

Proven by Geno,  
Norway



# NORWEGIAN RED

Since 1935



# WHY NORWEGIAN RED?

Norwegian Red genetics are known for supporting improved herd health and fertility, helping to increase your overall profit and reduce workload.

# 1

## **Profitability**

High milk production components, feed efficiency, fertility, and lifetime production

# 2

## **Easy to manage cows**

More adaptable cows that require less individual care

# 3

## **Efficiency**

Health, ease of calving, reduced labour, and improved stress management

# 4

## **Sustainability**

Improved animal welfare, feed efficiency, reduced antibiotics usage and resilient cows



"The addition of Norwegian Reds has made a real difference. Fertility, longevity, and calf figures have all improved, resulting in healthier and more productive cows."

– Huw Edwards, North Wales

**Autumn block calving, 410-cow herd**

## SUCCESS STORY:

# WILL CLARKE

## TWO-WAY CROSS COWS FUTURE-PROOF AUTUMN BLOCK CALVING HERD

Lancashire-based dairy unit combines Holstein and Norwegian Red genetics to optimise their autumn calving herd. Richard and Will Clarke have built a uniform, easy-care herd suited to their semi-intensive system, using sexed semen to improve genetic gain and breed heifer replacements from their best cows. This approach has enabled them to expand without extra full-time help.

With a 16% replacement rate, their 240-cow herd features many fifth lactation cows, helping to both reduce costs and lower their carbon footprint. Will, who joined his father at Cinderbarrow Farm in 2018, introduced modern crossbreeding techniques to maximise the cows' potential. The herd is fed concentrates to yield in the parlour as well as grass silage in winter and graze from March onwards.

In 2010, Richard transitioned from pure Holsteins to crossbreeds, finding the right balance with Holstein and Norwegian Reds after experimenting with other breeds. This strategy has doubled their cow numbers and improved business resilience. Lower replacement rates have cut heifer rearing and vet costs.

### **A more robust type of cow and a more resilient business.**

“The herd has really ‘blossomed’ now we’ve focused just on Holsteins and Norwegian Reds, helping to improve our business resilience with healthier and more fertile cows”.



Cinderbarrow Farms main expense is parlour feed, averaging 2.2 tonnes per cow annually. They achieve 7,250kg of milk per cow at 4.59% fat and 3.37% protein with efficient feeding strategies. The herd includes high-yielders, with some cows producing 100 tonnes of milk in their lifetime.

Will emphasises the importance of healthy, low-maintenance cows, with minimal calving issues and high calf survivability. Utilising a sexed and beef strategy they are achieving exceptional results.

Through this strategy Cinderbarrow Farm have increased fertility and reduced their herds calving interval to 375 days.

The farm's 138-hectare grassland is managed to maximise grass use despite dry spells in summer. They produce high-quality silage and graze for seven months a year. The herd has low health issues, with a 140,000 cells/ml somatic cell count and minimal antibiotic use.

### **Key Facts:**

- Farm size: 142-hectares
- Herd size: 240 cows - target 260 and 100 replacements
- Staff: two full-time
- Breeding: Holstein and Norwegian Red 2-way cross
- Replacement rate: 16%
- Calving interval: 375 days

# DAIRY CROSSBREEDING

Crossbreeding is considered an effective way to increase the efficiency of milk solids production. It allows farmers to breed better cows – and it's a quick way to achieve genetic gain. Crossbreeding provides dairy farmers with the best of both breeds. Effective crossbreeding begins with two different breeds that complement each other genetically.

Dairy crossbreeding systems should make use of the number of breeds that are optimal for the conditions of each specific dairy operation. Whether choosing a 2-way or 3-way cross each dairy farmer should make a plan and choose a crossbreeding system that suits their facilities, climate, milk market, economic circumstances, nutritional regime and level of management.

