



A pretty brown Indian Fan A flash grizzle tailmark. A nice quailmond Indian fan.

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Gosh, here it is the 18 of April and I have not written a thing on the May issue. Normally would have done it by this time last month or at least by the 1st of April.

I have been walking around drunkenly for several weeks. The doctors tell me I have crystals in my inner ear and I am in therapy to get them back where they will dissolve and my uprighter will function again.

Back to the subject at hand.

DINA MERGEANI SENDS: 10oct'08

What do you think of these (short beak) Chinese pigeons?



EDITOR:

Now there is quite a combination. Short beak, prominent nostrils and a nasal crest. These birds can dust off their feed before they eat it. ☺☺ It is difficult to see but in the first picture the beak is the slightly darker mark behind the nostril.

Thanks, Dina, for sharing these pictures with us. The next two pictures were sent by Dina and show the beak size a little clearer.



JAMES GRATZ WROTE: excerpts

I have read the posts on ember with interest. Richard, your pictures look very much like the embers I have down from those Larry Long found. Yours are alleles of recessive red, right? I agree spread embers can have a tail bar.

RICHARD KURSCHNER WRITES: excerpt

Yes, mine is an allele of recessive red.

GRAHAM MANNING WRITES: 8oct'08

I have decided to name the gene involved with my youngsters missing back toes as "Absent rear toe" and tentatively symbolize it as (art). This may change as further data becomes available with this effect. No idea yet if I have a dominant or recessive factor or if there is sex-linkage or allelic with anything. For now, I'm just assuming a simple autosomal recessive (art//art) until I can get breeding results back.

DINA MORGEANI WRITES: 8oct'08

I think that you know my old supposition about Nuns white shields; I think that Nun = gazzi + a recessive gene for white shield. Because for some pied patterns the mechanism is an incomplete migration of melanocytes from the neural crest and I think that white near the navel is a sign that a pigeon is carrying a pied gene. For white shields in Nuns, I think that there is a different mechanism like early melanocyte death in these areas or a blockage of melanocyte proliferation after entering the epidermal layer (colored wing tips is a sign that melanocytes can migrate). That's the reason for my opinion Nun = gazzi + a recessive gene for white shields.

Ten days ago, when I was in Pecs, Hungary, I took some photos of Arpad Cseplo's pigeons. I suppose Arpad is a new member of the group. In one of these photos is an F2 Nun X Modena triganino with white shields (see picture below). I know that Michael Spadoni had a similar result in F2 Nun X APT. Because I predicted that (like Hollander with his extreme dilute supposition) - I wrote first about that - now after Graham's message; I have decided (like Graham ☺) to name that recessive trait "Nuns white shield" and symbolize it as (nws).



EDITOR:

Since the above bird is an F2; it really doesn't prove that there is a white shield gene involved. Need to know what the F1s looked like and what other members of the F2s looked like and finally the ratio involved. You could be right but this one bird doesn't prove the case.

ARLEN SIERT WRITES: 9oct'10 excerpts

A) I have corresponded with Frank Mosca who had doubts that recessive red baldheads are possible due to his experience. However, I am convinced that I have one, although it only has one bull eye. It has the baldhead marking (with a tiny red feather on top of its head). I have others with the baldhead heterozygous marking. Have you ever heard that recessive red showing the homozygous baldhead marking are not possible or very rare?

B) I was wondering if you think its possible to tell by looking if an ash red bird is carrying bronze without breeding it to find out?

C) I have several white tick cocks (spread ash red lavenders carrying blue with grizzle). They show no lavender (grey) marks. Their dam is almost pure white ash red (pied with white flights) with just a couple tiny red feathers on the neck. The sire is an ash red lavender tick carrying blue. This pair has previously produced only either: white tick cocks or almost all white hens with a couple red feathers on neck and wings shield, or lavenders, or blacks, or all the previous phenotypes with pied white flights. So it is some type or combinations of grizzle (not the same type in the homozygous state) with lavender inherited from the white dam that is producing all the white cocks with black ticking. I bred one of the white tick cocks to a black hen, trying to ascertain the type or types of grizzle (it was not homozygous). So far, of the 3 offspring, 2 were lavenders without grizzle (meaning the grizzle from the white tick cock is not homozygous) and one is an unusual light spread black (I think it also has kite bronze) with a flash type neck, and a large grizzle white patch on the back and under the wings that shows when it flies or spreads its wings. It seems unlikely to me that only that slight amount of grizzle with lavender would produce all white cocks with black ticking. So I am guessing that the dam and the white tick cocks may be carrying two types of grizzle that with lavender

produce white?, or perhaps only one type of heterozygous grizzle with lavender is enough to produce all white? But if it is, it seems unlikely that a partial or slight grizzle pattern alone would account for that much whitening? And also, one of the original almost white dams and lavender tick cocks offspring looks just like her. I am thinking she and her mother must be carrying 2 different types of grizzle to be so white?

