

LONG TERM PRODUCTION IN A WHITE DOVE PAIR, *Streptopelia risoria*.

Most fanciers remate their best doves every new breeding season. Nothing wrong about that. But I go in for Genetics with large numbers and some other biological phenomenon such as total production and livability. Well one needs the mating space for other experiments and so cannot keep indefinitely the same pairs going.

I have 3 pairs of long term pair matings. The record holder is a peach pied female, 408Y, now with her great, great, great, great grandson previously reported as family 586. She now has produced 221 young, all natural--no fostering. I also have a rosy pair and a clear white pair in long term production. These I will have to give up soon. The first pair to go is the clear white pair. The male is 518U2 silky white and the female is 527H2. They have produced family 574. They have been in mating constantly since Jan 1982 to produce 141 young all naturally raised. From May 89 to May 90 they only produced 15 successfully raised young in contrast to 23 raised Jan 84 to 85. Since July the record got worse, so I decided that after these 9 years I had to replace them.

I donated them to the ARK, our local Pet shop, and Dr. Hollander contributed a cage for them. There they promptly raised 2 more young to independence! The employees and customers watched their development daily. Not bad for 10-11 year old birds.

This was a testcross for silky. So how did Mendel's rules fare about silky? In a test cross one expects a 1:1 ratio. 71 silky and 76 normal feathers is plenty close to a 1:1 ratio. Since that adds to 147 and not 141, I have to admit that a few died before independence, but lived long enough to be classified. The two raised in the ARK were both silky, so the ratio actually is 73:76--almost too good a fit to the expected.

The parents were right at the average 6 month dove weight at 162 x 164 grams. Well, I didn't weigh most of the young --couldn't keep them all for 6 months!

Young of family 574 which were measured at 6 months of age:

<u>15 males</u>	<u>19 females</u>
range 137-182 grams	131-190 grams
average 164.8	160.9
10 males were within 10 grams of the males 162g.	7 females were within 10 grams of the mothers 164 grams.

Did silky show any effect on weight? Well the heaviest male was a silky (June hatch)! And the lightest weight male (January hatch) was normal! The heaviest female was normal feathered (February hatch) and the lightest weight (July hatch) was a silky. So there is no evident association of weight with silky here.

Of course, nutrition and management (fighting, crowding, winter weather etc.) do affect weight. But the parental average close to the population mean seems maintained among the young!

I used to keep various data items on matings of 10 months continuous duration or longer. One of the most important is the Reproductive Success Index= RSI = Total fledged successfully, divided by the total eggs laid. F/ T.E. = 141/202 = 70% for the 574 mating!

Mating No. 574

Number of months duration.....	= 108
single egg clutches	4
total number of eggs.....	202
total no. of eggs known fertile.....	197
total no. of eggs known infertile.....	4
dead embryos.....	13
hatched.....	159
died as squabs.....	18
*accidentals.....	29
fledged.....	141

*Accidentals refers to cracked eggs, mashed egg or young, missing, died in hatching, cold, on floor dead, etc.

HOW ABOUT YOUR RSI FAMILIES?

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