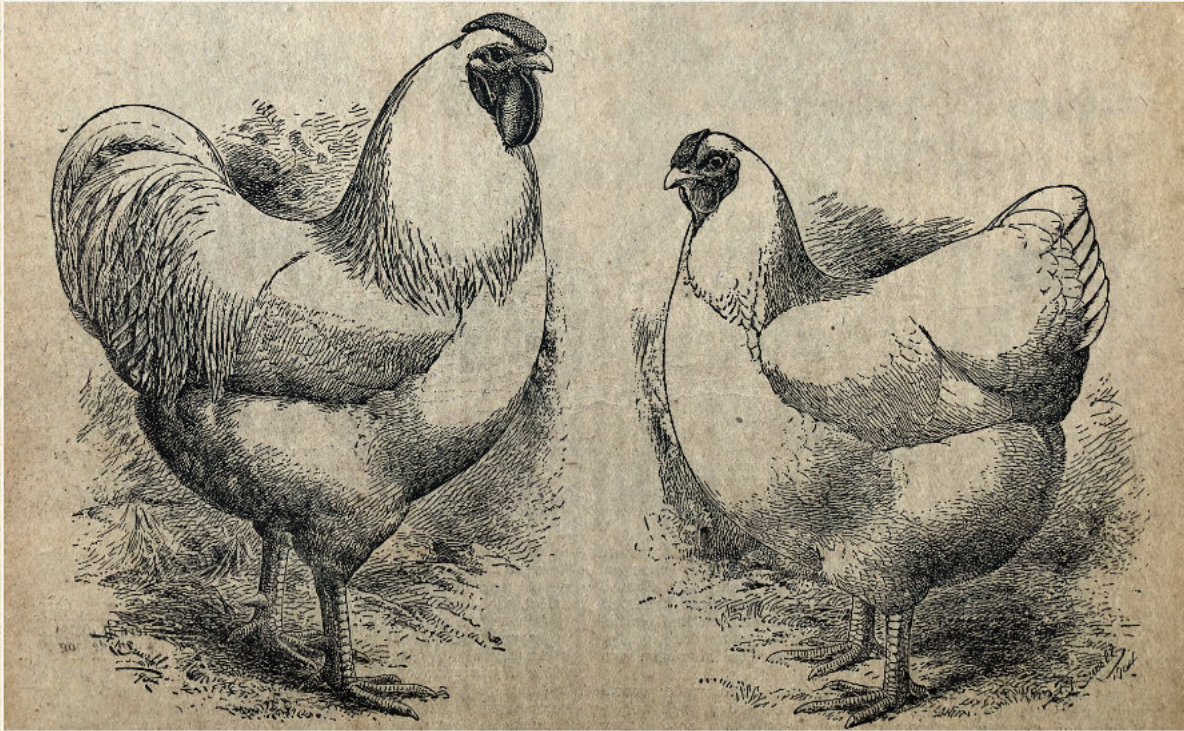


WHITE WYANDOTTES 1920

AND A CONVERSATION ON WHITE FEATHER COLOUR

After the white Leghorns, which are kept here in the country (NL) in very large numbers, but which can be seen at exhibitions in moderate numbers, there is no breed here in the country that is as popular as the Wyandotte breed and the first place among all the colour varieties of that breed is taken by the white variety, which is also the most perfect as far as shapes and head ornaments are concerned.

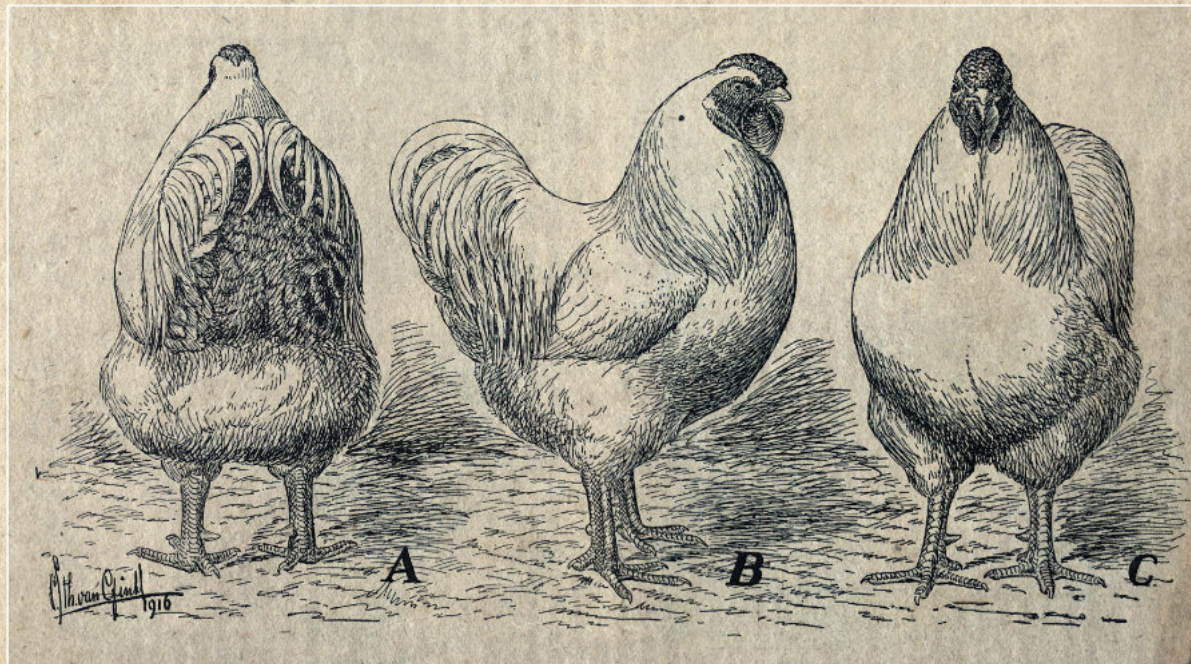
Picture source:
Avicultura 1921
or mentioned,
Translations &
explanations:
Sigrid van Dort,
Feb 2023



