

Further congenital malformation in birds bred at Slimbridge

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Over the past five years all live young birds and any eggs that failed to hatch have been inspected for gross malformation. Set out in the table below are the number of specimens examined and the type of deformity found. 21 deformities have appeared in a total of 8,878 downies and dead embryos, an incidence of 0.24 per cent, or 2.52 per cent of dead-in-shell alone. Included were 10 abnormalities of the beak or skull, 10 of the limbs and one case which involved a Muscovy Duck egg *Cairina moschata* containing twins. These Muscovy embryos (see page 7 of photographic section II) were apparently perfectly formed but shared the same yolk sac; since neither could absorb the yolk, both failed to hatch. Detailed descriptions of the deformities have been published

(Harrison & Kear 1962; Napier 1963) or are in preparation.

Incidence has fluctuated from year to year and further data are required before the cause of abnormal embryonic development can be established. Because of the possibility that certain foreign chemicals might be implicated (Kear 1964) a number of infertile eggs laid in 1965 were sent for analysis to the Infestation Control Laboratory of the Ministry of Agriculture. None of the usual organo chlorine insecticides were detected at a level of 0.01 parts per million. In view of the very wide distribution of some pesticides, in particular DDT and its metabolites, the results are gratifying.

We are grateful to Dr. A. Taylor for carrying out analysis of infertile eggs.

Table. Incidence of congenital malformation in birds bred at Slimbridge.

Year	Young live downies	Birds dead embryos	Total	head	limb	Abnormalities extra embryo	Total
1961	1593	174	1767	6	4		10
1962	996	117	1113*				
1963	2220	239	2459				
1964	1712	107	1819		3	1	4
1965	1524	196	1720	4	3		7
Total	8045	833	8878	10	10	1	21

* Not 934, as published earlier in error.

References

- HARRISON, J. G. and J. KEAR. 1962. Some congenital abnormalities in the beaks and skulls of wildfowl. *Vet. Rec.* 74:632-3.
 KEAR, J. 1964. Congenital malformation in birds bred at Slimbridge. *Wildfowl Trust 15th Ann. Report*: 99.
 NAPIER, A. 1963. Congenital malformation of the feet in Mallard ducklings. *Wildfowl Trust 14th Ann. Report*: 170-1.