

The Pigeon Genetics Newsletter

News, Views, and Comments.

Editor: R J Rodgers, Nova Scotia, Canada

Co-Editor: Jith Peter, Palakkad, India

(Heads OR Tails !) Last Issue HEADS (crests) ., This Issue TAILS (supernumerary feather counts and attributes for show) .

(Top Corner left : Usbeck Tumbler by Lamir A Anna Justovi , Australian Pigeon Assoc. FB Group) .
October 2016

Jackson Chambers writes : Mr. Rodgers,

Can you please inform me how I go about receiving the Pigeon Genetics Newsletter, as well as how I can contribute information to future issues?

Most of my interest is in structural mutations. Currently working on breeding work involving beak crests, eye crests, extra tail retrices, hanging wings and a few other oddities.

One thing I would be curious about is if you know of anyone who can shed more light on the subject of twin or split tail feathers such as are sometimes found in Fantails and other breeds with more than the usual 12 retrices? I am familiar with the study of T.H. Morgan that was published before WW1 on tail size that covered this subject briefly (later covered in Levi's "The Pigeon"), but I have not come across much else on the subject.

Regards, Jackson Chambers.

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Garry Glissmeyer wrote :

Very enjoyable discussion this month, on Crests.  
We, in the Indian Fantail group, deal with this beastly-crest-thing with every mating!

Although it is only a 5 pt detail on our bird, we consider it a "Finishing Point" ... it helps give our bird that distinctive difference from some of the other "tail" breeds. It helps with the shape of the head and a *"peaked crest to be desired."*

A small, cupped "thumb" shell crest is OK. From there, the more it wanders toward a wrapped, or mane-like crest, points are deducted.

So, like almost everything else about our breed, it is yet another recessive trait to perfect -- fighting against the odds of the dominant crest genes.

OK... to my pics:

Attached are 10 pics for you to ponder :-)

### Tail Mutations?

Our bird (like the Fantail, and some other tail-modified breeds) has, as its feature, THE TAIL. But then we added crest, muffs to make it even more difficult (and Fantails perverted the body-type, stance miles away from Wild Type, to deal with their difficulty-factor). Our body type "is to give the impression of levelness", the head being vertical, eyes above the toes, *"...with about a head-width space between the back of the head to the upright tail."*

We have tail count and tail wrap to contend with, as well as position. (As do others, per individual Standards).

We have discovered, through record keeping, that TAIL COUNT and WRAP are TWO different genes.

We ask for about a 3/4 Wrap "plus a feather or two"...we are not after a complete wrap, like Fantails. We don't want our wings pushed to the floor, they are to be up, tucked under the tail, "To give the impression of levelness."

We used to think/believe, that the more feathers we had in the tail, the greater the wrap downward? So, the quest was on! Breed for MORE tail feathers. We blew past 28, and then 32, then we had birds with high 30s, even into low 40s counts. some of them did have wrap, but others the tails became over-crowded and the 'extra' feathers bunched up down at the bottom of each side. Or the tails 'scooped' and became so heavy they wouldn't hold them up. Some even had NO wrap...didn't come down past the half-way mark.

While we also bred birds with beautifully shaped tails, open, upright, and enough wrap to be show-worthy, with only 27-28 tail feathers!

I showed a White Indian Fantail hen with a very large, open, and wrapped tail: only 27 tailfeathers. They were wider than normal, and her tail looked fine. Not dense, but shaped and filled in nicely. She had plenty of wrap.

So... more feathers the better?

Nope. "Enough" feathers is the better description.

Several of us Master Breeders have kept some records, and with your casual testing have concluded Wrap and Count are two different genes.

Wrap being more important than Count.

Our "ideal" count seems to be about 32-34 feathers for our standard-sized Indian. For our Mini Indian (Mindian), obviously far fewer.

