Chalky Brown Project

by Jason Gelder

In December 2014, I contacted Robert (Bob) Mangile with the interest of acquiring some of his Chalky birds. I was thrilled that he agreed to send some birds from Pittsburg, Kansas across the country to Pittsburgh, Pennsylvania. Mr. Mangile mentioned that with decades of Chalky breeding, he had not produced a chalky brown crossover, so that sparked a desire to possibly achieve that goal. Upon arrival of my new birds Robert (Bob) explained through email, the genotypes of the assortment and I quickly determined my pairings. I decided to pair AU 2001 ARPU 48440 (old band) hatched July 16, 2010 – Heterozygous barless, Smoky Chalky Blue – (dam was a barless brown.) and IF-1994-AHPI-5345 (old band) - Hatched July 27, 2014 – Hemizygous Chalky Blue (Not Pictured and culled 2016)

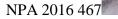


AU 2001 ARPU 48440

This pairing produced a false pearl eyed hen with a nontypical brown phenotype, NPA 2016 467. I believed that I had produced a Hemizygous Chalky Brown Hen. If I truly had produced a Hemizygous Chalky Brown hen then that would confirm a crossover, but I needed to test the hen.



NPA 2016 467 Hemizygous Chalky Brown Bar Hen



NPA 2016 467

The following year this pairing of AU 2001 ARPU 48440 and his daughter NPA 2016 467 produced AU 2017 16199 Hetero Brown, Homo Chalky Bar. This cock bird expressed both wildtype blue and brown pigment flecks.



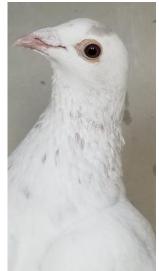
AU 2017 16199

AU 2017 16199



I felt confident that I had produced a Chalky brown crossover, however, I still needed to test the birds, so I mated together AU 2017 16199 and NPA 2016 467. I successfully bred a Homozygous Chalky Homozygous Brown Bar cock bird NPA 2018 1539. In the photos below, you can see the brown pigment expressed on NPA 2018 1539.







NPA 2018 1539

To summarize this article, the initial Mangile cock bird, AU 2001 ARPU 48440 St^{C+}//+b mated to IF 1994 AHPI 5345 St^C/. produced a St^{Cb} /. crossover, NPA 2016 467. This hen NPA 2016 467, St^{Cb} /. was then bred back to her sire AU 2001 ARPU 48440, St^{C+}//+b and produced a Homozygous Chalky, Heterozygous brown cock bird, AU 2017 16199. AU 2017 16199, was then bred back to his dam, NPA 2016 467, St^Cb/. And produced a Homozygous Chalky, Homozygous Brown Bar cock NPA 2018 1539. St^Cb/St^Cb.

Looking ahead, I plan on further testing NPA 2018 1539 and NPA 2016 467. The breeding results will be accurately documented and all testing will continue to be in individual breeding cages for monogamous confirmation.

This opportunity to work with a rather uncommon Stipper allele was made possible thanks to Robert (Bob) Mangile. He provided the foundation bird, 48440 and promoted the goal of producing the linkage of Chalky and brown. Without his insights, knowledge and generosity this accomplishment would not have been achieved.