*IDEAL WHITE
WYANDOTTE
COCK & HEN by
Sewell (usa)*

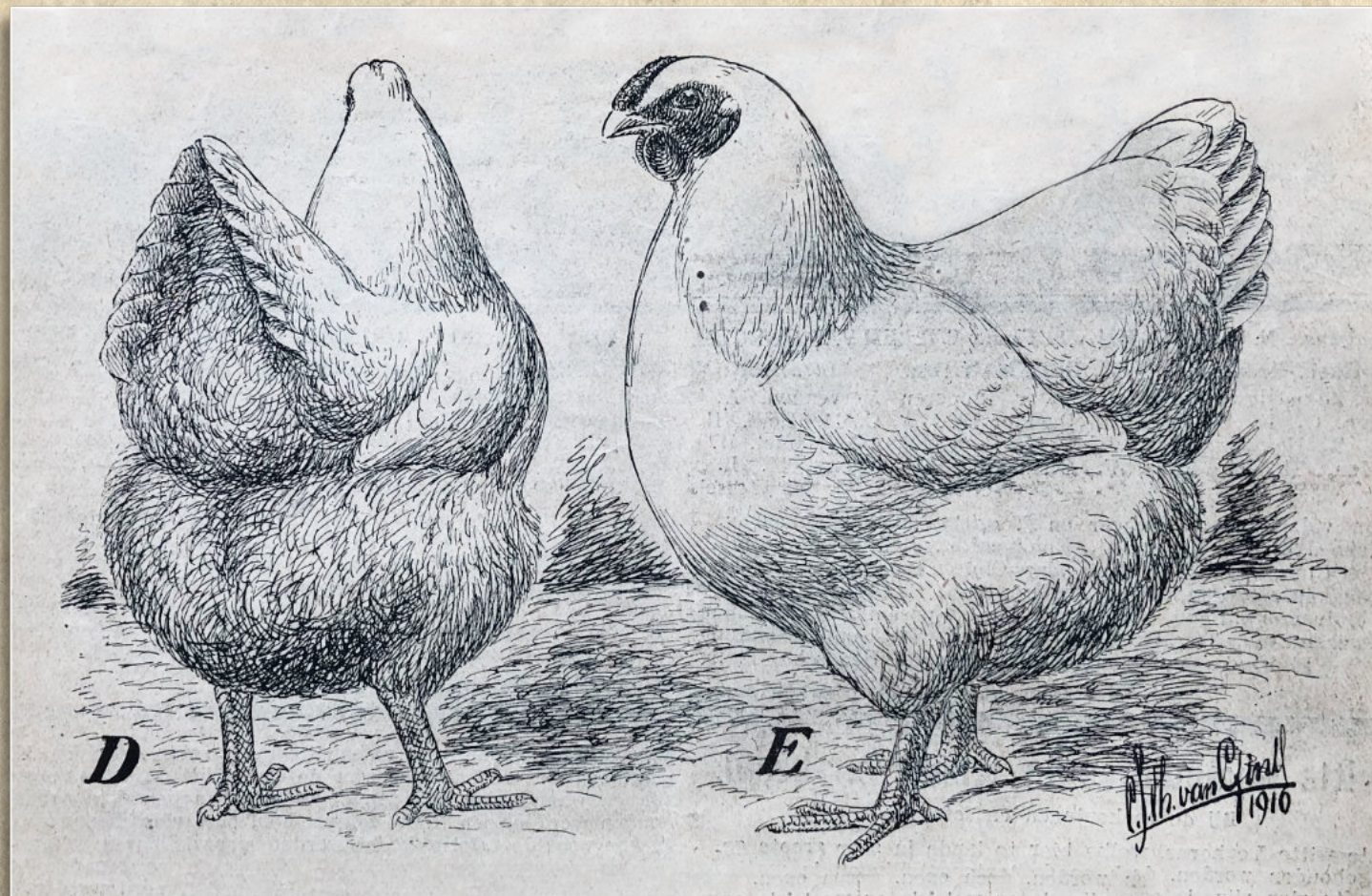
“One need not wonder at all, that the white Wyandottes enjoy such popularity, because they are poultry that are at home everywhere. Both the fancier, who has only a small city garden and only a moderately sized run to provide his animals, and the farmer, who can have a few dozen of these birds running around in his yard, derive a lot of pleasure from these chickens.

In general, they are very hardy birds, which, especially when not too heavy in weight and build, are



A WELL-SHAPED WHITE WYANDOTTE COCK.

When judging Wyandottes, and white Wyandottes in particular, one should not only look at the animals from the side, but also from the front and the back, because only then is it possible to get a good idea of their conformation. A good Wyandotte should be broad and have a well-spread tail. The breast should also be broad. If the animal meets these requirements, the back will also be broad. Only a broad, deep-built Wyandotte can meet the standard requirements. The Americans have understood this excellently, so the white Wyandottes there are almost ideal in shape.



THE TYPE OF A WELL-SHAPED WHITE WYANDOTTE HEN.

When grading Wyandotte hens, the same applies as for the cocks of that breed. The hen should have a spread tail, which when viewed from behind has the shape of an inverted V. Good layers very often have these spread tails, also in other breeds.

distinguished by rapid maturity and are ready to lay early, so that April chicks can generally be expected to lay eggs in October. These are not exceptions, but the rule. Such characteristics have obviously helped the breed a lot. In addition, the cockerels are very good for slaughter and when kept in a confined space for 14 days or so, they put on a good amount of breast meat and are eagerly purchased for the table, especially by hoteliers, as they have then reached a size at which they can easily be reserved as roasting cockerels.

