

The Pigeon Genetics Newsletter, News, Views & Comments.

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Thanks for your nice reactions to the Feb. Covid - 19 special Issue , we enjoyed doing it!

This Month we are exploring just what is it that draws people to the keeping of Pigeons in the first place? We have noticed that in both the Pigeon Hobby and the Tropical Fish Hobby, there are many more girls taking an interest than ever before! I realize that has one easy explanation, it is where all of us really HOT guys hang out , but what are the other reasons , or is it just that !?

I recall my sisters saying "eeeeuu" feathers and creepy feet !! , when I showed them my Pigeons as a kid and it was almost unheard of for a girl or woman for that matter, to keep Pigeons. Atlantic Canadians may remember Mrs. Vera Duffy , and Mrs. Joyce Elliott. They were the exceptions out of at least a hundred Boys and Men at any given time !

Other than the Racing Pigeon World ., where men DO name their Pigeons ., women are much more likely to give names to their Show Pigeons as they would any Pet. This is almost unheard of with Guys.

These aspects are observations , but they still do not tell us what it is about the Pigeon Hobby that attracts individuals in the first place. Generally the colours are far more subdued than most other domestic bird species. One possible trait that is very appealing is that Pigeons are quite quiet and relaxing to be around. They also tame very easily, and imprint on their owners.

If the loft is kept ventilated and clean , they have almost no odour and their droppings are usually very dry if the birds are healthy and fed a good diet.

There still is something else. I think in many cases , a parent will pass his or her love for the Hobby on to a child, especially in an effort to teach them responsibility , and help keep them at home and out of trouble and harms-way! High School studies, sports and sooner or later - dating often end the hobby for a few years.

Another aspect is that there are performance breeds as well as show breeds , and all are available in a multitude of shapes , sizes , and colours.

Breeds that attract women may surprise us : My first expectation would be the more 'ornamental' breeds such as: Indian or standard Fantails , Jacobins , Frillbacks , Capuchins , American Fantasy Pigeons, Trumpeters (English), etc., and usually one would expect whites as being the most popular. We have no data however to show that that is the case . Women are much more likely to start with Doves such as the ring necks.

When my Father purchased some birds for me as a very young boy of five., I loved the wild caught ferals just as much. My Mother tried to convince me that I should like black laced Satinettes , which were her favorite. I liked DUN African Owls, Lavender Lahores , any Racers the list grew !

As I typed this, I commented on a very attractive Light Grizzle cock that Adam Archer of Australia had posted on my "unnamed Unique Genetic Traits " Facebook Group" and he said it was his wife's favorite. So maybe whitish birds are Women's preference after all, symbolizing the Dove of Peace .



I never liked any grizzle trait until about the late 1980's , when I decided to purchase a stud of American Show Racers , and got a couple of Classical Grizzles in the lot. Some of the young were stunningly beautiful and I soon became hooked ! Check March 2020 for our complete grizzle Issue !



There is actually quite a range of different colour traits from Country to Country just as there are many uniquely different Breeds. Now , with the internet , we are starting to see some of these Breeds and new colours for the first time.

Performance Breeds reign popular in Middle Eastern Countries but Show Varieties have become the most popular on the North American Continent with the exception of the Racing Pigeon which has kept a very dedicated following despite the ravages of birds of prey!.

In India it is almost a family tradition for the boys to keep pigeons , and in both India and Bangladesh, it is common place for many of these boys to aspire to be owners of "Pigeon Farms " , where they develop breeding lofts and actually make a business out of selling their stock or supplementing other income.

Pigeon Clubs , and National Associations play a major role in Promoting the Hobby and the holding of Shows , with Internationally acclaimed judges being hired to stimulate a need and interest in breeding much better quality stock. Canadian Clint Robertson and American Drew Lobenstein come to mind.

SELECTION IS THE KEY !

We may know a great deal about what genes we are working with , and exactly how they combine etc., but without a keen sense of SELECTION, we may still be destined for failure.

Many Breeders of old knew absolutely nothing about the traits we are discussing in modern day terms , but they were very capable of selecting what it was they liked ! They singled out certain characteristics either in Breed type and/or colour , and they stuck to them. Family lines were kept as pure as possible. Close inbreeding was frowned upon, but line-breeding was utilized.

Canadian Breeders of a Bald head show Roller wanted to develop a specific type. They began selecting for a showier style of bird from their flying/performance birds. I started working with the members via email mainly developing an IDEAL drawing. I spent about two years working on the project. I had been developing a similar bird and showing locally but fellow fanciers were not prepared for any new type , and they wanted to stick with the performance type in the show pens. Ontario Canadian Breeders therefore had to face a similar up-hill battle. Old ways are always difficult to change.

Below you can see progression from just slightly beyond the Flying Roller type, more and more toward the American Show Baldhead style as that blood became introduced.



