



Thank you very much to the BSSA for giving me the opportunity to come here and talk about something that I am very passionate about – pairing.

Pairing birds and seeing the results of any given pairing is the part of the hobby that keeps me engaged.

My confidence in pairing comes through observing features and visiting a lot of bird rooms around the world, taking a keen interest in at least the two generations behind a super budgerigar, not just the bird itself.

However, it was probably a stroke of luck in a visit to Mike Ball in the UK on a day that he was pairing that really gave me the confidence to have faith in the strategy that I will outline this evening.

Flecking – how to not breed a flecked bird

I commonly hear the following in budgerigar circles:

- “Avoid using **flecked** birds all together (avoid the problem)”
- “Don’t pair two **flecked** birds together”
- “Don’t pair a **flecked** bird into a bird from a family with **flecking**”
- “To breed **flecking** out of a bird, pair it to a bird from a clean line. The first generation might be **flecked**, but then pair those into non-flecked birds again, and the majority should be not be **flecked**.”



To understand where I have a fundamental difference in the approach to pairing, and how it is different to most approaches, we need to talk about it in the context we all have experience in.

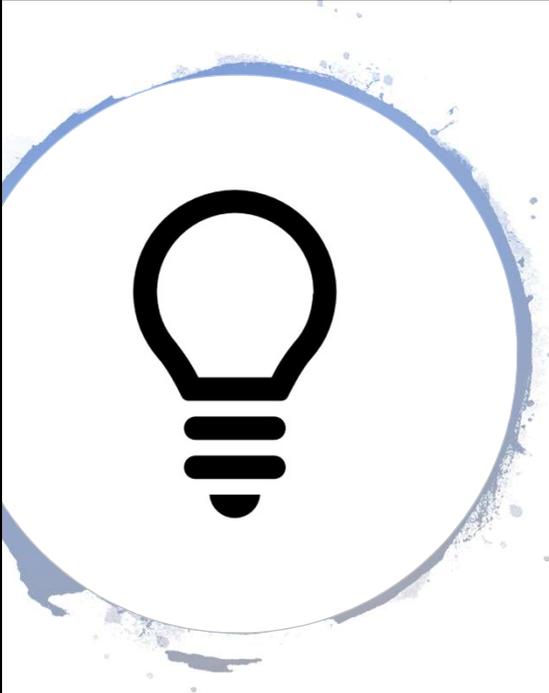
Let’s talk about flecking.

Everyone knows how to breed a flecked bird. Its easy. Getting the flecking out of birds is hard work, but it can be done. I’ve listed four statements here that I’ve heard budgerigar fanciers use to help people navigate the issue of flecking.

(Read statements)

In each of the above, I’ve highlighted the word flecking, or flecked.

Are we all in agreement about these statements?



