

Revue
Bird Study

Titre
Changes in Mallard *Anas platyrhynchos* bill morphology after 30 years of supplemental stocking

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ABSTRACT

Capsule : Massive releases of captive-reared Mallard for hunting purposes have been practiced for 30 years. During this period the number of lamellae per centimetre of bill length in wild Mallard populations has decreased.

Aims : Every year since the 1970s, several million captive Mallard have been released in Europe. This may lead to a spread of unnatural phenotypes into the wild. Nevertheless, the consequences of such introductions have not been examined.

Methods : Two widespread and common migratory ducks were studied: Mallard *Anas platyrhynchos* and Teal *A. crecca*. Mallard is the only duck species for which stocking programmes occur, and Teal served as a control. In a ‘before–after’ design, we compared duck bill lamellar density over the last 30 years.

Results : Lamellar density in Mallard, but not Teal, decreased. The observed 10% decrease occurred in the first (proximate) centimetre of the bill, the most crucial in terms of food filtration.

Conclusions : We hypothesize that the change in bill morphology was because of the propagation of captive Mallard into the wild: captive Mallard eat mainly large items, relaxing the natural selection pressure maintaining high lamellar density for sieving small prey in wild ducks.