(#1, 3, 4, 5, bred by Bob R. #2 bred by Club President 2002 Henry Zelasko of Ontario.)

The head shape was to be an egg shape with a full forehead curving gradually to a wide back scull in a very smooth curve as is depicted in this photo by Bob R. ,

The bib is not to extend below a line meeting the tip of the beak when pressed toward the neck in front and with the top to fall on a line extended back through the eye from the tip of the beak. Unlike the American counterpart, the Canadian Show Roller is to be a proud 'Stand-up' kind of guy that always appears alert, friendly, and ready to show.



Below is a painting of a Champion in Ontario some years ago, an ash-Red bar cock bred by Bill Albers.



painting - Bob R.

Selection continued and this Standard Ideal by Bob R. was and still is the aim as far as I know :



Below are a few more bred by Bob R.



No matter how basic the task or how complex it may be , you need to have a specific idea of where you want to end up. What is your aim? Are you reaching for the ideal standard set for the breed that you keep or just something YOU like !??

There is always a great temptation to breed from the first mature pair of youngsters , but you must avoid doing that . Raise about six youngsters from each pair and select ONLY the very best representatives as possible when compared to the written Standard and Ideal drawing. These may give you a new set of youngsters even better than the previous clutches , so that you can repeat the process again. One aspect of pigeon breeding that no one likes is 'culling' ! You need to try to do most of your culling on paper. By that I mean .. carefully plan your matings and keep strict records. That may cut down on the number of unwanted birds, some of which can be used by another breeder perhaps .

Letters from you regarding the topic of Saturated Coarse spread factor in the Feb. Special Issue :

From **Gene Hochlan** - Hi Bob , Haven't fully absorbed the new Spread theory but can report that around 1980 I had a volunteer mating of a Brander Bronze Show Tippler cock to a Dark Bronze Blackwing Archangel hen and they had two glossy , pseudo - black youngsters. **Gene** .

From **Richard Kurchner** -

Bob - How confident are you about this idea? 50/50 chance ? Or more or less so ? Not keen on the idea myself, but not wishing to dissuade tests if someone feels inclined. What would be the most desirable mating for testing purposes ? Archangels have already been tested against wild type and so have Kites.

Editor's reply :

Well as I said , if anyone has information to support or refute what I have suggested as possible, then please do provide it. I have given my idea and suggestions which I think some may find interesting. There is every possibility that coarse spread could be distributed throughout all feathers just as we see with smooth spread. There are a number of unexplained traits that have had breeders guessing for several centuries without coming anywhere close to resolve, and this suggestion may hold the key to that resolution. I do not think that it matters at this point just what percentage of certainty I or anyone else has pro or con. It is out there now for those who are interested, to examine more closely.

Richard's response : Fair enough. Haven't much time now, but if you mean , is there something that contributes in a significant way to the darkness of Arks and Kites, then I agree and I have ideas about that . But for later !

Quido Valent wrote in Strictly Genetics Facebook : Thank you for this treat!

Interesting theory on the yet unnamed trait for spreading Coarse Spread, specifically. If you were able to breed pigeons, how would you go about testing this idea?

Editor's response : I think we have to treat it like any other mutation and take it to at least a clean Wild-type ., and begin testing there, although some may say a brown series barless would be a better test starting point. Then we would have to look at the possibility that it is an allele of the spread factor for smooth spread, so we might have (S^s) and (S^c) respectively. I see no reason why we cannot expect that there are birds that are expressing this type of 'spread factor' already in abundance, but which are being confused as being all smooth spread distributed by one 'spread factor' gene. We would have to examine the results of the f1 stock carefully to decide if any further testing is warranted.

Quido replies : So, a saturated T pattern bird X blue bar (or Brown barless).

Editor : No, a bird that is suspected to be a spread factor 'Coarse spread' X blue bar ... It could be any pattern., we would be looking for the spread factor expression in the f1's. In the event that it was a

dominant and homozygous in the first cross, a repeat to wild - type would be required to split the homozygosity.

Quido wrote : Which others besides saturated 'T'? Blackwing ? more? -- which pigeons to use , besides sat T blue based , these dominant red , rec. red mimics perhaps ?

Editor's reply : Yes , of course , any bird suspected of expressing a spread - like phenotype that does not quite comply with the norm as we know it. At present that includes the Gimpel colouration, the sat, T pattern Black of the ESFT., and the Oriental Rollers, and the deep red ash - Reds.

Of course there would be no difference than with the (S) mutation as to what can be masked, any bird suspected of expressing a spread - like phenotype that does not quite comply with the norm as we know it.