White Wyandottes are excellent when cooked, thanks to their white stubs (feather stubs after plucking, svd).

Winter lay

Soon after this breed became popular, it was discovered that it lent itself excellently to winter egg production, and what we now know, that winter egg production is a guide and hold for the total yearly production, this characteristic is appreciated all the more.

It was not difficult for some English breeders to significantly increase the egg production of white Wyandottes through selective breeding, and this variety has always been the main competitor of white Leghorns. Many a year, the white Wyandottes won first prize at the big laying competitions. It was a pity that the size of the eggs in these record layers of this breed was not maintained and the small egg is now a problem to which all attention is paid. As for the number of eggs, the breed leaves nothing to be desired.

Body weight

When breeding Wyandottes and also white Wyandottes, the Americans have adhered punctually to the standard weight so that it remained a medium-heavy chicken and the results have proven them right. The Wyandottes can only show all their good qualities only if they are not bred too heavy. You can then keep 10 to 12 hens to a cock.

The animals keep all their liveliness without becoming flighty, as we observe in the light breeds, and can move with the same ease as the light breeds when they have free range.

On the other hand, they only retain their earlier maturity when they are not above standard weight. With late-April chicks one can still expect the first eggs in the second half of October, which, as every professional farmer knows, is of great value.

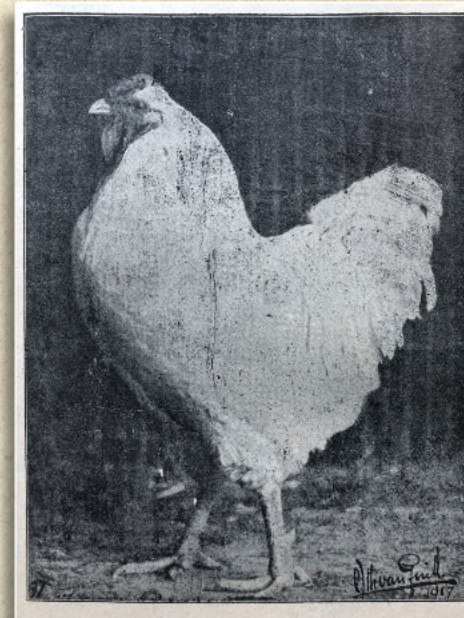
March chicks present a lot more difficulties, especially when bred in large numbers and are of course also more expensive, as more chicks die during early incubation and a larger number of eggs will turn out to be unfertilised. Moreover, for early incubation, a smaller number of hens have to be placed with the cock, if a sufficient number of fertilised eggs are to be expected.

From all this it can be seen that body weight plays a major role in this breed.

The English breeders completely lost sight of this and before the war (WW1, svd) bred their Wyandottes and in

particular their white Wyandottes far too heavy, they not only took much longer to reach maturity, but moreover no longer showed the true Wyandotte shapes, but, with the exception of comb shape and leg and beak colour, were much more reminiscent of Plymouth Rocks and Orpingtons in their breed characteristics.

The Wyandotte breed characteristics are not compatible with a heavy fowl breed. In the Netherlands, people have now realised the desirability of retaining the medium-heavy weight and it is to a large extent thanks to the



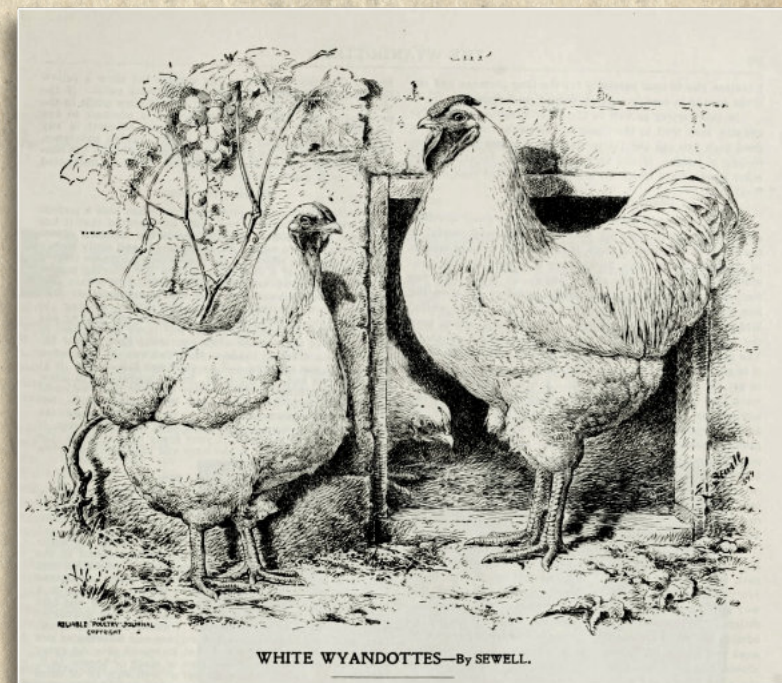
YOUNG AMERICAN WHITE WYANDOTTE. A cockerel with nice shape and good healthy model. The tail could have been a little more strongly developed. (1917)



YOUNG AMERICAN WHITE COCKEREL. This cockerel, an animal of very good quality, dates from the time when these animals were required to be very short-backed. Practical breeders objected to this and the short-backed Wyandottes had to disappear again.

breeding direction taken here that white Wyandottes are popular today. Much better than words, the white Wyandotte can be described with a number of illustrations, and the reader not only gets a perfectly clear picture of the standard requirements of this breed, but can also see that the various breeding directions have already come pretty close to this ideal.