*( FYI: our Standard Indian weighs "about 16-20 oz" as the ideal and will stand about 9-10" to top of head, when at proper station.*

*Whereas, the Mini ideal is 7" to top of head and 10-11 oz the ideal weight. However, the "style" of the bird is exactly the same; they are judged separately, but use almost the identical Standard "balance" guidelines, with SIZE being the differentiation.)*

Tail faults are: tail too far forward to head, flipping forward over head, or scooping, dropping back. The ideal is vertical with a slight tipping back away from head OK.

Tail Disqualifications are: Split center in the tail; crooked or canted tail; twisted feathers.

Soft feathering: Dr Gibson says this caused by malformed barbule hooklets, either anterior or posterior -- or both -- hooklets, not allowing the barbs to hold together.) Makes perfect sense. We feel, based on experience, this is recessive.

Twisted Feathers: we have found this to be genetic, and recessive. We are not talking about flights being caught in the tail, thereby twisting, but genetic malformation of the tail feathering and distribution.

Tail Feather Width: The wider the tail feather, the better for our breed...if it is a "hard" feather (good hook systems in play). We have narrow TF, from about a

1-1.25 inches width at the end....up to some being easily 2+ inches wide.  
Preferred. Recessive genetic.

Anyway, tail shape, count, position and resulting problems might be a future discussion? Not many of us out there messing with open-tailed breeds, but for sure it is an intriguing mutation for those of us who are!

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**PICS** (*Explanations... whether you use this idea, or these...nor not... fine with me, but in case...here are the "reasons" behind each pic. They are in sort of ORDER OF IMPORTANCE, to make them all make sense?*):

**Ab. Nearly Ideal, Overall Balance. Note: YB PreMolt Tail "Saucer Shaped":**

this pic shows a Youngster with tail in proper position, nice shape to it, even distribution of feathers, good wrap for the age ... and the head "about a head's width away from the tail." (Glissmeyer bird



**C. Near-Perfect 'Wrap':**

This pic shows the tail size and wrap-around we are looking for (34 tail feathers).

(Glissmeyer bird)



**Cz. No Wrap.**

Tail feathers bunched more together, reverting back to Wild Type. Dominant, we feel.

(Glissmeyer bird)



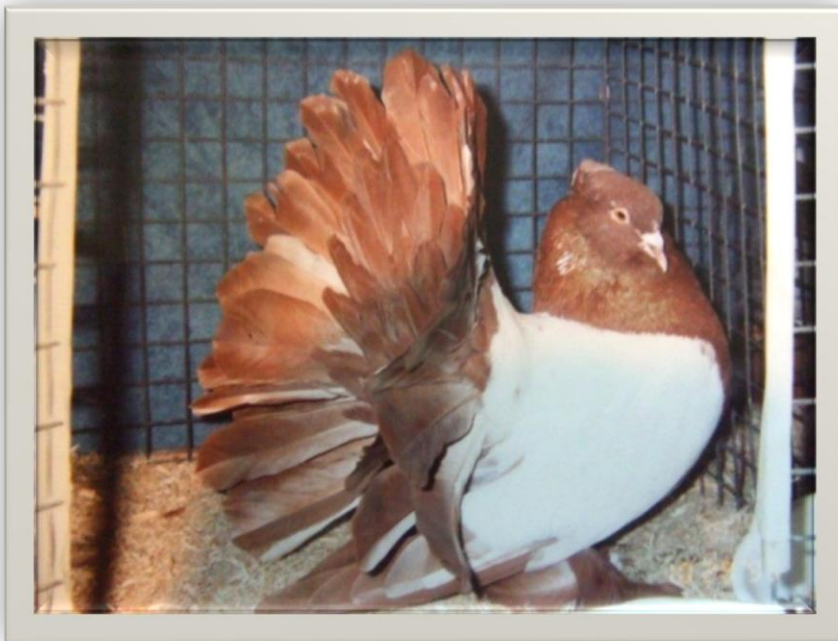
**D. Split Tail, Twisted Feathering:**

A Disqualification. The center two feathers diverge, split, in a V-shape, at the base. A "genetic" split. (*Weak tail centers, or sparse centers of tails, are not uncommon in our breed, and are anywhere from major Faults to a DQ.*) These are recessive genes, we are finding. (Glissmeyer bird)



**F. Tail beginning to Scoop**

...or "Cup", not open like a "saucer". The ideal. Again, a genetic trait. Dom.