How to not breed a good-faced bird

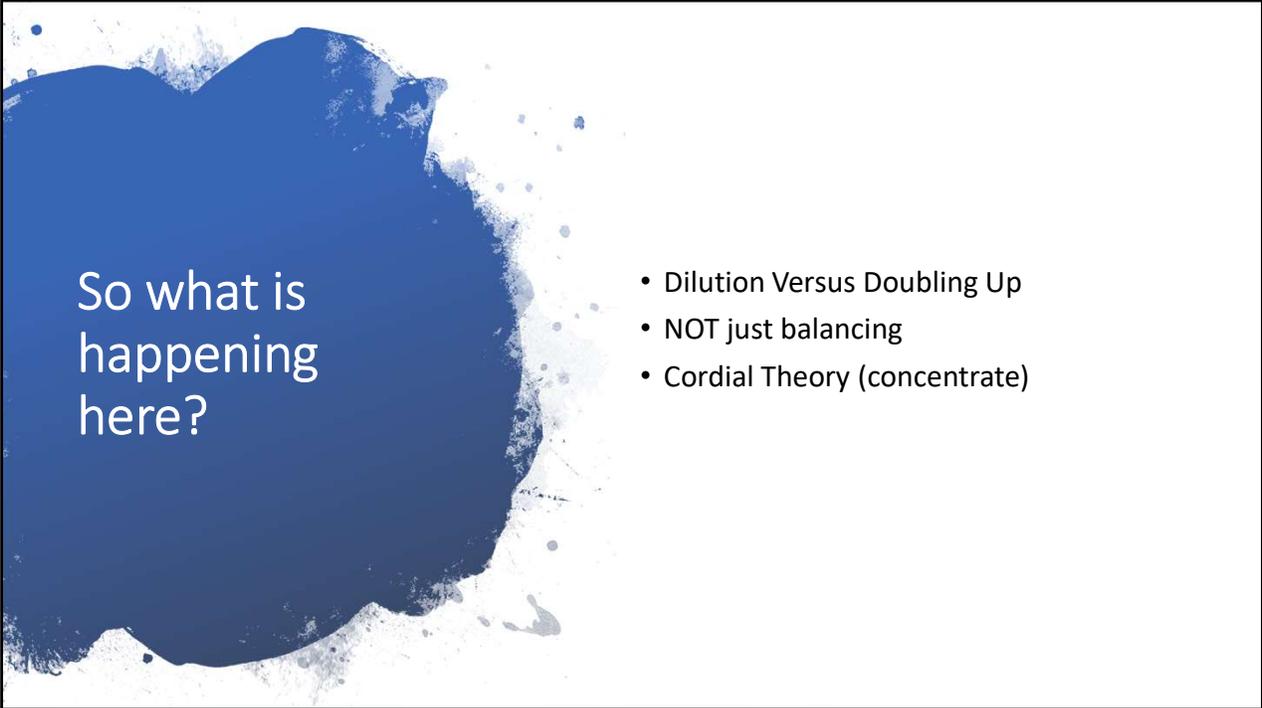
- “Avoid using **good-faced** birds all together (avoid the problem)”
- “Don’t pair two **good-faced** birds together”
- “Don’t pair a **good-faced** bird into a bird from a family with **good-face**”
- “To breed **good-faced** out of a bird, pair it to a bird from a clean line. The first generation might be **good-faced**, but then pair those into non-**good-faced** birds again, and the majority should not be **good-faced**”

Let’s do this simple trick, and change only the word flecking or flecked, and let’s make it “good faced”. Good face is a very broad term. When we talk about good face, we could be referring to the;

- width of cap,
- the blow,
- the directional feather over the eye that creates the brow,
- we can talk about the lateral feather out from the cere,
- we can talk about the feather down the side of the beak that creates the width of face,
- we can talk about the disassociation of the feathers around the cheek patch that create the owling effect,
- We can talk about the depth of mask and the balance between it and the height of the cap,

Or to keep it simple for explanation purposes, we can just bundle them all in together, and call them “good face”.

So, how we NOT breed good face?
 (read comments from slide)
 What are we seeing here?



So what is
happening
here?

- Dilution Versus Doubling Up
- NOT just balancing
- Cordial Theory (concentrate)

I subscribe to the notion that we are all guilty of “balancing” pairings by compensating, and this is where we go wrong. We dilute down features, so they don’t reproduce with any intensity, and slowly fade away, so that within three generations, the outcross that we brought in for a feature has transitioned back to our old norm because of our subconscious habits. **You need to concentrate the features.** Everyone will warn you about flecking, and how not to breed flecking, but nobody seems to understand the same principles apply to locking in a good feature – don’t pair two flecked birds together, or you will lock in the flecking, and they’ll only breed flecked birds, YET nobody seems to be able to apply the same principal to good features, like head feather. They’ll compliment the pairing first, before they consider consolidation and concentration.

I’ve seen so many breeders who take a big cock, and a small hen, because its easy to get her to breed, and they average down. Some of those chicks may be big, but will those babies be pre-disposed to CONSISTENTLY breeding big birds like the father when they mature? Unlikely. Just the same way as we consider flecking. We’re trying to breed out a feature, so we compliment it with one that doesn’t have it. We are immediately looking for compensating pairings, which balance and dilute down the ability of that feature to strongly impose itself on the next generation. I’ve seen many breeders who are afraid to breed a big bird to another big bird. The key is getting the birds “right to breed” by identifying when they’re ready and having in place an associated feeding program to support this – I can’t convey enough how important this is to success.

