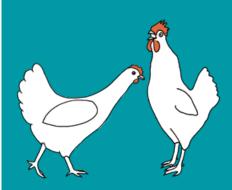




THE GOLDEN MEAN

Dual-purpose



HIGH PERFORMANCE BREEDS **LAYER HENS**

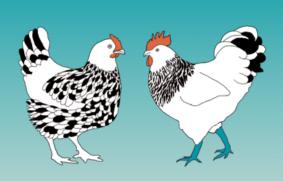
330 eggs/year





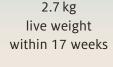
The high egg production requires special high-performance feed.

The brother cock – if not sorted out by sexing in the egg – remains lean.

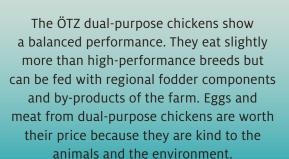


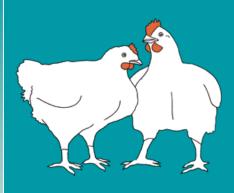
FROM ORGANIC BREEDING **DUAL-PURPOSE**

230 eggs/year









HIGH PERFORMANCE BREEDS
BROILER CHICKENS

approx. 2.5 kg live weight in 7 weeks





The massive meat crop can only be achieved with high-energy feed in the shortest possible time.

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Foreword

Dear farmers, dear colleagues,

The times stay ripe, even if the general conditions do not lighten the load. The breeding and further development of the market for dual-purpose chickens remains an important contribution to sustainable agriculture. An agriculture that is not about the most efficient misuse of resources, but rather about the most sustainable conservation of them. We at the ÖTZ consider ourselves as a small cog in the big machinery of organic farming, which is resisting the general dictation of "up or out" with a lot of effort and commitment.

We know from our own work how much effort and willingness to focus on details is necessary to economize responsibly and sustainably. From our many personal contacts and consultations we realize how much effort individual farms put into the proper keeping – and in some cases also processing and marketing – of our ÖTZ dual-purpose chickens. Without all of you we would not exist in that way. A big THANK YOU for that!

Expertise to support you – the ÖTZ Management Guide

In this 3rd edition with information and tips for practical farming, you will find familiar, updated and new information about the practice of and with ÖTZ dual-purpose chickens. In order to support you professionally, you will find a summary of all the relevant figures from our scientifically monitored trials of recent years. We hope that the information will help you find your way around and show you what the ÖTZ dual-purpose chicken can achieve with the right management today.

Advisory - online or individually.

You have the possibility to directly access a variety of information from our online expert forum held in 2022. You can find videos and further information at www.oekotierzucht.de/ fachforum. In addition, our operations advisor Pauline Seyler will be happy to answer any direct questions you may have.

Trademark users receive, in addition to professional business advice, the opportunity to access a wide range of advertising and sales promotion material as well as the option to participate in free online training courses. Information on this can be found at: www.oekotierzucht.de/vermarktung/schulungen

In future: 22nd of January is Dual-Purpose Chicken Day

This day is an important signal towards political persuasion as well as increasing awareness of the cause among retailers and consumers. 22nd of January, the Day of the Dual-Purpose Chicken – every year, nationwide and quite officially.

*The "Day of the Dual-Purpose Chicken" was launched on 22nd of January 2022. The initiating parties were: ei care – an initiative of Terra Naturkost and the market company of Naturland Bauern AG, the Bund Deutscher Rassegeflügelzüchter and the Ökologische Tierzucht gGmbH.

On our own behalf

We are not only into chickens, we are into ecologically sustainable livestock breeding in general. We are now one step further along this path. In 2021, we were able to expand our field of activity to include cattle. Here, too, we offer you information and support if you are interested. Carsten Scheper, as the responsible Managing Director, will be happy to answer your questions and provide you with suggestions.

Thank you for your interest and enjoy reading.

Kind regards, Yours Inga Günther



Inga Günther is in charge of organic poultry breeding. The focus is on the development of the dual-purpose chicken breeding programme. As Managing Director, she is responsible for communication, political work and networking at the ÖTZ. Her responsibilities also include project development and securing the initiative's finances.

inga.guenther@oekotierzucht.de



Carsten Scheper has been part of the management team since 2022 and has been in charge of setting up the new cattle breeding division of the ÖTZ since the beginning of 2021. Within the management team, he is responsible for the content and strategic orientation of the cattle breeding division as well as for project development and administrative issues.

carsten.scheper@oekotierzucht.de



Previously



New

Relaunch of the trademark for ÖTZ Dual-purpose chickens and their products

The ecological breeding of livestock is our goal. We started in 2015 with dual-purpose chickens. In the meantime, we have expanded to include cattle, and we are sure to add more livestock breeds for agriculture in the future.

Therefore, it was time to rework our well-known trademark with the motif "rooster and hen" in the middle and to place the ÖTZ as a symbol for ecological animal breeding in the optical centre. The surrounding text then includes the respective animal species. The shape and colour of the trademark have remained almost unchanged – intentionally so. In the meantime, it has achieved a high level of familiarity and sympathy by our partners, on products and in marketing. No need to rework it completely.

Those of you who already use the ÖTZ trademark as trademark partners can consume the existing and remaining advertising materials and gradually switch to the new trademark in the follow up. For all those who have permanently installed advertising spaces using the ÖTZ trademark, we will be happy to create suitable print templates and find individual solutions for a changeover. Please contact:

Maria Hermann marketing@oekotierzucht.de Mobil +49 151 17117813

1. Organic breeding

Transparency, knowledge transfer and networking of like-minded stakeholders are important to us. This first chapter therefore deals with the self-conception, history and structure of the organisation Ökologische Tierzucht gGmbH. The map on page 8 provides an overview about the current network and contains the contact details of the most important cooperating farms as well as contact persons of the ÖTZ. In addition, the breeding objectives, the approach of the ÖTZ poultry breeding and advantages of the ÖTZ dual-purpose chickens are explained.

1.1. The Ökologische Tierzucht gGmbH (Organic breeding association)

Ökologische Tierzucht is a non-profit limited company founded by the two shareholders Bioland e.V. and Demeter e.V. in 2015. The aim of the founders was to establish an umbrella organisation that would offer ecological animal breeding initiatives the necessary framework for development. Since 2015, the area of organic poultry breeding has been established. In 2020, the first cattle breeding projects were started.

Organic animal breeding is supported and further developed by a farming community through the member farms of the shareholders. In this way, a unique, sustainable genetic basis for ecological agriculture that is independent of the agricultural industry can be further developed, made available and preserved.

The organisational chart provides an insight into the existing organisational structure and contact persons of the ÖTZ.

Since its foundation in 2015, ÖTZ has been operating a breeding site in North Rhine-Westphalia that is certified according to Bioland Standards. At the cooperating farm Geflügelhof Bodden, the necessary stables are leased, and the breeding herds are looked after by a well-established team of employees. Another team works on breeding-related issues throughout Germany, such as scientific support and data evaluation, advising farmers and knowledge transfer, marketing, politics and public relations, as well as sales and marketing support, especially for cock meat.

The distribution of our core products, hatching eggs and chicks, takes place mainly in Germany, but increasingly also abroad. Numerous hatcheries and hatching egg producers cooperate with the ÖTZ.

Since 2021, the ÖTZ has been certified in accordance with the German and European Ordinance on the protection of the internal market against animal diseases (BmTierSSchV), which provides the basis for international trade in hatching eggs.

ÖTZ STRUCTURE



ÖTZ LOCATIONS AND SITES



1.2. ÖTZ General contacts and supply of hatching eggs, chicks and young livestock

Germany

Management



Inga Günther (Poultry breeding) Management and leadership 88662 Überlingen, BW inga.guenther@oekotierzucht.de Phone +49 151 10820382 Office +49 7551 9375436



Carsten Scheper (Cattle breeding) Management and leadership 46519 Alpen, NRW carsten.scheper@oekotierzucht.de Phone +49 151 50759422



Miriam Sorms, Susanne Grewe

Assistance assistenz@oekotierzucht.de Phone +49 7551 9375436

Public relations



Maria Hermann

Marketing and public relations maria.hermann@oekotierzucht.de Phone +49 151 17117813

Media contact



In cooperation with "Brudertier Initiative Deutschland e.V."

Lisa Minkmar

Press officer presse@oekotierzucht.de

Advisory



Pauline Seyler

poultry advisor pauline.seyler@oekotierzucht.de Phone +49 1516 2559188

Cockmeat marketing



Joachim Jeske

Supply chain manager joachim.jeske@oekotierzucht.de Phone +49 151 67028934

- Demeter certified
- Bioland certified
- Certified organic
- Bio Suisse certified

Shareholding associates



Demeter

64295 Darmstadt, HE

- · Fundraising
- · Market development
- · Fairs and distribution



Bioland

55116 Mainz, RP

- Controlling
- Accounting
- · Research projects

Parental animal breeding / basic breeding programme



Marlene Arndt (Site management) marlene.arndt@oekotierzucht.de Moelscherweg 16 | 47547 Goch

ÖTZ Hatchery order



Annett Grün

Ökologische Tierzucht gGmbH bruteiversand@oekotierzucht.de Phone +49 176 57909877

Rearing (without hatchery)



Andrea und Jens Bodden

Poultry farm Bodden

 Moelscherweg 16 | 47547 Goch biolandbodden@gmail.com Phone +49 172 9486064 www.biolandbodden.de



Peter Schubert

Poultry farm Schubert

Ebacher Str. 1 | 91338 Igensdorf vertrieb@gefluegelhof-schubert.de Phone +49 9192 998 568 www.gefluegelhof-schubert.de

Hatchery (without rearing)



Werner Hockenberger

Sperbelgartenstraße 3 75031 Eppingen w.hockenberger@ gefluegelzucht-hockenberger.de Phone +49 170 3526816



Geflügelhof Overmeyer

Voltlager Damm 22 48496 Hopsten info@gefluegelhof-overmeyer.de

Phone +49 5457 575 oder Phone +49 170 7076802 www.bioland-gefluegelhof.de

Hatchery (with rearing)



Christine Bremer

Heide-Geflügel

Kölau 5 | 29562 Suhlendorf c.bremer@heide-gefluegel.de Phone +49 160 97979362



Ionas Dorn

Dorn & Schmidt GbR

Ludwigsteinstraße 81 37214 Witzenhausen Unterrieden Brütereistandort: Lindenstraße 9 dorn-schmidt@gmx.de Phone +49 178 9144925



Simon Wolf

Hof Blumeninsel

Burgweg 7 | 79780 Stühlingen simon@hofblumeninsel.de Phone +49 175 8592783 www.hofblumeninsel.de

Switzerland

Hatchery (with rearing)



Nina Griessmeyer

Brüterei Zürcher Oberland ngriessmeyer@gmx.ch Phone +41 796329540

Fuchsrütistraße 98 CH 8626 Ottikon

Coordination office poultry keeping



Agency for hatchery eggs, chicks, young layer hens, cocks and old hens

Herman Lutke Schipholt

Untere Burghalde 11 CH 8225 Siblingen h.lutke.schipholt@demeter.ch h.lutke.schipholt@bluewin.ch Phone +41 78 7622544

International

Hatchery (with rearing) Kamerun

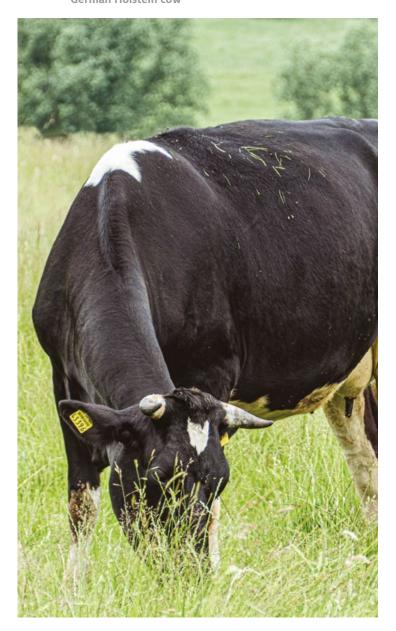
Lopez Voufo

International Consultant lopez.voufo@oekotierzucht.de +49 152 21056091

1.3. Short introduction of the ÖTZ cattle breeding programme

Organic cattle farmers need adaptable animals that can adapt to the diversity of the sites and the natural forage base growing on them. Animals are needed that can efficiently convert forage grasses (fresh grass on the pasture or served as hay, straw or silage) into foodstuffs (milk and meat) that are valuable for human nutrition, if possible, without the use of feeding concentrate. Plenty of basic feed in combination with little concentrated feed is the only way to achieve sustainable, climate-friendly ecological cattle farming.