**G. Scooped Tail.** Or "Funnel-shaped" tail. This seems to be a dominant, or partial...based on nearly 40 years of observation, but not hard data. Reverting back.





#### **H. Milky Brown, Dropped Tail, drags the floor:**

These types also seem dominant, reverting in shape back to Wild Type.

Of note: some YBs have upright, decently shaped tails, and then with age, slowly lower and drop them; however, I have a 9 year old White cock, although now sterile, has one of the best shaped (open), and up tails in my line...always a bird visitors note. He just has not enough wrap for showing. That longevity of a trait I tried to spread around, with accurate records. Up/open and it stays!



**I. Tail pulled up too close to head**, or touches neck, or "umbrellas" over the head.

This is a Big fault, but not a DQ. Is recessive, we experience. (Glissmeyer bird)



**J. Soft feathers:** often associated with "narrow" tail feathers. But not exclusively. The barbs just do not hold together. Malformed hooklets, as mentioned above. (Glissmeyer bird)



**K. Off-Setting mating:**



This is how we/I pair up two very good birds, but not going to win a Show due to a few imperfections ... hoping to get that perfect tail size, shape, position in a youngster.

This is one of my past matings (I happened to take a pic to show a long-distance friend.). Glissmeyer bird)

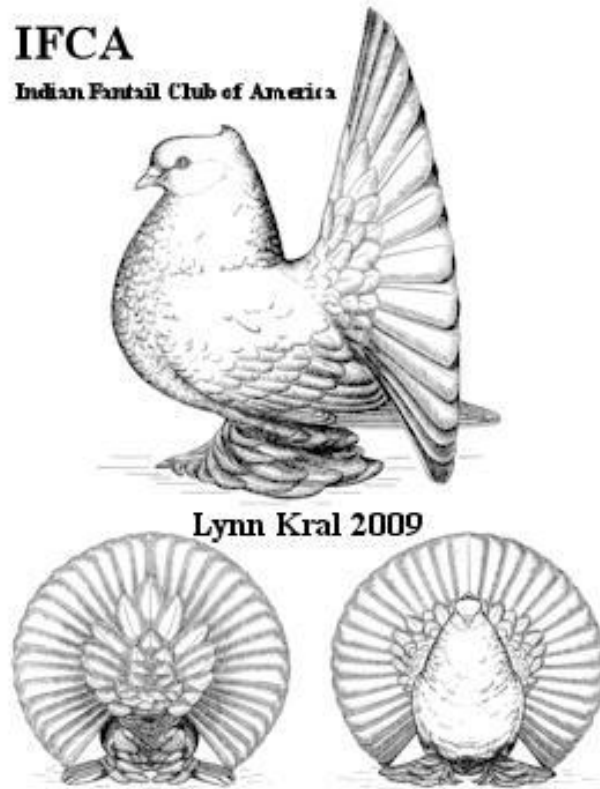


Bob, Jith ... most of these pictures are of my birds, but a few, not...they were in my digital collection.