## ADVANTAGES OF CROSSBREEDING

- In heterosis or hybrid vigour, crossbred animals perform better than the average of their parent breeds
- The additional benefit of complementarity breeds, avoiding inbreeding
- Opportunity to use a wider range of genetics
- Robust animals
- Improved lifetime production



"The cows and the heifers have done everything that they said Norwegian Red would, and they've outperformed themselves time and time again". – Chris Vaughan, Cheshire

**Autumn block calving, 250-cow herd**

# THE NORWEGIAN RED

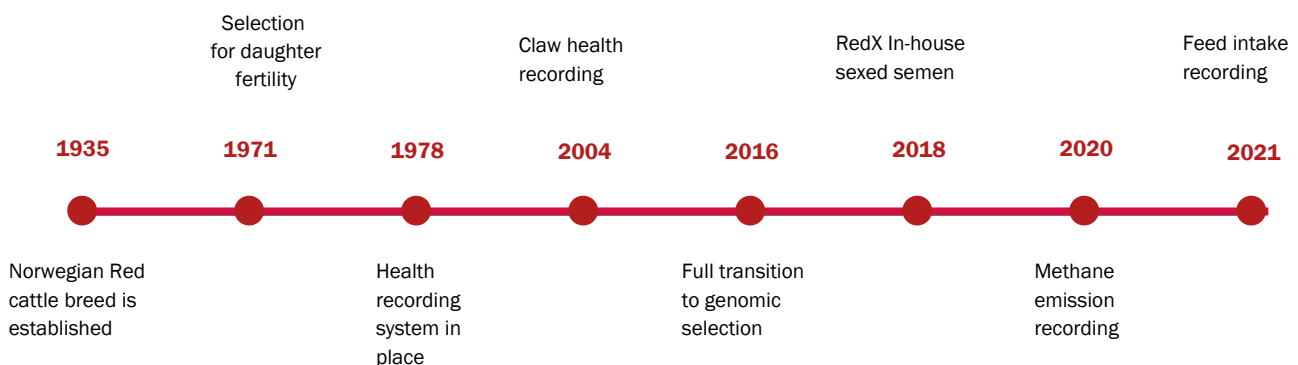


Positive genetic trends for health and fertility as well as production have been possible due to the comprehensive data collection system in Norway.

The Norwegian Red is a high-yielding dairy breed developed in Norway since 1935. Breeders have strongly emphasised functional and production traits since the 1970s. This balanced breeding goal has resulted in excellent production combined with world-leading performance in health and fertility traits.



## MILESTONES



# NORWEGIAN RED IS THE SCANDINAVIAN RED DAIRY BREED WITH:



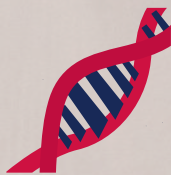
The largest population size



The largest breeding program with the highest selection intensity



The largest proportion of cows in automated milking systems (60%)



