



Isabelle



Ribbon tailed Ash red



Light Andalusian Swift

PIGEON GENETICS NEWSLETTER

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DICK CRYBERG WRITES:20dec'03

What do you mean by cis and trans?

EDITOR:

Cis and trans refers to the position of the gene on the chromosome that affects the phenotypic expression. In the Almond coloration, where the traits are linked on the sex chromosome, if the Almond gene is linked to the Black (blue) gene (cis position) and the bird is heterozygous for Ash red; the black pigment is suppressed by the Almond gene and the bird appears to be an Ash red Almond (thus Ash red stippling). However, if the Almond gene is linked to the Ash red gene (trans position), the Ash red pigment is suppressed and the bird will show black stippling.

This is a simplistic explanation since the suppression may be complete but usually is not so and some black color (in the cis) or some Ash red (in the trans) shows on the bird. This, of course, does not show in the females since they only have one sex chromosome.

STEVE SOUZA WRITES:

Here are pics of my mystery color. I suspect it's a brown bar recessive opal hen. Parents are: Blue barless cock, het brown, het opal and Black hen (suspected opal?).



INTERESTING? Sent by JDF

On a Sears' hairdryer: "Do not use while sleeping." (Shucks, that is when I do my hair!)

On a bag of Fritos: "You could be a winner! No purchase necessary. Details inside."

(Aha – the shoplifters special!)

RON HUNTLEY WRITES:

Steve could you please post pics of both your ember and the ?black hen (dam to the brown recessive opal) you spoke [about?]

STEVE SOUZA RESPONDS:30dec'03

Sure, I've posted a multi-year molt [sequence] of the Ember before, but I'll post it again. The supposed black hen, I'll get pics of and post soon.



ember during 1st molt to Blue Ck 'Dec.'01 ember 5 mo. later May'02, turning more red



ember Feb'03, after 2nd molt, more "dark red check" Grandparents of ember...
(grandma with ember showing & grandpa with Meuleman white (feb.2000)

EDITORS COMMENTS:

Steve, Great series of pictures of an ember check. This has paralleled some of my observations but I was not smart enough to take a series of pictures. The white tail feather makes a great marker for anyone that thinks these may be different birds. ☺, ☺ .



Here is a typical barred ember.

A spread? Ember.

These last two pictures were sent by Gary Young of a couple Arabian Trumpeters. These are the first Arabians that I have seen that are ember. (Note although the symbol for ember is e*Em, it is dominant to e but is still a recessive gene and should be written in lower case ember. We measure dominance to wild type not to rec. red when writing the symbol. Thus the full symbol for ember coloration is e//e*Em.)

RON HUNTLEY WROTE A VERY GOOD SYNOPSIS ON MITOSIS AND MEIOSIS.

It is several pages long and if you are interested in this please go to
<http://www.angelfire.com/ga/huntleyloft/graphic1.html>

SAMEER ALI SENT MORE PHOTOS OF HIS PARENT BIRDS:1jan'04

[Many thanks for the excellent photos. The pictures of the entire bird give us much more information about the birds. The male appears to be a beautiful Dirty, dilute, Dom. opal bar. The female appears to be a "Black" Kite. She is Dirty, probably Sooty, Blue T-pattern. Both parents carry recessive red.

The youngster is a poor colored recessive red and should be a male. The later young are dilute (short down) female on the left and full color (long down) on the right. The young do not tell us much more than that the parents are carrying rec. red.]

TIM RETELL WRITES:2jan'04

Ron, the photos show two birds, the one with the light band on the tail I think is [recessive] opal. The one with no tail band, I just don't know, but it has a lot of red in it. Can you help with the I.D. of what I'm working with?





RON HUNTLEY RESPONDS:

I think the first bird is a blue Indigo light checker and recessive opal. The other is also a blue Indigo but T-pattern and something else. The red color is the effect of Indigo on the course pattern areas that normally would be black. Indigo changes these areas to plum red color. It washes out the tail bar but to a lesser degree than Dom. opal. You might also ask Dr. Paul Gibson what he thinks.