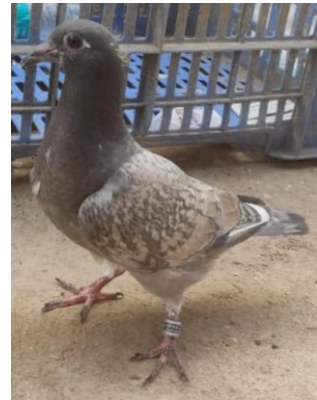
Quido wrote : As Ts expresses on coarse spread specifically, should one then have to be able to produce a white bird from such a spread coarse spread bird plus the Ts complex ?

Editor : I suspect not pure white, for the same reason (fs) does not make a completely pure white bird on a spread smooth spread phenotype .

Quido wrote : But one should notice a significant effect of Ts on these coarse spread birds - if you are correct.

Editor : Yes and we would also have to look at why the lacing appears on (fs) birds IF it only affects smooth spread areas, with smooth spread also on the outer edges of pattern as we discussed the other day, however we also have to consider that each factor acts in an entirely different manner, and we cannot be certain that we are taking all of that into consideration. It would be interesting to see some breeding results from suspected coarse spread birds and the full Ts complex, or even hetero. (Ts). I suspect that there would be quite a similar phenotypical outcome, just as I would expect an andalusian look-alike when (In) is involved with the Sat. coarse spread .

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A while back , **Siddartha Roy** , questioned how to reduce white from a dominant Opal as pictured above: My response :

White flights may be either a dominant gene or a recessive gene. As with any other pied gene, selection for or against the trait must be carefully carried out. Obviously mating birds together that express a pied gene will ensure that it continues. Select birds that do not express any white and mate them together. However if they both carry a recessive pied gene , it will surface. If only one carries the gene then you will be plugging that gene into all of its young from a non-pied carrier, so it will be very important to keep very close record of that. Sooner or later two birds will come together that both are carriers and pied young will be the result.

Usually if the bird is hetero for a dominant white flight trait, the very end two or three flights only will be white. Your Opal appears as if it may be expressing a recessive white flight trait. ( This point regarding hetero and homo white flights was mentioned by Michael Spadoni of Australia on another occasion ). The white 'tic' at the back of the eyes may be linked to Dirty factor which is evident by the blackened toe scales in the above pictures.

There are many different "pied" traits , and some have effects on more than one area of the bird with indication that some are specifically linked such as white flights and white muffs. Usually a clean legged bird that has white flights will also have a small amount of white at the top of what we call the leg.. the trasus, This is the heel of the foot in effect and the white indicates that if the bird had muffs they would be white.

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Shoibal Sabbir posted these photos of some of his Gimpel Archangels last year on one of my Facebook Groups. The first is of a White wing Ash-Red hen ., and a Copper Blackwing . Young below .

Ummota Moh'd Rahat Basit asked : Will it { the baby} increase white feathers as it ages?

Shoibal Sabbir answered: I got two babies the same colour. They both moulted out the same as this , with good ribbon tail & shiny gimpel

Faiz Manzoor asked : Is it ash-Red or gimpel?

Ed : Jith Peter then replied: The colour will not change considerably after the moult. The young bird is an ash-Red T-Pattern with probably some darkening factors as well. White wing trait doesn't express over pattern. Fiaz , the bird is an ash-Red and it got the mutation from the whitewing parent. Whitewing gimpels are ash-Red.

Shoibal Sabbir responded : Yes brother . As you explained white wings are not possible in pattern birds; so as that happens in recessive / dominant masking modifiers form.

Ed: Jith reemphasized : Shoibal , perhaps I need to clarify my point a bit further. The white wing trait expresses with pattern. However, the pattern shows through anyway. Since the shield of a T-pattern bird is mostly covered with pattern, there is hardly any space left for the white to show through. In the case of the young bird you posted, it seems to have additional darkening modifiers and a lot of bronze, which is often seen on ash-Red birds that come from mating Black wing with white wing, which undoubtedly smears the expression of the white wing trait. The white wing trait is said to be recessive, and if my memory serves me well, it is also sex-linked. The young bird must be a cock and thus heterozygous for the white wing, therefore the trait wouldn't express even if it were a bar pattern or barless and lacked the modifiers. I think I must say, in this occasion that I kind of remember seeing heterozygous white wing cocks that seemed to have wings neither too dark like normal ash-Reds nor too light like gimpel white wings but a shade in between the two and I was rather perplexed as to why, despite the fact it was still considered a recessive.





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The topic of Copper Blackwing birds always being T-Pattern , and the pseudo Black Kites of the ESFT also always being T-Pattern has produced contradictory results . Very often the cross of these with wild type blue bar produces an "OPEN CHECKER" pattern albeit a darker version , possibly the pattern that is symbolized as C<sup>dk</sup> as opposed to (C<sup>T</sup>). The above cross seems to support the C<sup>T</sup> theory., whereas we have had others including those in my own loft that gave different results. Perhaps as Gary Young suggested to me , those blackwing archangels were only hetero for T-Pattern , however it seems to me that if all other traits in the genome were pure , then the pattern most likely was also. I still think that there is yet another trait that causes the illusion of being Saturated T-Pattern. { Bob R.}

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Question on Pigeon Genetics "Pros & Cons" - from **Walter Wojcieszki** -

Bob -- on recessive red---Besides recessive red covering a base color-What modifiers are present to make this recessive red solid in color???What base color do you believe is under this red . Lots of red family's show a lightening of red color shade in tail.