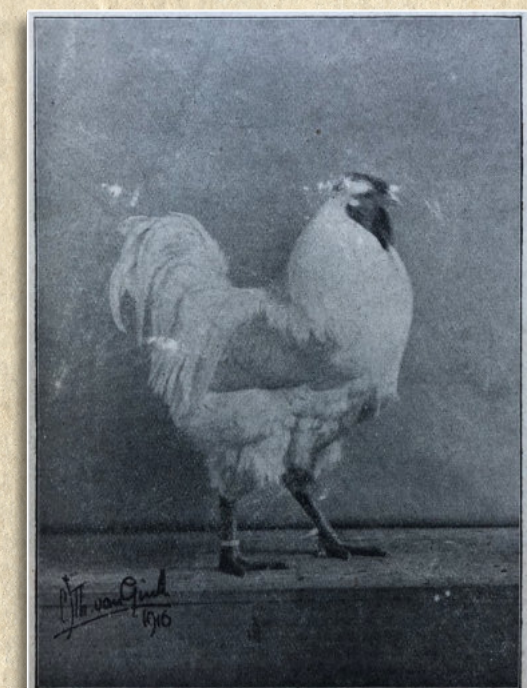
Some years ago, the same breeder won first prizes in the utility classes as well as in the open class, from which one may conclude that the breed is nowadays bred along



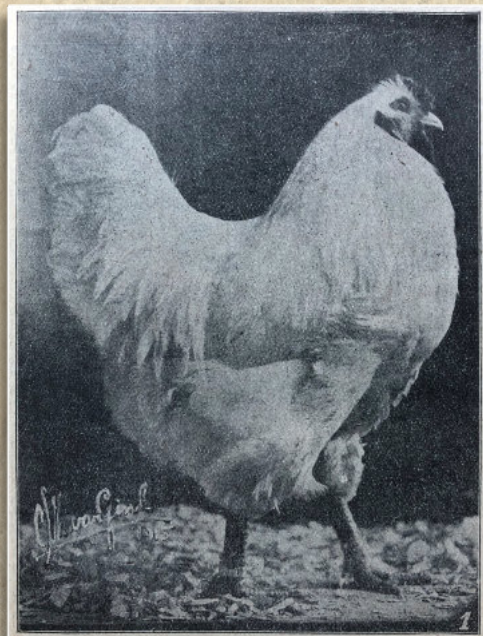
American ideal Wyandottes drawing by Sewell in 1899.



American white Wyandotte cock a photo of 1903, ideal at the time.



3548 OLD DUTCH WHITE WYANDOTTE COCK. This beautiful, large cock won the first prize in The Hague some years ago. Although the animal could have carried the tail a little lower it is a beautiful bird in every respect. (1916)



YOUNG AMERICAN WHITE WYANDOTTE COCKEREL. While people in America want full, round shapes in white Wyandottes, the breeders, eager to stick to the standard weight, could not satisfy this better than by developing downy growth. As

the photo shows, young cocks already have beautifully filled necks and the cushions on the thighs are broadly filled out, while the breast shows very deep. Despite its still young age, the bird shows a splendidly massive shape and is excellently proportioned. The head ornaments are small and well shaped. The comb rests nicely flat on the skull.

practical lines, which can only delight all those who are interested in the development of our national poultry breeding.

The various reports read at the recently held First World Poultry Congress have once again clearly drawn attention to the fact that a good evaluation of poultry breeding cannot be separated from a well-organised breeding of purebred poultry, and it seems certain that purebred poultry will once again occupy a very important place in commercial poultry breeding in the near future, because it offers the possibility to make any degeneration of the laying lines disappear immediately by effective cross-breeding.

That the question of degeneration in pedigree chickens bred for high laying should not be completely overlooked was demonstrated to us during a visit to well-known English breeders of high egg producers, whose main concern was to preserve the resistance of their birds.

White feather colour

When white chickens are bred and the colour is neglected completely, after a few generations the objectionable yellow hue appears in some cocks. The same happens when white varieties are crossed with each other and this can be seen in white utility Leghorns, which carry a little white Wyandotte blood, introduced there to increase their winter egg production. As a result, white or red feathers appear here and there in the plumage, even though the animals are 7/8 purebred. When the white Wyandottes arose from the silver Wyandottes, the cocks were initially far from pure white.

The colour of these birds has been improved considerably by breeding choices. Occasionally there are



A DUTCH PRIZE WINNER FROM 1913. This young cockerel, which won at a large show, was not yet completely white-feathered, but nevertheless shows a very symmetrical build. It is strongly developed and already has a nice

deep build for a young cockerel. The head points of this specimen is excellent. The comb lies beautifully long on the head, while the spine follows the curve of the neckline excellently. Due to the still incomplete development of the plumage, the tail is not yet full enough and the symmetry is slightly disturbed. However, the connoisseur cannot fail to notice the fine characteristics of this animal.



A DUTCH WHITE WYANDOTTE COCK. This bird, which managed to win for some years in The Hague (1916), lacks sufficient depth and is not sufficiently developed in the hind part, lacking symmetry. The comb is too coarse.