THE EDITOR:

Ron, I agree with you.

SAMEER ALI WRITES:

I have this beautiful squab. See pictures. I would like to have a full identification, if possible, and the way to improve it (the program to make its offsprings more beautiful such as bar, Checks, T-pattern, blue base, Ash red Base, or adding some genes). Also the way to duplicate the color.



GRAHAM MANNING RESPONDS:

I'm not sure what's going on with this squeaker! I was thinking the tail barring was similar to that 'azuro' affect we saw a while ago? Seems to be some stencil involved also. Homo Indigo crossed my mind also, but with other unknowns added? I would love to see pictures of this squeaker 'after' it moults into adult feathers.

SAM REPLIES:

Thanks for passing by. I forgot to mention that its mother is suspected to be Od with white bar. Its father is hetero Spread, hetero recessive red. I would love to know exactly what's going on. I let you know after moult.

THE EDITOR RESPONDS:

Yes, I agree this is a beautiful squab. It will probably not change much after the molt, except the tail may change some. It is a Dominant opal T-pattern, probably Dirty, and possibly also Sooty and carrying recessive red. It is always good to include a full side view of the bird. The head may change a little lighter and the color of the feather tips will either disappear or be harder to see.

The tail coloration appears like this when you add other factors to the Dom. opal such as Chalky or Faded. Indigo with Dom. opal also may add barring somewhat like this but usually not this distinct.

No, these are not fret marks in the tail. They are what I call confusion bands. The gene for Dominant opal plus other factors causes the color to turn on and off, on and off, creating the series of bands that are never exactly the same on any two birds. This same thing happens sometimes with a barred bird and you get multiple bands across the wings.

Your best bet for more like this bird is to breed them from the pair you have. Other combinations with the parent Od or the youngster may never repeat this pattern. In fact, you may not get the right combination to produce this exact coloration even from the present pair since Od is so variable in expression.

May you have the good fortune to produce many like this.
(Graham the azuro is a single wide tail bar but is azure blue outlined with black on a Blue base bird. With recessive red the center of the bar is still azure blue but outlined with darker red.)

STEVE SOUZA WRITES:

Paul, Ron, and others interested in the ongoing saga of my black hen and her strange offspring... Ron, you are probably right but this hen is at least het. opal if not homo recessive opal. It has produced a number of blue bar opal young, as well as the blue spread young with light grey (almost white) markings that Paul identified as an extremely light opal hen.

Since the sire for the really light spread opal young hen was a red-phase, it seems likely that it is red-phase as well, explaining the much lighter appearance.

This black opal hen is the same hen that (when mated to a blue/brown barless cock, het for opal) produced the two brown/yellow looking young. One obviously bar, the other appearing T-pattern. Comments?



EDITOR'S COMMENT:

Looks like a good Spread recessive opal hen to me. This hen unfortunately is not a good black or anything else. I think in the past, birds this color were discarded and thus the beautiful Spread males are rare in pigeons. This lighter than the one I show in my book, being more expressive of Spread rec. opal in the tail and flights.

MICHAEL SPADONI WRITES: 4jan'04

I noticed an 8 week old blue check Bokhara Trumpeter youngster start to moult in grizzle, it appears to be Undergrizzle.

In the picture, it can be clearly seen, the 3 new secondary covert feathers with white along the quill, the first primary that can't be clearly seen has a finch mark on the tip. The second picture is a close up of the 3 new feathers. The 3rd picture shows some of the new boot and hock feathers also growing in with a very large amount of grizzle.

The parents are self black and a blue check mismark, I have 5 other siblings to this one, one has 1 grizzled boot feather, most are mismarked in that they have white in the boots and I have found so far 100% of the these birds are hetero recessive white. I have bred rec. whites from the mother before, I also have bred 36 young from this hen to various cocks in the 3 years since I imported her. She shows no type of grizzle whatsoever. Neither does the black cock.

Interesting to note that the bird is also Sooty. This can be clearly seen on the close up picture. Any ideas on the specifics of this type of grizzle?



