BREEDING FOR THE LONG RUN

PERFORMANCE MEETS RESILIENCE

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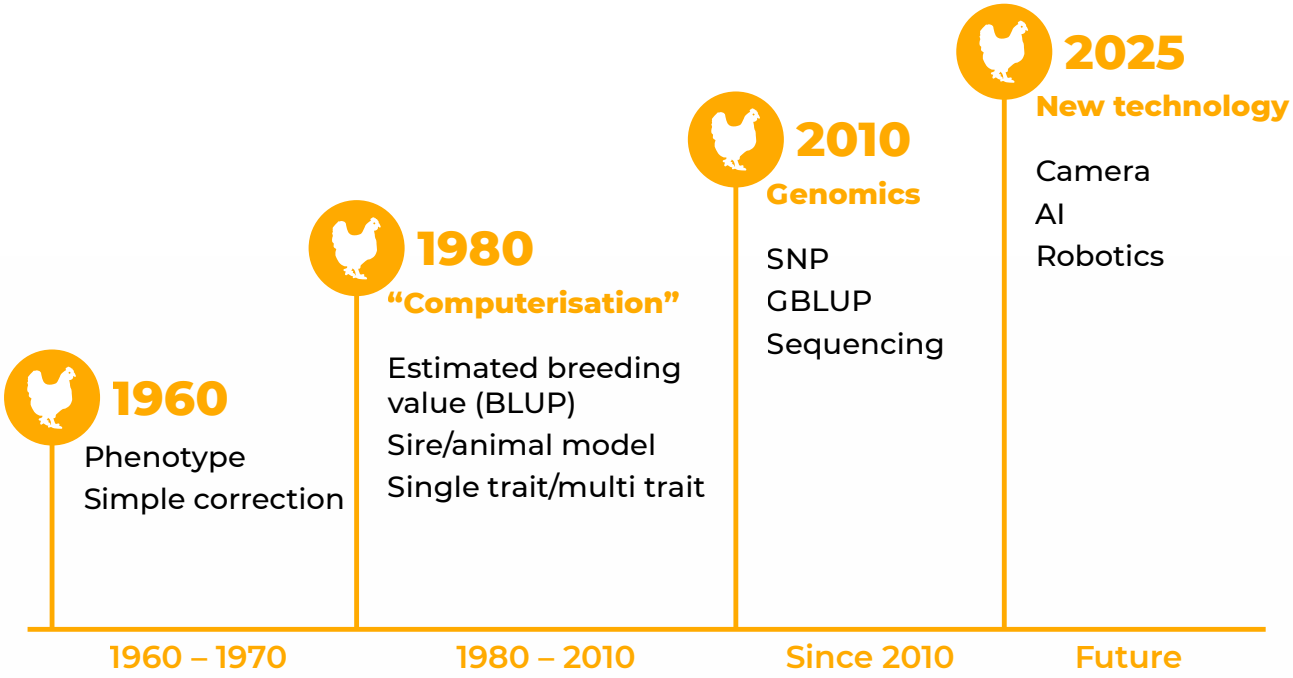
In poultry breeding, lasting success means consistent high performance and resilience. At LOHMANN BREEDERS, we focus on developing hens that are productive, robust, adaptable, and sustainable.

A journey of innovation and precision

Poultry genetics has advanced from basic phenotype selection to a science driven by genomics, AI data analysis, and automated recording.

> **These innovations allow us to accurately identify superior animals earlier, shorten generation intervals, and accelerate genetic progress in economically important traits.**



▲ ***Graphic 1.*** *Evolution of breeding*

Genetic progress you can measure

The outcomes of this approach are measurable. For instance, the LOHMANN LSL-CLASSIC line has demonstrated consistent improvements in egg production over time.

> **In 2003, hens produced approximately 345 eggs by 80 weeks of age. This figure increased to 374 eggs by 2022, with projections indicating up to 378 eggs by 2026.**
>
> **This represents an increase of 29 eggs over two decades, achieved through sustained genetic advancements.**
>
> **Additionally, the productive lifespan of the hens continues to expand, with a single cycle of 120 weeks now considered attainable.**

Weeks	80	90	95	100	120 weeks
2003	345				
2005	351				
2008	359				
2011	364	411			
2015	368	416	438		
2022	**374**	**425**	**449**	**471**	**?? (580)**
2026	?? (378)	?? (430)	?? (455)	?? (480)	

29 additional eggs over two decades

▲ ***Chart 1.*** *LOHMANN LSL-Classic performance standard*

What is behind longer cycles: the power of persistency

Optimum sexual maturity and peak lay rates over 98% for several weeks is already achieved. The focus is now on persistency—the ability to maintain high laying rates over time. We focus on traits that support long-term performance:

> **Stable egg weight curves** with good early egg size
>
> **Late shell quality** to ensure marketable eggs throughout the laying cycle
>
> **Good feed intake capacity,** especially at the onset of lay
>
> **Livability,** ensuring hens remain healthy and productive well into later stages

These traits are carefully monitored and selected across generations, contributing to both economic efficiency and animal welfare.

	Prod. 20-27	Prod. 28-43	Prod. 44-51	Prod. 52-71	Prod. 72-87	Prod. 88-103	Prod. 104-119	Egg weight	Feed intake	Shell Strength
Prod. 20-27	**.44**	.42	.36	.14	.00	-.03	-.05	-.30	.12	-.01
Prod. 28-43		**.07**	.95	.81	.66	.24	.15	-.44	.01	.18
Prod. 44-51			**.09**	.89	.81	.46	.17	-.38	.08	.11
Prod. 52-71				**.13**	.94	.81	.58	-.26	.02	.02
Prod. 72-87					**.24**	.90	.85	-.15	.09	.05
Prod. 88-103						**.31**	.92	-.19	.12	-.06
Prod. 104-119							.34	-.21	.06	.07
Egg weight								**.76**	.61	-.23
Feed intake									**.29**	-.08
Shell Strength										**.30**

▲ ***Chart 2.*** *Genetic parameters of persistency*

Genetic Parameters for longer egg production show a high heritability and not more stronger negative genetic correlations to sexual maturity and egg size as already seen before.

