



A pink (albino) porpoise calf and his mother.

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MANGUS@mail.ru writes: excerpt

I want to have white bar Archangels, but it is impossible because you can see toy-stencil only on spread birds.

EDITOR:

I don't know where that idea came from. Of course you can have toy stencil Archangels. It is just a matter of putting the Ts complex into the genome.

EDITOR: Bits and pieces:

Ron Huntley emails – I don't think smoky will darken with age but in my opinion, it is the best modifier to both bring out a color and darken it.

Since sooty only affects the wing shield area, it is not much of a darkening factor. Sooty does increase with age but on a dark check, the wing shield is already dark, so there really is not much improvement. It works best when on a barless, a bar, and a light checker.

EDITORIAL ON SOOTY:

Sooty has been misunderstood since its early description in 1922 by Sarah van Hoosen Jones. She thought it was part of the C series and described it as a dominant. It was later described as a recessive. This is because the Sooty normally does not show on the juvenile feather, but sometimes it does. As soon as the sooty bird molts in comes the sooty markings on the wing feathers looking like variable checkering. A blue barless or barred squab changes into a checkered phenotype. As Dr. Hollander observed "True checker marks are on the outer vanes of the feathers whereas sooty marks are around the distal rachis of the covert feathers"

The statement under bits and pieces shows the common thought about sooty. However, there is much more to sooty than that. As a bird ages, the sooty marks migrate to the undertail coverts then forward to the hock feathers then if enough darkening factors are present forward up the breast and over the back. In fact, sooty T-pattern along with dirty can produce charcoal blacks. In Ash reds the sooty produced dappled ash reds. Sooty on the Brander bronze genome can be seen in

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most if not all feathers of the bird. There are instances when sooty produces a phenotype that mimics the checkered grizzle (G).

RON COSTA EMAILS:

The best mating is a black with an underlying T-pattern, so this would suggest a better colored black since most good blacks are t-pattern plus other modifiers. The underlying t-pattern produces better lacing in the reduced young. T-pattern produces the best almonds also, as well as the best toy stencil.

AMANDA BARBAR EMAILS: 16nov'07 Re: is this Roller a Grizzle?

Hi Paul, here is a photo of the ash red grizzle as a young bird before he moulted.



RICHARD CRYBERG RESPONDS:

I have raised several ash red grizzles that looked a lot like this in nest feather. The big difference between your bird and the ones I have raised is mine are generally a lot whiter than yours. Mine only have dirty and check in them as additives. I did not even have sooty in my loft when I made these birds. Your bird also molted darker than mine molt when on ash red. But if mine start whiter it is reasonable they will be whiter after the molt also. Mine do not show the color in the tail and primary flights that yours shows but this may be due to the recessive red in your bird. I find that grizzle responds very easily to any selection pressure at all. A couple of generations and you can change the amount of colored feathers drastically. It seems clear there is more than simply classic mendelian stuff going on with this trait.

Before someone claims grizzle always starts out solid color and then molts to

grizzle go back and look at old lit. Levi even has a picture in “The Pigeon” showing a grizzle much like Amandas in nest feather. Hollander talked a bit about it someplace or other.

EDITOR:

When we work with ash red and grizzle seldom do any two look the same. If the bird carries undergrizzle (Ug), it will usually molt darker. If it has both undergrizzle and grizzle (G) it may stay whiter. If it has tiger grizzle (G*T) as part of its genome, it will molt a lot whiter.

Cryberg cautions against claiming grizzle always starts out solid color and then molts to grizzle. Grizzle (G) never starts out solid color. Tiger grizzle usually does but not grizzle.

EDITOR:

Here are a few interesting pictures. The first two are a couple nice interesting colors in reduced. I believe these were sent by Jerry Sternadel. The next four are pictures lifted from the Indian Fantail Club. The last two are pics of milky birds sent by Mick Bassett.



[I bred one this color years ago, still have it. Beautiful phenotype.]