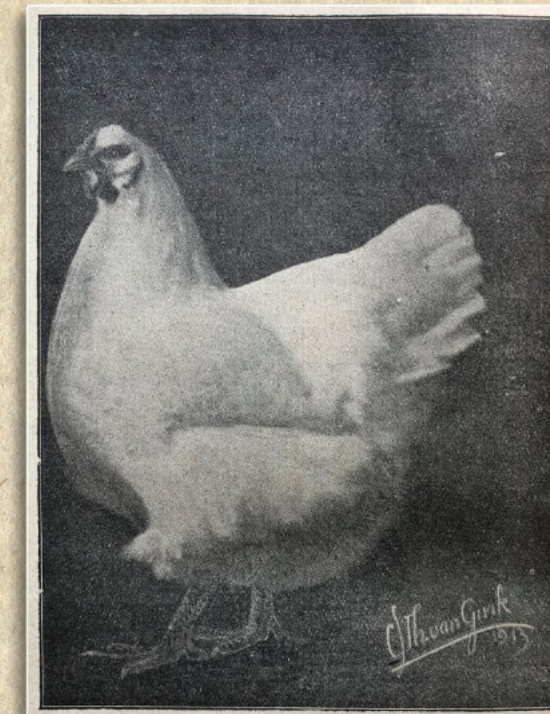


YOUNG WHITE WYANDOTTE COCK. This young cock, bred a few years ago (1919), is considered by many to be the best white Wyandotte cock that has ever appeared at our Dutch shows and is quite rightly a splendid animal on which there is really nothing to criticise, no matter how one looks at it. Such breeding results do not occur every year and usually only, if at all, from well-bred strains.



OLD AMERICAN WHITE WYANDOTTE COCK. Except for its somewhat high leg position, this cock is an almost ideal animal and shows splendid type and beautiful head ornamentation. The tail structure is also very fine. Chest and backline are excellent.

birds from a strain that are absolutely snow-white and do not develop yellow under any circumstances. Such animals are extremely rare, but they arise in sufficient numbers to be able to create absolutely white strains with the help of their blood, which only produce a very small percentage of animals with a tendency to turn yellow.



AMERICAN WHITE WYANDOTTE HEN 1913 This hen won the highest awards at the American shows and is one of the best animals bred to date. Her type, attitude and head are almost perfect.



YOUNG AMERICAN WHITE WYANDOTTE HEN. This young hen has beautifully curved lines and will undoubtedly develop into an excellent old hen. There is little to improve on the type of this hen. The breast and back lines are white excellent. The tail is carried very well. The same may be said of the neck shape.

White Wyandotte Chickens.



Photograph of Our White Wyandotte Chickens When Only 7 Months Old.—(November, 1899.)

THE longer we raise White Wyandottes the more we are convinced that they are the best all-purpose breed. There are other kinds that have some good qualities, but are lacking in others, while the White Wyandottes seem to possess all the most desirable qualities in a marked degree. In the first place they are very handsome birds to have about the place. Their snow-white plumage, handsome shape, bright red combs and yellow legs make them very ornamental. But what is more important, they are wonderful **winter layers**. Last winter we had two weeks of very cold weather in February, when very few people got any eggs from their hens and the price went up to 40 cents per dozen. During this time, as well as before and after it, we got an average of 60 eggs (5 dozen) a day from 100 White Wyandotte hens in an ordinary hen house with no heat. Our hens also layed well during the whole summer and fall. The Leghorns are supposed to be the best layers, but they only lay in the spring and summer when eggs are cheap, while the White Wyandottes keep at it all the year around. In addition to all this they are perfection for **early broilers**. They mature with great rapidity and make nice **plump** chickens with yellow skin and legs, that always command the highest prices in market.

The White Plymouth Rocks are the White Wyandottes' most formidable rivals. Their only advantage, if it can be called one, is that they grow a little larger than the Wyandottes. But on the other hand they do not mature as rapidly or make as plump a broiler as do the White Wyandottes, nor do they lay as well.

We Raise but One Breed of Chickens. After raising Plymouth Rocks for a good many years we decided to try White Wyandottes, and have found them so superior that we have discarded all others. As we have but one breed on the place, we can let our chickens have **free range** and do not keep them shut up in yards, as others who breed more than one kind have to do. Our White Wyandottes are bred from the finest strains in this country and are **perfectly pure**. Not being confined in yards, as most pure-bred chickens are, our stock is remarkably vigorous and healthy, and is as fine as can be procured anywhere at double the prices we charge.

Crossing With Other Breeds. It is of great benefit to introduce White Wyandotte blood into flocks of common mixed breeds. The nearer they can be bred to the White Wyandotte type the better they will be, both as layers and for the table or market. To do this use nothing but **pure-bred White Wyandotte cocks**. By doing this for a few years the whole flock will soon get to possess all the good qualities of the pure White Wyandottes.

Prices of White Wyandottes.

We offer some very fine, strong, healthy, early-hatched birds at the following prices:

Cockerels—7 to 8 lbs., extra fine, handsome birds, such as are usually sold for \$5.00, - - - **\$2.50 each**
Cockerels—Not quite so "fancy" as above, but good strong birds, suitable for crossing with common hens, - - - **\$1.50 each, 2 for \$2.50**
Pair—One extra fine Cockerel and Pullet, - **\$4.00**
Trio— " " " " 2 Pullets, - **5.50**

Eggs for Hatching.

We can furnish Eggs from our own breeding stock, which has been selected with the greatest care. Our hens have open "scratching sheds" in which to exercise

in the winter, and every other advantage which tends to make the eggs fertile and the chickens strong and healthy. After March 1st we guarantee the eggs to be at least 80 per cent. fertile. We can furnish eggs before that date but they usually are not as fertile as those laid in the spring. The eggs will be carefully packed and we guarantee them to reach the purchaser in good order.

Prices—At the prices named the eggs are to be sent by express at the purchaser's expense.

1 Sitting, 13 Eggs,	- - - - -	\$1.25
2 Sitings, 26 Eggs,	- - - - -	2.00
50 Eggs,	- - - - -	3.50

Mr. J. T. Bracken, Vintondale, Pa., wrote us May 19, 1899: "Eggs (3 sitings) received in good condition, and 19 chickens hatched and doing well."

