

August Newsletter 2019 -

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.

TOPIC #1 : Smoky and its effects on Toy Stencil by Octavian Sarafolean.

"One question that is bugging me. Does smoky affect the Toy Stencil on pattern?"

Bob Rodgers - The three components of Toy Stencil each effect coarse spread. Smoky seems to lighten or diminish coarse spread in some cases , but not others . It also does not seem to have any effect on bronze , so I would venture a guess of no , or if so, only minimally . Perhaps we have people here who have various toy stencil birds that they suspect may also be smoky, so that some comparisons can be made, and thus arrive at a definitive answer for you ! Thanks for the post.

TOPIC #2 : The Neck Crescent marking. by Bob R.

Usually when we think of a crescent on the neck region we think of either a "white" or a "bronze " marking on the breast with somewhat of a half 'Moon' shape with the points aimed toward the head. These crescents are however expressions of other traits that appear as a previously 'Darkened' area . What exactly causes these dark areas on some birds and not others is not yet known.

It is known that when breeding for good "ICE" colouring on Ice pigeons and Damascenes , the dark areas should be avoided (Paul G.) as the gene seems to affect the entire bird and prevents a good white Ice expression. The dark crescents seem to be linked also to the darkened inner vanes of the tail feathers which we talked about in the April Issue . It may be that a form of Dirty Factor is involved .

Heterozygous (Ka1) usually expresses only on the black crescent area of birds that have both Dirty and smoky factors such as we see with the Archangel (Gimpel).

(ka2) expresses on the head and neck and seems to assist in moving (Ka1) to the underbody of Gimpels.

Kite (K) expresses on the crescent areas on ash - red Barred specimens , and on the dilute form of the Blue/black series when the dark crescent areas are also present. Since we already know that (K) does not express on condensed smooth spread granule coated areas such as the sub-terminal tail band and the wing flight feather tips , it seems safe to assume that the darkened crescent areas are not condensed smooth spread , or if they are , then an additional modifier is allowing bronze to express in these areas.



photo Aust FP.

area, this is often seen on ash birds.

note the dark red crescent region on the neck/crop

Below are photos of various birds that have neck crescent markings as a result of various genetic traits.

Not all birds affected by these genes will express these coloured crescent areas.



Riyad Khan photo. (Intense phase and Pale phase Ka1) . (Pale is about 1/4 way between Int. & dilution).



A dilute blue with sulphur crescent by Octavian Sarafolian.



Anwarul Sabbir photo. (Dilution on a blue checker pattern with dark neck area tarnished sulphur bronze.



Naimal Parves photo.

A dilute phase bird with a "sulphur" collar or crescent marking. This may also have a gene called Bleached , symbol (Bl) , which tends to further lighten the bird somewhat with the exception of both condensed coarse and smooth spread pigments. These are called "Gold " Collar, and may be pale phase as opposed to dilution in some cases.

TOPIC # 3 ~ Question by Longseth Loft , David

I've posted elsewhere but casting a wider net. Any info (from hard data to swags) on the patternless look seen notably in Seljuks but also seen elsewhere in birds from the Middle East ?



Bob Rodgers - My first impression is smoky Ice barless. I found a reference to them in a 2012 Issue of the Genetics Newsletter where Paul stated they are Barless Ice. I suspect that they may have the "erased" gene as found in Takla of the Middle Eastern areas also .

Zandri Erasmus - Following .

Keaton Taylor - Seljuks are in the same group as Turkish Takla which are actually derived from Iraqi Mosulli. The erased gene can also be found in Egyptian Safi (those that aren't stipper). They are the culmination of hundreds if not thousands of years of people with no genetics knowledge breeding best to best to best.

Layne Gardner - Probably not barless. At least some that appear barless were tested . Stan Luden in Southern California made crosses to barred Indian Fantails to add barless. He was surprised that he couldn't get back to barless.

Bob Rodgers - The American NPA Book of Standards states: " The Ice color is barless and should be a clear , even Ice color. Only in the neck may there be some of the darker feather color lightly shimmering through. The flight feathers and the tail bar should be as dark as possible. The end of the tail is a pale Ice to end of the feather from the bar " {Band} ... Now assuming that Master Breeders produced this written Standard and that they were speaking genetically as well as phenotypically , the birds are truly barless. However as is all too often so, that may not be the case. I must say however that I have seen many barred Ice that also were "erased", and none appeared barless.

