



Isabelle



Ribbon tailed Ash red



Light Andalusian E. Swift

PIGEON GENETICS NEWSLETTER

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EDITOR: LESTER PAUL GIBSON

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FRED WRITES:

My current understanding is that the grizzle gene plays a large part in eliminating the majority of the colour ...however, I have grizzle in my Budapests and they still have a small amount of dark "flecking" around the head and neck area, as well as a little in the flights and tail. How do I eliminate this and generate pure white birds?

MICHAEL SPADONI REPLIES:

I sounds like all your Budapests are blue based. Do you have any Ash Birminghams? Add in Ash red to Grizzle and they will turn white with pearl eyes.

RON HUNTLEY EMAIL:24nov.'05 excerpts

I'm not sure that grizzle on its own will produce a pure white bird with colored eyes, at least not in my loft. However, if you add in the Ash red and the Spread factors you should be able to eliminate the remainder of any Ash red still showing. I say this, because what you are trying to do is turn off the pigment production in the bird. Therefore, the question becomes - how do we do that?

Ash red turns off the production of pigment at the feathers extremities. Grizzle does just the opposite, i.e. it stops formation of pigment in the center of the feather. I have a photo on my web site that demonstrates this. However, the combination of the two does not always result in all pigment being turned off. In the case of grizzle the darker the pattern (checker and t-check) the more pigment color shows. Homozygous grizzle reduces this effect but not completely. Therefore, to get where you want to be you must begin the process with a barless or bar pattern pure for Ash red and then homozygous Grizzle and at least one factor for spread.

SAFETY FIRST SENT BY JDF

Stay safe in the world today:

1. Avoid riding in automobiles (20% of all fatal accidents are in automobiles).
2. Do not stay at home (17% of all accident occur in the home).
3. Avoid walking in town (14% of all accidents occur to pedestrians).
4. Avoid traveling by air, rail, or boat (16% of accidents occur in these).
5. Avoid hospitals (32% of all deaths occur in hospitals).

You will be pleased to learn that the safest place for you to be at any given point is known. Only .001% of all deaths occur in this place. The safest place on earth for you to be is (in worship services in church). FOR SAFETY SAKE – ATTEND CHURCH! IT COULD SAVE YOUR LIFE.

YE EDITOR WRITES:

Fred is right, of course, most homozygous Grizzles do have some dark feathers on the neck and or head as well as dark wing tips and tail tips. They can also be bred without the dark feathers on the neck and head but with just dark flights and tail tips. All variations can be selected. With those that have the dark flights and tails; the addition of white tail and white flights will clear that up. Thus as Ron says Grizzle by itself will not produced solid whites [with blue base] but with Ash base it is possible.

There is a grizzle that will produce pure whites by itself. It is White Grizzle in which the heterozygous G*W looks similar a Tiger Grizzle or a near white Splash. The homozygote is normally all white.

TOM BARNHART EMAILS:

In response to the discussion started by Steve Souza and Ron Huntley [on Indigo/Dom. opal], I will offer the following. Over the last several years, I have found myself overrun, so to speak, with birds that are Indigo, Dominant opal Blue. In my experience, the presence of Indigo with dominant opal is not signified by a rusty color but rather by pure white bars and checks, and usually with a lighter body color than normal. There is some variation, probably due to the variability of Dominant opal, but if you have a light Dominant opal with pure white bars, you can almost bet that Indigo is involved. (Add Ash red to the mix and you will get an ill-defined gold-colored edging on the bars. Attached photos – one is Blue the other Ash red.)



[Editor, I cut the top of the heads off, Tom didn't.]

EDITOR:

A lot of very good discussion took place during the latter part of Nov. 03 about Ts1 and its effects. To these I interjected the notes that heterozygous Ts1 with or without hetero Ts2 indeed produces bronze spangled blacks [like the picture below] but not all the time. We are still working on that aspect. There are a number of genes that can enhance the effect of Ts on some birds. These include recessive opal, Dom. opal, and juvenile Indigo. However, Indigo and Ash red tend to mess up the pattern of the Ts and do not produce nice sharp bars, etc.