Ed. reply : I read somewhere that a deep recessive red with a clear beak and dark tail was masking black. I have also read that masking black was a MUST in order to create deep recessive reds . Now stipper breeders contradict that in that they say (1) they have no spread factor in their Classical Almond breeding programs to avoid gray in the tails., and (2) The saturated T-Pattern Kites that they use are not spread factor but fall short of ever saying what genes beside Dirty , smoky , and possibly Sooty are needed to make these "Black Kites". Obviously these reds are homo (e) , they must be homo Kite, and the base pigment must be black with the preferred pattern being as saturated as possible, however we need to find out, saturated with what if we are ever to fully understand its influence.

Breeders of old had no idea about 'genetics'. They bred together that which they saw and liked , selected the best from that and mated those together, and on and on., sometimes for generations without new blood, so that certain traits became fixed even to the point of resembling new mutations. The black Kites used in the ESF Tumblers and now apparently the Oriental Rollers, may have had such a beginning hundreds of years ago in India. We may never know exactly what gene or genes is/are involved.

Quido wrote : In OR base colour is black, so homo blue , homo spread, T-Pattern, homo smoky, Kite for intensity. Of course they also are homo recessive red. They may be hetero Dirty as well. In other breeds they sometimes use dominant Red as base colour.

Walter wrote : So this is what the Euro reds are -- what modifier do you feel are used to get the tail the same rich red throughout like the body---base bird is blue T-Pattern ?

Quido replied : I understand that is the spread factor.

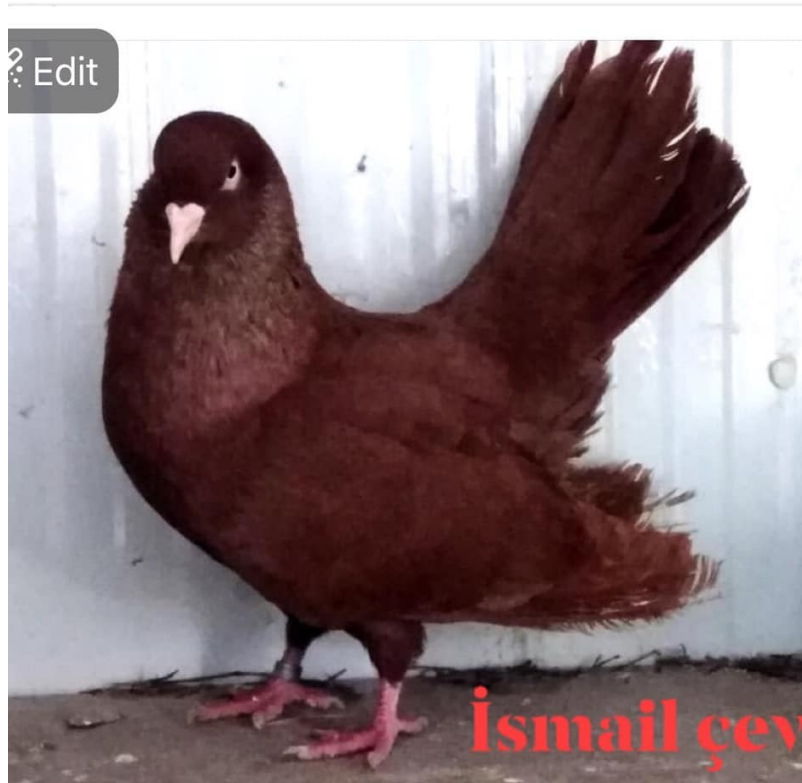


Photo used by Walter Wojceiski.

The topic of "recessive red" is probably much more complex than any of us realize , although there are some who feel that they completely understand it . It is a recessive autosomal mutation at a locus named the Sox10 locus. The pigment is Phaeomelanin which is red in colour. However the original mutation looked NOTHING like what we know as recessive red today. We have covered this in earlier Issues . The true recessive red looked more like a very odd ash -Red . The colour was NOT evenly

distributed all over the bird and was not completely epistatic as believed. The blue / black pigment series underneath showed through in various amounts and interestingly in various portions of the feathers that we might not expect. Here is a chart by Bob R. giving paintings of what each Pattern may look like when influenced by homozygous recessive red without any additional modifiers.



Well , there you have it for yet another Month, From Bob in Canada , and Jith in India / Oman , we hope you will all stay well and safe .