German Holstein cow



Developments in non-organic cattle breeding point in the opposite direction. The main focus is on further increases in performance and efficiency and greater specialisation, often combined with less species-appropriate feeding (high amounts of concentrated feed). The "core competences" of ruminants, the sensible transformation of grass into milk and meat without "food competition" with humans, are increasingly being pushed into the background. Specialisation and one-sided orientation make dual use difficult in a similar way to poultry, and increasingly contradicts ecological ideals.

However, it is difficult for the individual organic breeders to give weight to their goals and ideals (forage, dual use, adaptability) in the existing structures. They need a supporting force that bundles, represents and mediates their interests and identifies problems. This is where the ÖTZ comes into play with regard to cattle breeding.

The topics and orientation in the cattle sector have been very diverse from the beginning, corresponding to the variety of breeds and farm systems in organic cattle farming. In addition to the development of concrete practical offers (e.g. further development of ecological overall breeding values), the main focus is to work on a mission statement that educates the concrete breeding goals. The second focus is on project development. In addition to dual-purpose cattle, the focus is on breeding issues such as basic feed conversion, longevity, health and robustness. In the first step, the cattle breeding sector is developing more in the sense of a project supporting company. An activity as a breeding company, as in the poultry sector, is not foreseeable in the short to medium term.

Please find more information under:

www.oekotierzucht.de/rinderzucht



1.4. What signifies organic poultry breeding?

Animal breeding has a systemic effect on agricultural practice. It directly influences the quality of the food produced. Based on this knowledge, the ÖTZ builds up the poultry breeding programme according to the classical rules and usual tools of animal breeding but supplements this procedure in animal assessment with ecologically and holistically conceived aspects.

From the very beginning, the breeding activity of the ÖTZ has been geared towards adapting to organic husbandry and feeding, species-appropriate animal husbandry and the goal of being able to feed as many regional and farm-grown feedstuffs as possible.

Through the target of "dual purpose", overloading of the natural body functions as well as the production of disposable products in the form of over-fluid male chicks are avoided as a matter of principle and out of conviction.

Most important differences in ÖTZ run organic breeding compared to non-organic breeding

- All ÖTZ breeding livestock is kept to 100% organic husbandry and feeding conditions in herds with outdoor access.
- Breeding takes place without keeping the animals in cages, which is the usual custom in non-organic breeding, and without artificial insemination.
- The data collection takes place on the basis of the traditional, transponder-based hand drop test control.
- The breeding objective is to produce high-performance, healthy dual-purpose chickens that can be fed regionally and sustainably and are particularly suitable for the use in organic agriculture.





1.4.1. The breeding objective of ÖTZ poultry breeding

Approach and basic principles

For successful selection and measurable breeding progress, a clear fixation and reduction of breeding parameters has top priority. This is particularly important as the methods for data collection (hand drop nests), unlike cage breeding, are not 100% precise. For this reason, as few parameters as possible are used that can be reliably recorded. The focus is on adapting the animals to organic farming and reducing the antagonistic breeding goals of eggs and meat. This is particularly evident in the weighting of the traits within the organic breeding value estimation.

The usual weighting of traits in breeding value estimation is purely based on profitability. The coefficient of economic efficiency directly correlates benefit and profit and thus has a direct impact on the breeding decision.

In the view of the ÖTZ and within the framework of organic breeding, however, this must be considered in a more differentiated manner, which claims to take a holistic view on the system. So-called external costs in animal welfare and resource consumption must be taken into account to a large extent, in contrast to the pure cost-benefit principle, in order to not only mimic the current system with a green touch.

Critical issues, such as the questioning of current feeding methods, the development of new feeding strategies regarding the question of raw materials as well as the question of the necessary technical developments for feeding residues, must therefore also influence breeding decisions. Expanding the animal welfare parameters relevant to organic farming, not only in terms of feather pecking and cannibalism, breastbone health, susceptibility to breast blisters, stomach, intestines, walking ability, laying intestine and foot pad health, but also in terms of heat tolerance, hatchability and chick mortality, are tasks that await us in the future.





Breeding objectives

The following breeding objectives are primarily pursued within the ÖTZ:

Dual-purpose: As a principle, all ÖTZ lines are selected for dual-purpose, which means that preference is given to animals whose body weight and egg production are distributed in a harmonious balance (reduction of antagonism between egg and meat).

Laying performance: The envisaged objective for dual-purpose chickens in the ÖTZ is 240 eggs – including broken, cracked and dirty eggs – in the first twelve month of the laying period.

Fattening weight: The objective for fattening performance is 2.7 to 2.8 kilograms living weight of the cock in 16 weeks on pullet feed. The chest muscle is taken into account, but the weight is assessed in total and not on the basis of a single body part.

Lifetime performance: Chickens are not disposable products. For this reason, an extended testing period (lifetime performance test) has been established. This data is included in the selection of breeding animals.

Procedure

In addition to the breeding objectives mentioned, a number of parameters not directly associated with economic performance are pursued with a higher priority than is usual in non-organic breeding. The breeding programme is oriented towards:

- Animal Welfare
- · Product quality
- Performance and persistence



The weighting of the respective traits in the breeding value estimation is oriented individually to the respective needs of the animals per generation and is not rigidly fixed. It is attempted to achieve the objectives by stabilising the initial pure breeds.

In addition to the classical performance data, the animals are also phenotypically assessed regarding the individual animal. The New Hampshire and White Rock breeds tend to be corrected downwards in egg weight. This is done by selecting hens that have a below-average egg weight in combination with an above-average number of eggs. In addition, preference is given to cockerels that have a below-average egg weight through their mother. In the case of the Bresse Gauloise, on the other hand, hens and cocks with corresponding female characteristics are preferred, which have an above-average egg size in combination with over-average daily weight gain. At the moment we consider the White Rock as the lightest line with the highest laying performance, the New Hampshire as the medium-heavy line with the largest egg size, the Bresse Gauloise as the heaviest line (emphasis on meat quality) with relatively small eggs.

Hypotheses for organic breeding

We assume that feeding 100% organic feed is the best basis for selecting chickens with focus on organic agriculture because it is practically relevant. Even if feeding in its current form is not considered species-appropriate within the framework of the ÖTZ (as a matter of fact it does not contain animal protein), special attention should be paid to adapting the available components. This is where organic farming will continue to differ significantly from non-organic farming, which is why an animal adapted to this type of feeding will undoubtedly be needed. Feeding is assumed to be an essential key to resource-efficient husbandry of dual-purpose livestock. The aim of this hypothesis is to have animals that are able to make the best possible use of the feedstuffs provided, thanks to the chickens' own digestive capabilities.

A high crude fibre share in the feed ration results in a high gastrointestinal activity. It is therefore assumed that the intensive use of the digestive system will lead to a high degree of utilisation of the feed provided. This method will not reduce the size of the gastrointestinal tract in the long term, but it will remain large and therefore flexible for different feed concepts.

The feed used as a basis for selection, which tends to be less nutrient-dense than comparable non-organic diets, thus makes it possible to find animals that cope well under these circumstances and therefore also perform better under restricted conditions. The longer the animals are selected for dual purpose, the sooner the pure breed lines will also come close to these characteristics and the current conflict between egg and meat in one animal will be solved. In the long term, F1 crossbreeding will only contribute to improving hatchability and increasing chick vitality.

Selection without cages allows the animals to interact socially. This selects animals that can cope well in larger herds. At the same time, we select animals which prefer to lay their eggs in the nests provided instead of elsewhere. Natural mating without artificial insemination disadvantages less vital cocks. Hens and cocks that do not harmonise with each other do not mate. Moreover, the necessary keeping of isolated cocks for artificial insemination is not permitted in organic farming, which is why it is already completely dispensed within our breeding programme.







ÖTZ Cream cock and hen

1.4.2. Advantages of ÖTZ dual-purpose chickens

The ÖTZ dual-purpose chickens are the result of crossing old pure breed herds formerly bred in the German Democratic Republic by Dr Sigmar Götze and further developed by the ÖTZ. They are robust animals that are particularly well suited to organic farming:

- Rooster and hen are considered equal in the ÖTZ concept and have a balanced laying and meat performance. The cock is not a disposable product.
- ÖTZ dual-purpose hens not only lay about 230 eggs per year but also have a pronounced meat production and can therefore be marketed as high-quality soup hens at the end of the laying period.
- The balanced performance has a positive effect on animal health and social behaviour. The risk of high performance-related diseases and stress disorders is minimised from the outset.
- Due to their large stomachs, ÖTZ dual-purpose chickens can be fed with 100 procent organic and local feed to meet performance requirements. If the feed is not sufficiently dense in its nutrient composition, the birds simply eat more of it.

- The ÖTZ dual-purpose chickens can behave like real birds throughout their lives. They are vital even at the end of fattening and move freely in their environment.
- Eggs and meat products from ÖTZ dual-purpose chickens are not only convincing because of their ideal and systemic advantages, but also because of their fine and original taste.
- ÖTZ animals are pure breeds that are independent of any corporate group. Thanks to the quality criteria set by the ÖTZ, farmers and consumers can be sure that no hidden methods of genetic engineering are used in the stables with ÖTZ animals. The breeding is in the hands of farmers and non-profit organisations and allows transparent insights into the breeding process at any time.



ÖTZ Coffee cock with Coffee and Cream hens

1.4.3. Where do the ÖTZ chickens come from and how do crossbreeds emerge?

The work of the ÖTZ began with the resumption of former breeding activities with the New Hampshire and White Rock breeds. Both breeds had been developed over many years by "Domäne Mechtildshausen" (organic farm near Frankfurt) in cooperation with the breeder Dr. Siegfried Götze and the Martin Luther University Halle-Wittenberg (MLU) in Merbitz. The aim was to breed high performance laying hens with large eggs. After the end of the cooperation between the MLU and Domäne Mechthildshausen, these animals were transferred to the ÖTZ breeding site, which has continued to select them ever since.

The Bresse Gauloise is an old commercial breed from France, where it has been appreciated for some time for its special meat quality. In 2012, Inga Günther began to select a herd based on the French Bresse according to ecological criteria and integrated it into the ÖTZ breeding programme in 2017.

Since 2022, further breeds and breeding initiatives could be included under the umbrella of the ÖTZ. The primary criterion here is that no animals from non-organic breeding origin should be used. The only exceptions are the "Robust turkey" and the "Wild

duck", but primarily traditional pure breeds are newly selected and their performance is prepared for the use on farms. These animals are then partly crossed with animals that have already been selected by the ÖTZ in order to improve performance and vitality.

The ÖTZ "Caramel" chicken is one of the first attempt towards this direction. Sebastian Seelig, a breeder of a healthy and high-performing herd of a traditional German breed ("Deutsches Lachshuhn"), is using his animals as the basis for crossing the ÖTZ CARAMEL. Further projects of a similar nature will follow in the future.

The "Triesdorfer Landhuhn" is also worth mentioning as an example. This dual-purpose chicken, newly selected from old breeds, can be traced back to the commitment of Hans-Joachim Schleicher, the former head of poultry breeding at the Triesdorf Agricultural College, and Frank Kötzel, his successor. Together they developed a robust, fertile and at the same time meaty country fowl, which should be stably reproducible as a pedigree chicken.

Ingrid Meußel continues the work of Frank Kötzel and is now the responsible breeder. She provides the animals, the ÖTZ keeps them as an organic certified parental herd.

Small but excellent is Christine Bremer's "Robust turkey" breeding. This breeding is based on crossing a slow-growing fattening turkey with two old turkey breeds, the "Cröllwitzer" turkey and the "Ronquières" turkey. The fattening turkey is supposed to transmit its small size, early maturity and meatiness. The cockerels of the old breeds should pass on their vitality to their offspring. All in all, this results in handsome, light-footed but nevertheless well-muscled animals.