Real-life testing for real-world results

Our breeding programs reflect global production diversity. We test pure and cross lines in various settings—single cages, family groups, transponder-nest systems, and aviaries—to ensure hens perform well under commercial conditions.

> **Crossline testing captures heterosis effects and assesses family performance in realistic environments. These findings directly improve our selection process, enabling us to breed hens that succeed in real-world settings.**

Global reach, local impact

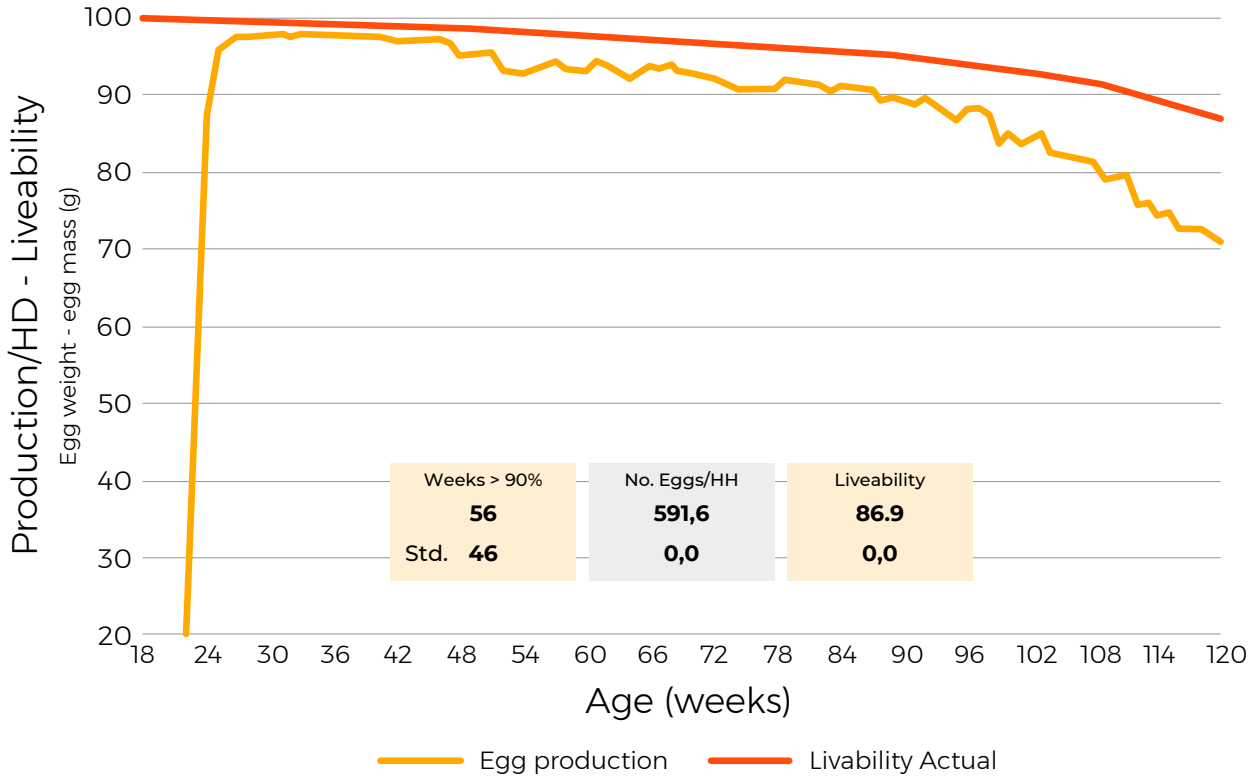
Our genetic lines are tested and proven across continents—from Europe to Asia to Latin America.

> **Whether it's improved livability in Japan or enhanced egg numbers in Colombia and Brazil, the genetic trends are clear: LOHMANN hens deliver consistent performance across diverse climates and management systems.**

Story of success continues: LOHMANN LSL-LITE EUROPE

LOHMANN LSL-LITE EUROPE, introduced in the Netherlands and Germany in 2021, continues to perform outstanding.

The latest example is a flock from the Netherlands in aviary housing without beak treatment reaching 592 eggs/HH in 120 weeks.

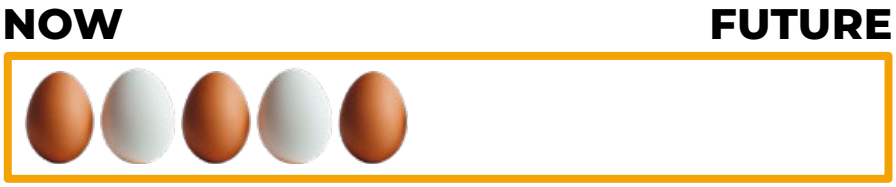


▲ ***Chart 3.*** *Flock LOHMANN LSL-LITE EUROPE: 120 weeks*

Breeding with responsibility

At LOHMANN BREEDERS, we believe that breeding is a responsibility. It's about shaping the future of poultry production with a focus on sustainability, animal health, and economic viability.

By combining cutting-edge technology with decades of expertise, we continue to breed hens that meet the demands of today—and are ready for the challenges of tomorrow



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