A very nice recessive red dilute. (yellow).
on these two.



Od spread. Notice the hock feathers



Another Od spread.



A flash grizzle (check those pantaloons).



Very nice milky Mookees.



And milky Lahores.

JERRY STERNADEL

[Jerry sent me pictures of an F1 from a frill stencil cross that showed whitened spots on the top of the tail feathers but not on the bottom.]

EDITOR:

The frill stencil gene is recessive so it should not express on the F1. John Potter showed that the homo fs can genetically drift enough that none show the fs markings. It is possible that there is fs in Figs but just does not express?

There is a breed in Europe that only the females show the marking. I suspect this may be another gene that expresses similar traits to the fs.

Ralph Smith had an experience similar to Jerry's when breeding Ts,fs birds. The tails showed spots on top but not on the bottom in the juveniles F1s. Mating this bird back the a parent is the fastest way to check whether it is fs or not. Some strange things happen with fs. I had a young fs that did not show the spots so I plucked half its tail at fledging. It came in spot tail on that side and three molts later, only the side I pulled the feathers showed the spot tail trait.

JERRY EMAILS:

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Very interesting, Paul, as I have only had hens express as F1s.

RON COSTA EMAILS:

That information on the tail you pulled is interesting...Weird. I utilize the same trick with my frills, pulling several feathers and a clump of feathers on the windshield to determine if they will spot up or lace in satisfactorily. Usually works.

LYNN KRAL EMAILS: 11nov'07 excerpts (combination of two emails)

Paul and Tim - This is an update on the "baby doll". Included is a picture of her and her parents. Last year the parents made two baby dolls and two babies that were the color of the baby doll and some were brown spread. This year the pair made two babies that were the color of the baby doll, a couple browns, but no baby dolls.



Parents of "Baby Doll" – Spread brown male and ? female "Baby Doll"



Baby doll and young cock her color Od milky? Sibling of "Baby Doll" Od ash?



Spread brown male and “Baby Doll”



Young from “Baby Doll” ???

Lynn’s questions –

- 1) is baby doll made up of two genes, one that turns off color and another that turns off feather growth?
- 2) If phenotype is made up of two genes, then they must not be that close together on the chromosome because they can be separated and produce the birds that have the color turned off and not the feather growth turned off.
- 3) “Baby dolls” can produce good babies that are colored and grow feathers just as well as the regular bird.
- 4) I am wondering which bird would be best to put ‘baby doll’ to next year. The young cock or one of her babies? Is the color gene being turned off more important to learn about or should I put her back to her babies to see what they produce? The babies may not be hetero for the color gene being tuned off or the feather growth gene being tuned off, whereas the young cock could possibly tell us more about the color gene. What do you think?
- 5) Or maybe should I put baby doll with her baby and the ‘ecru’ young cock to the mother or to the light pastel grayish bird if it turns out to be a hen?

TIM KVIDERA RESPONDS? EXCERPTS

Since you like the color of the young cock and want more I would suggest pairing him to mom as one option. Another, more scientific and patient way would be to tear him apart and find out what that recipe is. Pair him to a brown bar to find out what base color he is and whether he is at least hetero spread. Then to a milky to see if he is that too. Along the line you should be popping combinations with dominant opal if it is in there.

Another thought is he could be milky spread brown dominant opal. He is a bit mindful of my milky brown T-pattern old hen, but more uniform and platinum looking. Spread and dominant opal could get it there.

Follow-up emails indicate that the baby doll breeds as an ash red hen. This would indicate that the brown was not the actual father. The hen pictured with the brown cock and the baby doll could be milky dominant opal, leaving us the fairly consistent anecdotal connection of baby doll to opal.

The young cock could be dominant opal ash red spread with or without milky.

The last baby her color could be ash red spread, possibly milky, maybe not dom. opal.

What to do next year? I would suggest pairing one of her young cocks onto her to verify the simple recessive nature of baby doll, or to find indication that it is more complicated than that. I would also suggest taking a hen and cock from her this years young and pair them together.