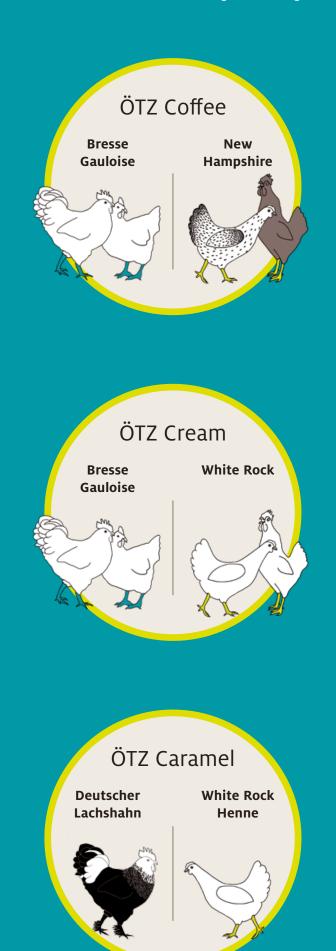
The same can be said about the "Wild Duck", which is offered by Jonas Dorn. The "Wild Duck" has nothing in common with the small mallards that actually live freely in nature. But compared to the commonly in agriculture used white fattening ducks, they are real wild escapees, which is primarily true of their external appearance.

The conservation breeding of "Augsburg" chickens by Katharina and Manuel Förg can be described as a rarity. The Förg family is a member of the "Sonderverein der Züchter des Augsburger Huhnes und der Zwerg-Augsburger" and keeps certified organic parent stocks of this rare and endangered breed.

The ÖTZ crossbreeds

Depending on how the breeds are mated, animals with different performance profiles are produced. At the base are the purebred animals (grandparents), which are cared for and further developed by the ÖTZ. The parents are used for pure reproduction and hatching egg production. This ensures that animals are available all year round.

- **ÖTZ Coffee** is a cross between the New Hampshire and Bresse Gauloise breeds.
- For the ÖTZ Cream the breeds White Rock and Bresse Gauloise are mated.
- The ÖTZ Caramel is the result of crossing a Deutsches Lachshahn cock and a White Rock hen as parents. The White Rock line is coming from the ÖTZ.



The following describes the performance tests of the ÖTZ breeding herds over the year.

Choice of the best selection candidates

After the breeding value has been estimated, the best animals are selected and mated.

Pedigree slip

The hatching eggs of the selection candidates are collected with special care and in so-called mating compartments. The identity of both parents is noted on each egg and the eggs are stored under optimal conditions for a maximum of ten days. When the incubators are loaded, the traceability of the parentage is documented. Hatching takes place after 21 days in parent hatcheries. Immediately after hatching, wing tags are applied. These enable lifelong documentation of the performance and exact traceability of the kinship relationships among each other.

Life performance test

The end of the regular performance test takes place at the age of approx. 60 weeks (about 40 laying weeks). In addition, the best performing hens per line are put into the extended lifetime performance test for another four months.

Comprehensive information is provided in the ÖTZ documentation "Insights into practical breeding work".

youtu.be/5Y9H1AbHKIw



Performance test

The new generation is reared in mixed sexes according to standard practice.

Breeding value estimation and six-week assessment with pre-selection of the male chicks: At the age of six weeks, all cocks are weighed, and it is decided which animals can be considered as potential breeding cocks. Cocks not used for further breeding are marketed as fattening animals.

Breeding value estimation and sixteen-week assessment: At this time, the second pre-selection of the young cocks takes place as well as the housing of the best hens and cocks in the test stables. Every individual is equipped with a transponder to enable permanent identification.

Performance testing in the test stables from the 19th, 20th to 60th week of life: From the 19th week of life, the transponders are scanned daily to determine which hen laid the eggs and the quality of the respective eggs. At the beginning, middle and end of the laying period (~week 27, 38 and 60), egg weights and breaking resistance of the eggs are documented.

Breeding value estimation and thirty-five-week assessment: In the 35th week of life, weights and important parameters of the breeding objectives – in particular animal health – are again collected from each breeding animal. The data collected, in combination with the data from the performance test, are used to identify the hens and cocks that are suitable for further breeding.

Remontage of the following generation life week 40 to 43: Selected breeding animals are housed in mating compartments. This makes it possible to work without artificial insemination and without keeping the breeding cocks in individual cages. The next generation hatches from the hatching eggs laid during this period and the cycle begins anew.



CROSSING SCHEME

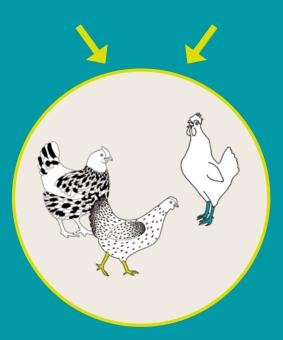
Crossbreeding

Parents of two different breeds are mated with each other.





By mating the two parental breeds, the different characteristics of the animals are crossed.



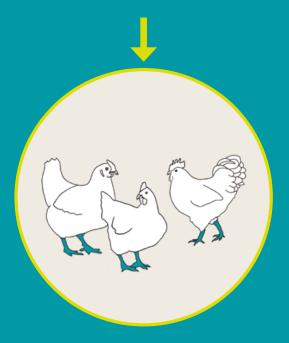
So-called utility crosses are created, which split back into the various original breeds when they continue to multiply.

Pure breeding

Parents of the same breeds are mated with each other



The hereditary characteristics of the purebred parents are passed on to the offspring.



The breed remains consistent and further breeding with the offspring is possible.

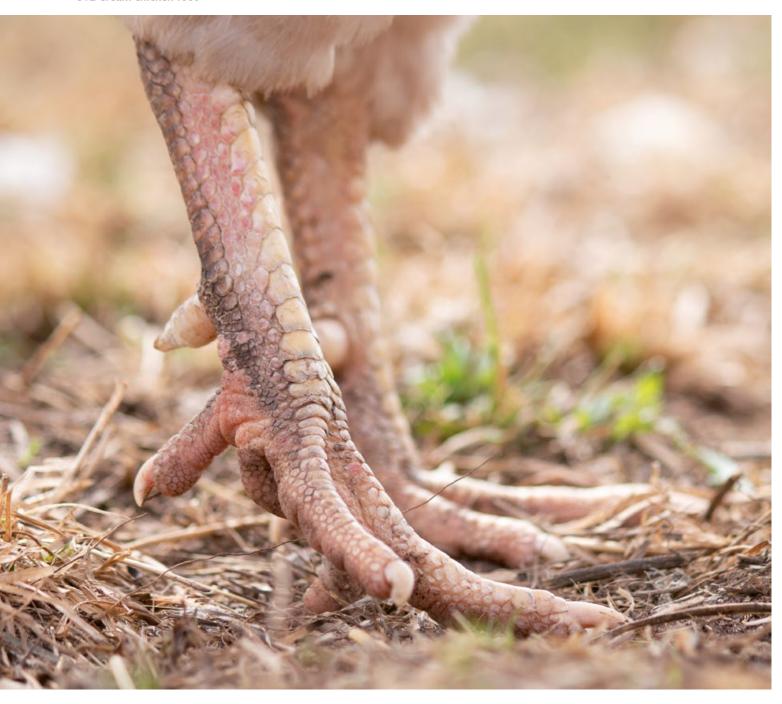
2. Profiles and fact sheets

Over time, a lot of data on ÖTZ dual-purpose chickens has been collected. The data are based on performance tests within scientifically accompanied projects and are constantly supplemented and updated. Please note that the data presented can only show the actual situation at the time of completion of this catalogue. The latest data can be viewed at any time on the ÖTZ website under the category "Tiere":

www.oekotierzucht.de/tiere/unsere_tiere



ÖTZ Cream chicken foot



2.1. ÖTZ Coffee

The ÖTZ Coffee are classic dual-purpose chickens resulting from a cross between the two breeds "Bresse Gauloise" and "New Hampshire". This mating results in a colourful flock with brown, white and partly black patterned chickens.

NOTE: In exceptional cases there may also be creamy white Coffee herds. This depends on the positional effect of the two crossed breeds. If too few hatching eggs are available for the coloured cross (New Hampshire cock x Bresse Gauloise hen), the ÖTZ reserves the right to resort to the reverse and thus white Coffee mating (Bresse Gauloise cock x New Hampshire hen). As things stand today, this does not change the behaviour or performance of the animals.

ÖTZ Coffee hens

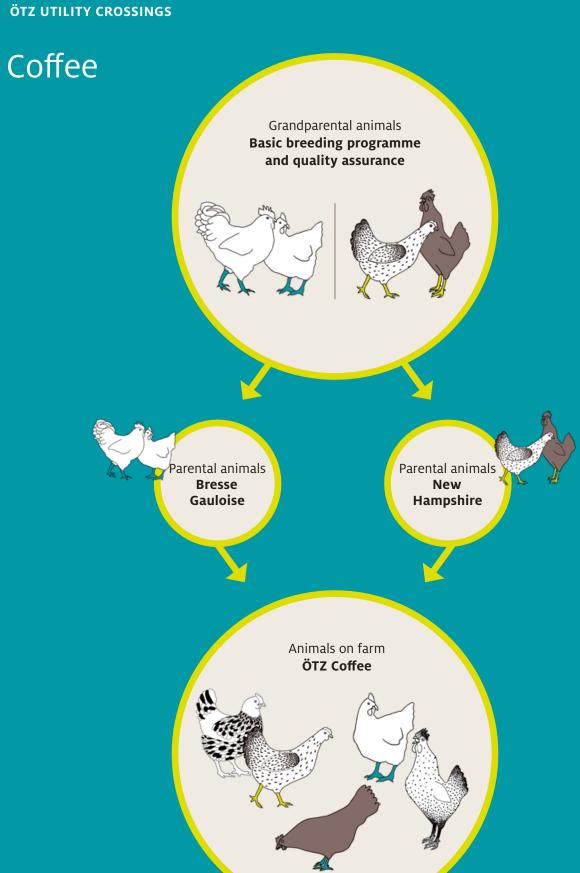


PERFORMANCE DATA AT A GLANCE

PARAMETERS	PERFORMANCE
Marketable eggs per year	200 – 230 pieces
Shell colour	light brown/beige
Start of laying period	20th week of life
Living weight at the beginning of the laying period	1.9 – 2.1 kg
Weights of the old hens: 72nd week of life	Living weight: 2.6 – 2.8 kg Slaughter weight: 1.5 – 1.7 kg
Living weight of the cockerels	15th week of life: 2.3 – 2.7 kg 20th week of life: 2.8 kg
Slaughter weight of the cockerels	15th week of life: 1.5 – 1.6 kg 20th week of life: 2 kg
Feed consumption with 100% organic feed	135g – 145g/ animal and day
Feed consumption*	8.4 – 8.6 kg
Availability	Chicks and hatching eggs all year round, pullets on pre-order
EU certification **	yes

^{*} For one animal (m/f), raised in a mixed-sex group until 15th week of age.

^{**} Certified in accordance with the Animal Health Protection Regulation (BmTierSSchV) and thus approved for trade to EU-certified hatcheries and abroad.



ÖTZ Coffee hens

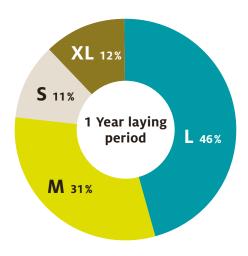
Performance: Various trials have shown that ÖTZ Coffee hens have a performance potential of up to 250 eggs. Depending on the management and husbandry system, up to 230 marketable eggs can be expected. The eggshell colour varies from light brown to beige. The start of laying occurs around the 20th week of life. At the beginning of laying, the living weight should not be less than 1.9 to 2.1 kilograms, as too low weights at the beginning of the laying period have a negative influence on the height of the laying peak and persistence. The latest scientific findings also point to a connection between a too early start of laying or too low a weight and keel bone deformities and injuries.

Feed consumption: The daily feed consumption per animal is between 135 and 145 grams.

Old hens: After the 72nd week of life, ÖTZ Coffee hens weigh between 2.6 and 2.8 kilograms. The slaughter weight is between 1.5 and 1.7 kilograms.

Behaviour: ÖTZ Coffee are well compatible amongst each other's in both small and large herds. Also noteworthy is the intensive use of the out run and the receptivity to eat raw fibre. Special attention should be paid to the hens with black plumage when observing the animals, as there is a risk that they can become "mobbing victims" in larger flocks.

EGG-SIZE DISTRIBUTION





ÖTZ Coffee hen

TIP: Colour sexing: If you raise the animals yourself, you can already make a rough sorting into male and female on the basis of the colours. All brown coffee chicks are female. About 10% of the white chicks are female and 90% male. At this point, the ÖTZ is working on a further improvement of the gender colour recognition.

