April 2019 Newsletter.

The Pigeon Genetics Newsletter, News, Views & Comments.

(Founded by Dr. Willard .F. Hollander)

Editor R.J. Rodgers Nova Scotia Canada.

Co-Editor: Jith Peter Palakkad India

"The latest updates from around the World brought to You Monthly"

TOPIC #1 : What color? الحمام تربية معنا احد ترف from "Genetics Pros & Cons) FB.

Muhammad Bilal neither of the parents is spread, how come the offspring is spread ?

Arif Al Kamal Interesting. blue check and dilute blue give Spread baby. is it actually Spread?

Bob Rodgers By now you must have a photo of it as an adult , obviously it cannot be spread factor as Muhammad Bilal { and Arif Al Kamal} pointed out. If indeed it is spread factor , then the sire was not the Blue checker. We cannot see that Blue check very well , so it may be something other than Blue check although I cannot think of anything off hand that may produce a youngster that appears to be spread .

Arif Al Kamal Thanks Sir. I also agree with you.

{This is an example of a phenotype that can tell us things about who its parents were or were not. You may say , but the pair were together in a single pair breeding cage . Perhaps the hen was mated by a black or other spread factor bird just before you placed the pair together. This may be a saturated T-Pattern plus other modifiers such as smoky, which may cause a slate phenotype . The beak and feet do not indicate any Dirty factor (V)., and there is no clearly visible dark tail band. The feather and beak colour suggest smoky to me , but it would be nice to see the finished colour. } * Later Charles Kendrix noted a black owl in the next cage.

TOPIC #2 : Silver or brown ~ Keaton Taylor. , (post in Genetics Pros & Cons) FB.

Needing a little help. The darker checked bird: silver ice or brown ice? Another miski for comparison. Could they both be silvers and the darker just lacking bleached? Thoughts greatly appreciated.

Jerry Sindelar what parents are and what sex of these?

Keaton Taylor Parents are the same and these are hens .

Jerry Sindelar picture or right description of parents .

Keaton Taylor The parents of both birds are both ice silver checked. Miski in Turkish.

Bob Rodgers If both parents are silver as in dilute blue ., then a brown offspring would have to be both female and dilute (Khaki). But if they are Ice blue checkers , then a brown female would be possible. The Ice gene is a partial dominant autosomal so if both parents are hetero Ice , then some non-ice in either sex is possible that still would be dilute.

Jerry Sindelar agree with Bob...photo-miski .

Keaton Taylor Jerry Sindelar I have this variation of mişki as well. Nice clean clear checks.

Graeme Boyd That purple/bronze patch on the chest indicates dilute blue cheq with ice, I'd say that patch is simply the modified version of the bronze seen on "golden dun". I don't think you would see that on an intense brown, I've always found it difficult to get bronze to express on brown, but my experience is largely with Horseman and Spanish pouters.

Keaton Taylor Sabuni and miski tend to show the gold crescent like the Lucerne gold collars but the fact that this one doesn't show that at all leads me to believe the bleached modifier is not present in this bird.

Bob Rodgers Bleached (Bl) is a Dominant autosomal . It is slightly lighter than a Coburg Lark when combined with dilution. Bleaches colour slightly lighter in Blue series birds. It IS believed to be in the genome of "Ice" factor.



TOPIC #3 : Analyzing pigment distribution. by Bob Rodgers.

This is a topic we have touched on in the past , it is a topic of considerable disagreement , and a topic that I think plays a far more significant role in how all of our modifiers express, than most realize!

Let's just think about "Intense phase" at this point. We will also just talk in terms of" wild type" Blue series. We are all quite familiar with the terms (1) "smooth spread" as it applies to the sub-terminal tail band , and tips of the flights. (2) "Coarse spread" as it refers to the "C" areas of wing pattern ., and (3) The actual gene "SPREAD FACTOR". This is a gene that is on the same chromosome as Pattern and is therefore considered to be "linked" to pattern. It causes a spreading of the smooth spread pigment granules over the entire bird involving all feathers in Solid coloured birds.

Most people generally believe that all other areas of the self pattern series feathers , where Spread Factor is not involved , are "Clumped smooth spread ". That is to say that the smooth spread of the sub-terminal tail band and tips of the flights is actually distributed in all other feathers in small clumps or clusters , so that there are spaces in between them that lack pigment. This is what causes us to see the black pigment as a gray or as we call it BLUE , when the black pigment and white areas blend visually .