Recessive opal Spreads are not sex-linked. The male is laced similar to a reduced black and the female is just a poor black with the C areas showing blacker. This is not sex-linked but is sex-influenced, just like the chicken rooster and hen.



Picture of this Thuringer sent by Michael Spadoni.

Black t-pat Ts1

GRAHAM MANNING writes (excerpts)

That would explain the bronze spangled black [Modenas]. I never saw them until the import Modenas arrived here several years ago. Prior to that all our black Modenas were solid black.

Your comments on Indigo messing up the sharpness of the bars in Ts birds was of interest to me, because I now have a young Indigo sibling of that dilute bronzed (Ts1) Serbian hen I sent a pic of recently. It looks like it has the Ts as well? But as you say the bar is not sharp and pretty hard to tell. Still only juvenile feather though.

JIM MUCKERMAN WRITES:

In reference to your queries/comments on this Ts1 bird. I'm not sure if this will help but I am attaching a pic of a Ts bird "cock" Black with White bars which I paired to an Ash red hen. A couple of offspring are also included. The first is a Spread brown that I presume is Ts1 from the cock. Another offspring is possibly a brown bar? I think this one is also probably Ts1 but in a bar pattern like the parents.

Would you agree that this is Ts1 at work here? I would appreciate your comments.



Black Ts Complex Bar Ash red hen Yg Spread Brown hen Yg Ts1 bar brown hen

EDITORS COMMENTS:

Nice depiction of a Black Ts whitebar cock, its Ash red mate and their two young brown hens. Shows the male is het for Spread and het for brown. Males from this mating will be Ash Spread (probably with bronze bars) and Ash with bronze bars.

GRAHAM MANNING WRITES 27nov'03 (excerpts).

I look forward to your research data on the Brander crosses. I'm thinking this Undergrizzle is more likely 'ordinary' grizzle but is being suppressed by T-pattern, Dirty factor, etc? Not so much 'suppressed' really as 'smothered' I think is a better description?

Another thing, before I forget... the Dirty gene that was being discussed, I'm afraid I disagree with some points of referral. To me a dirty factor pigeon is the very same dirty gene as exhibited in the phenotype of the Egri Tumbler (as per Axel Sell's book). I don't agree with the eye-tick scenario. Could the dirty factor suppress grizzle? I was even thinking that Dirty may be allelic with Grizzle? (It's hypothetical...humour me). If so then what would a Dirty/Grizzle individual look like?

The Branders mentioned earlier may very well be homo Grizzle as was mentioned. (That was taken from tests done by Earl Klotz wasn't it?) I really don't see how the presence of Undergrizzle is actually causing the Brander phenotype????

MY REPLY:

Tests will tell the story on the grizzle in Branders. Whichever it is, it is tightly linked to the bronze. There are times I wonder which it is, but both Grizzle and Undergrizzle can be extracted from the bronze Tipplers.

Yes, the Egri Tumbler in Sell's book is Dirty but this is only one phenotype, some are lighter, some are much darker being almost black. On page 125 of Sell's book the symbol for Sooty is So (not so) and is a partial dominant that normally shows up after the first molt. Back up to Figure 119, the Stargard Shaker is not just smoky but is also Dirty.

Concerning the idea that Brander Bronzes being homozygous Grizzle. No, that was taken from my own findings and I am not familiar with tests done by Earl Klotz (whoever he is). Glad he agrees though.:-))

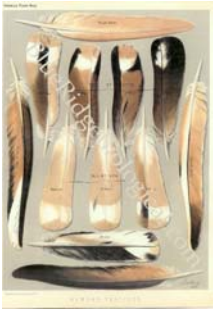
While we are on the subject of "hypothesis, sometime earlier you wondered if the idea that Modena bronze and Ts1 were the same, was from someone else's hypothesis. NO, I do my own thinking and tests. I never heard of anyone even come close to that idea before my tests and proof that they were one and the same.

In fact, the idea of Toy Stencil and frill stencil traits were hypothesized and tested by John Potter and I. Hope this helps.