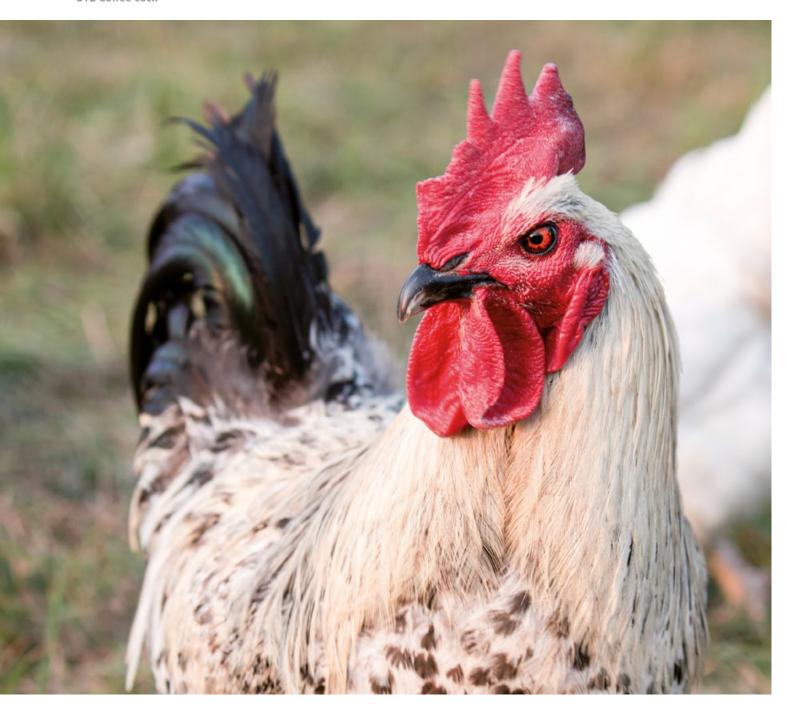
PLEASE NOTE: Feeding advice: Cruciferous plants (rape, mustard, etc.) cause a metabolic disorder in individual animals of the ÖTZ Coffee crossbreed. This can lead to fishy-smelling eggs without fishmeal having been fed. This phenomenon can also occur when mobile stables are moved over an intercrop with cruciferous plants.

ÖTZ Coffee cocks

Slaughter performance: Depending on flock size and feeding, Coffee cocks reached a living weight of about 2.4 to 2.7 kilograms and a slaughter weight of 1.5 to 1.6 kilograms at the 15th week. At the age of 20 weeks, depending on rearing and feeding, a live weight of 2.8 kilograms and a slaughter weight of 2.0 kilograms is possible.

TIP: Dual-purpose cocks are much more mobile than the conventional broilers. This should be taken into account in the housing design to prevent the occurrence of breast blisters and other injuries. Straw bales and raised levels are suitable for structuring the house, but also provide good resting areas for lower-ranking birds. From the 10th week of life onwards, apart from daylight, additional light in the barn is unnecessary and should be switched off in favour of the calmer animals.

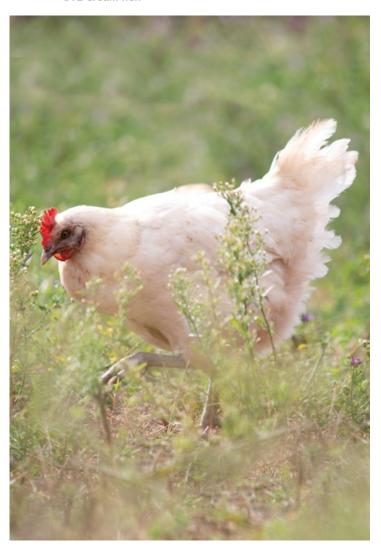
ÖTZ Coffee cock



2.2. ÖTZ Cream

The ÖTZ Cream are a classic dual-purpose chicken. They are the result of crossing the two breeds Bresse Gauloise and White Rock. ÖTZ Cream cocks and hens have white plumage and coloured feet. The colours of the legs range from cream and beige to the blue-grey legs, typical for the Bresse Gauloises.

ÖTZ Cream hen



PERFORMANCE DATA AT A GLANCE

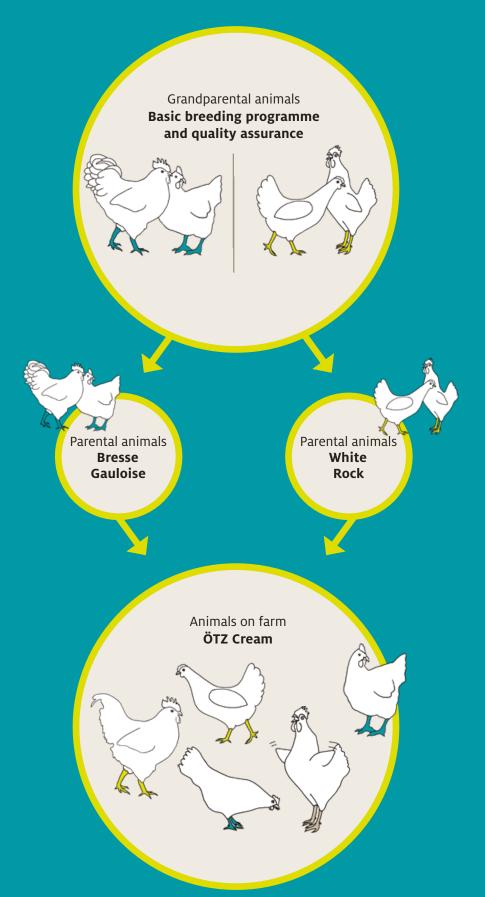
PARAMETERS	PERFORMANCE
Marketable eggs per year	200 – 230 pieces
Shell colour	light brown/beige
Start of laying period	20th week of life
Living weight at start of the laying period	1.9 – 2.1 kg
Weight of the old hens: 72nd week of life	Living weight: 2.4 – 2.8 kg Slaughter weight: 1.3 – 1.6 kg
Living weight of the cocks	15th week of life: 2.3 – 2.6 kg 18th week of life: 3.1 kg
Slaughter weight of the cocks	15th week of life: 1.4 – 1.5 kg 18th week of life: 1.9 kg
Feed consumption with 100% organic feed	135g – 145g/ animal and day
Feed consumption*	7.8 – 8.0 kg
Availability	Chicks and hatching eggs all year round, pullets on pre-order
EU certification**	yes

^{*} For one animal (m/f), raised in a mixed-sex group until 15th week of age.

^{**} Certified in accordance with the Animal Health Protection Regulation (BmTierSSchV) and thus approved for trade to EU-certified hatcheries and abroad.

ÖTZ UTILITY CROSSINGS

Cream



ÖTZ Cream hens

Performance: Various trials have shown that ÖTZ Cream hens have a potential of up to 250 eggs. Depending on the management and husbandry system, up to 230 marketable eggs can be expected. The eggshells have a colour spectrum from light brown to beige.

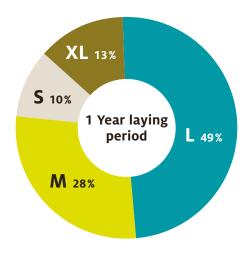
The start of the laying period is in the 20th week. The living weight at the beginning of the laying period should not be below 1.9 to 2.1 kilograms, as too low a living weight at the beginning of the laying period has a negative influence on the height of the laying peak and persistence. The latest scientific findings also point to a connection between too early a start to laying or too low a living weight and keel bone deformities/injuries.

Feed consumption: The daily feed consumption per animal is between 135 and 145 grams.

Old hens: After 72 weeks of life, ÖTZ Cream hens weigh between 2.4 and 2.8 kilograms alive and between 1.3 and 1.6 kilograms slaughtered.

Behaviour: The ÖTZ Cream are well compatible with each other in both small and large herds. Also noteworthy is the intensive use of the out run and the receptivity to eat raw fibre. When keeping ÖTZ Cream hens, special attention should be paid to rounding off the corners of the house, as they can tend to group very dense in rare and particularly stressful situations.

EGG-SIZE DISTRIBUTION







ÖTZ Cream hens

ÖTZ Cream cocks

Slaughter performance: Depending on flock size and feeding, Cream cocks reach a living weight of about 2.3 to 2.6 kilograms and a slaughter weight of a around 1.4 to 1.5 kilograms at the 15th week of age.

At the age of 18 weeks, a living weight of 3.1 kilograms and a slaughter weight of 1.9 kilograms is possible.

TIP: Dual-purpose cocks are much more mobile than the specialized version. This should be taken into account in the housing design to prevent the occurrence of breast blisters and other injuries. Straw bales and raised levels are suitable for structuring the house, but also provide good resting areas for lower-ranking birds. From the 10th week of life onwards, apart from daylight, additional light in the barn is unnecessary and should be switched off in favour of the calmer animals.

ÖTZ Cream cock



2.3. ÖTZ Caramel (Conservation breeding)

The ÖTZ Caramel is the result of crossing a "Deutsches Lachshuhn" cock and a "White Rock" hen. In contrast to Coffee and Cream, only the mother hen is part of the breeding programme of the ÖTZ. The male chickens originate from our cooperation partner "Wendland Geflügel".

The ÖTZ Caramel has white legs and beige-brown flowered plumage in a varied pattern. From time-to-time feathers and up to five toes appear on the feet. The beard also gives the animals a special appearance.

The ÖTZ Caramel is a new crossbreeding attempt with a focus on conservation breeding. The hatching eggs are not EU-certified, which is why the animals can only be purchased as hatching eggs or as chicks on a small scale via ÖTZ partner hatcheries. The purchase of pre-reared young hen is also only possible from small-scale rearing farms.

ÖTZ Caramel hen



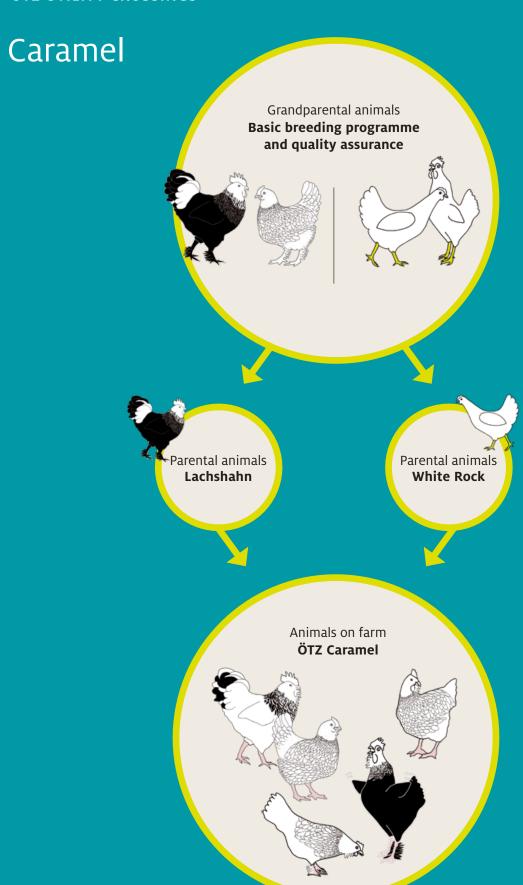
PERFORMANCE DATA AT A GLANCE

PARAMETERS	PERFORMANCE
Marketable eggs per year	200 – 230 pieces
Shell colour	cream
Start of laying period	20th – 21st week of life
Living weight at start of the laying period	2.1 – 2.3 kg
Weight of the old hens: 72nd week of life	Living weight: 2.7 kg Slaughter weight: 1.5 kg
Living weight of the cocks	15th week of life: 2.4 kg 18th week of life: 2.9 kg
Slaughter weight of the cocks	15th week of life: 1.4 kg 18th week of life: 1.7 kg
Feed consumption with 100% organic feed	130 g - 135 g / animal and day
Feed consumption*	7.6 kg
Availability	Chicks and hatching eggs on demand all
EU certification**	no

^{*} For one animal (m/f), raised in a mixed-sex group until 15th week of age.

^{**} Certified in accordance with the Animal Health Protection Regulation (BmTierSSchV) and thus approved for trade to EU-certified hatcheries and abroad.

ÖTZ UTILITY CROSSINGS



ÖTZ Caramel hens

Performance: Depending on the management, an ÖTZ Caramel hen can be expected to lay 200 to 230 marketable eggs per year (further performance tests are ongoing). The eggshells are cream coloured.