YE EDITOR WRITES:

Michael, this is not Undergrizzle. Undergrizzle reacts the opposite in that it decreases in expression after the molt. And the bird is not Sooty. Sooty fills in the center along the quill and would make this bird look like a dark T-pattern. I see the "ink spots" that you thought were Sooty. Haven't a clue what causes them.

The 'grizzling' is more like the color break action produced on Almond. Very possibly this is a NEW trait.

SAMEER ALI: WRITES 6jan'04

I would like to ask about the genotype of these phenotypes: 1) Lavender, 2) Isabell. And what is the phenotype of (1. B*A//B*A; S//S, 2) B*A//B*A; S//S; d//d.

MY RESPONSE:

The genotype of the Lavender phenotype is not just one. Ash red milky and blue milky are referred to as Lavender, so is Spread Ash sometimes.

The genotype of the Isabelle phenotype also is not just one. Isabelle is French for blonde; most Isabelle Pouters are Dom. opal recessive red or Dom. opal recessive yellow; however in other breeds, white barred (and sometimes check) browns or khaki are also referred to as Isabelle.

What is the phenotype of B*A//B*A, S//S? Ash red bar Spread (Ash red pseudo barless) but the bar does not show unless Sooty is in the mix. This is called Lavender. B*A//B*A, S//S, d or d//d is Ash yellow bar Spread (Ash yellow pseudo barless).

JAKE SEWALL EMAILS 7jan'04

Does anyone know the genetics behind the Saxon Breast marking? I am wondering if it is a refined version of the Pencil factor? The young are laced but moult white wings. Head and breast remain colored and the flights retain some lacing, like the flights on some penciled birds?

Also, is it possible that white winged Archangels are this same combination of factors with the addition of white flights (to cover the laced flights)? Or has the same (almost) mrking been achieved in two different ways?

BOB WRITES:

It's not refined, it is the pencil factor.

THE EDITOR WRITES:

Hi Jake. Sorry Bob, although many (if not most nowadays) Saxon Breast Pigeons are also Pencil, the Breast Pigeon marking is not part of the effect of the Pencil gene. The Breast Pigeon marking is an extension of the Moorhead marking. Pencil does not usually mark the head but it can to some extent. Pencil (normally) obliterates the pattern of the wing and with certain combinations will produce white wing.

Normally the body including the wing shield of Pencilled birds has different amounts of pigmentation, starting at the beak, the feathers are colored and diminishes the pigmentation beyond the head mainly over the back and tail. Hana Pouters, Danzig Highfliers, Breast Pigeons, and Tete Noir de Brive are mostly Pencil.

Also, the whitewing of the Archangel is a completely separate trait that depends upon Ash red base to print out white. Yes, the whitewing of Archangels has been achieved in a different way without Pencil.

MICHAEL SPADONI EMAILS:

Has anyone come across this genetic fault before, if you look carefully just in front of the eye (halfway between the eye and the nostril) is an opening angled at 45 degrees. The only reason I noticed it was this youngster has the start of a one eye cold on the other eye and while having a close look, noticed liquid was weeping from this hole so it's obviously attached to the nasal canal.

I did notice that this youngster was different in the nest as it had no feather growth in this area.



[Looks like it might be a misplaced enlarged tear duct. It is probably a mistake in development and not genetic.]

MICHAEL SPADONI EMAILS:10jan'04

It seems Bokharas have some unusual features, they have a unique Bald head gene. I sent some pictures the other day of a young blue check I have that is moulting in grizzled feathers. Here is another trait I have mentioned before. It's a type of Grizzle that most resembles flash grizzle on how it expresses on the feather. It expresses mainly on the wing shield (C area).

It is not Toy stencil nor is it either form of Opal. White in the boots seems to be a common feature. I have found white in the boots normally in my Bokharas [normally] means the bird is heterozygous for one of the alleles on the Z locus normally [recessive] white, or splash but the late and great Doc Hollander's Z locus chart also lists penciled. Could this be a mutated expression of penciled? Or an altered expression of undergrizzle concentrated on the shields?