The highest frequency of polled genetics



The shortest stature

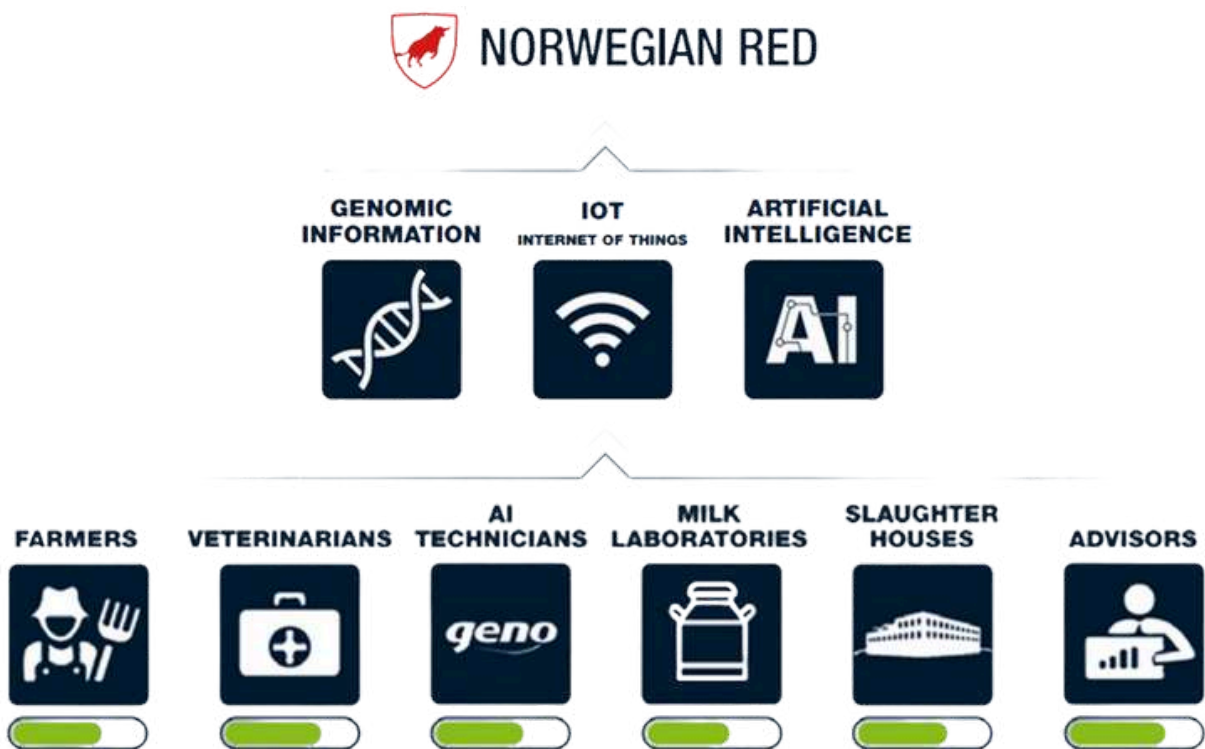
## ABOUT GENO

Geno is the breeding organisation of Norwegian Red cattle, the main dairy breed in Norway. It is a farmer cooperative that has been conducting research and development for cattle breeding since 1935. The cooperative system gives the farmer members the power to influence the development of the Norwegian Red breeding program.

**Our vision is “Breeding for better lives”, both for animals and farmers**

# NORWEGIAN HERD RECORDING SYSTEM: 99% DATA ACCURACY FROM DECADES OF COMPREHENSIVE COLLECTION

In Norway, 99% of cows and 98% of dairy herds are part of the Norwegian Dairy Herd Recording System. This system tracks data on an individual animal basis, including health cards, slaughterhouse reports, laboratory milk analyses, insemination reports, calving information, milk yield records, and culling details, all meticulously recorded by farmers.