Keaton Taylor - The Turkish Takla and Seljuks are full of erased. Mermeri, Bulut as well as Seljuks in particular. Often times there is a ghost bar visible. And no master breeders didn't write the standards for the middle eastern birds at all.

Bob Rodgers - Usually the most prominent Breeders in a BREED CLUB, are the ones who have input into their Standards. As I said, I assume that they would be Master Breeders. Perhaps not all specialty clubs bestow such credit, but surely the most experienced Breeders involved provided the Standard ., who else?

Longseth Lofts - As Keaton Taylor notes, the "ghost" of the bar is still visible and the effect is seen in a number of breeds from that area. I have raised a number of birds from "erased" X "intact" pattern birds. It seems to inherit as an autosomal dominant though it might not be quite that simple and that is just a working theory for now.

Keaton Taylor - The Middle Eastern Club is taking the responsibility to write correct standards for these birds. Often times birds change when they are brought stateside they are changed too much, the Middle Eastern Club is going to rectify that.

Longseth Lofts - Ah, the standard is another issue and not knowing who wrote what and why, it is a non-factor. Saying the end of the tail should be PALE Ice makes me suspect the writer was not genetics savvy. The standard may say "barless" , the birds say otherwise.

Keaton Taylor - Exactly . Correct representation is key.

Bob Rodgers - I am wondering why , if the desired phenotype is a pseudo barless, it would not be prudent to incorporate the barless pattern gene as opposed to constantly be dealing with the variability of the "erased" gene on barred pattern?

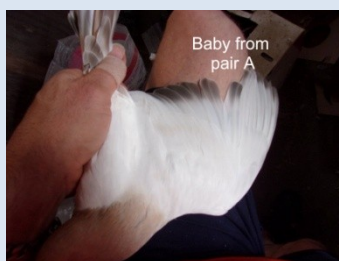
Keaton Taylor - Because that doesn't exist in the breed whereby incorporation of the barless gene would not only muddy the color but ruin the breeds. It's through careful selective breeding that the desired clean shield is achieved. The Turkish and other Middle Eastern birds are chalk full of interesting genetics that need to be preserved.

Bob Rodgers - That is the process of every single trait we have in all Breeds. The Ice factor on Barless could just as easily be improved as has been done in other breeds. It often takes much less time than one expects, and saves many culled birds in the long run by not creating them in the first place.

Keaton Taylor- Call me a traditionalist but I find crossing unnecessary unless it's to understand the mechanism of the pattern and even then it would be a closely related breed and in the Seljuks case that would be the Turkish Takla and their many forms. No need to recreate that which is already established. It would be like trying to remake a Sheik Sharli using a modena.

Bob Rodgers - David , Just a side note from your comment earlier above regarding "Pale". I feel certain that it had no reference to Pale phase. Simply that Ice and most likely smoky factor produce the lighter and wider than normal terminal tail band. Quite often the smooth spread otherwise extends right out to the end without these modifiers. This has been somewhat interesting and as I stated in my first comment, I suspected that the "erased" gene was present in response to the request for info by Longseth Lofts. This has been confirmed by Keaton, and it seems that no specimens have ever been barless, although that pattern has been around for a very long time and certainly would likely assist in the aim for a truly clear wing where NO PATTERN coarse spread is desired. It will be interesting to see future updates in the Standard.

Longseth Lofts - Brief update on the Mermeri/Seljuk phenotype. One of my pair (pair A) has so far raised 2 like themselves and one with an intact bar. This was as I anticipated since last year, when mated to intact pattern birds, they produced both intact and "Erased" phenos. One of their babies shows even less bar than either parent. Could be homozygous but would need testing. second photo is of their 3rd. baby -- intact bar.



