the dairy cow population was falling. By 2005, they made up just 10.8% of cows.

The Jersey Cattle Society decided to introduce a Protein Line Project, to breed bulls that were superior for protein production. During the 1990s, 20% of all young sires that were progeny tested were selected from this program. When choosing bulls to go into this program 80% of the emphasis was put on protein and only a little on conformation and other traits.

The results were some bulls good for protein, but more importantly it changed the minds of breeding committees. The result was that all Jersey breeding societies (FYN, ODA, Q and SKAE) amalgated their young sire sampling programs and started to do all selection by using the Protein Line Project as a screening procedure, from the year 2000.

The Jerseys of Scandinavia co-operate in breeding

In 2008, Danish Jersey became part of Viking Genetics, a new Danish-Swedish-Finnish AI society. Jerseys popularity had risen again (66,000 milk-recorded cows – representing 12.5% of the total and increasing), due to the fact that more Jerseys can be milked, making more profit per hectare than with other breeds. Jerseys also live longer, they have better fertility and fewer health problems. Jersey herds milk, on average, 150 cows – 10 more than Danish national average. Denmark now has the largest Jersey cattle population in Europe with 66,000 purebred and milk-recorded Jersey cows.

Exports of livestock onto the European market range between 1,000 and 3,000 head a year. Semen exports started in 1954 to South Africa and this market is nearly double the domestic one.

Semen imports have been very important for the development of the Danish Jersey. First it was semen from Jersey Island and New Zealand during the 1960s and 1970s and finally semen from the USA and Canada between 1985 and 1995.

The most influential bulls have been Glenmore Royal Guide (NZ), Highland Duncan Lester (US) and Meadow Lawn J Imperial (CAN). These bulls have resulted in sons, grandsons and great grandsons like FYN Tved, FYN Haug, SKAE Hede, FYN Lemvig, Q Impuls, Q Zik and DJ Zuma. Today 62% of the genes are Danish and 38% foreign (USA) in the Danish Jersey population.

World high record on butterfat production

Credited with the highest production of butterfat in the world, the 2010 national average for purebred recorded Jerseys is 6,680 kg milk with 396 kg fat (5.93%) and 274 kg protein (4.10%).

Annually, semen from around 55 young bulls is used for test inseminations and 32% of all inseminations involve young sire semen. Denmark is a major exporter of Jersey genetics and most national Jersey herds in mainland Europe are founded on Danish Jerseys.

Danish Jersey began using sexed semen in December 2004 and within five years its use had risen to 18% of proven semen used.

In 2009, Danish Jersey introduced genomic selection. All bulls entering the national breeding program are tested. One-third of the bulls selected have unproven genomic selected sires. The increase in demand for genomic-selected bulls is close to 50%.