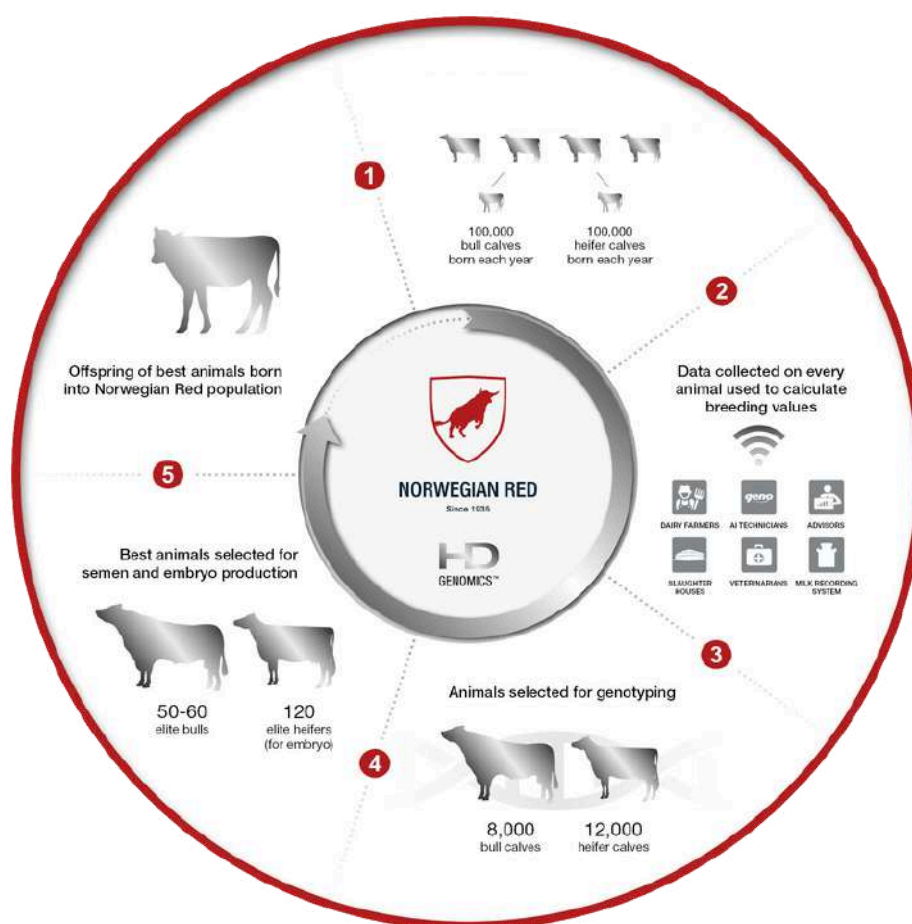


All data used for genetic evaluation historically and presently comes from the Norwegian Dairy Herd Recording System. Data, including health records, insemination reports, and veterinary treatments are stored in one national database.

The health-card system is an integrated part of the milk recording system, and information from the daughters was used in the genetic evaluation of sires. The data from the health cards are now utilised in our genomic selection scheme.

# THE NORWEGIAN RED BREEDING PROGRAM

The Norwegian Red breeding system is the unique genomics-based breeding program for Norwegian Red which is built on the foundation of Geno's long-term progeny testing program. Breeding value calculations by Geno are based on single-step genomic prediction. This means that all bulls and cows, both those who have genotype information and those who do not, receive estimated breeding values in the same step.



“Breeding Norwegian Red brings us immense joy as we recognise the potential to make a positive impact on dairy farming both locally in Norway and worldwide.”

**Line Borgerud Skøien and Ole Hjerpaasen, Norway**

**Breeders of Norwegian Red popular bull, NR Skoien**

# HEALTH & FERTILITY

By keeping a balanced breeding goal for 50 years, Norwegian Red has overcome the negative correlation between production traits and health and fertility traits.

## HEALTH TRAITS

- Health traits included in the breeding goal since 1978
- Selection based on resistance to mastitis and resistance to other diseases (ketosis and other transition diseases)
- Health traits have lower heritability than production traits so genetic progress occurs over many years
- Dramatic genetic progress in resistance to clinical mastitis since 1995 – most cows have zero clinical mastitis

## FERTILITY TRAITS

- Fertility traits included in Norwegian Red breeding goals since 1971
- Selection based on non-return rate (conception rate) in cows and heifers and time from calving to first insemination in cows
- Fertility traits have lower heritability than production traits so genetic progress occurs over many years
- Most fertile of all dairy breeds due to superior breeding program
- Norwegian Red cows proved to have longer estrus periods with more of the primary sign standing and more time spent in sexually active groups compared with the Holstein-Friesian breed (Journal of Dairy Science)



“We introduced Norwegian Red 15 years ago and are very pleased with the results. The herd benefited from improved health status and fertility, reduced size, and more efficient and high-productive cows. Success is demonstrated in the figures. Current fertility KPIs are a submission rate of 78%, conception rate of 50%, and a pregnancy rate of 36%, with an impressive 66% of the herd pregnant by 100 days in milk.” – John Millar, Dumfriesshire

**All-year-round calving, 350-cow herd**

# BREEDING FOR HAPPY AND HEALTHY COWS



- 96.1% of Daughters NOT treated for Milk Fever
- 98.9% of Daughters NOT treated for Ketosis
- 98.3% of Daughters NOT treated for Cystic Ovaries
- 99.0% of Daughters NOT treated for Metritis
- 97.3% of Daughters NOT treated for Silent Heat (no Sync hormones)
- 87.8% of Daughters NOT treated for Clinical Mastitis

Based on observations of all Norwegian Red cows in Norway



“Since introducing Norwegian Red crossbreds into the herd in 2019 lameness cases have gone down by 75%.”

Empty rates have halved –the calving interval has gone down and the six-week calving rate has increased from 72% to 86% with 80% of cows holding to first insemination.”

**Conor O'Sullivan Co. Tipperary, Ireland**  
**Spring block calving, 200-cow herd**

# SUSTAINABILITY

Geno's goal is to further develop the Norwegian Red as the most sustainable and profitable dairy breed in the world. Improving feed efficiency is one step towards both.