So how do we concentrate?

We take a stud cock, and look at what its features are, and most of all, we are HONEST!

- length,
- shoulder,
- mask,
- spot,
- brow,
- directional feather,
- back-skull,
- height above the eye,
- width of head,
- width of face,
- and style (particularly how it stands off the perch)



So, how do we concentrate?

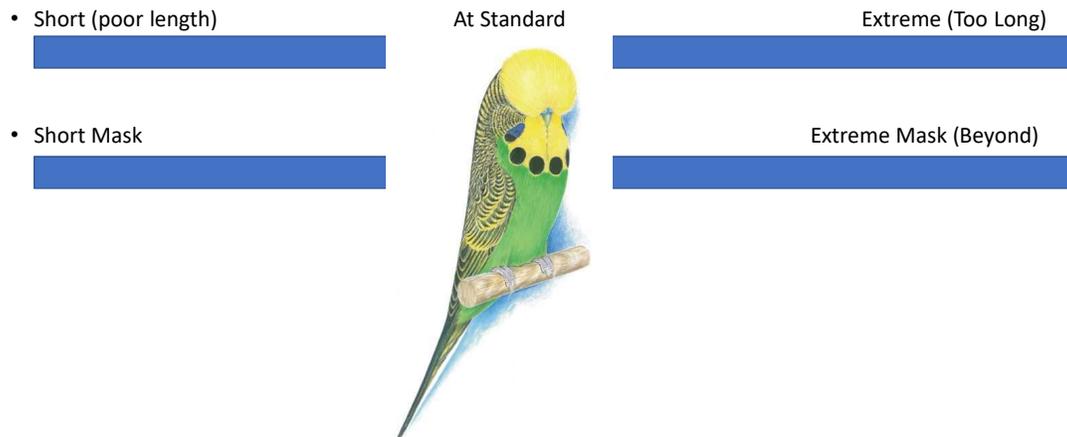
We take a stud cock and look at what its features are.

The metrics I use are length, shoulder, mask, spot, brow, directional feather, back-skull, height above the eye, width of head, width of face, and style (particularly how it stands off the perch). A couple of key ones missing here are variety, and wing carriage, but specifically for the later, my self-awareness doesn't allow me to use birds with poor wings often (they're unsightly and not attractive to me in the aviary).

You don't need to use these same characteristics – I am just providing these as a guide for what I am looking for.

We then take the stud bird, and we mate it on paper on the basis of these characteristics.

We then look at these features on a continuum



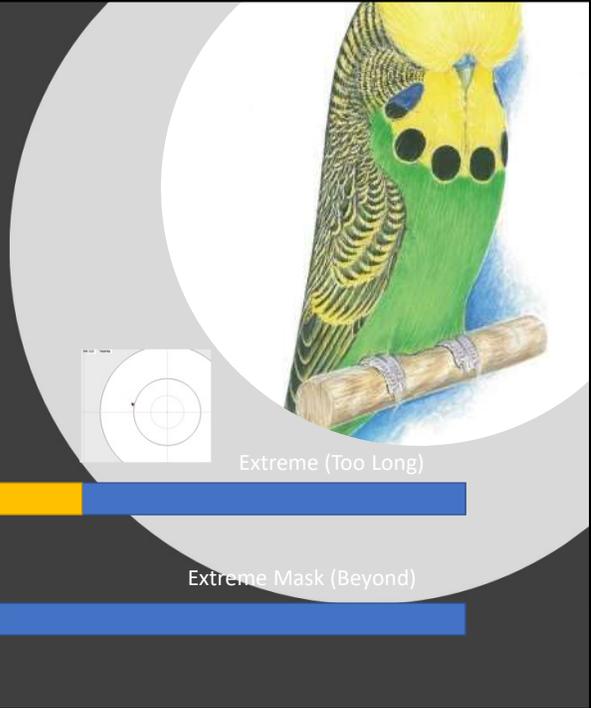
So, I look at the stud cock, and I identify its strengths, and its weaknesses. Ideally, the bird wants to be as close to the ideal as possible. Rather than being vague and aloof, I would use real examples to show how I develop this model.