'02 Blue cock bred by
Dusan Stojimirov, Germany



Young Blue T-pat bred by
Darrel Ferguson USA



Older sibling, molt almost
completed (D. Ferguson)



EDITORS REPLY:

The '02 cock resembles Flash Grizzle. The second and third pictures of the blue T-pat of Darrel Ferguson's are very typical of homozygous Undergrizzle in the juvenile and adult plumages. Picture 5 is a blow up of the feathers of the Stojimirov bird. It very much resembles some of the flash grizzles.

I am still not sure about flash grizzle. It looks different from Undergrizzle but I have not had the opportunity to work with it myself. I visited Dr. Hollander (in 2003) and saw what he was doing with what he purported to be flash grizzle and I told him what he had was Undergrizzle. I hope to follow up on the flash grizzle that was reported by Lynn Kral and Tim Kvidera. (I talked to Lynn and Tim and they did not give Doc a start of the trait. What they have certainly looked different than Undergrizzle. It affected the tail feathers and some of the tertiary flight or coverts differently. Undergrizzle does not seem to affect the tail feathers except a little in rec. reds. The main effect when one is present, with Undergrizzle on the tail, was the presence of one or two white or nearly white feathers. This was on full color birds.

I am happy to report that I bred a couple young pied Homers that have the Flash grizzle trait. I should know a lot more about this trait in a year or two.

I commented above on the pictures sent earlier that look more like Almond break.

MORE INTERESTING ADS SENT BY JDF

On a bar of dial soap: "**Directions: Use as regular soap.**" Is there an irregular soap?

On some Swanson's frozen dinners: "**Serving directions: Defrost.**" Good suggestion!

On the bottom of Tesco's Tiramisu dessert. "**Do not turn upside down.**" A bit late?!

On Marks & Spencer Bread Pudding: "**Product will be hot after heating.**" Thought so!

On package of Rowenta electric iron: "**Do not iron clothes on body.**" ?????

On Boot's Children's Cough Medicine: "**Do not drive a car or operate machinery after taking this medication.**" Gotta get those darn 5 yr olds off the fork lift!

On Nytol Sleep Aid: "**Warning, may cause drowsiness.**" I am taking it because????

On most brands of Christmas lights: "**For indoor or outdoor use only.**" Is there someplace I don't know about?

On a Japanese food processor: "**Not to be used for the other use.**" Boy, that makes me curious, someone out there know the 'other use'??

On Sainsbury's peanuts: "**Warning: contains nuts.**" Halalujja, the real thing!

On an American Airlines packet of nuts: "**Instructions: Open packet, eat nuts.**" Duh!

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SAMEER ALI EMAILS: 8jan'04

I would like to share these photos of web-footed pigeons. The left leg has two toes webbed while the right is webbed even to the nails.

WILLIE CORT EMAILS: 8jan'04

I was just about to post this when I read your message. This is my young Homer with a webbed foot.



Sam's right



Sam's left



Willie's Homer

EDITOR'S COMMENT:

Thanks, Sam and Willie for sharing these pictures. Very good examples of web-foot.

SAMEER ALI WROTE:

I have these duns which puzzle me. Why there is a different degree of duns? ps: the black is a cock and the duns are hens.

MICHAEL SPADONI EMAILS: excerpts

I think the bird on the right is a dun, I have bred many duns with this shade as well as dark dun on the left. The bird on the right also appears to be sun bleached. If the dun is not dark, the bleaching is more pronounced.

What causes this variation?

STEVE SOUZA RESPONDS: 9jan'04

I think the reason you're puzzled is that you don't have two 'dun' birds. One looks like Spread Blue (Black), one looks like dilute Spread Blue (dun), and one looks like intense Spread brown (self brown). Especially if it is a hen, I bet the two hens were not both short downed in the nest?? If not, then brown is likely.

EDITORS 2 CENTS:

Yes, Steve is right. This is a good group of Spread birds for comparison. The left bird is dun, the center bird is black, and the right bird is brown. Michael noticed the bleaching in the one bird which is always a good sign of brown. (Brown bleaches much more than other colors.) With this group could be added a nice khaki for the dilute of brown. It would look like the light bleached area on the brown.