However ; there are specimens that sometimes have areas that normally would be gray/blue that do appear black such as Breast crescents & patches in the tail feathers. These areas have a significant

effect in the expression of modifiers such as Ice factor , some bronze factors , frill stencil expressions , and the list goes on.

Let's take a look at some of these areas in photos , so that this becomes more clearly visible . First we can see in the photo below , some secondary feathers that are mainly light grey expressing clumped pigment but with smooth spread ends that show as black. Photo - Bob R.

This next photo shows dark areas at the base and inside vane of the first two feathers , not all blue series birds have these . The significance will be given a bit later. Note also that the terminal edge or band(tail tip) is wider and lighter than normal. This often means the sub-terminal band will be slightly narrower than usual. This can mean the bird is smoky but the vivid albescent strip implies that it may be only hetero for smoky or not smoky at all.

photo **Ryan Harvey**.

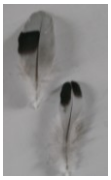
photo Bob R.

We know that Coarse spread pigment granules are deposited particularly on the "C" areas of the wing shield. These cause the wide range of "checks" , the checker pattern. Not enough study has been done by anyone to determine if these finer pigment cells are distributed in any other feathers on the bird and if so , what causes that to take place.

We know that smooth spread granules that seem to be larger than coarse spread granules , are found concentrated in the (sub-terminal) Tail band, and in the flight feathers toward the tip. If we take note , we will see that Kite bronze will express on coarse spread , but will NOT express on smooth spread. This further explains why we may not see Kite bronze on the main body feathers anywhere that the smooth spread granules are "clumped". Now is that actually a fact , or can we say that we just cannot see Kite in these areas due to the reduced amount of pigment cells and the manner in which they are deposited? Ironically Juvenile Kites will show bronze well distributed over the head, neck , breast, and shield , but this usually seems to moult away in the adult bird ,or does it ? It seems more likely that changes in feather strength and pigment density may contribute to hiding the bronze.

Take note of the dark areas on the two feather examples above, amid the clumped pigment areas are darkened areas suggesting either more concentrated areas of smooth spread , OR an expression of coarse spread in some birds and not in others. This may explain why we see Kite bronze expressing in these areas on Almonds in particular. Some ash-Reds will also have bronze expressing in these areas, which most people see as Dominant Red thus never question it.

Coarse spread is applied to feathers from the outside edge or edges moving inward toward the mid-rib. Another form of concentrated pigment is brought about by the dominant mutation Sooty factor (So) . There is possibly also a recessive form of this gene mutation called sooty (so). This appears to be coarse spread also as genes that affect coarse spread affect or "print on " Sooty that do not express on smooth spread. Also genes that express on smooth spread , do not express on Sooty marked feathers. People become confused in this regard as various forms and other similar traits will express on Sooty. One such trait being Frill Stencil. Below are some feathers of the shield that are expressing Sooty . Note that the colour pigment of apparently coarse spread granules begins at the midrib and extends outward fig.(2) either side of the rachis/mid-rib. Unlike the pattern expressions , Sooty increases with each moult as the bird ages. This increase is dramatic with the first moult , but much less so thereafter. Sometimes the Sooty affects as just a slight dark streak on the mid-rib and nothing more. Sooty marks tend to fill in the space between the two dark areas of the checker pattern Fig.(1) making. It difficult to determine if dark checkers and T-pattern birds are also Sooty. Usually Sooty creates a light lace effect to those feathers , not shown in these photos..

(1) 

(2) 

(1) Bar , checker from the net., and (2) sooty shield feathers - Bob R.