I take the stud cock, and I critically aware of any weaknesses, as I can concentrate a fault just as easily as I can concentrate a weakness. So, I am looking at these metrics:

- length,
- shoulder,
- mask,
- spot,
- brow,
- directional feather,
- back-skull,
- height above the eye,
- width of head,
- width of face,
- and style (particularly how it stands off the perch)

Limitations

- One of our biggest limitations in Australia is that we don't have access to lot of birds that are beyond the standard, or extreme.
- We also have very few breeders aspiring to breed beyond the standard for certain features, so our pool to access looks more like this.



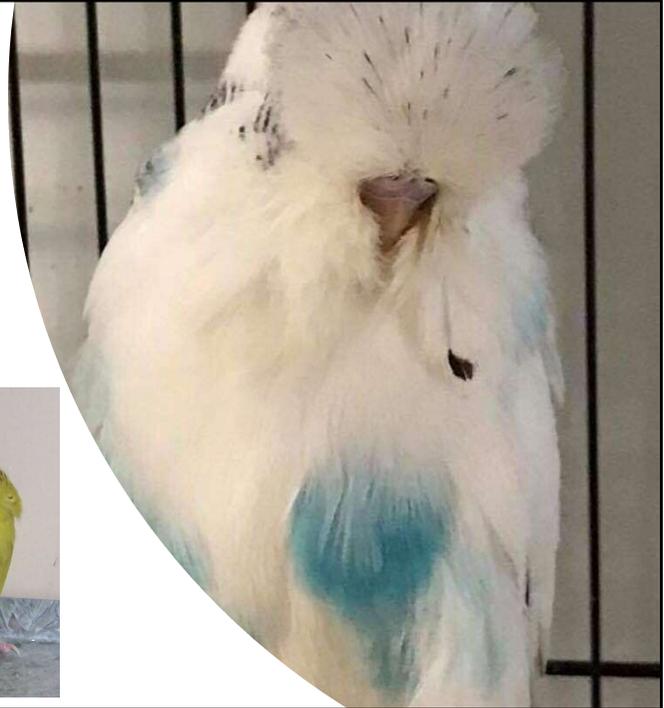
Now, you may be sitting there saying this is great in theory, but our pool is limited by what we can use. I mean, where do we find extreme, and “past the standard”? Our genetic pool in Australia is limited by the fact that we can't import birds like our overseas colleagues can, but I think the fundamental mistake is what we are not aspiring to breed birds well beyond the standard – what we call extreme.

When you see what Mike Ball and people of the like are doing in Europe, and what we call extreme, the two are poles apart. One of the key successes Gary Gazzard reiterated to me that saw the first imports in the early 90's, where he bred some birds well ahead of their time. Gary believed that this was simply because those breeders wouldn't necessarily work together in the UK.

By pooling some of our best birds, we can do so much more with the genetic pool on offer with improved quality. Working together is one of our keys to success. I don't believe that it is a case that we need an enormous number of cabinets in the hope of producing 10 to 15% of birds worth keeping, because we couldn't have intent with that many cabinets, and I struggle to believe that we would have quality at the extent that we need to move forward that will fill all of those cabinets. In fact, we want the reverse. We want to only have 10 to 15% of the birds to dispose of, because the quality is on point.