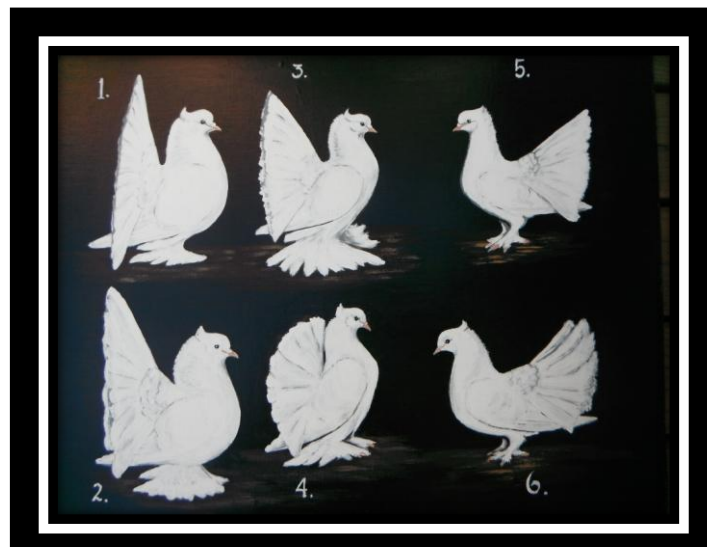
I certainly enjoy your efforts, both of you!  
THANKS. Garry Glissmeyer Colorado Springs, CO

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The Present Standard Ideal Drawing of the Indian fantail Club of America ,provided previously by Dan Stiles



A while back I drew up the comparison below for a Facebook Group .
#1 was the Standard just a few years ago , #2 is the style we see a great deal of now , #3 is the type preferred by many in India, while #4 seems popular in Bangladesh . # 5 depicts early 1960 imports from India and #6 depicts a type from Thailand., nearly identical to very early Indian specimens . Bob R.

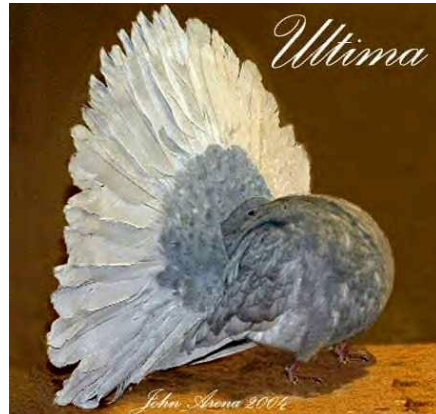


Below are a few photos from Levi's Encyclopedia of Pigeon Breeds showing the Indian Fantail as it was first imported from India either by intension or by accident as food in crates of imported snakes. Here

again you will see the tail trait faults that Garry described above. This drives home the reason why these recessive traits are so difficult to irradiate .

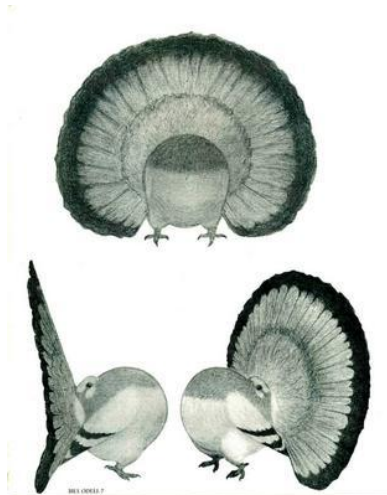


Below a quick comparison with the changes in the Standard American Fantail since the 1800's .



Sketch by J.C. Lyell back in the mid 1800's of a standard fantail type , that would be totally faulty by today's standard. and the "Ultima " by John Arona 2004 .

Below is the standard Ideal shown in the NPA 2010 Book of Standards , a quick search of the Net showed that most if not all Fantail Clubs do not presently post an Ideal Drawing along with their written Standards .



Comments on Last Issue's "CREST" Traits . Edited.

From Tom de Munnik of Canada - Hello Bob As always really enjoy the newsletter,

I did a few saddle test mating's as I was unable to find suitable birds for the program. I crossed old German owls with saddle homers with two different mating's and one with a voorburg/ owl mating. I knew the owl shell crest and rosette were recessive and thought the chest frill would be also.

The voorburg/ owl mating showed the F1 with chest frill as did one of the homer/ owl mating. However the third pair homer/ owl mating had the f1 youngsters clear from frill. It appears it is a partial dominant .

I had to cut my breeding season short as I came down with pneumonia brought on by pigeon dust so raised only one set from each pair.

See the attached The pair in the third picture are both clear from frill. - Tom



Editors' Note : We think we would have to make quite a number of test pairings with these Homers and Voorburgs , in order to rule out the possibility of a "carried" gene for that "zipper " breast frill before determining its status .

