**Science at the heart of game bird management – and a result of it too**

*Adam Smith*

We are now at that point in the year when it is open season for all game birds – grouse, pheasant and partridge – and other wildfowl, geese and wader species as well.

Looking back 10 years, in 2005 the Game and Wildlife Conservation Trust, then the Game Conservancy Trust, published *Nature’s Gain –* a paper that expressed how game bird management had influenced wildlife conservation.

At that point, science had a great deal to tell us, and a great deal more has been studied, published and achieved in the intervening period.

*Nature’s Gain* highlights in part the work of those wildlife biologists who were interested in farmland game birds and the impact of organo-chlorine pesticides on them. These biologists were the pioneers of wildlife research on arable land and first to recognise the repercussions of the indirect effects of herbicides on farmland inverterbrates and bird fauna.

This laid the basis for the Trust’s Allerton Project at Loddington that illustrates how the abundance of a nationally declining farmland bird species – albeit a game bird – could be doubled in less than five years. Also, whilst improving the pheasant shoot, management has significantly increased songbird and brown hare numbers too. The Allerton Project continues to produce impressive results and undoubtedly work done at Loddington is among the best examples of shoot research benefiting wider conservation.

At the time that Nature’s Gain was published, the Trust’s Otterburn experiment in the north of England was almost midway through its programme. Otterburn is yet another example of how management for game can not only benefit other species but also spark science that explores and tests various management actions being taken across that habitat.

Systematic studies have shown that waders are more abundant on grouse moors that are managed than on nearby unmanaged moors. The GWCT’s Otterburn research showed, even at its halfway point, that golden plover, curlew and lapwing were far more successful in raising one chick on ground where there was predator control than where there was not. Moors managed for grouse, like Otterburn, typically have five times more golden plovers and lapwings as other nearby unmanaged moors, and about twice as many curlews.

It’s worth a thought then that as grouse moor management in Scotland continues to be scrutinised in Parliament and in wider circles that where there is investment in management of habitats for quarry species there is also investment in science.

Through the 1980s, large areas of our uplands had been enclosed for forestry - a response to successive encouragement by governments either directly through the Forestry Commission, or indirectly through tax breaks for planting trees. Against this pressure for commercial land use in the uplands, grouse shooting remained as the main economic alternative. And we know from science it was worth resisting that pressure.

No only has Britain managed to retain a substantial proportion of its moorland because of its importance for grouse, but it has done so for the benefit of many other moorland species, as proven by science.

Hunters have a profound interest in the landscape over which they hunt. Hunting for food has been practiced since time immemorial; it can also be strongly argued that those who hunt do so not just for food but for conservation – conservation of their quarry species, and also those species that thrive on the healthy ecosystem that their quarry requires.

Science isn’t free; it requires investment, and is for the long term. Without the insights that science provides much of what goes on in the countryside would be based on argument, supposition, conjecture and who shouts loudest. Science however provides the backbone to maintain and support those species that we love not just in Scotland but across the UK and elsewhere.

Much of our understanding of our countryside where there is ‘hunting’ and how we manage it is based on science. Without it our knowledge bank would be considerably poorer and our ability to deliver effective solutions considerably weaker. Science! Don’t knock it.

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