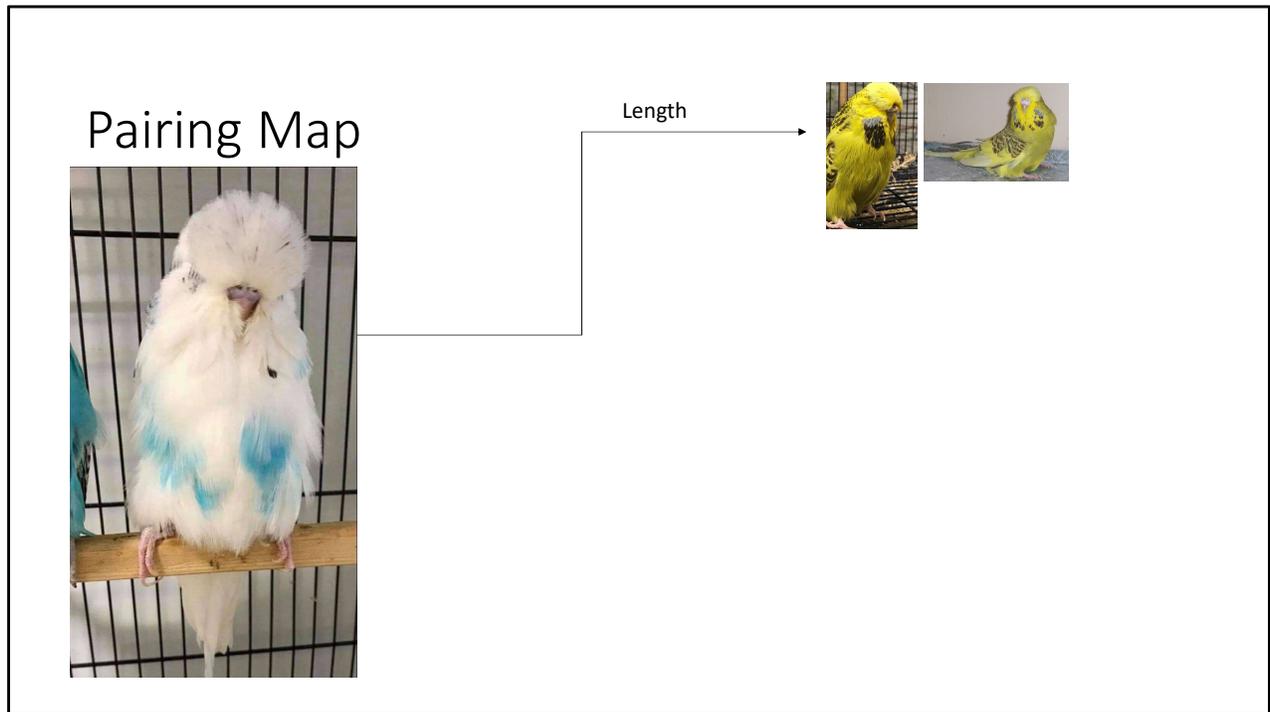
How to work with what we have

- Look for the consolidation partner for each of the features;
 - Length – where do we go looking for length?
 - **Must** be consolidated for length.



So, let's look at the consolidation feature identified – length. So, in my aviary, I need to find the longest hen, that is CONSOLIDATED for length. I can't just find a long bird – that won't do. I need a long bird, bred from long birds, that is going to preproduce length. In my situation, I went outside my aviary, to a trusted friend, Wally Capper, for one of my three. We all have nuances as breeders, and Wally's is that he breeds big birds. Others you might consider are Tony Appleton, Kelwyn, Henry George, Jeffrey Leong, John Ennis, Peter Thurn, Craig Barnett or your own Wayne Weidenhofer amongst others. Wally's National Winning hen line is a line of big birds, bred in conjunction with Craig Barnett. They are a good, strong bird, with shoulder. In my mind, I line up the top three hens I can establish for length:

- Cinnamon Grey Green Hen 15/080
- Opaline Cinnamon Hen – WAL 16/071
- Cinnamon Grey Green Pied Hen –16/093



Using what I have flagged, I begin to create a “pairing map” which becomes a ring number matrix.

I start identifying up to three birds (and if the three birds don’t make the grade, the number is less – ruthless is best!). This helps me identify up to three hens I would pair to that cock, to improve that feature on him.

I have to stress that it is to IMPROVE, not to maintain, or worse still, to dilute it down, or weaken it. Where is my longest hen in the aviary, bred from long birds, that is from a line of long birds?