The company is constantly improving its genetic material to suit the needs of dairy farmers. By investing heavily in actual feed intake recordings on Norwegian Red, selecting the most feed-efficient cow with the highest possible precision will become possible. Geno has also started measuring and monitoring methane emissions on Norwegian Red cows and bulls.

The goal is to develop a full Feed Efficiency Index that lets dairy farmers breed for a more feed and energy-efficient cow. This leaves farmers with a lower-emission herd and helps to improve overall profitability.

Geno's long-term project is to breed more feed and energy-efficient cows



# TESTIMONIALS



**Shane Fitzgerald**  
Co. Cork, Ireland

**SPRING BLOCK CALVING, 430-COW HERD**

“We introduced Norwegian Red genetics into the farm's breeding program in 2004. This led to a three-way crossbreeding strategy involving HF, Jersey-Kiwi cross, and Norwegian Red, aiming for a robust, uniform cow producing 540-550 kg of milk solids annually.

We have great fertility, we have excellent mastitis control, low cell counts, and high feed efficiency. In our three-way cross system, Norwegian Red has truly given us the strength and depth we aimed for, crucial for optimal performance.”



**Noel Griffin**  
Co. Waterford, Ireland

**SPRING BLOCK CALVING, 220-COW HERD**

“Using the Norwegian Red TMI, we look for sires with a breeding value (BV) of 120 for milk percentages, with 100 being the average, positive value for fertility, and keep a keen eye on stature and body depth. Despite not selecting a sire using the EBI index for 10 years, the herd's EBI score published in January 2024 is an impressive €253, which puts it in the top 1% in Ireland.

As soon as our heifers join the herd the EBI improves, so we're moving in the right direction”



**Dafydd Evans**  
Kilford Dairy Farm, North Wales

**AUTUMN BLOCK CALVING, 450-COW HERD**

“The Norwegian Red crosses have impressed us with their vitality and ease of management. The calves are spritely and healthy, helping to reduce our costs and improving overall herd health. Their smaller stature also makes them ideal for the farm's grazing system, handling the mile-long walk from the fields to the parlour with ease”



**James Martin**  
Ballydown Farm, Northern Ireland

**ALL-YEAR-ROUND CALVING, 450-COW HERD**

“When we first began looking into the breed back in 2018, myself and Brian McCarron - Genus ABS Breeding Advisor - went to farms which had introduced Norwegian Red into their herd. One of the key things which stood out to me was when I asked one the herd owners about his vet costs. He said the vet had been out last week for the horse but he couldn't remember the last time he'd been out on farm. After battling with our herds overall health status over the years this really spoke volumes.”



**Mark Birkett**  
White Lund Farm, Lancashire

**ALL-YEAR-ROUND CALVING, 350-COW HERD**

“Crossbreeding makes more money, easier money. The cows look after themselves, they have fewer problems and few mastitis issues in the winter. They are healthier cows.

There's a big misconception out there that if you crossbreed, you're going to lose loads of milk. But it's the fact that your cows are healthier, get in calf better, are calving more regular and sticking around longer to be mature cows. We've actually gained milk from when we were in Holstein.”

# RED



- x Superior Sexed Norwegian Red genetics**
- x Increased relative conception rates\***
- x Produce more high value heifers, faster**

REDX™ combines 21st century technology with increased performance gained from Norwegian Red genetics.

\* Based on observations made through ABS Real World Data

POWERED BY  
**IntelliGen**  
TECHNOLOGIES

## Norwegian Red sexed semen

See faster genetic gain and performance in your herd by breeding from your best cows, therefore maximising your profits.





**THE NORWEGIAN RED** BREED PROVIDES UNIQUE GENETICS THAT HELP DAIRY FARMERS TO BREED COWS THAT ARE EASY TO MANAGE, ARE SUITABLE FOR A VARIETY OF SYSTEMS AS WELL AS HELPING TO IMPROVE OVERALL HERD PROFITABILITY.



## NORWEGIAN RED

Since 1935

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Help future proof your dairy herd with Norwegian Red genetics.