Fourth photo is pair D , intense and intact cock, dilute hen. First two babies show the (expected) partially affected bar. (I also took a shot of that baby's tail --has a narrow tail band like dad, also middle tail

feathers are mostly white but with a little color at the ends. A topic for another day ...). My hypothesis is that what we are referring to as an "erased" effect is an autosomal partial dominant that , in the presence of Ice, produces the phenotypes seen in Mermeri, Seljuks, and many other birds from that region. In my notes , I write it as *Er". The asterisk denoting 'tentative' , and I think "erased" is an accurate description of the expression.



Octavian presented four photos of his Takla birds showing variation in the Tail colourations.



TOPIC #4 : Stipper / Toy Stencil / frill stencil by Shoibal Sabbir. (Bangladesh).



Here is a very interesting expression that demonstrates something that I (Bob Rodgers) have been commenting upon for some time now but which a few others have been trying to say is not so . That is that **Stipper (St) BREAK** is and has always been "white" or colourless areas caused by the de-pigmenting action of the stipper gene in what we call "Almonds" , and "Sprinkles".

A very distinct characteristic of the stipper gene also is that it causes pigment to be cut off in "V"-like abstract arrangements , particularly in the Flight feathers and Tail feathers , where the feather structure ribbing is more distinct, and naturally branches outward on an angle from the rachis (mid-rib).

Frill Stencil (fs) on the other hand de-pigments the sub-terminal tail band and ends of the flight feathers except for the very outer edges and tips , which may be left intact as condensed smooth spread pigment. Both of those actions can easily be seen on the Almond COF seen above , bred by Shoibal Sabbir of Bangladesh. The **Toy Stencil** (Ts) is seen by the additional whitening of the shield except for the residual bronze , which blends with the same action caused by the Stipper gene.

Topic # 5 :

The Qualmond phenotypes can be varied.



A dilute spread blue series (Dun Qualmond) expressing a sulphur neck colouring. Photo by breeder MD MeDz Fsl.



An Intense Blue series Qualmond aged male that looks like a dark dun at first glance. Photo by Shoibal Sabbir.

TOPIC #6 : The complexities of **Spread ash** with some sort of lacing, and **Indigo/Andalusian** with bronze factors etc.? - by Bob R.

We see and hear many names being used for the multitude of 'phenotypes' that are out there in the Pigeon world today. That is not going to get any easier as time goes on because many more NEW mutations and combinations will be created.

The **Ash-red series** is caused by the **Dominant Red mutation** at the major colour locus where we also find **Black pigment (blue series)** and **chocolate pigment (brown series)** alleles.

The **Spread factor 'GENE'** allows us to see the pigment colour spread over the entire bird (as **BLACK**) for the blue series, and as (**CHOCOLATE**) for the brown series. In the pattern series for each we see the true pigment colour in the Coarse spread and condensed smooth spread only, with the remainder of the plumage various tones or hues of '**clumped pigment**' blue and brown respectively.

Something different happens with the ash series. Red pigment cells are shaped differently being more **oblong** as opposed to **round** and therefore they also are laid down differently in the feather structure, so that even in the Spread factor bird , we do not see the colour as a deep red , instead it appears the same ash colour that we see with the pattern clumped Red pigment areas. The brick RED is seen in Coarse spread pattern areas only sometimes enhanced by bronze. The condensed smooth spread of the tail band and flight tips is almost colourless.

Now, one would think that when Doctor **Willard .F. Hollander** named the colour "**ASH-RED**", that SPREAD ASH would automatically stand as the logical name for the spread factor form . However someone decided that they would name it "Lavender", despite the fact that the **milky Blue series Black** was already known as Lavender. You therefore will see a number of Breed standards using the term Lavender for their spread ash classification. Ironically the term is still used for many specimens despite the fact that they may be changed in their appearance by other modifiers, such as Indigo , Sooty, smoky Dirty, a bronze etc. Then to confuse things further , some of those phenotypes do in fact have terms specifically applied to them such as: Dappled , Strawberry, Red laced , etc.

Bronze { usually Kite bronze (K)} and Dirty factor tend to add richness to the 'RED' colouring of the ASH phenotypes. This additional effect may be enhancing the coarse spread areas of the wing (**pattern**), or the central portion of each shield feather (**Sooty**), or the outer edges of the shield feathers (**lacing**) - (possibly a combination of any two or all of the above).