Lynn, you start mentioning ecru, I am confused as to what you are referring to as ecru. None of the pictures indicate that you have ecru in the mix.

LYNN RESPONDS: excerpts

I was referring to the ecru/lemon pictures in Paul's book and they appear to be the color of the cock pictured with baby doll. My picture is pretty exact in color, but the books picture could be off allowing me to believe they were the same color.

EDITOR:

Lynn, I agree with the suggested matings that Tim has enumerated. I have labeled your pictures the way I read them. Ecru is not in the mix. Ecru is much more colored than this. The colors in my book are as exact in color as possible, not like the ones in this newsletter which may transmit a little off color. The picture, of the beautiful platinum color cock with the "baby doll", I have labeled milky dominant opal is exactly the color of all the birds I got when I mated an Od to milky. So I firmly believe he is hetero milky and hetero Od.

Indications early on in studying the "baby doll" was that all of them had an Od component and I thought since milky was rampant in the birds also that that never got any from that combination.

Considering your questions – 1) Yes, there is an interaction of two genes, one of which is most likely Od that produces the "Baby doll" phenotype. I do not believe one turns off the color and another turns off feather growth. I think it is the combination that does both. 2) There is a good possibility that the two genes involved are not even on the same chromosome. 3) This you have proved. 4) Tim has covered this well. If it were me I would use one of her young cocks and put together two of her young. 5) Covered.

Lynn, your research with this phenotype has been outstanding. Keep up the good work.

JERRY STERNADEL EMAILS: 12nov'07

Is the bird pictured here Ts or are the white bars the result of spread on ash red? Or is it something else.



Ash red spread.

EDITOR:

I believe it is something else. I think the “bars” are just a manifestation of the juvenile feathers and will change with the molt.

BILL GREENSLADE EMAILS:

I have a question that I likely would know the answer if I were on-line. It was reported in the Canadian poultry/pigeon newspaper, by a gentleman who seems up to date about pigeon genetics, that it is now thought that the wild type is blue check and that bar is a mutation from check. I assume that he got this from the net somewhere because I don't recall ever reading anything about this in the newsletter. I would appreciate your comments about this statement. I enjoy the newsletter and appreciate all the time and effort that goes into producing it.

EDITOR:

Concerning the wild type of *C. livia* – Originally the type specimen of *C. livia* is a black barred gray pigeon which we call blue bar. Another specimen that was checker was called *C. affinis* as a distinct species.

This is what I wrote in my first book, “Genetics of Pigeons, *Columba livia* (Gmelin) – ‘I should be understood at the outset that the “wild type” pigeon or Rock Dove, *Columba livia*, will be accepted as a “blue bar”.’

It is interesting to note that not everyone agrees with the selection of *C. livia* as the type species. Riddle (1919) states that W.O. Whitman in 1903 writes, “Two black bars on a gray ground have always been held to be the more primitive pattern, and birds of this pattern are supposed to represent the typical *Columba livia*. The form with black checkers evenly distributed over the wing and back, although once named *C. affinis*, as a distinct species was regarded by Darwin as a variety derived from the two barred rock dove, and his opinion stood undisputed.

It appears from a comparative study of many species of wild pigeons, and from a study of the variations in domestic species that the relationship is just the reverse: *C. affinis* is the original rock dove and *C. livia* is the derived type. Domestic pigeons come from both sources.’

The truth of the matter, as I see it, is that the checkered form is the original but following the rules for scientific literature, I made the statement that the blue bar is accepted as wild type. The rules state that if a term is used in literature for a long time, that is the accepted term. I accepted this with the knowledge that the so called wild type is really not the original term.

There is another rule in nomenclature that if two “species” are found to be the same species, then the one described first becomes the accepted species name. Darwin stated that all pigeons derived from the barred form. Hollander agreed with this. I do not. However, it is purely academic and has no practical use in the study of genetics of pigeons.