WILL BROWN WRITES:

118 year old almond feathers. I knew that subject line would get your attention! Just thought I would post this here as likely interest to a number of others. Aside from raising pigeons, I am a rare art dealer specializing in natural history subjects. When this print entered my inventory, I just had to post it here for all to see. The attached photo is a scan of an authentic (not a reproduction) 118 year old print titled "Almond Feathers". Of course, the protective watermark is not on the actual print! Printed in Europe, 1885, it depicts a variety of almond feathers. It is as scientific as it is beautiful. I very much like how the artist demonstrated the color change during successive molts in both a cock and hen's tail feathers. Kite, splash and agate are also represented on the print. By the way, the print is available if anyone is interested. Hope you enjoyed seeing it.

[If interested in the print contact: www.BlueRidgeBiological.com]



[There are two problems with the picture. One is that the hen is dilute Almond, the other is that the feathers depicted are representative and not the same feather (follicle) positions. Otherwise a very, very interesting picture.]

MICHAEL SPADONI writes 30nov'03 excerpts

The picture below is a dilute Andalusian Bald hen I bred (d/, In//+, S//+, Bh//+, K//+, C*T//C). Notice the striations and the large dun patch on the wing, I don't believe this bird is a mosaic but just a different variation of the striation effect seen with Indigo and similar to what is seen on het Ash cocks.

EDITORS COMMENTS:

I recognize that this is a dilute Spread Indigo but it has so many spots that it resembles an Almond. Large patches like this are not infrequent on Almonds. Are they mosaic spots--- It depends upon your interpretation of mosaicism. Some of my Andalusians will also have such areas sometimes. And as you say het. Ash may also.



Babydoll Fantail

RALPH SMITH SENDS: 1dec'03

Here is a babydoll that another Fantail breeder raised.

YE EDITOR WRITES:

Thanks, Ralph. These "babydoll" birds almost all (but not all) are from parents, one of which is known to be Dom. opal. Also they usually are the same washed out color that resembles milky or homozygous Dom. opal coloration. A few have been other colors (dark steel gray or bronzy). Almost all have the parentage that includes Fantail and Od genes. There have been a couple of Homers and a couple of Rollers of this phenotype.

TWO PEANUTS WALKED INTO A BAR, AND ONE WAS A SALTED.

STEVE SOUZA WRITES: excerpts

I went out to the loft yesterday and took a side view pic of the youngster that started this whole discussion [about Ts1 & Spread].

The bird is the result of breeding tests to see what the Dam is. She is a “mystery” black, and is only slightly off color black. She has Dirty and Spread on a blue base. The offspring have shown she is both bar and Check under the Spread.

The question is – what is causing this youngsters C areas to show through? Is it possible that Spread has been effected by something to create a variability.

RON HUNTLEY REPLIES:

The photo attached to your post showed a young hen of the following gene make up. Hemi blue, homo recessive opal, linked to bar and Spread, Dirty and who knows what else. Is this bird down from any of my stock? If she is then you know where it comes from as I have several just like her. She will molt to an even darker color (almost black) as she ages.

STEVE SOUZA REPLIES: excerpts

Pretty close evaluation. Yes, the young hen is hemi Blue and homo opal but the opal is linked to bar and to barless. Spread is linked to the Dam’s Check not to her bar. Yes, very likely Dirty. Here is a tail view of the same youngster. From this the Spread seems to have washed out a lot more of the “black” than I expected from seeing the photo in Paul’s book.

EDITORS COMMENTS:

First I am surprised that this caused the discussion on Ts1 and blacks since Ts1 is not involved here. Steve, you are right this bird is lighter than the female Spread recessive opal shown in my book. The expression varies according to what the rec. opal gene is linked to as well as other genetic factors present in the bird. If Spread is on the same chromosome as bar-rec. opal, or as Check-rec. opal or as barless-rec opal; then the expression will be different for each. Also, the red-phase may have some bearing on the expression of the rec. opal Spread. This bird is almost as light as would be expected for a male rec. opal Spread. I only bred one Spread rec. opal hen, out of several dozen, that was as light as the males and this was from a red-phase opal Spread Check.

TWO ANTENNAS MEET ON A ROOF, FALL IN LOVE AND GET MARRIED. THE CEREMONY WASN’T MUCH, BUT THE RECEPTION WAS EXCELLENT.

TWO HYDOGEN ATOMS WALK INTO A BAR. ONE SAYS, “I’VE LOST MY ELECTRON” The other says, “Are you sure?” The first says, “Yes, I’m positive”.

