Wild birds general licence: public consultation

Angling Trust suggested responses for anglers, angling clubs and fisheries

Introduction

The government has launched an online consultation on the General Licence, https://consult.defra.gov.uk/wildlife-management/wild-birds-general-licence-survey/. This public consultation is open to 5th December 2019.

This is an opportunity for cormorants to be added to the general licence to enable angling clubs and riparian owners to more effectively control the impact these fish-eating birds are having on our fish, including those fish which are themselves meant to be protected under UK and European legislation.

We encourage as many anglers and angling clubs to submit evidence to this consultation. To help we have set out below where we think it is important to make the case to include cormorants. Please feel free to use our suggested response and accompanying evidence in your own submission.

Suggested responses

Here are the survey questions. Our suggested responses.

About you:

Please complete this section with your own information.

Theme A – Purpose "to conserve wild birds and to conserve flora and fauna"

A.1. We suggest **Canada Goose** under "Conserving fauna (animals other than wild birds). Add the following evidence:

> **A review of 26 invasive alien birds in Europe, found Canada goose to have the greatest environmental impact and greatest impact on the economy (Kumschick and Nentwig, 2010). They pose a significant threat to the health of water bodies and the wildlife they contain through the toxicity of their excrement which is deposited in large quantise at the waters edge. Research has shown that the excrement of Canada geese contains a wide variety of pathogens capable of infecting humans and that can also be transferred to the water and air quality. These include three parasites that are a concern to human health; cryptosporidium, giardia and toxoplasmosis. The bacteria transferred from Canada geese that cause humans concern are chlamydiosis, e-coli, listeria, pasteurella multocida and salmonella. In addition the high phosphorous content of their faeces can lead to significant algae blooms which can kill fish and damage invertebrates.**
>
> **A recent cost-benefit analysis for management of Canada geese in Belgium showed that the cost of additional management was always outweighed by the reduction in damage costs (from eutrophication, human health, grassland damage etc) (Reyns et al., 2018)**
> https://peerj.com/articles/4283.pdf

A.2. Add **cormorants (*Phalacrocorax carbo carbo and Phalacrocorax carbo sinensis*)**

Suggested wording to submit as supporting evidence:

> **The great cormorant is a highly efficient predator of fish and able to deal with relatively large prey. Studies have demonstrated that predation by cormorants can be the primary cause of collapses in fish abundance at a local level, possibly threatening the survival of isolated populations. A tagging study of brown trout (*Salmo trutta*) and grayling (*Thymallus thymallus*) populations in several river systems in Denmark showed that an estimated 30 per cent of tagged trout and greater than 70 per cent of grayling were consumed by cormorants, causing population collapses.**
>
> **This study has highlighted the severity of impact of cormorant predation. A period of cold winters and low availability of coastal prey fish can trigger cormorants to seek their prey on inland rivers and water bodies that are popular recreational angling venues. The study found this increase in bird presence coincided with huge declines in fish populations, and the collapse of grayling numbers in particular. Consequently angling activity reduced by approximately 95 per cent on one of the study rivers.**
>
> **The study sites were on Danish rivers with pristine habitat, good water quality and abundant flows. This contrasts with England, where most of our rivers are heavily degraded by human activity – with just 14 per cent**

currently meeting Good Ecological Status under the Water Framework Directive – and fish populations are depressed as a direct result, leaving them even more vulnerable to predation by fish-eating birds.

Cormorants possess a voracious appetite, with each bird consuming an average of 500g of fish daily, when raising chicks this can rise to between 1.1kg and 1.9kg per day. According to a study in the Netherlands a chick needs an average of 386g of fish per day in its first 30 days, with a peak food requirement of 632g per day in the period of fastest growth. Their effectiveness as predators of salmonids, trout and other native fish species brings them in obvious conflict with recreational fisheries. The majority of EU member states see it necessary to control cormorant numbers in order to protect fish populations of recreational, economic or conservation significance, with France making extensive use of the derogation to protect Fauna and Flora. This includes protection for heavily threatened fish species such as European eel and Atlantic salmon.

Roach populations in the Hampshire Avon were decimated in the 1990s and early 2000s through increased predation by cormorants, such that Environment Agency fish surveys of 2005 revealed a perilously low number of roach remaining in the river. Roach conservation projects have been running in recent years in order to enhance the roach population of the river, and such projects are now being mirrored on other major rivers across England where roach populations have also suffered through cormorant predation.

For more information see [name of report] submitted to accompany this survey response.

A.3. The Angling Trust will not be answering this question.