Attribute #2 - Shoulder

- Look for the consolidation partner for each of the features;
 - Shoulder – what do I have that has the best shoulder in my aviary? Where can I find better shoulder?
 - **Must** be consolidated for shoulder.

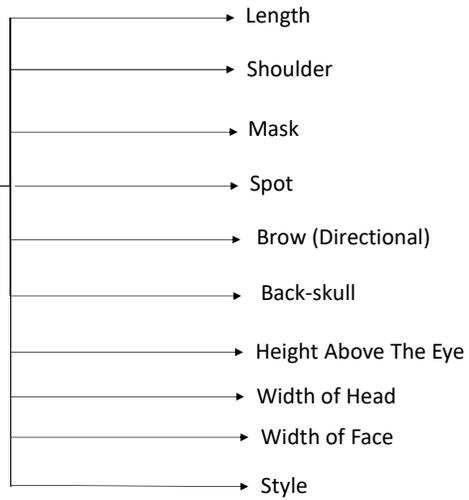


I then look at the second feature – shoulder, and I work my way through my birds trying to locate the best shouldered birds.

In this instance, I have to be honest, and it may be that I only have one hen on the premises that is going to improve his shoulder. Again, I have to stress that it is to IMPROVE, not to maintain, or worse still, to dilute it down, or weaken it, relative to this specific cock.

Where this helps me (as a side note) is making me critically aware of what I might need to find if I visit someone else's stud, or an auction.

Pairing Map



As I work my way through all of the attributes, I create a table of features to go to this particular bird, and where it becomes very interesting is where the same hen appears in multiple categories. This hen then becomes a **MUST** to pair to this cock.

Pairing Map



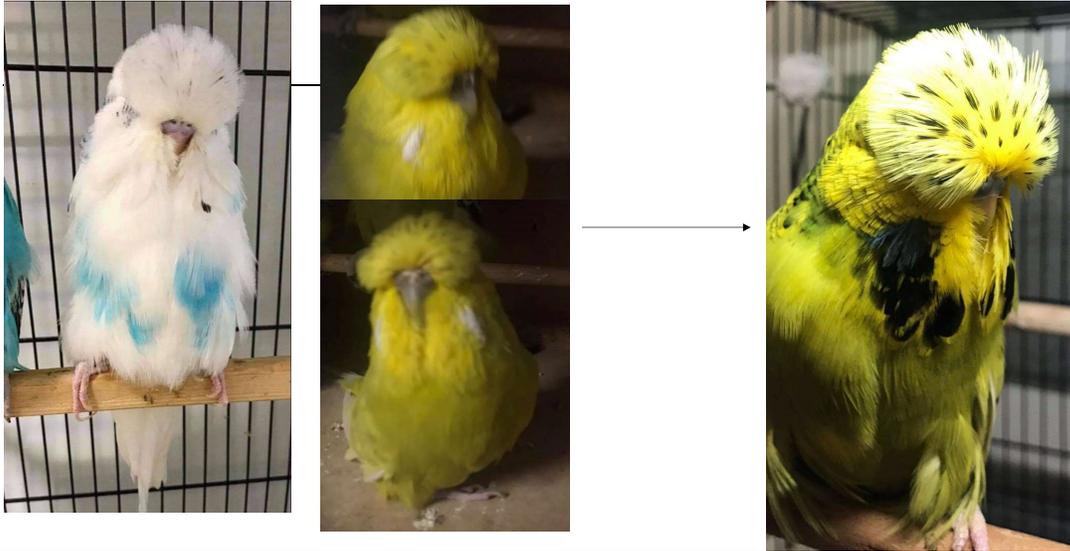
	Hen 1	Hen 2	Hen 3
Length	15/080	WAL 15/071	16/093
Shoulder	15/2129	16/023	17/121
Mask	WAL 15/071	16/043	17/099
Spot	17/043	15/8149	17/046
Brow	16/NO RING	16/002	17/048
Directional Feather	16/NO RING	17/020	18/019
Backskull	15/238	WAL 15/071	18/022
Height above the eye	16/049	15/238	15/20266
Width of Skull	17/001	N/A	N/A
Width of Face	16/007	18/080	N/A
Style/Stance	17/023	18/033	16/222
Feather Texture	18/031	17/093	17/028
Cleanliness	16/155	15/2129	17/007

This table becomes a very interesting tool. I've identified only the single feature of a hen to go with this cock that will improve his feature. I've been very honest, and said that I only have one hen in the aviary capable of improving his width. So when I am out and about, and I am looking at the budgerigar auctions, or aviary visits, my focus is on finding birds with the best possible natural width of skull, that I can bring in to improve this guy.