D) My bronzes that I can tell are bronze (not the tortoiseshells, they seem to have more widespread bronze) are either blue bars with the bronze on the bar area or T-checks with a little bronze on the wing shield. Do you think this is probably kite bronze?

EDITOR:

A) Frank is right. I worked with rec. red and baldhead for a number of years and produced some crossovers. They are correctly marked in the nest but when they molt they molt gayly pied. Joe Quinn postulated that rec. red (e) and baldhead (Bh) genes were on the same chromosome and I found that to be true.

That is the story with the Bh gene. There are other genes that cause white heads or white caps. Graham Manning in Australia found that the Tumblers have a white head gene which allows the Tumblers to be recessive red with white heads. The Bh gene produces a white mark across the top of the head from ear to ear when heterozygous and white headed when it is homozygous. The Tumbler Bald (TB) produces a white head rec. red when heterozygous and an all white bird when homozygous.

If you have a red bird with a white head, it probably is an ash red velvet which can produce a rec. red look-a-like.

B) Yes, it is possible to tell an ash red carrying bronze if you know what to look for. First their flights and tail feathers will either have red color pushed to the end of the feather or these feathers will be white. If you have seen an ash red carrying bronze and remember what it looked like; you can spot bronze in most ash red birds carrying it unless it is a nebulous bronze such as Roller bronze, which does not show up well.

C.) I suspect the white ticked birds are not grizzle but are pied white. When you mated the white tick cocks (was this a white bird with dark ticks or a dark bird with white ticks?) You stated with flash? Type of grizzle. First, was the bird black or what is laced? It sounds like it was laced. When you describe a bird in flight, it sounds like it is undergrizzle (Ug).

D) Your bronzes sound like they are toy stencil bronzes. They could be dominant opal bronzes or even indigo but they sound like toy stencil. They are not kite (K) bronze. Kite bronze shows up as a reddening of the inner part of the flight feathers. The better colored ones have a reddish wash over the ends of the wing and head.

In the tiny petal of a tiny flower that grew from a tiny pod is the mystery of all creation of God!

Work is good, but it is not that important.

May you always have a rainbow of smiles on your face, and in your heart forever.

ALAN WRITES:

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I hope you can answer my question. I am transferring Frill Stencil into my Homers. My question is: when working with Frill Stencil, is there any modifiers I should avoid, such as dirty, sooty, smoky, etc. that may smear the phenotype?

RICHARD K. ANSWERS:

I have yet to see any patterned pigeon, this is not solid black, red, etc. not affected by homozygous smoky when present. Smoky doesn't always create unpleasant effects but if you want clean crisp bars and stenciling (as in well delineated and not smeary), smoky is something to keep out. The ground colour of the bird would be altered too. Dirty won't hurt other than darken the base colour of your birds. Sooty would not help bars. Sooty in T-patterns and chequers shouldn't really hurt but it may extend the amount of white stenciling. Sooty and dirty in blacks shouldn't hurt either but if you have those genes in blacks, they might go through to any non spreads that come along and spoil them. All in all, I'd say avoid all these genes if you can. Probably easier said than done. Smoky is the one to definitely keep out though.

ALAN WRITES 10oct'08

Here's where I am at right now. They are not very typey yet. I am putting them back with the best flying birds I have. My goal is competitive Frill Stencils that are attractive. I know.....I want my cake and I want to eat it too!



This bird appears to be Ts2, the white area on the shield is sunlight coming through wire.



This bird is homozygous for the Ts complex and for frill stencil.

WHIPPOORWILLOFTS WRITES:

Alan, you are not just dealing with frill stencil here. You also have toy stencil. Frill stencil only affects the flights and tail of the bird. The lacing up the shield to the wing butts is a result of toy stencil, not frill stencil.

