

FOSTERING DOVE EGGS

BY

Wilmer J. Miller

Egg fostering is regularly used by pigeon fanciers breeding Owls, Turbits, Oriental Frills, Tumblers, and Jacobins, for example. But it is less often used by dove fanciers. Fanciers having several wild species are most likely to develop its use, since wild species are more likely to break their eggs or abandon the nest. It can be a helpful procedure even in a domestic breed such as the ringneck, Streptopelia risoria. One can get twice as many offspring out of one important pair. A little information can help the less experienced in fostering attempts. The ringneck is a good to excellent foster parent for species smaller than the common pigeon. Or ringnecks can even raise a single squab of the common pigeon successfully.

Note that the reciprocal fostering has been less successful. Not only are the dove eggs with thinner shells more likely to be broken by pigeons, or the newly hatched squab mashed, but pigeons seem to carry bacterial or viral strains (perhaps Herpes virus) to which doves are not resistant.

If the same species is to be used as donor and foster parents, or if the incubation period is the same (14 days in the ringneck), then the first requirement is to have the laying date of donor and foster parents the same or within two days of each other. Earlier laying by the parents to which eggs are fostered (foster parents) results in their having pigeon milk too early, and they are most likely to leave the eggs before hatching. Later laying by the foster parents results in the fostered eggs hatching before the parents have developed pigeon milk, so the new squabs starve until they are so weak they get mashed. If the species are different, the main concern is to match the hatching dates as closely as possible.

The second requirement is to start incubation of the eggs while they are relatively fresh. Chickens, other gallinaceous birds, and the duck family, for example, lay several eggs on approximately sequential days. So the earlier eggs must resist drying, and must be able to wait until the full clutch has been laid before incubation starts and embryonic development begins. Eggs of Columbiformes, pigeons and doves, have a clutch of only two, or rarely one egg. Their eggs have very thin shells and start drying out right away. For example, notice the size of the air bubble grow in egg #1 compared to #2, and then enlarge in unincubated eggs. Drying may not be the most important factor. Nevertheless, incubation must be started by 4 days after laying to maintain high (90%) viability of the eggs. By day 6 of holding ringneck eggs before incubation, viability is perhaps 50% and drops rapidly thereafter.

I worked out these approximate times many years ago, while at the University of Wisconsin. I was doing lots of fostering and artificial incubation then. I still do some, but not as often. However, I don't have regular experimental data. Who wants to improve on these times and percentages? Perhaps storage in cool (55°F?), but highly humid conditions will stretch the holding time.