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Addition from Jackson Chambers : Hi Bob,

Thanks for adding me to the list, as well as for your interest.

I am attaching a photo of a dilute Ash Red Check squeaker that was just weaned out of my project birds. This squeaker is shell crested, beak crested, has a zipper frill and grouse legs. It is from an F1 cross from a Cream Bar Old German (Shield) Owl cock and a Dun Self Uzbekistan Tumbler hen. The Owl cock has a very well developed frill, but this is the only offspring from five rounds that showed a frill (as well as the only one from 11 combined rounds of Old German Owl crosses this season that showed a frill). The rest were otherwise normal, apart from a few that showed a small bare spot which I suspect is connected to the Frill gene. Two clutches of Old Fashioned Oriental Frills also turned out normal offspring where the Frill was concerned. (All individual coops, of course). Needless to say, this youngster with a pretty good neck frill was a definite surprise and is much more in line with what I expected from some select F2 youngsters next season. The dam of the youngster is a better than average Uzbek with shell crest, a very flat beak rose, good muffs and a rosette/whorl type eye crest over each eye. (A few of the siblings did inherit the rosette/whorl type eye crests from the dam. This one did not).



You will also note that in one photo, a sort of over-hanging "eye crest" can also be seen in the squeaker which is somewhat reminiscent of that seen in Pomeranian SchauKappen and some old strains of Danzig Highfliers. I have not decided if this is really an "eye crest" or some stray feathers from the beak crest, as I have seen a wide variability in the beak crests ranging from simple tufts on up to double "whorls" and double tufts such as was described in some Chinese breeds by early writers.

I wish I had written before you had put a bulletin out on crests. Another one of this year's surprises has been some strange rudimentary "side crests" from some of my Kazan X Old German Owl crosses. The first of these was a Red Check splash hen with a strange rosette on the right side of the back of the neck that could best be described as a sort of "half crest". The last round just produced a second one, a Yellow Check Saddle with another "half crest" or "side crest", but this time on the left side, a bit more crude looking and with no rosette. I just tried snapping a few photos of the Red Check, but she's in a pretty heavy moult and I can't get a good photo of her.



Editors' Bob R & Jith P.: Our take on this is that we are looking at what we might call "Back engineering" as we go back from the rose beak crest to the Nasal tuft, then go on again from there selecting for those side "sprout", feathers that are neither forward nor backward growing, they eventually result in multiples that create a complete circular rose formation. Then again, selection will determine just what specific configuration becomes the ultimate goal as set by a specific Breed standard..

Interesting input Gentlemen, that is about it from the Pigeon Loft until November. In the meanwhile, let's hear from all of you on any topic, we will work it in as time goes on.. Bob & Jith.

One final note: No matter what feather anomalies you are attempting to perfect as per a given standard, We think the most important feature to consider is the actual "quality" of the feathers. There is a tendency to inbreed quite a bit in this hobby, and that often leads to a weakened quality of feather structure. Poor feather quality will cause a decrease in the support that the various ornaments require. The feathers that support a beak crest, or a peak and shell crest, for examples, MUST be of a sufficient strength and balanced evenly to hold all feathers in a desired formation. The same holds true for the cushions on either side of the Tail, Often it is the lack of equally strong Cushions that allows the tail to either pop forward, or fall back. Twisted or awry tails are usually as a result of the tendons on one side being weaker so that they give way to those pulling on the other side. Editors.



Photos : Clint Robertson Amaranth Manitoba Canada , Champion & Reserve at top Shows .



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We thank Andreas Boisits of Austria for his very nice presentation in the Austrian Publication Freude mit der Kleintierzucht regarding our Paper on the genome of Lal Band Ghagra which we published earlier here in this Newsletter . The article is not in English ., but many of you may have seen it. The Magazine is very professionally Edited and we enjoyed seeing Andreas' report. ~ Jith & Bob .