EDITOR:

You have gotten some good comments about the effects of the darkening genes. The comments about smoky are not complete. Smoky lightens the skin, feet, and produces a light colored beak. It causes a soft blurring of the pattern, eliminates the albescent strip n the outer tail feathers, darkens the underwing coloration, widens the area between the tail bar and the tip of the tail (see the brown fantail at the top of page

861), and helps darken spread blues (black). You can use these criterion to decide whether you want this gene in your endeavor.

Sooty will cause you problems if you are trying to achieve a barred phenotype because it will color the center of the covert feathers on the wing and produce a pseudo check, after the first molt. This darkening may increase with age. If you are trying to produce a black bird with white bars, it will allow the toy stencil white to make white markings on the black shield. They can be attractive but some do not like the effect. On the other hand, to get a bird that shows the greatest amount of lacing on the wings, as well as on the underside of the bird; sooty will allow you to do that.

Thanks for sending the pictures. They tell us an awful lot about where you are in your painting of the bird via genetics and lets us offer more suggestions and comments. First, you birds are both toy stencil and frill stencil. (Some people use a Frill Stencil breed to get the stencil effect but do not realize that they are Ts and fs genetically). Your progress to the Homer type has been very good. The whitened bird has some blurring in the upper shield and I suspect that this is because an ancestor of this bird had darker checkering in this area. The other bird shows a bronzing of a pinkish hue that normally molts to white either in the second or third molt. If it does not molt to white then it is most likely Ts2 bronze which is part of the toy stencil complex. It is homozygous for frill stencil (fs) which puts the white tail mark and the white flight markings on the bird. I doubt that I am telling you anything new here, just covering more of the bases.

JERRY STERNADEL: 1nov'08 excerpt

If ember is recessive to recessive red, what causes the recessive red embers to molt out ember? I think there is a lot more to learn on ember.

EDITOR:

Ember is recessive to wild type but is dominant to recessive red. As far as I can tell, it is dependent upon recessive red to express well. Cryberg doesn't agree but I even wonder if it is an allele of recessive red or just is dependent upon rec. red to express.

You are right, there is more to be learned about ember. It wasn't until last year that I produced one that I believe to be homozygous ember. Cryberg say he has some and that mine has a lot of junk besides ember in the bird. I have yet to see a picture of one of his homo. embers.

EDITOR: 25oct'08 excerpts

At the 2008 National Young Bird Show at Louisville, KY, we were discussing the mosaics and chimeras (a special type of mosaic). Dick Cryberg and I were in agreement that many, if not all, of what we are calling mosaics are very possibly chimeras. This is another way of looking at the bi-paternity or two sperm fertilization of the egg which Doc. Hollander came up with quite a few year ago. Many thought that this meant that the mosaic was the result of two fathers. In some cases, that may be true but several of us breed our birds in individual cages and know that there was only one cock bird involved. So the sperm came from one male.

I tried to explain some time ago that the bipaternity produced young were like Siamese twins that did not divide but were closely integrated. The chimera is such an

organism. During cell division, 4 cells are produced (a tetrad). In some cases in the production of an egg, instead of one of these getting all the cytoplasm, which normally happens, there are two or even three that receive some of the cytoplasm and become 'eggs'. Each may be fertilized by similar or dissimilar sperm. Thus the 'bipaternity'.

DICK CRYBERG WRITES: Excerpts

Embryology studies show that the development at the time of fusion has a major impact on the ultimate chimera.

If the fusion is very early in the cell stages, all kinds of mixing happens and you could end up with random patches of the different patches of genetic traits.

However, if the fusion happens much later such cell mixing does not take place. My guess is that half and half pigeons chimeras are the result of grafting of the two embryos after a lot of cell orientation has already happened. Grafting just a little later and you would get Siamese twins rather than on individual.

EDITOR:

Over the years, I have had quite a few mosaics and several of them were hens. At present, I have one hen and she is mated to a mosaic. Yes, mosaics do produce mosaics. Not many but some hens produce more than others. An odd thing can happen with some ash red/blue mosaics. As they age, the hens become more blue and the cocks become more ash red. This progression increases year by year.

SERGIO KIRST INQUIRES: excerpt

Is 'your statement immediately above' a proven fact, or a hypothesis, or emotions? Is this a scientific discovery? At least in pigeon genetics?

