The following poster paper was presented at the 2003 Castlebar Conference on the Great Western Lakes. Since then, mallard populations on Lough Carra have not recovered – further data are available on this website (see "Winter wildfowl census" and Chris Meehan's thesis).

Wildfowl populations on Lough Carra - where have all the mallard gone?

Data on wildfowl populations on Lough Carra (especially ducks) have been collected since 1967. Analysis of these counts shows that several species have suffered significant declines over the last thirty years. Lough Carra was famous for holding very large numbers of mallard *Anas platyrhynchos* both as a breeding population and a wintering population.

The census figures show that the winter population of mallard from 1967 to 1986 was always above 1,000 birds, with a peak in the winter of 1971-72 of 2,500 (Stronach, unpublished report). In recent years, the population has never exceeded 500 and has fallen as low as 53 (Fig1).

In addition, the breeding population on the Lough in the late 1960s and early 1970s was estimated to consist of up to 150 pairs (Stronach, unpublished report). Recent informal estimates suggest that this has declined to no more than a few pairs.

The decline in mallard numbers has been paralleled in other dabbling duck species (notably teal *Anas crecca* and shoveler *Anas clypeata*).

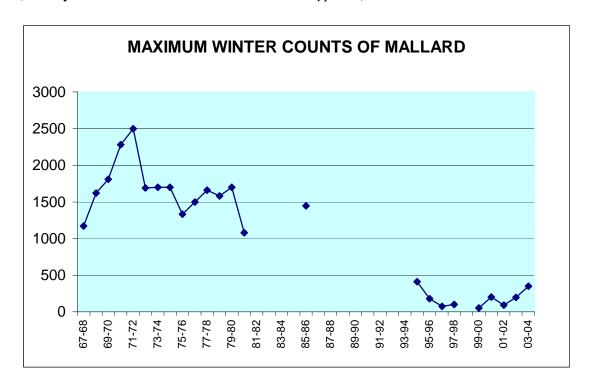


Figure 1. Change in maximum numbers of Mallard (*Anas platyrhynchos*) on Lough Carra between 1967 and 2004

Possible causes of this catastrophic decline:

It is likely that this dramatic decline in mallard numbers is a result of several negative factors:.

- Changes in breeding habitat on the islands and lakeshore;
- Loss of breeding habitat in the surrounding areas;
- Predation of breeding adults, especially females on the nest, by the alien species American mink *Mustela vison*;
- Loss of eggs and ducklings to hooded crows *Corvus corone* (and other predators); and
- Loss of winter feeding habitats

More research is needed to determine which of these are the most important.

Conclusions

The decline in both breeding and wintering populations of mallard indicates the presence of significant ecological changes to either the Lough itself or the surrounding habitats, or both.

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Chris Huxley