

Changes in Faroese Seabird Populations and Human Impact

Broytingar í føroysku sjófuglastovnunum og menniskjalig ávirkan

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Úrtak

Áðrenn fólk komu til Føroyar, vóru sjófuglarnir í javnvág eftir teimum livikorum, sum vóru í havinum kring Føroyar. Síðani tá hefur fólkíð gagnnýtt fuglin, og hefur hetta í flestu førum verið gjørt, uttan at tað hefur ávirkað stovnarnar stórvegis. Um 1816 áttu teir fyrstu havhestarnir í Føroyum. Síðani tá er havhestastovnurin vaksin, so hann nú er størsti og mest veiddi fuglastovnur í landinum. Har rottan er komin, hefur hon verið til stór-an skaða fyri drunnhvítan, skrápin og lundan, og umráðandi er tí, at rottan ikki spjaðist til fleiri oyggjar. Høvuðsbroytingarnar, ið síggjast í sjófuglastovnunum, eru framvegis náttúrligar, og umráðandi er tí at skilja hesar broytingar fyri at kunna meta um, hvørja ávirkan menniskjan hefur.

Extended abstract

Before the settlement of the Faroe Islands the seabird populations have changed in accordance with environmental variations, especially the changing productivity of the sea around the islands. Since then the birds have been used for food, for their feathers and also for recreation. At first the birds nesting on plane ground have been the most affected while the cliff breeding birds have been more difficult to reach. It is likely that sizeable populations of the great auk or the garefowl formerly occurred at the Faroe Islands and that it was a rare breeding bird by the late 1700s. This bird was hunted and the last record believed to be plausible for the

Faroes is 1 July 1808 at Stóra Dímun where a single bird was claimed to have been killed. This species was exterminated sometime between 1844 and 1853.

As the skill of hunting improved the huge colonies of cliff breeding seabirds have been exploited and these traditions have been continuing into this century. In order not to overexploit the populations, the fowling has been regulated by a series of traditionally developed and adopted rules trying to keep the bird populations on a steady level while, at the same time, giving a maximum yield. These rules indicate that the populations have been rather stable. Hunting bags for gannets indicate that this population has been stable or slightly increasing during 300 years. According to the export of feathers the guillemot and puffin populations have fluctuated with maxima in the middle of both the 1700th and 1800th centuries. This was also the fact in this century, but the decline since then has reached a lower level than in the previous century. The cormorant was breeding in the islands until the middle of this century, but although the population was declining it was not protected until too late when no breeding birds were left.

In 1768 the brown rat arrived to the Faroes. This indirect effect of man has certainly affected the bird populations in a negative way, especially the hole nesting species, storm petrels, manx shearwaters and puffins. Storm petrels are now only found on not rat-infested islands. The shearwaters and puffins have now only small isolated colonies on islands with rats while their main colonies are on the rat free islands. It is only a question of time when rats will be introduced to other islands and this is now the most serious manmade threat for the seabirds as the traffic between the islands is increasing and so the risk of transferring the rats. The most popular tourist boat trip is to the bird cliffs of Vestmanna where the populations of guillemots and kittiwakes have shown a dramatic decline during the last 40 years and they have probably been negatively affected by the tourist traffic during the last 15 years. Therefore it is highly recommended that the tourism planning take the vulnerability of the seabirds into account.

A major change in the seabird history was the settlement of the fulmar, which started to breed here about 1816. Since then the fulmar has gradually increased in number and is now the most common bird on the islands, composing 50% of the total Faroese seabird biomass followed by puffins (23%), guillemots (16%) and kittiwakes (7%). The increase of the fulmar in the North Atlantic has partly been sustained by the offal from the increasing fishing fleet. As the hunting of guillemots and puffins has been restricted the fulmar has become the most important fowl. About 50,000 to 100,000 youngs are taken for

food each year but the population seems still to increase.

Data for the guillemot suggest that there was a very sudden decline of immature birds late in the 1950s, probably caused by food shortage, which may even have resulted in a reduction of the time immature birds spent in the colony. The breeding population showed a more gradual decline. Since 1980 the guillemot has been legally protected during the breeding season and this was followed by some stable years. But in the late 1980s, there was a drastic decline in the number of guillemots. The production of young guillemots and puffins almost completely failed, while the production of gannets and kittiwakes were probably unaffected. The most negatively affected seabird during the last two decades is the common tern, which experienced an 11-year period of breeding failure. During the same period, late in the 1980s, the plankton productivity and the recruitment of the major food species for the guillemots and puffins decreased dramatically. Also the recruitment and individual growth of other fish stocks were reduced during these years. This situation is now improving. The guillemot numbers are increasing as well as the breeding success and the growth of the young puffins. Concurrently, the plankton productivity and the recruitment and growth of many fish stocks has increased substantially. The main reason for these changes is natural, and therefore quantitative studies of the interrelation between seabirds, their prey, and oceanographical changes are required as a basis for identifying the effect of other factors, such as human influence.