We are currently on the right track with white Wyandotte breeding here in the country and in England, too, the very coarse, large-combed type has finally been discarded. Nevertheless, in our opinion, the birds in England are still a bit heavy and leggy and our Eastern neighbours have succeeded better in forming a symmetrical Wyandotte, thanks to important imports from America, done by leading German breeders in the happy days before the war when the Mark were still 59½ (guilder) cents and people in Germany made a lot of money."

EXPIRED THOUGHTS :

Feeding for Color.

Feeding to produce a pure white color has been a serious study with some fanciers, and some have proved that it has an effect in particular cases. Considering my own experience, I say look to nature for your remedy and study nature for the cause and effect. It is reasonable to suppose that a part of the diet of a fowl goes to form the coloring matter of its plumage and we have learned that it is a fact that some foods contain much more of this coloring matter than others. After a feather is grown you can do nothing to change it, that is, it is a finished production and feeding any particular diet cannot change it. But there was a time in the history of the feather when you could have helped nature to add a different shade to it. That was the time when the feather was growing and its quill was full of sap. If at that time we had fed for color, being careful not to allow our fowls anything but the whitest kinds of food, we could undoubtedly have helped to make the plumage white, but after the feathers are matured it is too late to remedy the fault, unless we want to pluck the fowl and try it over. If you wish to help the color of your fowls it must be in the molting season, as that is the time and the only time when food can affect the plumage.

WE NEED TO HAVE A SERIOUS CONVERSATION AND DEBUNK THE ANCIENT 'KNOWLEDGE' ABOUT WHITE FEATHERS & FEED

On White feathers Yellow skin

On the assumption that the colour of the feed goes into the feathers. This misconception still exists today. Fuelled by history - see snippet - and not by biology because chickens do not put feed colours in their feathers, also not while growing new feathers during moulting.

Feed suppliers conveniently capitalise on this faulty reasoning (even they know better and keep the consumer conveniently dumb or at least confused) and sell expensive 'white cock' feed that 'would prevent yellow' in white feathers. This is bullshit and misleading. Do not buy this feed even though the feed manufacturer says it helps, it is impossible and you are just being ripped off.

Biologically, chickens cannot, like canaries or flamengos, put feed colour in their feathers. Chickens do not have the mechanism to put carotenoids (yellow pigment from

DEBUNKED:

The Wyandottes - Reliable poultry journal 1903-1910 Standard requirements, the original text:

White Wyandottes—Purity of White

In treating of the two remaining varieties another physiological trait remains to be considered — the relation of color deposit within the carcass to that of the plumage. In the early days of the White Wyandotte it was commonly asserted that a clear white plumage is impossible to obtain upon a fowl with yellow carcass and shanks, the internal fat being tinged by the red pigment and its deposit upon the plumage accepted as a foregone conclusion. But time has brought its changes, and theory has had to change to accord with experience.

As an example of the fact that the outward deposit upon the plumage of a pigment does not always follow its secretion, we have the Silky fowl. Perhaps the peculiar formation of its feathers in a measure unfits them to receive the pigment; but at any rate its plumage receives no color although secretion of black is active, being deposited throughout the carcass, the skin of head and appendages being saturated, the total color effect of both skin and contained pigment being dark purple. In line with this is the entire Wyandotte family, regardless of plumage deposits, all actively secreting the red in sufficient proportion to give the desired yellow carcass. The difficulty at the beginning was to find actually white specimens; and once found, there was the influence of a long line of faulty ancestry to work away from. The strong tendency remains, of the yellow inner color towards the plumage; but in carefully bred stocks the ancestral habit of suspended deposition on the plumage, despite active secretion for the carcass has become fixed, and the White Wyandotte of a satisfactory degree of purity is an established fact. Source: <https://doi.org/10.5962/bhl.title.36715> for the same but earlier story.

corn, carrots, grass, greens in general) in their feathers. Also silver chickens (silver pencilled, white (silver) columbian etc.) do not turn yellow from carotenoids in feed, they cannot get it into the feathers, there is no biological process in a chicken that makes this possible. Then you would not be able to give white Wyandottes any corn or greens during moulting season when they need it, because they all would be yellow like a canary. While they do need carotene for the yellow legs.

What makes white feathers yellow?

UV light and especially wet feathers exposed to it, drying in the sun. Not that you should lock white chickens up in

a dark shed, chickens need sunlight just like other diurnal animals.

Feather structure and UV light

... also plays a role, soft feathers are more sensitive to UV light compared to hard feathers. That's why ornamental feathers on cocks turn yellow faster than the contour feathers on the back of hens. It also depends on the bird itself, whether it often walks in the sun or prefers to scurry under shrubs.

Feather age, quality and what sort of visual white?

Also, white feathers are not always white, keratin is only white when it is dry and gets light. Therefore, new white feathers are yellowish when they emerge from the skin, something that scares some breeders of silver columbians, for example. After the new feathers have spread, the light falls on them, air comes in, they are dry and then they are 'suddenly' white. White feathers are white because it reflects the light spectrum (in our eyes).

In addition, one chicken may have more creamy keratin than another. It is not likely the difference between white and white is noticable by the eye. You need a densitometer to measure 1 or 2% more or less of a colour. Your eyes don't see it. This does not apply to dominant white, this gene leaks a little, then milk-white is possible instead of snow-white due to a little red pigment leakage in heterozygous dominant white (I/i+).

Recessive white and silver feathers contain no pigment, so whether the chicken is silver or gold makes no difference in recessive white. Unless recessive white leaks (eWh) and allows red or yellow to pass through or sometimes little black splashes. This is nature, the chicken colour process is not directed by a machine. Regulate the gene expression better (selection) or choose another e-allele.