Now if we add in genes such as Indigo and spread factor we get another laced effect . A similar phenotype may happen if we combine Classical Grizzle with ash and spread.

The true "ANDALUSIAN" is a Blue series bird that also has both Spread factor and Indigo factor. These are **Black Indigos**. Ideally they should be a bluish gray all over with a mid-night

blue lacing , depending upon a number of Modifiers , again we will see differences and a wide array of explanations as to what causes those differences. Indigo de-pigments base pigment slightly such that a black bird may appear a soft bluish gray. All of the feathers will (in a good specimen) have darker edges. There are a number of reasons for this and not all birds will express this lacing. Birds that are lightly laced to our naked eye are said by some to be the result of simply having frayed edges causing a shadow effect. However many gene modifiers tend to express moreso at the edges of each feather . These genes may be : Sooty factor, Spread factor , Dirty factor , and possibly Indigo factor itself, especially when T-Pattern is involved. Birds in all three base colour alleles that have one or more of these modifiers tend to express darker lacing than birds that do not have any. Birds that have only clumped pigment on the wing shields, such as barless and barred birds usually have only the shadowed edges effect, and when used with spread and Indigo, the resulting Andalusians will be less laced as they will have only the shadow effect.



Photo from Jith's file by Jose Manuel Jimenez Miguez.

An ash red bird that is spread factor and Indigo should **not** be called an Andalusian. It would simply be an Indigo Spread ash. The feathers will be laced with a deep brick RED colour on an otherwise ASH base. Usually the head and face are a darker "dirty" ash.

Some Blue series Andalusians may have red lacing due to residual bronze and here is where it becomes rather difficult to distinguish the difference between a very light blue Andalusian laced in red, from a dirty ash Indigo laced in red. That is why when looking at photos , we need to see the parents and even grandparents so that the traits can be followed to cast aside any doubts.

Then we have yet another "terminology" problem whereby someone over one hundred years ago decided that the term "Mealy" should be applied to any Ash-Red specimen. This to me is one of the most ridiculous of all misused terms in the hobby. Originally it is conceivable that the first Ash-Reds no matter what pattern or other modifiers , were also heterozygous in the case of males. These would have expressed the second chromosomal colour (black or chocolate)



Photo by Jo Ki from Jith's file.

However the hens and pure males would not , so why on earth would the term 'mealy' still apply? These specimens would express soft clean clear colour that in no way would appear mealy or grainy in texture. The Best expression to demonstrate a "MEALY" phenotype would be the SPREAD ASH that is heterozygous for blue/black., or brown /chocolate. Then the males hetero for black or chocolate in the pattern series would be Barless mealy , Barred mealy , checker mealy , and T-pattern mealy. All of the Pure ash should be termed simply Spread Ash for the spread factor birds , then Ash-Red Barless, Ash-Red Barred , Ash-Red Checker , and Ash-Red T-Pattern. MOST of the Fanciers in the world use these terms this way now , but we still have a few old die hards that refuse to drop the errors of the past.

One last note on this subject , I recently was told that the birds being referred to as MEALIES in at least one other Country , are being called "CO-ALMONDS" , due to the fact that breeders see the phenotypes as being similar if not the same. This is wrong on several fronts , but let's just examine the most obvious . Even here in North America we have breeders who make the mistake of naming any admixture of colours as "break" , and therefore believe that heterozygous Ash - Red birds express break. The term break was coined to describe the de-pigmented areas created in Base pigment by the Stipper gene. We clearly see that in the spread factor Stippers that are Base Black . The Stipper affected areas are colourless or white ., they ARE the BREAK. When we look at an As-Red bird that is NOT stipper , but is heterozygous (split) for blue/black, or brown/chocolate , we simply see some of the base pigment from both chromosomes. Ash/red as the main base pigment and one other allele black or chocolate. There are no broken areas, no BREAK. The base colour flecks on a ash hetero for black are called Ink spots.

That is it from the Pigeon Loft for July ~

Now it is my pleasure to make a special announcement : Our Co-Editor Jith Peter will be married to his girl friend Maya on the 12th. of September 2019. I am sure all of you will join with me in wishing them all of the very Best in Health and Happiness in their new life together !