JOE POWERS WRITES:

I do not know what Paul has on this, but I can tell you this. Back in the early 90's, I had two mosaics in the same nest. Both were hens and I bred from one of them. That hen, mated back to a black cock produced 9 of 11 or 11 of 13 babies that were mosaics. All my records went to Bob Tauscher when he got the last of my Komorner Tumblers, so I cannot break it down to cocks and hens, or whether it was 9 or 11. Memory is mostly OK but not perfect. The black cock was bred from for 9 or 10 years either by me or a friend and never produced another mosaic. The mosaic hen was mated to one of her mosaic sons the next year and produced four more mosaic babies. At that point, I sent the family to Gerald Dooley in Tenn. for him to work with. This same family produced more than 100 mosaics from 1971 until the last of them left here in the late 90's. Dr. Hollander called me Mr. Mosaic for all of them I bred over the years. First time I showed any to him was in 1973 and I had five in a carrier for him to view – he was quite surprised at them.

RICHARD KURSCHNER WRITES:

G'day Joe, very interesting. I had heard on a few occasions of mosaics that bred more of the same but not to the extent yours did. That includes a family of quality African Owls that was around, I think it was in the 1970's. I remember a few comments

to that effect made about them and the ads put in the APJ by the breeder concerned. Can't remember his name. Was it Hanson? Those African Owls were brown/black mosaics if memory serves. A cock bird of such colour one can understand breeding both colours but a hen you'd think would only breed one or the other, unless the ovaries themselves are of differing genetic material.

I have bred a few mosaics over the years but they did not breed any in turn. Two mosaics were produced by one pair of birds in consecutive nests and I've also heard of other pairs that produce a number of mosaics. So apart from whether or not mosaics breed more of the same I often wonder if there is some particular reason why they are produced by some pairs and not others.

My two mosaic sisters were Carriers and also brown/black mixture. One I did not breed from and she was a brown pied with a half black tail. The other was more brown than black but she did have several large patches of black, about 1/3 of her in total. She bred as a brown. Apart from the obvious brown/black mosaics I have notice quite often in brown pigeons an odd black or blue feather. A small one usually. Are such bird genetic mosaics or are the odd feathers the result of reversion within the few cells of the embryo? It appears to me that brown seems a bit more inclined to revert occasionally to blue but don't know if that is actually what is happening.

EDITOR:

My reports are facts as found in my loft and my breedings. No hypotheses or emotions. Scientific discovery? Well a discovery alright.

In my old records, I noted that I had an almond hen mated to a dun cock. They produced about $\frac{3}{4}$ mosaics, one of which was a gynandromorph. This bird was split with one side dun and the other almond. In breeding from this bird, which had the area over the head mostly almond and the area over the gonads mostly almond, I figured it would act like a male even though the dun part had to be female. It did breed as a male and fertilized about half of the eggs. The young were almond, dun, kite, mosaics, and some very odd mixtures. I surmised the gonads were a mixture and produced a variety of sperm.

Some of the other mosaics produced by the parents of the above gynandromorph also produced mosaics. Most of these were almond with usually a dun wing patch. These that had a very distinctive wing patch did produce more with identical wing patches. From this menagerie, I bred one that was dun with an almond tail. This bird in turn produced non-almond birds with almond tails. I produced about a dozen of the almond tailed birds in several colors including ash red and blue, barred and checkered. One night a raccoon got in and killed the almond tailed birds and I have never produced another since.

At present, I do have a mosaic (male) that is ash red and blue checkered with a brown tail.

*I am thankful for too much email because it means I have friends who are thinking of me.
I am thankful for the mess to clean after a party, because it means I have been surrounded by friends.*

*I am thankful for my pigeons because through them I have met many fine people.
Live well, laugh often, and love with all your heart.*

Here are some of the more striking mosaics (chimeras).



Mosaic Roller/Chinese Owl. Left side hetero blue bar baldhead Roller, right side black homozygous Chinese Owl.



A bilateral Indian Fantail mosaic ash red bar on one side and blue on the other side.



A front to rear ashred/blue mosaic. Another bilateral mosaic. A saddle with left wing ash, right wing blue.

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A mosaic with mixed spots but mainly bilateral ash and blue. This bird is a hen and was originally mostly ash red but after several years molted to this phenotype.



An ash red male with blue area on right side of bird. Originally this bird was near 50/50 ash and blue but after several years arrived at this phenotype



A very striking tricolor. A rec. red head, rec. yellow neck, and blue wings and tail.



This is my dun and almond mosaic that proved to be a partially fertile male. The dun areas are female. The almond areas are male.

Be nice to your friends and family. You never know when you are going to need them to empty your bedpan.