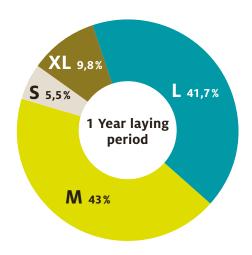
The start of the laying period occurs between the 21st and 22nd week. At the time of the start of the laying period, the living weight should not be below 2.1 to 2.3 kilograms, as too low weights in this phase have a negative influence on the height of the laying peak and persistence. The latest scientific findings also point to a connection between too early a start of laying or too low a live weight and keel bones deformities/injuries.

Feed consumption: The daily feed consumption per animal is between 130 and 135 grams.

Old hens: After the 72nd week, ÖTZ Caramel hens weigh 2.7 kilograms. The slaughter weight is 1.5 kilograms.

Behaviour: The ÖTZ Caramel are calm, sociable chickens. They are curious and make good use of their out run.

EGG-SIZE DISTRIBUTION



ÖTZ Caramel cocks

Slaughter performance: Depending on flock size and feeding, ÖTZ Caramel cocks reach a living weight of about 2.4 kilograms and a slaughter weight of 1.4 kilograms at the age of 15 weeks.

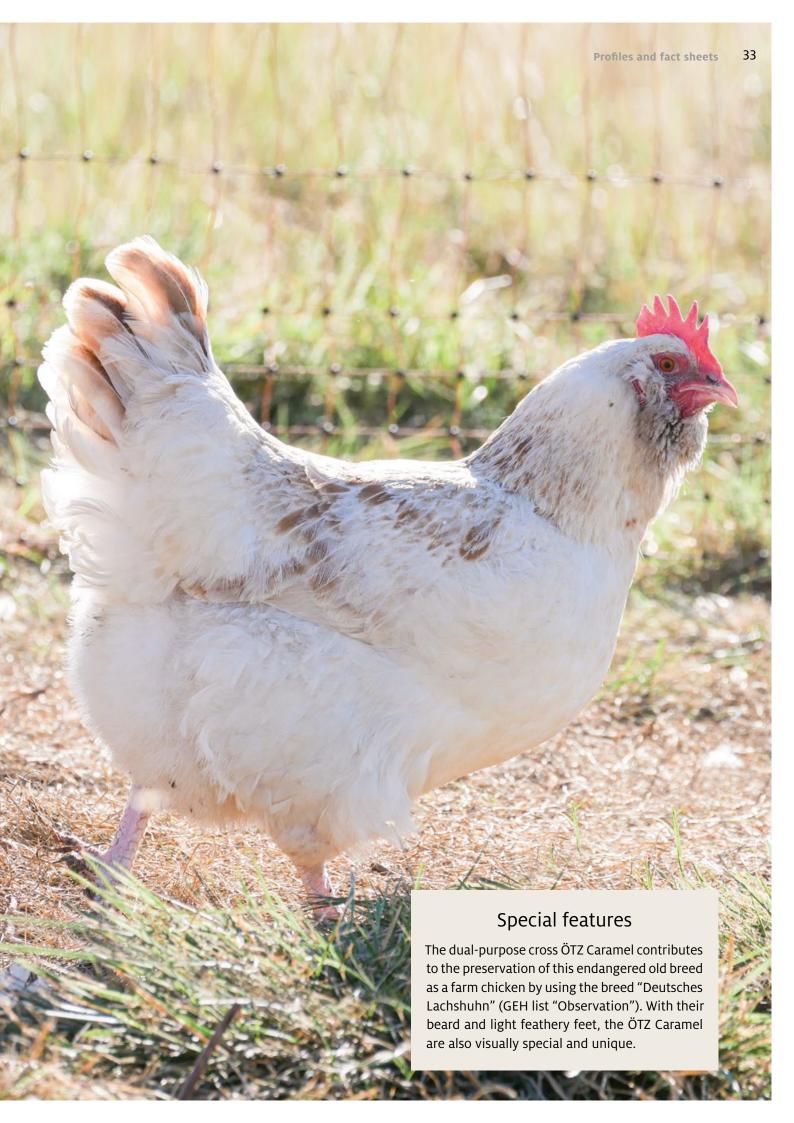
At the age of 18 weeks, a living weight of 2.9 kilograms and a slaughter weight of 1.7 kilograms is possible.

Peculiarities in behaviour: The ÖTZ Caramel cocks are particularly peaceful. Rank fights are rare until the 18th week of life.

Image above: ÖTZ Caramel cock Image below: ÖTZ Caramel herd







2.4. ÖTZ Bresse Gauloise

The ÖTZ Bresse Gauloise is a meat-focused dual-purpose chicken that originates from France. The Poulet de Bresse is internationally appreciated as "the queen of poultry" due to its excellent meat quality. Traditionally, this breed has white feathers, blue legs and a bright red crest, in in the style of the French national colours.

Special feature: The Bresse*Gauloise breed is particularly suitable for direct marketing farms with small groups. The eggs are somewhat smaller but particularly tasty. Since the animals are purebred, on-farm reproduction is very possible without splitting.

* ÖTZ Bresse Gauloises from German parental herds, hatched and reared in Germany.

ÖTZ Bresse Gauloise – young poulets



PLEASE NOTE: "Bresse" is a protected designation of origin. This means that the meat of Bresse chickens may not be declared as Bresse meat outside France. In Germany, the animals and the meat are therefore named Bresse Gauloise or Les Bleues.

PERFORMANCE DATA AT A GLANCE

PARAMETERS	PERFORMANCE			
Marketable eggs per year	160 – 180 pieces			
Shell colour	cream			
Start of laying period	16th – 17th week of life			
Living weight at start of the laying period	2 – 2.3 kg			
Weight of the old hens: 72nd week of life	Living weight: 2.8 kg			
	Slaughter weight: 1.7 kg			
Living weight of the cocks	15th week of life: 2.8 kg			
Slaughter weight of the cocks	15th week of life: 1.7 kg			
Feed consumption with 100% organic feed	140g-150g/ animal and day			
Feed consumption*	7.9 kg			
Availability	Chicks and hatching eggs on demand all			
EU certification**	yes			

- * For one animal (m/f), raised in a mixed-sex group until 15th week of age.
- ** Certified in accordance with the Animal Health Protection Regulation (BmTierSSchV) and thus approved for trade to EU-certified hatcheries and abroad.

ÖTZ Bresse Gauloise hens

Performance: Various trials have shown that the ÖTZ Bresse Gauloise hens have a production potential of up to 200 eggs. Depending on the management and husbandry system, up to 160 to 180 marketable eggs can be assumed. The eggshells are cream-coloured.

Due to the high body weight, laying begins as early as the 16th to 17th week of life. At the time of laying, the final weight should be 2 to 2.3 kilograms.

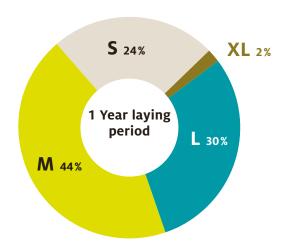
Feed consumption: The daily feed consumption per animal is between 140 and 150 grams.

Feeding instructions: These are robust and docile animals whose nutritional requirements are already met by low nutrient concentrations. The provision of raw fibre (e.g. bran, silage, hay) in the feed mix is absolutely recommended.

If fed too richly, the ÖTZ Bresse Gauloise hens tend to become fatty, which reduces the laying performance. Laying birds should always be in good condition and not exceed the recommended maximum live weight of 2.8 to 3 kilograms.

Behaviour: The ÖTZ Bresse Gauloise hens are friendly, self-confident and lively, but as youngsters they are also somewhat skittish.

EGG-SIZE DISTRIBUTION





ÖTZ Bresse Gauloise hen

ÖTZ Bresse Gauloise cocks

Slaughter performance: Depending on the size of the flock and the feeding, the roosters reach a live weight of about 2.8 kilograms and a slaughter weight of 1.7 kilograms within 15 weeks. The meat is firmer and has a more intense taste due to the long growth and the animals' willingness to move. The intramuscular fat storage makes the meat juicy and very aromatic when fattened skilfully.

Feeding: The ÖTZ Bresse Gauloise are very well suited for extensive fattening with alternative feed components (sprouted grain, potatoes, oats, whey, etc.). However, they should not starve during the growth phase under any circumstances.

Behaviour: The cocks are to be kept in an all-cock group until sexual maturity up to a maximum of 17 weeks. After that, the potential for aggression increases and growth stagnates.

2.5. Rare Breeds - Profiles

The ÖTZ cooperates with various smallholder breeders and supports projects and initiatives dedicated to the preservation and development of dual-purpose chicken breeds. In order to make this essential contribution to a sustainable future of livestock farming in the poultry sector visible, we are happy to present some relevant animals and projects.

2.5.1. Robust-Turkey (Robustpute)

Robust-Turkeys are small, strong animals with black and white patterned plumage. Completely white animals can also occur. Robust-Turkeys are suitable for extensive husbandry on small farms and perfect for agricultural direct marketing.

Robust turkeys are a newly bred cross between a slow-growing fattening turkey and turkeys of two old breeds (Cröllwitzer turkey and Ronquières turkey). The fattening turkey is meant to transfer its small size, precocity and meatiness. The roosters of the old breeds should pass on their vitality to their offspring.

Breeding objectives of the Robust-Turkey

- Vitality and stress resistance in free-range husbandry
- · Affability
- · Good foraging behaviour
- Frugality
- Early maturity (final weight after 30 weeks)
- Up to 6.5 kilograms final weight of the hen
- 7 to 8.5 kilograms final weight of the cockerels
- Level of slaughter value at least 65 percent
- Breast meat content at least 25 percent

The breeder of the Robust-Turkeys is the Demeter farmer Christine Bremer. On her farm "Heide-Geflügel" in Kölau, Suhlendorf, Lower Saxony, the reproduction and rearing of the chicks takes place.

NOTE: "Robust-Turkey – development of an economic organic turkey cross for the direct marketing farmer" is an EIP project funded by the EU and the state of Lower Saxony and coordinated by the Kompetenzzentrum Ökolandbau Niedersachsen GmbH, Bahnhofstraße 15 b in 27374 Visselhövede.

Robust-Turkey



2.5.2. Augsburg chicken

The Augsburg chicken (Augsburger Huhn) is a medium-sized laying breed with a strong rump. The crown or cup comb, which is worn by both sexes, is a special breed characteristic. The breeding history of today's Augsburg chicken began around 1870/80. In the vicinity of Augsburg, black feathered animals of the French breed La Flèche were crossed with black Italians. The breeding of the black Augsburg originated from the offspring of this mating.

Augsburg chickens were considered a typical laying breed in which meat production as a breeding characteristic took a back seat. Nevertheless, their meat yield is higher than compared to other laying breeds. In the 1920s, the animals were included in the list of recognised farm chickens by the German Agricultural Society. However, like almost all old laying breeds, they had to give way to modern hybrid chickens (Source: Einheimische Nutztierrassen in Deutschland – Rote Liste gefährdeter Nutztierrassen 2021).

Since 2018, in addition to the Coffee and Cream, a small flock of Augsburg chickens has been living in conservation breeding with Katharina and Manuel Förg, from the "Bioland" certified farm "Alte Schäferei" nearby Augsburg. The Förg family is a member of the "Sonderverein der Züchter des Augsburger Huhnes und der Zwerg-Augsburger", a farmers' association dedicated to the conservation of this traditional breeds.

In cooperation with the ÖTZ, hatching eggs from Augsburg chickens can be offered certified organic.

Special feature: The "Augsburg Chicken" breed is on the red list of endangered livestock breeds. Farm breeding and keeping contributes to the preservation of this endangered old breed as a farm chicken.



Augsburg chickens

PERFORMANCE DATA AT A GLANCE

PARAMETER	LEISTUNG
Marketable eggs per year	180 pieces (Purebreed-Standard Europe 2018)
	150.5 eggs/year (ZB 2019)
	140 eggs/year (Tiemann et al. 2018)
Egg weight	up to 60 g (TGRDEU 2019)
	56.2 g / 55th week (Tiemann et al. 2018)
Shell colour	white
Start of laying period	27th week of life, 50% performance 39th week of life (Tiemann et al. 2018)
Living weight of the hens	up to 2.5 kg (Purebreed-Standard Europe)
Living weight of the cocks	up to 3 kg (Purebreed-Standard Europe)
EU certification*	no

*Certified in accordance with the Animal Health Protection Regulation (BmTierSSchV) and thus approved for trade to EU-certified hatcheries and abroad.