Chickens don't put feed colour in feathers. "If you repeat a lie often enough, it will be seen as the truth." (citation of Joseph Goebbels and too often used by others who follow his example for spreading lies to their own advantage). In the chicken world, fairy tales have been told for centuries, like pointed eggs give cocks, round eggs give hens. There is no virtue in serial ignorance.

Yellow skin

Chickens only put feed colour in their skin IF they have the gene for it to do this. Hens put carotenoids in the yolk regardless of their feather or skin colour. A simple gene makes it possible to put carotenoids in the skin. The gene in hobby breeding is called 'y', y/y must be homozygous because it is autosomal (works the same in both sexes) and recessive to white skin.

In science it is called W^Y. The causal gene is called BCDO2 which is knocked-out it white skinned chickens. Since yellow skin is not in Red Jungle Fowl (perceived primary ancestor of our domestic chickens) this means that another jungle fowl is the reason, this might be Gallus sonneratii. This is useless knowledge, if you want to know more about this, read this paper: Identification of the

Yellow Skin Gene Reveals a Hybrid Origin of the Domestic Chicken, it is from 2008.

White skin is called 'W+', W+/W+ homozygous, W+/w heterozygous which is also white skin because the little w is actually y in this notation and that's recessive. So when the skin is heterozygous white (1 dose of white skin and 1 dose of yellow skin), the skin is still white because W is dominant.

How genotype is noted

A further explanation on how to write it down because it can be confusing for genetics starters: chickens only have two skin colours, white ('+') because Red Jungle Fowl is the starting point and it has white skin). Yellow skin is the mutation (deviation from RJF and therefore doesn't get a +). Capital letter is dominant and recessive is lower case.

A heterozygous white-skinned chicken is W+/w, where the small w is actually telling you it is y. However, we are talking about 'white skin' and that is why we write only about 'white skin'. If we are talking about yellow skin then the heterozygous white-skinned chicken (that has one dose of yellow skin) is Y+/y. Because this is an odd notation because you cannot see it, it is not used. Because you see white skin so you talk about white skin and then say: that chicken has white skin and it is 'split for yellow skin' (also carries a dose of yellow skin). A chicken always has 2 doses of a gene. Why? It gets one from dad and one from mum. Getting nothing does not work, then the chicken doesn't exist. Skip the chimera here, that's a different subject.

This 2-doses-thing works for autosomal genes and not for sex-linked genes where the hen always has only 1 dose (hemizygous instead of heterozygous) and expresses fully what the gene is doing. She gets that from her father. Think of silver and gold, when dad is gold (s+/s+), then the daughters are gold, regardless of whether the mum is gold or silver. A heterozygous white-skinned chicken (split for yellow skin) is not W+/y because then you put two different genes in one notation and that is not agreed upon. In genetics if you really want to name the genes (genotype) and not just what you see (phenotype) you write down the gene W+/w when talking about white skin and y/y when you talk about yellow skin. However, you know there are only two skin colours, so W+/w is sufficient, because the little w can only be one thing: yellow skin. This same system works for comb types. There is no symbol for single comb (from Red Jungle Fowl), it is only '+' and we call it single comb. Only when you talk about heterozygous comb types you use the '+', impure rose comb is R/r+, like that.

Why yellow or white skin?

The prevalence of a chicken's skin colour is culturally determined when it comes to eating the chicken. In W. Europe, people wanted white-skinned and in N. America yellow-skinned chickens on their plate. This explains why (early) utility breeds in Europe had white skin. The oldest being Dorking, later Orpington, Faverolles and others.



Reliabel Poultry Journal, Boston 1898

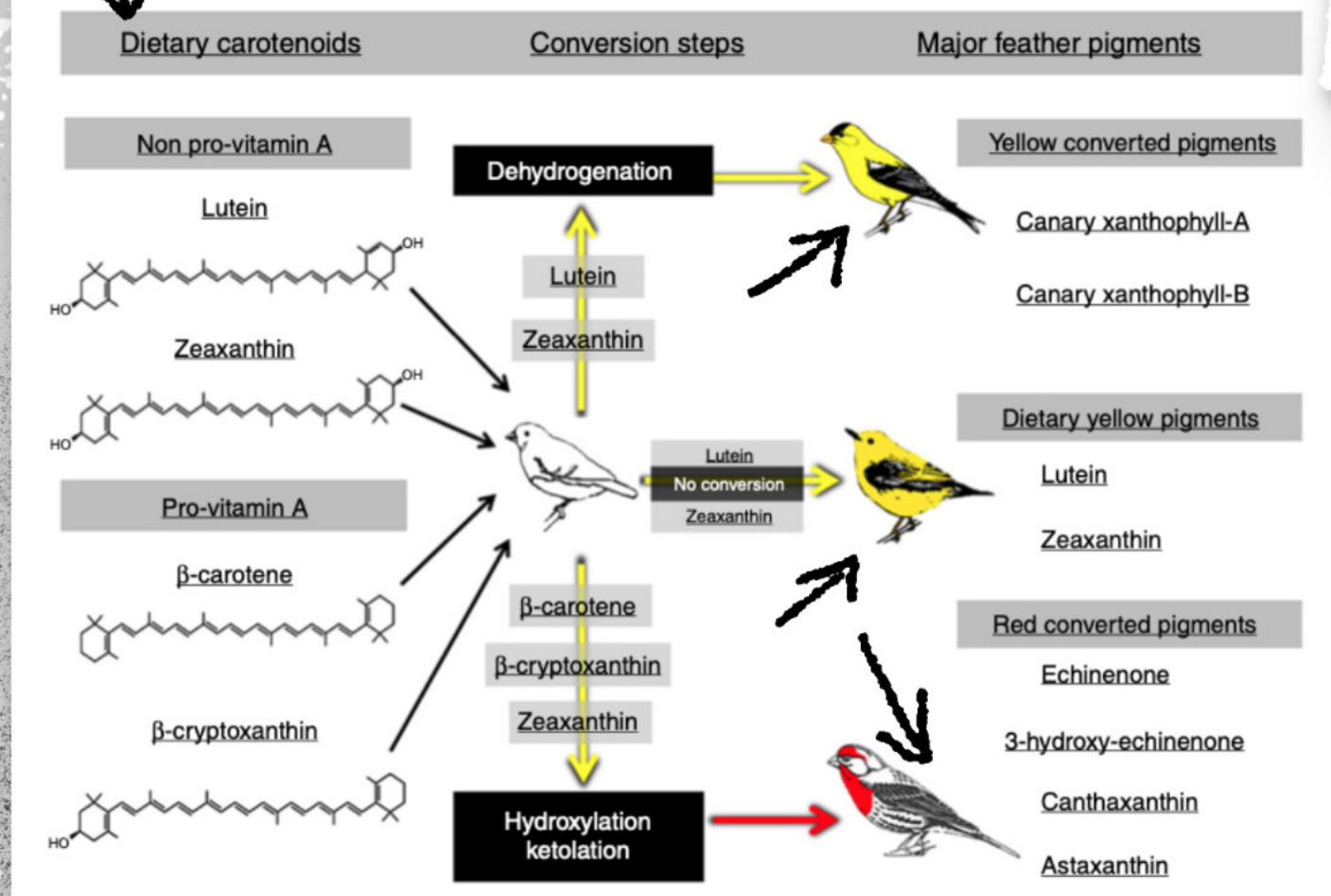
It is interesting to see how the topline, tail carriage, depth of the keel, leg length and posture change over the years. Because Wyandottes are no longer utility fowl, those traits, which have been selected for decades, will disappear. Unless breeders preserve these original traits.