STEVE SOUZA WRITES:3dec'03

I received information from a California Homer flyer about a strange color change in one of his young birds...I'm hoping some of you may have seen this before. If not, we may be looking at another new gene discovery..?? It seems the reverse of ember.

The young hen started out as a Sooty Blue bar with some "bronzing" on its bars. Upon first molt, the newly molted feathers seem to be red (ash-red?) in color. The bird is now almost done with its molt, and looks (according to the owner) like an Ash red bar with sooty. I've got him checking on the tail now to see if it still has a bar or not.

The sire is a blue white-flight while the Dam is Sooty blue. The grandDam is known to be het. rec. red, so the Dam probably is as well. The sire has never shown any rec. red in his offspring on his ancestry. Ok, this is strange, but possible, any thoughts??

EDITORS COMMENTS:

Thanks, Steve for sending this info and the pictures. It would be very good to get some pictures of the adult coloration. Do I think this is a new genetic trait? No, it looks more like a hormonal condition. But then, I have been wrong before. Since the parents are both blue, the bird should be blue. The new bar feathers do appear to be Ash-red with rec. red.

ONORIO WRITES:10dec'03 excerpts

I was curious if scientists have standardized on a set of symbols or not. I can't imagine them not having a standard set of symbols somewhere. Where might one find the list that the scientists work from?

While we are on the subject of symbolic representation of alleles, does anyone know why Ash red is symbolized as Ba [it is B^{*}A, with the * meaning superscript]. I'm guessing that it's a reference to the fact that it's an allele of Blue and that Blue was probably identified first.

Also does anyone know why recessive red is symbolized as e?

YE EDITOR WRITES:

Hi Onorio. Curious little devil aren't you? THAT IS WONDERFUL! I will try to explain your questions (notice I didn't say answer). In the beginning...whoops, that is another story. Do scientists have a standard set of symbols ...well, no, not exactly. BUT we do have some guidelines. When choosing a symbol (for pigeon mutants), we cannot use one that has already been used by someone else for a trait in pigeons. For instance, in 1911, Bonhote & Smalley selected G for Grizzle, d for dilute, and C for Checker. In 1930, Horlacher selected K for Kitiness and C for crest. Hollander in 1937, noticed the duplication and changed the symbol (C) to cr for crest. You will note two things here.

One, if the trait is recessive to wild type (and crest is), then the symbol starts with a lower case letter. Two, since the symbol was already used (for Checker), Hollander correctly replaced it with cr. If the trait is dominant to wild type, then the symbol starts with a capital letter.

Where do the symbols come from? The researcher makes them up from what he observes. Only mutants are named... Grizzle =G, cr = crest, skpy = show king polydactyly, etc.

To decide what symbol to use, a researcher must determine if the mutant trait is dominant or recessive to wild type. A researcher finds a mutant that looks purple, he checks the literature and finds no one has described a purple mutant and that p has already been used for porcupine trait, so he uses pu. This is too simplistic, but you get the idea. If you mate the purple to wild type and get an intermediate phenotype then you must test further because it may be a partial dominant trait. If it is it still gets a capital letter designation. These partial dominants may be nearly recessive or nearly dominant.

Why is Ash red symbolized B*A. Well, first it was described by Cole and Kelley in 1919, as A, but they did not say what A stood for except it was a dominant red and we assume they used A for ash. Anyway, in 1931, Hawkins found that it was really a Dominant allele to brown (b) and so the symbol was changed to B*A showing that it is a dominant allele of brown and thus we have the series of brown, wild type(blue), and Ash red at that locus.

Now e is a little trickier. Cole, 1914, first mixed Ash red and recessive red and stated that recessive red was RRbb. (Don't understand that one myself but remember genetics of pigeons was in its fledgling stage.) Next, in 1923, Christie and Wriedt used r for recessive red. The symbol e (meaning extension) is used in a lot of critters to denote an all red critter. Metzelaar, in 1926, chose ee for recessive red and we have accepted e as the symbol for recessive red.

So now, you see that this whole symbolization thing is mainly a tool used by researchers like shorthand is to a secretary.