2.5.3. Triesdorf Country chicken (Triesdorfer Landhuhn)

Performance data at a glance

The Triesdorf Country Chicken are characterised by their colourful plumage, the crest and the blue feet. They have been developed as a purebred dual-purpose chicken at the Triesdorf Agricultural Training College (LLA) since 2014. Breeding is mainly based on the three original breeds Bresse Gauloise, Italian and Sulmtaler.

NOTE: The Triesdorf County Chicken has been significantly influenced by Frank Kötzel and, in the further course, by Ingrid Meußel. From 2023, the first parent stock of this new breed will be kept in cooperation with the ÖTZ (certified organic).

Triesdorf Country hens

Performance: Depending on the management, an annual laying performance of up to 190 eggs can be assumed for a Triesdorf hen. The shell colour of the eggs is light beige to brown. The laying period begins in the 20th week of life.

Triesdorf Country cocks

Slaughter performance: Depending on the rearing period, flock size and feeding, Triesdorf cockerels reach a living weight of 2.2 kilograms and a slaughter weight of 1.4 kilograms at 14 weeks. At 20 weeks, a living weight of 2.9 kilograms and a slaughter weight of 2 kilograms is possible.

Triesdorf Country hens



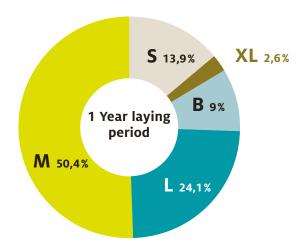
Special feature: The Triesdorf Country Chicken is a purebred animal which is self-reproducible. As it is a very young breed, the offspring can still vary in weight and size. In general, the colourful animals are eye-catchers and delight customers, e.g. in the context of agricultural direct marketing.

PERFORMANCE DATA AT A GLANCE

PARAMETERS	PERFORMANCE
Marketable eggs per year	194 pieces
Shell colour	light brown/beige
Start of laying period	25th week of life
Living weight at start of the laying period	2.5 kg
Weight of the old hens: 72nd week of life	Living weight: 2.9 kg Slaughter weight: 1.9 kg
Living weight of the cocks	14th week of life: 2.2 kg 20th week of life: 2.9 kg
Slaughter weight of the cocks	14th week of life: 1.4 kg 20th week of life: 2 kg
Feed consumption with 100% organic feed	141 g/animal and day
Feed consumption*	7.9 kg Cocks 6.3 kg Hens
Availability	Organic certified from Eastern 2023 onwards
EU certification**	no

^{*} For one animal (m/f), raised in a mixed-sex group until 15th week of age.

EGG-SIZE DISTRIBUTION



^{**} Certified in accordance with the Animal Health Protection Regulation (BmTierSSchV) and thus approved for trade to EU-certified hatcheries and abroad.



Wild Ducks chicks

2.5.4. Wild Ducks (Wilde Enten)



Herd of Wild Ducks

Wild Ducks have a colourful plumage. They are vital and robust animals that are suitable for extensive free-range husbandry on small farms. Wild ducks usually reach slaughter maturity after 16 to 20 weeks and are ideally offered via agricultural direct marketing.

The Wild Ducks are a cross between the white Peking Duck and the Saxon Duck and have nothing in common with the mallards living in nature. However, their colourful appearance, inherited from the mallard duck, makes them real wild escapees compared to the "normal" white ducks.

After 16 weeks, the ducks have a living weight of approx. 3 to 3.5 kilograms and a slaughter weight of 1.8 to 2.5 kilograms. At this time, the drake has a living weight of between 3.5 and 4.5 kilograms and a slaughter weight of approx. 2.5 to 3 kilograms. Depending on the feed intensity, these weights are sometimes not reached until the 20th week of life.

NOTE: Ducks in moult are very difficult to pluck. It is advisable to look closely here: At the start of moulting, many small downy feathers can be seen in the birds' posture. Four weeks later the new quills have developed feathers and are easy to pluck from then on. The 1st moult occurs between the 8th and 11th week (depending on weather and food).

The breeder of the Wild Duck is the organic farmer Jonas Dorn, Bioland certified. The reproduction and rearing of the chicks also takes place on his farm in Witzenhausen.

3. Performance data from science and practice

The animals of the ÖTZ breeds are regularly tested nationwide in independent research projects. The focus of the research varies according to the scientific questions. In the evaluation different farm sizes and husbandry systems are taken into account. This provides a comprehensive insight into the performance potential of the animals.

The following data are the result of performance assessments conducted within the framework of various research projects in the period from 2014 to 2022. The projects were each accompanied by different questions. Therefore, a comparative comparison of the data is unfortunately not possible for all study parameters.

Hints and field reports on performance data from the field are always welcome – please feel free to contact the ÖTZ poultry advisor Pauline Seyler.



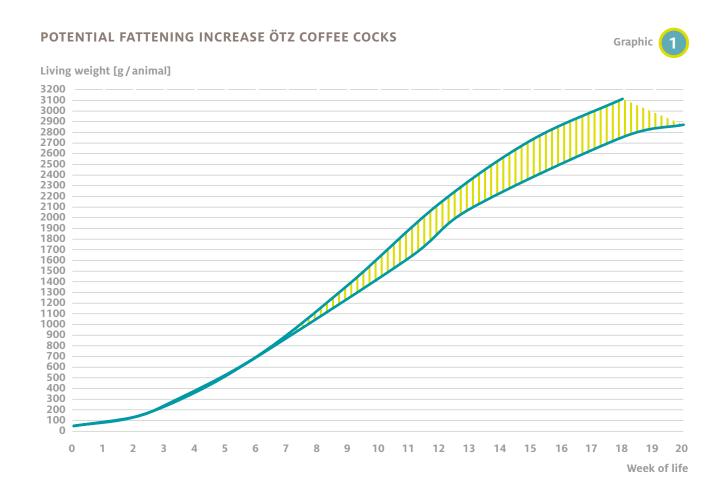
Mobile +49 151 62559188 pauline.seyler@oekotierzucht.de

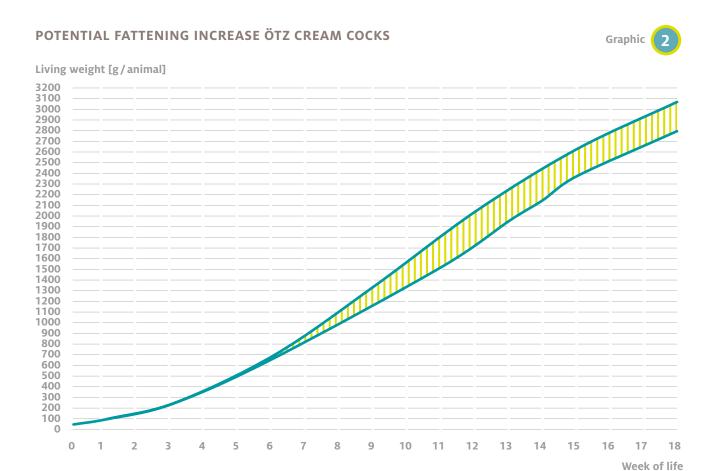


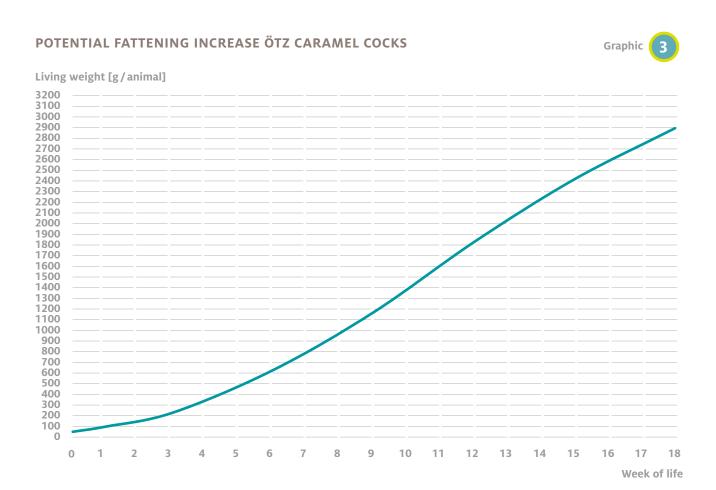
3.1. Performances of the ÖTZ dual-purpose cocks

3.1.1. Growth curve of the ÖTZ dual-purpose cocks during rearing

The following 4 graphs show the potential fattening trajectories of the ÖTZ dual-purpose cocks. Depending on feeding and group size, the weight development of the ÖTZ Coffee and Cream cocks lies within the corridor shown. If you notice a significant deviation in the weight development of your animals, please do not hesitate to contact the ÖTZ advisor.







POTENTIAL FATTENING INCREASE ÖTZ BRESSE GAULOISE COCKS Graphic Living weight [g/animal] 3100 3000 2900 2800 2700 2600 2500 2400 2200 2100 2000 1900 1500 1400 1300 800 700 600 400 300 100

Note: Between the 6th and 13th week of life there are no measured values available, a linear growth cannot be assumed here

ÖTZ Coffee cock – 16 weeks old

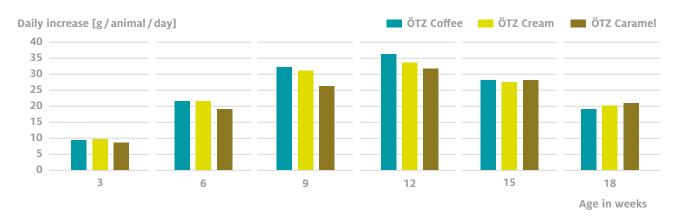
Week of life



Slaughtering degree ranges from 56% to 62%.

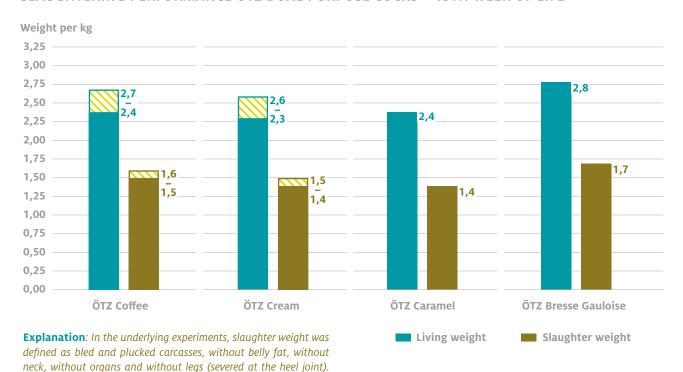
3.1.2. Daily increase ÖTZ dual-purpose cocks

DAILY INCREASE ÖTZ DUAL-PURPOSE COCKS



3.1.3. Slaughtering performance ÖTZ dual-purpose cocks

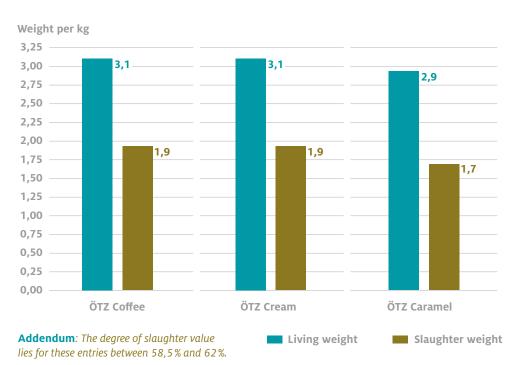
SLAUGHTERING PERFORMANCE ÖTZ DUAL-PURPOSE COCKS - 15TH WEEK OF LIFE



3.1.4. Slaughter performance of the ÖTZ dual-purpose cocks in an overview

Breed	ÖTZ Coffee		ÖTZ Cream		ÖTZ Carame	I	ÖTZ Bresse Gauloise
Week of live	15	18	15	18	15	18	15
Living weight	2,7 kg	3,1 kg	2,6 kg	3,1 kg	2,4 kg	2,9 kg	2,8 kg
Slaughter weight	1,6 kg	1,9 kg	1,5 kg	1,9 kg	1,4 kg	1,7 kg	1,7 kg
Degree of slaughter value	59%	62%	59%	61%	56%	58%	62%
Legs as a percentage of carcass weight	40%	43%	39%	42%	40%	41%	Not specified
Breast as a percentage of carcass weight	18%	19%	19%	17%	16%	16%	Not specified
Wings as a percentage of carcass weight	13%	13%	12%	12%	15%	16%	Not specified

SLAUGHTERING PERFORMANCE ÖTZ DUAL-PURPOSE COCKS – 18TH WEEK OF LIFE



3.2. Performance of the ÖTZ dual-purpose hens

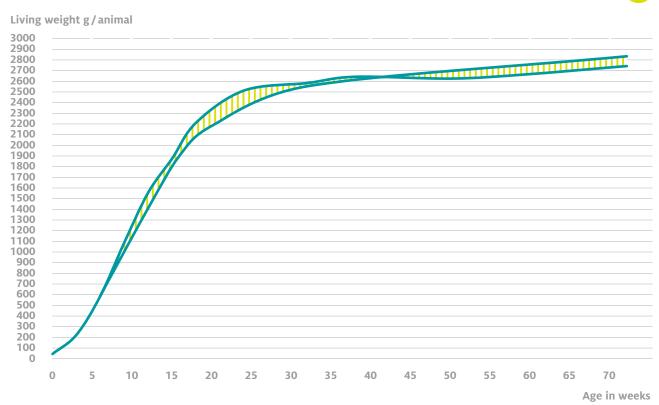
3.2.1. Growth curves of the ÖTZ dual-purpose hens during rearing and the laying period

The following 4 graphs show potential courses of weight development of ÖTZ dual-purpose hens. Depending on feeding and group size the weight development of the ÖTZ Coffee and Cream hens lie within the corridor shown. If you notice a significant deviation in the weight development of your animals, please contact the ÖTZ advisor.