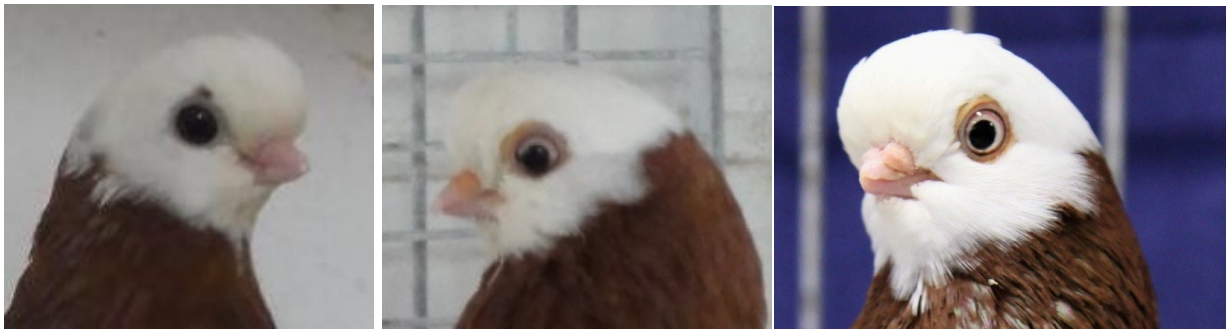
TOPIC #4 : Dark eyed Baldheads that turn Pearl - submitted by : **Ko van Vliet** ~ Holland. from Personal Message Chat.

I am a breeder of English shortfaced Tumblers and have them also in Baldhead. This is a Young Baldhead of 2018:

A baldhead must have white (pearl) eyes.

If you see this bird you think this one has so called Bull-eyes. But they are not. And that is the problem I have.

Of course I also do have some baldheads with bulleyes. I know how a bulleye looks like, but in the nest I cannot see any difference. If it is a bulleye or not. I have some pictures of an old hen and those pictures are from the same hen but taken in an other year.

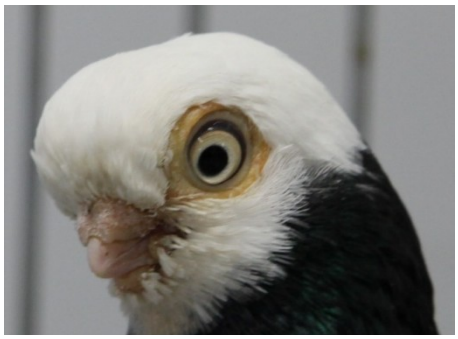


As you can see. In the first year the eyes are as dark as bulleyes, in the second year they are lighter and at least the eyes looks like pearl eyes.

Last year I started a cross with an Elbing Whitehead.

Those youngsters do have light eyes already in the nest and that is what I want to have with my ESFT baldheads.

I want to know if other breeders have the same problem with these dark eyes and their experiences .



Elbing whitehead

How would you call these changing pearl eyes?

Thank you . Ko van Vliet-Holland.

{ A while back, we published an article by Stephen Scott of NewBrunswick Canada , whereby his Portugese Tumblers were also producing some Dark eyed birds that were slow to express pearl. I do not think that it is the same trait that we are dealing with here !

{I was once told that Bull eyes in young look blue , and dark eyes look brown . when looked at in good day light} Bob R.



TOPIC #5 : The identification of Grizzles V/S Stippers , **Kamal El Motaouakkel** . from "Strictly Colour Genetics for Pigeons ." FB.

Hello Bob Rodgers how are you, you think this squab an almond or grizzle? Thank you..

Bob Rodgers The short answer is that it could be either or both !! Looks more like a grizzle , but as usual we need to know more. To be Stipper , it must have at least one parent that is Stipper , and to be a grizzle of any sort , it requires at least one parent to be a grizzle . Those traits could come together to the baby with each parent contributing one , or with both traits coming from one parent etc. The base pigment can also cause different effects as you know , and so can other modifiers. Then we have traits such as reduced that may give a youngster this sort of phenotype without any grizzle or stipper. I think you have shown us a number of grizzle traits in the past in this breed , so let's see the parents.

Kamal El Motaouakkel Father is grizzle, mother is almond . (father as a youngster)


{Note: the following comment was made before I realized which parent he was calling the hen and cock. The red on the left is the hen.}

Bob Rodgers Just by this photo , both parents could pass for either Stipper or a grizzle , or a combination of both , so it is a tough one to call for the youngster , but I am guessing it will look more like the Mother. If she is almond/stipper , then it will be a cock ., unless the sire is also stipper . He is not typical of hetero Classical Grizzle (G).

Kamal El Motaouakkel They gave me these two girls before. , And now these two.. front one older



Kamal El Motaouakkel The white is 100% almond and the little one is the one on the video .

