Sperm Storage in Female Pigeon Oviduct

I had an interesting occurrence happen this year with a pair of pigeons in an individual breeding cage. I put the pair together early last November 2019. The pair have raised two sets of young so far in 2020. In each nest I got a young bird that did not turn out to be the phenotype they should be. The hen is a spread brown frill/toy stencil. The cock bird was a check dilute brown. The first baby they raised was a grizzle blue bird. The second nesting produced an ash red grizzle. Both birds were in different open lofts for about six months before I put the pair together. The spread hen had paired up with an ash red white side bird. The white side expression without recessive red is a mix of at least three grizzles along with some other traits. So it is not surprising that the ash red white side and the spread brown frill/toy stencil produced grizzle young. The interesting part is the white side and brown spread hen hadn't been together for over 4 months when the eggs were laid that produced the blue grizzle young. The ash red young hatched about three weeks ago. With the ash red baby was a spread brown baby that looks like a fantail. The spread brown frill/toy stencil mother is about ¾ fantail. The brown check cock bird was given to me last fall and he is supposed to be a frill/toy stencil carrier. Other than that knowledge I know nothing more about the bird except he is pretty much full fantail looking.

So, I did a little internet search on how long birds' sperm can survive inside the females' body. Some studies show can survive for years. The females have sperm storage tubules in their oviducts. They also excrete some special types of lipids (fats) that preserve the sperm.

This kind of throws a kink into classic genetics studies if the mother in the genetic study was ever in an open loft or mated to another bird before the genetic study was done.

The two young grizzles are what would be expected out of a wild type bodied bird and a ¾ fantail. The young are nearly wild type for body type.

This is the brown baby out of the brown frill stencil and brown frill stencil carrier. This bird has 32 tail feathers which common number for a full expression fantail.

This is the ash red grizzle baby out of the brown frill stencil pair. It has 12 tails feathers which can happen with a wild type crossed with a partial expression fantail such as it's mother.

This is the father of the three young birds produced. He doesn't express frill.

This is the spread mother that is full expression frill and toy stencil.

This was the first baby the pair raised. At first as in this photo I thought it was a brown. The brownish color was bronzing from grizzle. It turn out to be a blue tort grizzle. This is common in white side F1 crosses to wild type. It had a bit more of an upright tail, but still not what one would expect out of the pair for a tail.