POTENTIAL WEIGHT DEVELOPMENT ÖTZ COFFEE HENS

Graphic

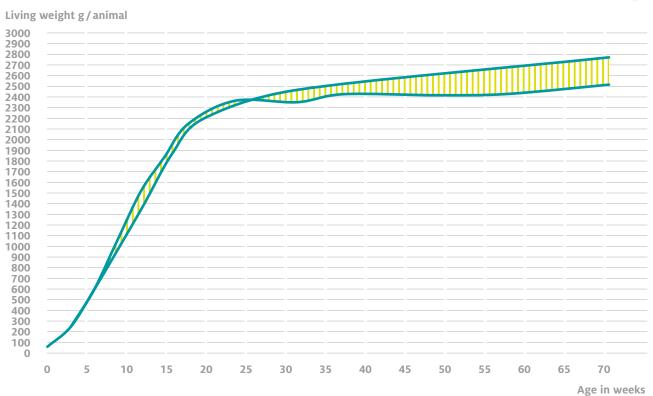
5



POTENTIAL WEIGHT DEVELOPMENT ÖTZ CREAM HENS

Graphic

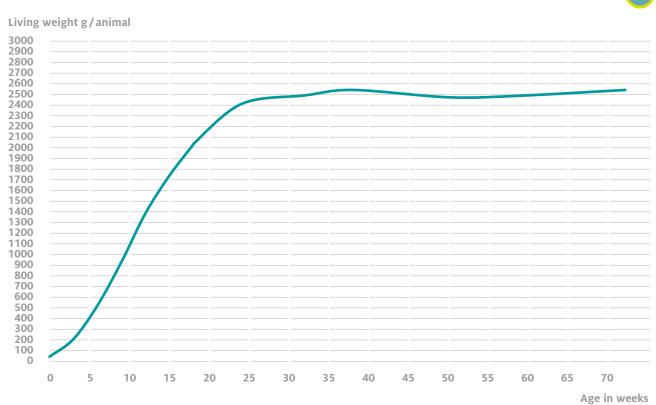




POTENTIAL WEIGHT DEVELOPMENT ÖTZ CARAMEL HENS

Graphic

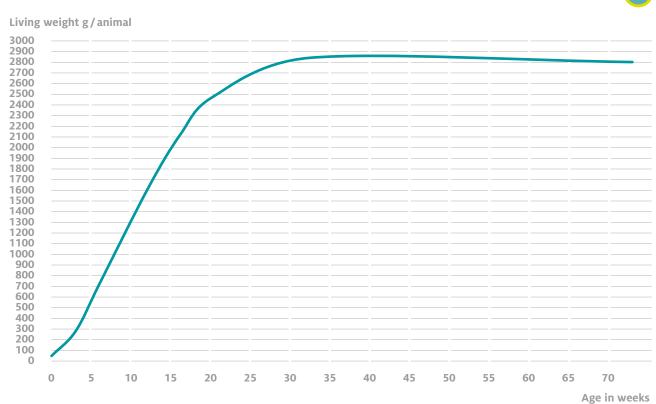




POTENTIAL WEIGHT DEVELOPMENT ÖTZ BRESSE GAULOISE HENS

Graphic

8

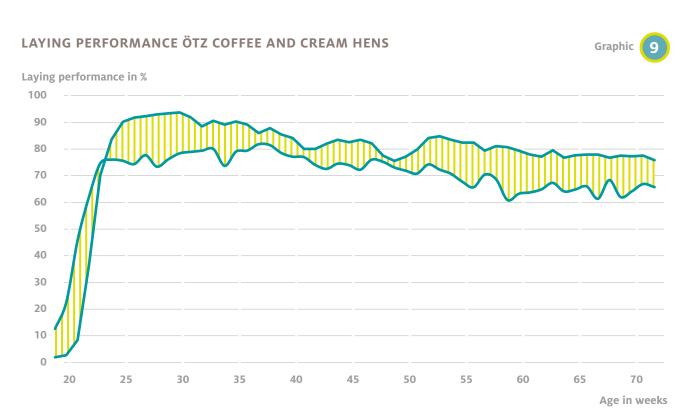


ÖTZ Cream hens



3.2.2. Laying performance ÖTZ Coffee and Cream hens

The graph below shows a corridor of the typical laying performance of ÖTZ Coffee and Cream hens. Depending on the management, the hens reach their laying tip within the first six weeks after the start of laying. The start of laying is to be expected in the 20th week of life. The living weight at the beginning of the laying period should not be less than 1.9 to 2.1 kilograms, as too low living weights at this time negatively influence the height of the laying peak and persistence.

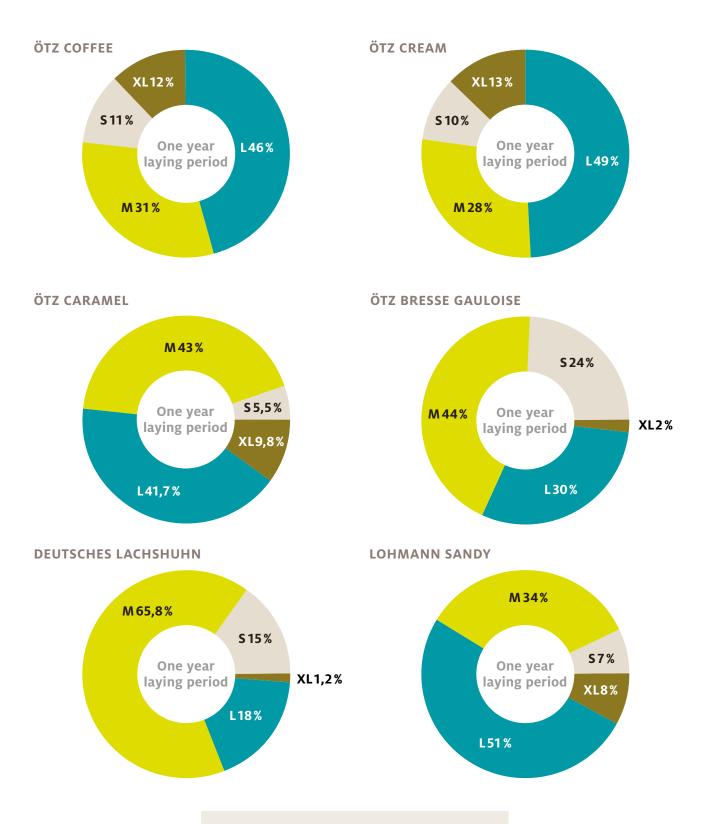


Further details on the laying performance of ÖTZ Coffee and Cream hens can be found in a forum article by Annemarie Kaiser:

https://youtu.be/7mwOwKEpYvQ



3.2.3. Egg size distribution in the first year of the laying period



NOTE: The data in this chart come from two projects in which the animals were tested. For more details, please contact the ÖTZ poultry advisor Pauline Seyler.



ÖTZ Cream hens in the nest of a mobile chicken stable

3.2.4. Slaughter performance of the ÖTZ hens after the laying period

SLAUGHTER PERFORMANCE OF ÖTZ LAYING HENS AFTER THE 1ST LAYING PERIOD - 72. WEEK



4. Management recommendations

4.1. Basics

Summary of basic peculiarities in the keeping of ÖTZ dual-purpose chickens

- Regularly record and interpret the weight development of the hens (housing, start of the laying period, for more information refer to 5.1).
- Avoid cruciferous plants and seeds as a feed component (for more information refer to: Management recommendation 4: Avoid cruciferous plants in feeding).
- By-products (e.g. clean-out cereals) and non-marketable parts of the harvest (e.g. field vegetables etc.) can be included as feed components.
- Coordinate laying performance and feeding (for more information see management recommendation 2).
- Recognise huckles in time and act accordingly (set up hen compartments, compare also to).
- Consider raising chicks on the farm and take advantage of marketing opportunities (compare to 7.1.3 for more information).

4.2. Feeding recommendations

A key role for resource-efficient keeping of ÖTZ dual-purpose chickens is attributed to feeding. The breeding objectives of the ÖTZ dual-purpose chickens include therefore, among other things, the best possible utilisation of the feed components available on the (organic) farms.

The breeding lines are fed with a 100% organic diet with components such as oats, pea, sunflower, maize, wheat, field bean, triticale, barley, in different weight proportions and the ad-libitum provision of lucerne hay.

High raw fibre contents in the feed anatomically require a distinct gastrointestinal tract. It can be assumed that an intensive use of the digestive system leads to a high utilisation of the feed components. (Source: "ÖkoHuhn" Research project – partial report part A)





ÖTZ Coffee and Cream herd

MANAGEMENT RECOMMENDATIONS



Monitoring the weight development

The weight development of the hens is THE decisive management factor for ÖTZ farmers. When stabling pullets, at least 25 birds should be weighed, and the following days should be individualised based on the weight as follows.

Setpoint weight for ÖTZ Coffee and Cream layer hens at the end of the 20th living week: 1.9 to 2.1 kg.

Measures in case of underweight:

- Moisten feed and provide enough feeding places. Moist feeding. (For details compare also to p. 105, Basic knowledge MTool).
- Only increase the daylight length slowly to 16 hours when the set point weight has been reached. When stabling in June/July with a natural daylight length of more than 16 hours, it is recommended to darken the stable in order to shorten the daylight length.

For details compare also to page 11 – BLE Management Guide, whole-farm husbandry concept poultry – pullets

www.oekotierzucht.de/produkt/ managementhilfe-haltungskonzeptgefluegel-junghennen

MANAGEMENT RECOMMENDATIONS



Coordinate feeding with laying performance

To avoid wasting resources, ÖTZ Coffee and Cream laying hens should not be provided with more than 135 to 145 grams of feed per animal and day. In general, the feeding of laying hens can be divided into two phases:

1st phase: > 70% laying performance	2nd phase: < 70% laying performance
Fully feed hens – nutrient content according to L1 Laying hens complete feed.	Dilute feed mixture with oats, alternatively with wheat or triticale
Adjust quantity as needed: - Animal weight - Egg size - Thermoregulation The animals should not be fed more than they need, otherwise they will become too heavy.	Conditions: - Daily feed intake not less than 135 – 145 g/animal - weight > 2.3 kg - Laying performance < 70

Monitoring by egg weight:

If the average egg weight drops, the dilution was too strong.

Practical tip: Determine the average egg weight. To do this, place trays of 30 on a scale, subtract the empty weight of the tray and divide by the number of eggs. Measure once a week over the entire laying period!

MANAGEMENT RECOMMENDATIONS



Avoid feeding ad libitum

Ad-libitum feeding systems are not a good prerequisite for feeding dual-purpose hens. This leads to a rapid fattening of the hens, the laying performance and the firmness of the eggshell decreases.

Instead of feeding ad libitum a daily hand feeding to a total feed intake of 140 g/animal/day is recommended.