Now, what my table also does is show where a bird appears multiple times. This becomes a priority pairing. Right now, WAL 15/071 appears three times, as a hen that will consolidate length, mask and backskull. 16/NO RING is also on there twice as a hen with brow and directional feathering, as is 15/238 and 15/2129.

As we identify each of these traits, you can see at times, there is a double up, where the same bird is repeated as a bird that may have the best brow over the eye (forming that chiselled look), as well as being the best directional feather in the stud. In my mind, these are really important birds that we seriously want to considering the pairing thereof. Eventually, in a perfect world, we want to consolidate all of the features in one pairing. In reality, the cock can't run over an infinite number of hens in a season, so with these pairs in mind, let's look at the outcomes.

Pairing – Consolidation of Directional & Brow



So we start to pair the birds. Our brow to brow concentration, as well as our directional feather to directional feather concentration pair is the stud cock 16671 to HOL 16/NO RING, and we breed a bird that not only has super brow and directional feather, but it is also big. Now, here is where being honest is so important. Is that bird big – the answer is YES, but is that bird consolidated for BIG? The answer is NO. This bird hasn't been bred from a size to size pairing. The mother wasn't small by any stretch, but she wasn't the hen identified for size, so the size of this baby is a pure bonus, and can't be relied upon for size. The baby in this instance is HOL 18/017. He is flecked. When we consider the iterative process of him moving forward, all the partners we identify for the features can't double up on the flecking attribute.

When I am looking at brow, the strength in this typically comes from finding a breeder who repeats pairings of birds with brow to brow – who has inadvertently concentrated this over time, whether openly, or subconsciously. In my mind, Gary Gazzard has some super-strong face in his birds, and particularly those associated with Blue and Orange lines, as well as in later years, birds bred from 75 and 57.

In years prior, I had bred a hen I considered to have super brow: HOL 16 Spangle Opaline Cinnamon Grey Green Hen, which goes back to Gary's BLUE line

Pairing – Consolidation of Length, Mask & Skull



In parallel, 16671 is paired to the Cinnamon Grey Green sibling to Wally's National winner. She is a big hen, from a big nest, with excellent shoulder. She breeds 3 chicks, all of good size and length, AND reasonable facial characteristics. These birds are consolidated for size and shoulder, but can't be relied upon for other features.

Pairing – Consolidation of Backskull & Blow



Result

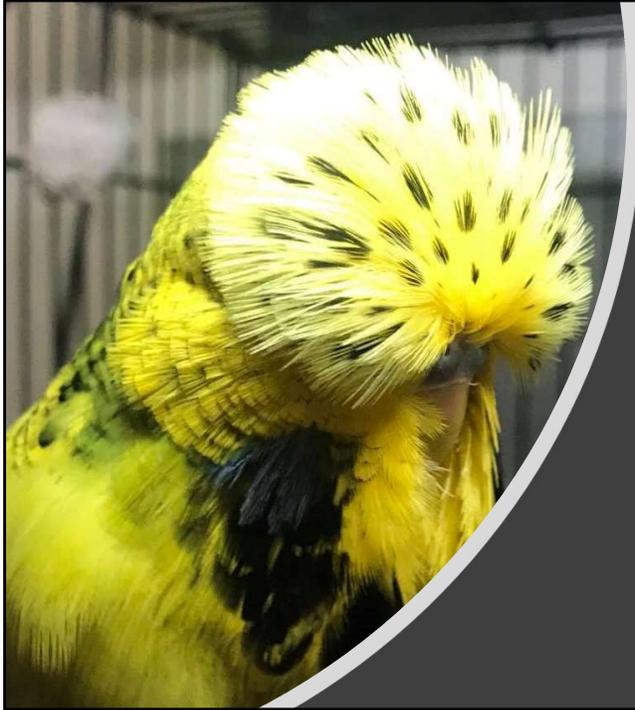


To 15/238, a hen who has bred super backskull and blow on her chicks, this is the outcome.