Bob Rodgers Yes and my guess is that the smaller one on the left is classical or print Grizzle , and the one on its left is a combination of Stipper and Grizzle . The pure white one may be homozygous stipper , it will be interesting to see how it does as time goes on , or the parents carry recessive white . The greyish one is probably a combo which would indicate that as I suspected , both parents are indeed stipper .

Kamal El Motaouakkel So the father is stipper and grizzle??

Bob Rodgers Most likely yes he is both … actually I misunderstood you at the beginning , and thought you meant that the hen was the one standing behind the nest bowl . Anyway , IF the white baby is Stipper and PURE for it , then both parents would have to be stipper.

Kamal El Motaouakkel Father's parents (Almond cock, print grizzle hen)

From this photo we can see that the paternal grand-parents still leave us with some doubts , but it appears as if the cock is a stipper , and the hen is a print Grizzle as Kamal said , with extensive bronze.

TOPIC #6 : Tracking down an old phenotype that suggested a completely new type of "grizzle" some eighteen years ago., (it was given the temporary symbol (GB) to denote a dominant 'grizzle bar' , which of course was not acceptable. from a new post on (Strictly Colour Genetics for Pigeons) FB.

In an old Newsletter , a type of grizzle was mentioned as NEW , and it was described as an entirely white bird except for having "red bars".

I presented this in Genetics Pros & Cons , and it took on a new life in the direction of simply homozygous ash-red classical Grizzles . Here is the discussion:

Eighteen years ago , there was talk of a type of grizzle that in the hetero produced a basically white bird with CREAM bars . Has anyone any knowledge of such a genome/phenotype , and if it still is being worked with nowadays?

Jan Lombard YES in the German breed Schoeneberger.

Bob Rodgers Thanks Jan , do you have any photos , or further info , "name" for the trait , genetic symbol , etc. ?

Jan Lombard Ask prof Axel Sell He is the most knowledgeable person on pigeon genetics that I know of.

Bob Rodgers I did not see anything of this nature in his book.

Jerry Sindelar Czech stavak- homo ash red grizzle! also Silesian pouter etc.

{ Now as you can see , these birds are typically what we know today as Homozygous Grizzle ash - Reds . However I felt that these would be known and understood genetically just eighteen years ago, so was under the impression that the red barred whites were something different , and expected that they would not have dark beaks !?} B.R.

More discussion followed : I have edited out photos and comments to fit into this 12 page Issue , but have attempted to give you the most pertinent material as far as the main topic was concerned .

Bob Rodgers I think that what was intended by the original source regarding a white bird with red bars , had NOTHING to do with any traditionally known member of the "grizzle" family. Certainly not **Classical Grizzle (G).** So I think we have gone far off topic . I also do not think it was intended that it was a **Homozygous Tiger grizzle (white)** or a **White Grizzle (GW)** . This seemed to be a new (twenty years ago) , mutation that produced a white bird that expressed a type of reddish bars , I am not even certain if it was indeed Ash-Red base. I saw the topic in an old Newsletter and wanted to see if anyone was aware of it and IF it still was recognized. It may have been just a mistaken identity based upon lack of knowledge at the time.

Quido Valent - This 'white with red bars', what is that genetically? { He posted this photo }

Bob Rodgers This looks more like an Ice factor as opposed to a grizzle allele.

Quido Valent Bob Rodgers but ice, is that compatible with red bars?

Bob Rodgers Yes , Ice is a mutation modifier that can express on all three base pigments .

Brian Krog - Looks like a homozygous Ice Ash Red bar.

Graeme Boyd It may have the Ice factor involved, but if you look at Silesian croppers, all of their "schimmel" expressions appear to have more to them than a typical grizzle expression. Not sure if it's a grizzle/ice combo or something else.

{ I will add the remainder of the topic next Issue } B.R.

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The Pigeon Breeders of Bangladesh proudly announce the formation of their very own **National Pigeon Association** and that it has been accepted as an affiliate of the NPA of America. Photo presented by Shoibal Sabbir.

Congratulations from us here at PGNV&C Newsletter, Keep up the good work!

That is it from the Loft for the Month of April , Look forward to sharing Genetics News , Views & Comments again in May .
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