If you want to see some really scientific symbolization of genes you should see the genome map of man. It will drive you nuts!!!

BRYAN BEDDES WRITES:11dec'03

I'm assuming this bird to be het. Indigo, but I'd like to hear from anyone that might want to comment.

GRAHAM MANNING RESPONDS:

Looks a lot like smoky Ash red? I'd say het for Indigo is a good call. It certainly looks similar to some of my het Indigos on an Ash red base, but I am thinking smoky gene is playing a hand in the phenotype as well? I have Indigos on Ash red base and on Blue base, and the phenotypes depending on what other factors are involved can be quite different at times. I have smoky factor Indigos, but only on the blue base in this current crop of youngsters. That bird definitely looks Ash red base to me.

TWO CANNIBALS ARE EATING A CLOWN. ONE SAYS TO THE OTHER, "DOES THIS TASTE FUNNY TO YOU?"

STEVE SOUZA RESPONDS:

It doesn't look like any of my Indigo Blues, perhaps Indigo brown? The neck doesn't look dark enough, and the tail bar looks GONE instead of just washed out.



EDITORS 2 CENTS: Bryan, you had a few good responses. It does look like het. Indigo brown. If it is Ash base (I think it is brown), then it is Spread with het e and het. In. The two combos look similar.

SAMEER ALI WRITES:10dec'03

Attached are pictures of a cock and a hen. I would like to know what is the color or combination of colors composing the cock. The hen is dilute Spread Blue (dun). Pictures of the off-spring will be in the next post.



cock



hen

MICHAEL SPADONI REPLIES:

I would say the cock is hetero Ash red, hetero Blue/Black, bar pattern Sooty & shield marked pied factor. Does the hen carry recessive red? Having bred a Blue bar and a black, it confirms that the cock is only hetero Ash-red, otherwise the youngsters would have all been Ash. Also the dun hen is hetero Spread, hetero bar, to be able to breed a blue bar youngster.

RON HUNTLEY REPLIES:

Michael, in my opinion you are 100% correct.

THE EDITOR WRITES:

I said that I also thought the Ash red is also a Spread or the bar would not be so smeary and that Sooty was what was causing color to show in the wing. Also, I had told Sam that he should include full body shots to give a better idea of the whole bird.

SAM EMAILS:

Here are shots of the dun hen and of the young. [He also sent head, wing, and foot pics.]



dun hen



Blue bar young



Dirty, Sooty, Check

YE EDITOR WRITES:

Sam, you are great. The new pictures show a lot more information. The first youngster looks like a Dirty Blue bar. The second youngster is a Dirty, Sooty, Blue Check probably carrying smoky instead of Spread although it appears to have Spread markings scattered around the bird. The scattered white on the second bird is most likely produced by a mutant white that we (for want of a better name) call migratory white. The white belly possibly is a part of the saddle trait.

Of interest to me are the head shapes. The bill is more like the Homer and the eyes are somewhat bulging like the Vienna SF. The overall body shape is more wild type.

“Doc, I can’t stop singing ‘The Green, Green Grass of Home’” “That sounds like Tom Jones Syndrome”. “Is it common?” Doc. says “It’s not unusual.”

Two cows are standing next to each other in a field. Daisy says to Dolly, “I was artificially inseminated this morning.” Dolly says, “I don’t believe you.” “It’s true, no bull!” exclaimed Daisy.

An invisible man marries an invisible woman. The kids were nothing to look at either.

A man takes his Rottweiler to the vet and says, “My dog’s cross-eyed, is there anything you can do for him?” “Well,” says the vet, “let’s have a look at him.” So he picks the dog up, examines his eyes, then checks his teeth. Finally, he says, “I’m going to have to put him down.” “WHAT? because he’s cross-eyed?” “No, because he’s really heavy.”

I went to buy camouflage trousers the other day but I couldn’t find any.

I went to the butcher’s the other day and bet him 50 bucks that he couldn’t reach the meat off the top shelf. He said, “No, the steaks are too high.”

I went to a seafood disco last week... and pulled a mussel.

THESE CORNY SENTENCES HAVE BEEN BROUGHT TO YOU VIA COURTESY OF RON HUNTLEY. Thanks Ron.