Pairing – Consolidation of Shoulder & Cleanliness



To the hen that was identified for cleanliness and shoulder, these two birds (amongst others) were bred.



Evaluating & Reconsolidating

The beauty of the matrix is that it gives us a really clear picture of which birds we are likely to you the next year, and helps us ask the question, why am I actually keeping this bird. At the same time, we get the ability to understand what we might need in the way of new additions, or outcrosses, to fill voids – in my case, the natural skeletal width.

This becomes a map, and when we have time to really sit down and consider these pairings, and where the priority for a hen has to go (who ends up with who). It also provides a great reflection tool, for the heat of the moment, when you go to re-pair two different birds in the middle of the breeding season, having a “strategy” document by identifying three hens, and not just one.

The process has to be an iterative one, where each year, we strive to improve. So in 2019, the focus becomes 18/017, and not 16671. That’s not to say 16671 isn’t used – but the focus for moving forward becomes the next generation bird.

Pairing –
Consolidation
of Length, Mask
& Skull



In 2019, 18/017 is placed into the mix, the son of 16671 and the HOL 16 Spangle Opaline Cinnamon hen. We consider the longest hen he can be bred to, it is still the sister to Wally's National winning hen that was previously paired to 18/017's father from the year prior.. This same pairing applies to the shoulder, as this hen is very strong in this area also. The pairing of 18/017 and the Cinnamon Grey Green hen produces birds that are likely consolidated for size and shoulder. At the same time, they have brilliant backskull, which is a trait of those particular Capper birds, who release their heads from the mantle. At the same time, because their father has been consolidated for brow and direction feather, this has been imprinted onto the babies also, so these will be a step ahead of him.

Pairing –
Consolidation
of Directional &
Brow



It is important, knowing that this bird is consolidated for directional feather and brow, that we double it up again. In this instance, 18/017 was bred to a bird down from Gary Gazzard's 75, who in my opinion has one of the strongest faces this country has seen. One of the chicks is shown here from the pairing of 18/017 to a Grand-daughter of 75. This bird will be a good sized hen, but her importance is linked to the fact that she is consolidated for directional feather and brow. I believe that because she is a double up of a double up, she should reproduce directional feather and brow in almost all of her pairings once she matures. In effect, she will be "prepotent" by choice, not chance.

Pairing –
Consolidation
of Shoulder &
Cleanliness



In this instance, again I am showing a real life example of the outcome of pairing him to a bird consolidated for cleanliness and shoulder. The mother was a light green spangle, a half sister to the national winning grey green by the same sire. The pairing was consolidated for shoulder and cleanliness, making her eligible to be paired to him to consolidate this feature.

The hope is that in 2020, the light green will supersede the dominant pied opaline grey green father.

Rules to live by

-  You can consolidate a fault just as easily as a desirable trait
-  Continue to be honest in your assessment of the birds – look to birds overseas to see just how big a bird can be, how much lift it can have in its cap, and things of the like
-  Remember what a bird is consolidated for in its background, NOT what it visually appears to be
-  Know what you need to move forward
-  Remember to have fun

What having these consolidated birds does is allow the breeder to go out and “tap” a bird for a feature, whether it be consolidated mask, width, or something of the like. I am a firm believer that prepotency doesn’t happen by accident – being prepotent for a feature is simply a result of concentrating a feature over and over again – doubling up.

The beauty of working this strategy is that it can also provide very clear and concise insight into what a breeder needs to be on the look out for as an outcross, as well as providing a very real tool for culling birds, as you identify what you will use, inadvertently leaving behind those that aren’t required.

Some important rules to live by:
(Read list from Slide)



Questions