MANAGEMENT RECOMMENDATIONS



Avoid feeding with cruciferous plants

Cruciferous plants (such as rape) in the feed ration can lead to fishy-smelling eggs in ÖTZ Coffee hens. This also applies if the mobile stable moves over an intercrop with cruciferous plants.

Special knowledge about fishy-smelling eggs: During the digestion of cruciferous vegetables, brown egg-layers may produce eggs with a fishy smell. The cause is metabolic products which deposit in the egg. Trimethylamine (TMA) can enter the hens' bodies via the animals' metabolism, which produces TMA itself, or via molecules from which TMA can be formed. TMA is transported via the bloodstream to the liver, where an enzyme is responsible for the oxidation of TMA. The activity of this enzyme is inhibited in the ÖTZ Coffee hens by various substances found in cruciferous cruciferous plants and thus contributes to the development of the unpleasant odour.

ÖTZ Coffee hen



4.3. Management of clucking hens

Clucking is basically not a misbehaviour, but a maternal instinct and thus a sign of "natural hens". The clucking is also related to the laying performance. Due to the moderate performance of the ÖTZ dual-purpose hens, they tend to cluck more than high-performance animals. In addition, the following management mistakes can favour clucking:

High mite infestation

- → Stress
- → Anaemia
- → Activation of the species conservation instinct

High temperatures

- → Less feed intake
- → Undersupply

Overweighted animals

→ Overprovision

The following immediate measures against clucking are recommended:

Remove the clucking hen from the nest and move her to a separate house or a "foreign" group. The change of environment makes it impossible for the hens to return to the laid clutch and the brooding is interrupted.

Important: If the hens cluck for too long, they lose body fat. This delays the re-start of laying enormously.

Avoid weight loss of the animals by early detection of clucking and transfer to a special hen house for clucks. → Not enough body fat results in much less eggs.

The special hen house for clucks can be a trailer, a construction trailer, an extra compartment in the stable or similar. The hen house must be equipped with food, water, perches, nests and runs like any other hen house.

ÖTZ Cream hens in a mobile chicken stable



5. Management and marketing support

It is an important concern of the ÖTZ to ensure that poultry keeping itself and marketing activities are supported from the beginning, as well as to provide suitable management support.

5.1. ÖTZ advisory

5.1.1. ÖTZ poultry advisory service

Since October 2021, the ÖTZ Poultry Advisory Service has offered support and advice to farmers who already keep ÖTZ animals and to all those who are interested in starting with dual-purpose breeds. The ÖTZ is networked with many farmers who keep dual-purpose chickens and is in close contact with the partner companies for rearing young pullets and the respective hatcheries.

If you have any questions about on-farm rearing, sources of supply, feeding and management of dual-purpose chickens, the ÖTZ advisory service will be happy to help you by telephone or during farm visits.

5.1.2. Expert forum for organic animal breeding

Once a year, the ÖTZ invites to an online expert forum within the framework of the Öko- 2Huhn project. The expert forum is a format in which science and practice come into exchange. All expert contributions are documented and can be viewed at:

www.oekotierzucht.de/fachforum



CONTACT Pauline Seyler Poultry Advisor ÖTZ pauline.seyler@oekotierzucht.de Mobil +49 151 62559188

5.1.3. Exchange platform for farmers

The ÖTZ round table (Hühnerstammtisch) on Face-book serves to provide professional information and collegial exchange around the keeping of ÖTZ animals and their marketing. Training and event information is also shared here. If you are not yet a member, you are welcome to join:

www.facebook.com/groups/ 19823422152915



5.2. Management support

The transfer of knowledge between research and practice is an important concern of the ÖTZ. Management materials, such as expert lectures and seminars, reference works and other helpful tools for practical application, are developed and made available. This management support is available under:

www.oekotierzucht.de



5.2.1. Laying performance forms

The ÖTZ laying performance form offers a clear and summarised documentation of the laying performance over the entire laying period. It is a helpful basis for advisors and also for the organic inspection. The laying performance form is available as a print version or as an interactive PDF file, also for use on a mobile device.

www.oekotierzucht.de/produkt/ legeliste



5.2.2. Box of six for ÖTZ eggs of different sizes

ÖTZ offers an egg box exclusively for ÖTZ trademark partners. The inscription "eggs of different sizes" and the addition "min. net weight 318 g/box" make it possible to market XS to L eggs in one box. The lid contains an explanatory text for consumers. In addition to the compulsory information and the ÖTZ trademark, the overall design leaves enough space for individual logos. On the back there is an EAN code which supports the listing in the trade. More information and instructions for ordering at:

www.oekotierzucht.de/ produkt/oetz-eierkarton











5.2.3. Chick Guide

The ÖTZ Chick Guide contains helpful tips for the onfarm rearing of dual-purpose chickens. This guide was developed in cooperation with practical farmers. The compact information is aimed at all farmers who want to raise chicks themselves on a small scale. It explains which equipment is necessary for chick rearing, how and what should be fed, and which diseases should be recognised and how. Available for download:

www.oekotierzucht.de/produkt/ leitfaden-kuekenaufzucht



5.2.4. Research and practice library

A comprehensive collection of various studies and information from research and practice on the keeping and breeding of dual-purpose animals is available at the following link and is constantly being updated:

www.oekotierzucht.de/ ueber-uns/forschung



Special recommendations

MTool – a management tool for rearing and keeping laying hens www.mud-tierschutz.de/ mud-tierschutz/beratungsinitiativen/ etablierung-eines-managementtoolsbei-legehennen



Full cost calculator for organic laying hens -

a management tool of the Landesanstalt for Agriculture, Food and Rural Areas Schwäbisch Gmünd.

https://lel.landwirtschaft-bw.de/pb/ ,Lde/Startseite/Unsere+Themen/ Kalkulationsdaten+Oeko-Legehennen





Chick Guide

Whole-farm husbandry concept for poultry – pullets. A management aid from the Federal Agency for Agriculture and nutrition.

www.ble-medienservice.de/0341/ gesamtbetrieblicheshaltungskonzept-gefluegeljunghennen



Leaflet: Triggering moulting in organic hens,

Fibl Switzerland

www.fibl.org/fileadmin/ documents/shop/1434-mauser.pdf



"Kunstbrut - Handbuch für Züchter",

Dr. A.F. Anderson Brown, deutsche Bearbeitung v. Hans Aschenbrenner, Verlag M. & H. Schaper, 2009

5.3. Marketing support

The ÖTZ actively communicates and promotes topics related to the dual-purpose chicken on various channels online:

www.oekotierzucht.de | www.das-oekohuhn.de

as well as Facebook and Instagram and also in print, e.g. in trade journals. These are often linked to the ÖTZ Trademark "Aus ökologischer Züchtung".

5.3.1. Webinars

Every year, the ÖTZ offers webinars on the subject of broilers and dual-purpose chickens. The respective current dates are announced on the website and in the newsletter.

5.3.2. Social media

Follow the ÖTZ on Facebook and Instagram. Here, news and information about chicken breeding and keeping, dual-purpose chickens as well as egg and chicken meat marketing are posted. The content focuses on consumer education, information and networking.

5.3.3. Communication material

The ÖTZ offers a wide range of promotional and communication material in both print and digital formats. In addition to sales incentives, such as tasty recipes, they contain consumer-friendly information explaining the issues around dual-purpose chicken. The printed materials are suitable for display at the point of sale, at farm festivals and trade fairs or as an insert in online mail order and subscription boxes. Further information under:

www.oekotierzucht.de/vermarktung/ werbematerial



5.3.4. ÖTZ trademark and homepage

A well known label is already half way down the road towards good marketing. The product seal "From organic breeding" can be used to label egg and meat products from ÖTZ animals.

The homepage **www.das-oekohuhn.de** explains the special features of organically bred dual-purpose chickens in a way that is easy to understand for consumers.

NOTE: Please understand that the use of the trademark is reserved exclusively for partners with a valid trademark contract.

Would you also like to become a trademark partner and use the ÖTZ Trademark and print materials? Please contact us at:

info@oekotierzucht.de

Initial information on the trademark cooperation under:

www.oekotierzucht.de/vermarktung/ produktsiegel

CONTACT Miriam Sorms Assistance and contract awarding miriam.sorms@oekotierzucht.de Office: +49 7551 9375436

5.3.5. Supply chain management – meat

ÖTZ dual-purpose cockerels are an alternative to the classic high-performance fattening breeds and the brother cockerels of laying hen husbandry. They offer a versatile potential for added value and appreciation. They are a niche product characterised by meat quality and a systemic "added value".

The ÖTZ has access to a broad network of players in the sector and will be happy to advise and network with you in order to bring together the supply of cockmeat and the corresponding sales opportunities. Please contact Joachim Jeske for individual advice or with questions about sources of supply and product offers.

About our cockerel meat project

Together with the Brudertier Initiative Deutschland e.V. (BID) and Bauckhof GmbH, we run a office for supply chain management for cock meat since the beginning of 2022. The project is co-financed by the ministry of agriculture.

The aim is to connect supply and demand for cockmeat products and to broker partnerships along the supply chain (from producers, slaughterhouses and processors to retailers and restaurants).

This three-year project is funded by the Federal Organic Farming Scheme (BÖL)

More information about the project under:

www.oekotierzucht.de/vermarktung/ hahnenfleisch

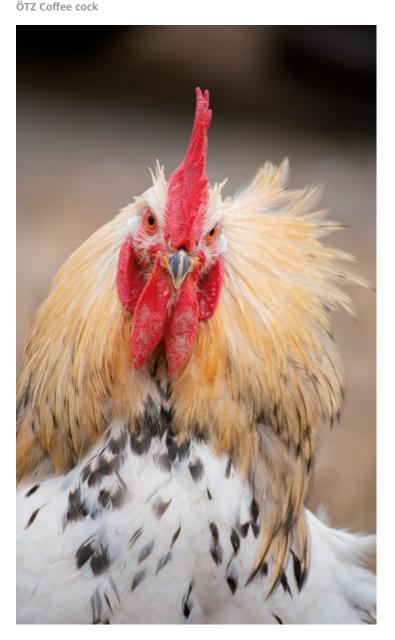


CONTAKT

Coordination office cock meat

Joachim Jeske joachim.jeske@oekotierzucht.de Mobil +49 151 67028934





6. Sourcing addresses and providers

You would like to keep ÖTZ animals and order hatching eggs, chicks or pullets? The hatching eggs of ÖTZ dual-purpose chickens are only shipped directly from the breeding site. For the purchase of chicks and pullets, you can access the nationwide network of selected hatcheries and rearing farms of ÖTZ dual-purpose chickens:

6.1. Hatching eggs

Hatching eggs of the ÖTZ dual-purpose chickens as well as the rare breeds presented in chapter 2.5 can be ordered via the hatching egg mail order of the ÖTZ:

www.oekotierzucht.de/tiere/ brutei-shop



CONTAKT

Hatchery shipping and advisory

Annett Grün bruteiversand@oekotierzucht.de Mobil +49 176 57909877

Postal address

Ökologische Tierzucht gGmbH Heiligenbreite 20 88662 Überlingen

Invoicing address

Ökologische Tierzucht gGmbH Auf dem Kreuz 58 86152 Augsburg

info@oekotierzucht.de www.oekotierzucht.de www.das-oekohuhn.de

Management: Inga Günther, Carsten Scheper

6.2. Chicks and pullets

Concerning hatching egg sales and the supply of chicks and pullets, the ÖTZ cooperates with selected partnering farms. This enables a nationwide offer with reasonable transport distances and facilitates the establishment of regional networks.

The partner companies with their contact details and locations are summarised in the overview on pages 8 and 9 and under:

www.oekotierzucht.de/tiere/ bezugsquellen



IMPORTANT GENERAL NOTES:

- Please note that we sell only mixed sex animals
- The order of young animals should be placed in a timely manner, at least six months before the planned stabling.
- Please use short distances and order chicks in your region (<100 kilometre radius, if possible).
- Please check the availability of organic chicks via the platform https://organicxlivestock.de.





CONTAKT

Ökologische Tierzucht gGmbH Auf dem Kreuz 58 86152 Augsburg Telephone +49(0)7551 9375436 www.oekotierzucht.de info@oekotierzucht.de

NEWSLETTER

Subscribe to our regular newsletter under **www.oektierzucht.de**

NETWORKING

Feel free to sign up to participate in the Facebook group "Hühnerstammtisch ÖTZ" for tips and collegial exchange.