THERE IS **NO CAROTENE SYNTHESIS**
IN CHICKEN FEATHERS AS IN
CANARY BIRDS.

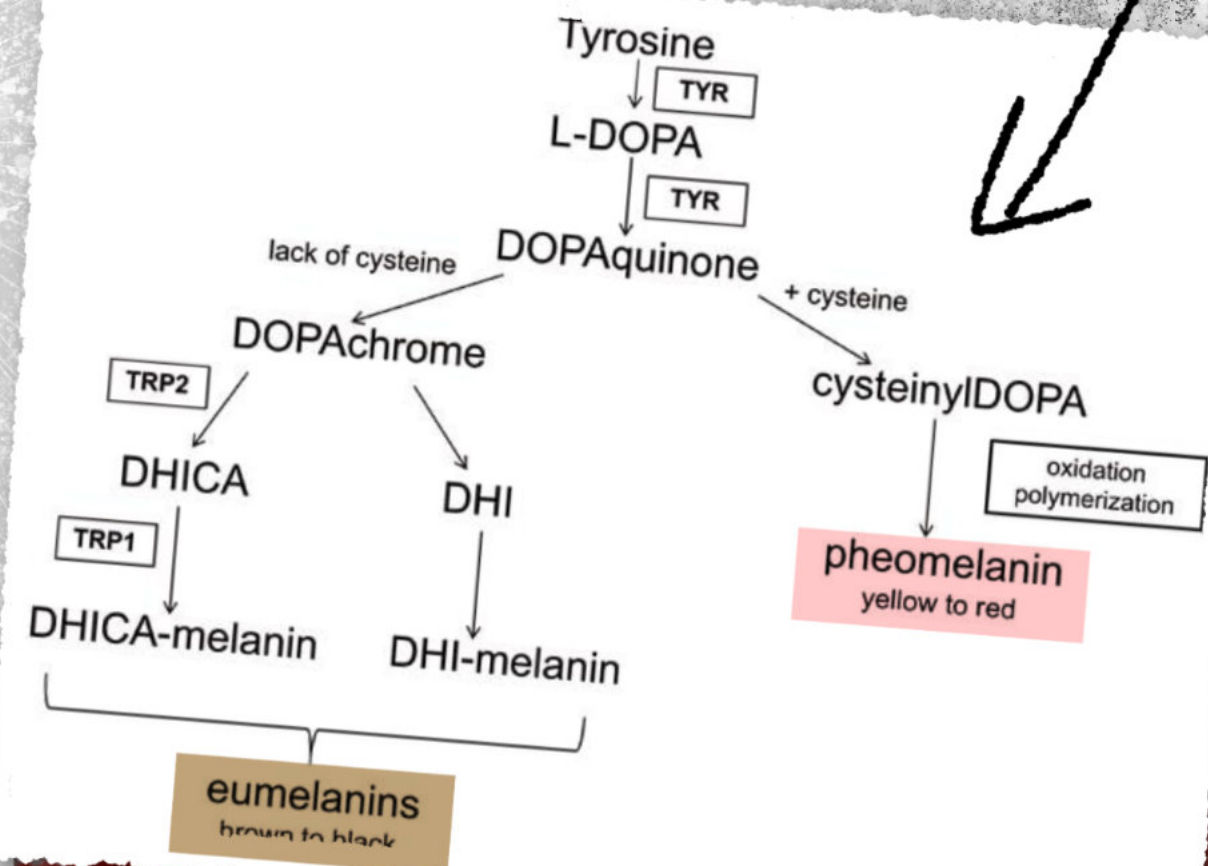
FOREVER **SHUT UP** ABOUT WHITE
FEATHERS BEING YELLOW DUE TO
FEEDING CORN AND/OR GREENS.

CHICKENCOLOURS.COM

THESE ARE NOT CHICKENS



PIGMENT FORMATION IN CHICKEN



**A CHICKEN
IS NOT
A CANARY!**