JERRY STERNADEL EMAILS:2nov'07 excerpt

I noticed Ron Huntley said sooty only affects the pattern area; that contradicts what Bob Pettit said about the bronze Modena with the dark (almost black) bodies. I had always been told that extreme sooty did darken the whole body.

EDITOR:

Forgot to mention about the sooty. When working with the Oriental Frills and with Ts,fs combinations, it was found that Ts would print through on sooty marked feathers. Thus when the combination was present with sooty that the Ts marking increased on the bird every year. In the juvenile feathers the Ts marked the pattern C areas. The first molt the Ts marking also printed out on the sooty markings on the wings. The second molt the Ts markings printed out on the leg, rump area, and under the tail. The third molt the Ts markings printed out on the belly and rear of the breast. The fourth molt the Ts marked sooty feathers printed further forward on the breast. The progression showed that the sooty affected areas increased each year.

On the Oriental Frills you see birds that are marked clear to the head, leaving the head dark and this seems to be the action of homozygous sooty and the homozygous Ts complex.

EDITOR:

Notes on ecru/lemon: Blue bar and blue check in ecru/lemon have visible tail bars. Ash reds and indigo ecru do not have visible tail bars. Recessive red ecru look exactly like spread ecru. Ecru birds whether on a blue/black base or ash base are very similar in color. Ecru with T-pattern bronze are identical to those without the bronze.

All are the color of unbleached muslin but darken somewhat with age to a soft cream khaki no matter whether the base color is ash red or blue/black. Brown ecru are somewhat darker than the blue/black and ash reds.



Ecru bar and ecru check



Ecru check Ts bronze (ex Saxon whitetail)
Head was badly pecked as youngster.

I WISH YOU ENOUGH SUN TO KEEP YOUR ATTITUDE BRIGHT.
I WISH YOU ENOUGH RAIN TO APPRECIATE THE SUN.
I WISH YOU ENOUGH HAPPINESS TO KEEP YOUR SPIRIT ALIVE.
I WISH YOU ENOUGH LOSS TO APPRECIATE ALL THAT YOU POSSESS.
I WISH YOU ENOUGH GAIN TO SATISFY YOUR WANTING.

EDITOR:

Hi Joel, usually the white toenail can be equated with a white feather and thus the birds are probably carrying a recessive pied factor. This is true of a white scale on the leg also. So don't be surprised if a few white feathers show up on the young from these.

KIM WRIGHT REPLIES:

Now you have me intrigued – white scale? Can't say I've ever seen one, at least not one I recognized. I assume these aren't actually white but maybe paler/redder than normal. Can you give us more info?

EDITOR:

Gonna pin me to the wall this morning. Having seen so many white scales, I just mentally recognize them and then go on. I guess the reason I have seen so many is with my experimental crosses, I try to maintain the birds without pied factors for most colorations and I watch for them. For instance, when I test pied colors for dominance, say I test a Swallow, the young will be colored with probably an eye tick or white or a mottled toe or a white vent. These tend to be marker that I find and record. The eye tick may not be a pied factor but they may be a factor such as dirty. I have lots of color pictures and will try to find one [or two] that shows the white scales. Usually the scales are best seen on the squab when the legs are yet dark. After the molt they may not be obvious at all and the leg and/or toes will be a nice red color



Blurred but white scales on foot. Non pied bird.



white nails and scale on left foot. Non pied bird



several white scales & white nails. Pied bird.

THE BATHTUB TEST

During a visit to the mental asylum, a visitor asked the director, "How do you determine whether or not a patient should be institutionalized?"

"Well," said the director, "we fill a bathtub, then we offer a teaspoon, a teacup and a bucket to the patient and ask him or her to empty the bathtub."

"Oh, I understand," said the visitor. "A normal person would use the bucket because it's bigger than the spoon or the teacup."

"No," said the director, "A normal person would pull the plug. Do you want a bed near the window?"