Theme B – Purpose "to preserve public health or public safety"

B.1. We suggest **Canada Goose** under "Prevention of trips, slips and falls" and "Preventing spread of human disease". Add the following evidence:

A review of 26 invasive alien birds in Europe, found Canada goose to have the greatest environmental impact and greatest impact on the economy (Kumschick and Nentwig, 2010). They pose a significant threat to the health of water bodies and the wildlife they contain through the toxicity of their excrement which is deposited in large quantise at the waters edge. Research has shown that the excrement of Canada geese contains a wide variety of pathogens capable of infecting humans and that can also be transferred to the water and air quality. These include three parasites that are a concern to human health; cryptosporidium, giardia and toxoplasmosis. The bacteria transferred from Canada geese that cause humans concern are chlamydiosis, e-coli, listeria, pasteurella multocida and salmonella. In addition the high phosphorous content of

their faeces can lead to significant algae blooms which can kill fish and damage invertebrates.

A recent cost-benefit analysis for management of Canada geese in Belgium showed that the cost of additional management was always outweighed by the reduction in damage costs (from eutrophication, human health, grassland damage etc) (Reyns et al., 2018)
https://peerj.com/articles/4283.pdf

B.2. The Angling Trust will not be answering this question.

B.3. The Angling Trust will not be answering this question.

Theme C – Purpose "to prevent serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber, fisheries or inland waters".

C.1. We suggest **Canada Goose** under Fisheries. The evidence in the previous two themes has focused on human health and fora and fauna. Add the following evidence:

High phosphorous content of their faeces can lead to significant algae blooms which can kill fish and damage invertebrates.

A recent cost-benefit analysis for management of Canada geese in Belgium showed that the cost of additional management was always outweighed by the reduction in damage costs (from eutrophication, human health, grassland damage etc) (Reyns et al., 2018)
https://peerj.com/articles/4283.pdf

C.2. Add **cormorants** and list them under "fisheries" and "island waters". Add the following evidence:

Freshwater angling in England is a past-time that well over one million people take part in every year, with each of them purchasing a fishing licence from the Environment Agency and therefore contributing financially to the conservation of freshwater ecosystems and fisheries. Freshwater angling supports around 27,000 full-time equivalent jobs and contributes approximately £1.2 billion annually to the English economy. Furthermore, each year anglers collectively contribute hundreds of thousands of hours of volunteer time to improving habitat, engaging young people with the countryside, removing litter and deterring illegal fishing.

Successful angling depends on healthy stocks of fish species that are of interest to anglers, and many of these species have suffered markedly as a result of increased predation by cormorants. Roach populations in the Hampshire Avon were decimated in the 1990s and early 2000s through increased predation by cormorants, such that Environment Agency fish surveys of 2005 revealed a perilously low number of roach remaining in the river. Roach conservation projects have been running in recent years in order to enhance the roach population of the river, and such projects are now being

mirrored on other major rivers across England where roach populations have also suffered through cormorant predation.

Studies have demonstrated that predation by cormorants can be the primary cause of collapses in fish abundance at a local level, possibly threatening the survival of isolated populations. A tagging study of brown trout (*Salmo trutta*) and grayling (*Thymallus thymallus*) populations in several river systems in Denmark showed that an estimated 30 per cent of tagged trout and greater than 70 per cent of grayling were consumed by cormorants, causing population collapses. The increase in bird presence coincided with huge declines in fish populations and resulted in a reduction in angling activity of approximately 95 per cent on one of the study rivers.

Still water fisheries – both those that are artificially stocked by angling clubs and those that are naturally colonised – can also be decimated by cormorant predation. Loch Leven is a natural lake in south east Scotland that supports a world-renowned recreational fishery for both brown and rainbow trout (*Oncorhynchus mykiss*) as well as being home to a large number of overwintering cormorants. It was the subject of a study by Stewart *et al.* looking into the level of predation by cormorants and the impact on the fishery. Using diet analysis and subsequent modelling, it was estimated that over a seven-month period, cormorants consumed in excess of 80,000 brown and 5,000 rainbow trout. This compared with an average annual angler catch of 5,828 brown and 12,815 rainbow trout, indicating a very large degree of competition between cormorants and anglers and a huge economic loss of stocked trout to cormorants.

While cormorants can take fish up to 4lbs they are known to actively hunt prey much larger, 'slashing' at larger fish with their sharp beaks and often afflicting deep wounds. These damaged fish become stressed, stop feeding and are more vulnerable to disease. They shoal up unnaturally often in very shallow water, making them prone to attack by other predators.

For more information see [name of report] submitted to accompany this survey response.

C.3. The Angling Trust will not be answering this question.

Theme D – Alternative to lethal control

D.1. The Angling Trust will offer no evidence in response to this question.

D.2. Add, cormorants.

Purpose:

- Audio-visual deterrents
- Exclusion
- Habitat management
- Livestock/crop management
- Other – human disturbance, shooting to scare

Add the following evidence, if you have no evidence of you own to support your answer:

> **The Angling Trust [of which we/I are/am a member] has extensive, practical experience of alternative measures. We have two Fisheries Management Advisors that have 4 years' experience in the field training clubs and fisheries in these methods. The key here is that there is no one method that is totally effective due to the cormorants ability to recognise that a particular measure is not lethal to the bird and therefore volunteers have to constantly change measures to counter adaptability of cormorants more information can be found here** https://www.anglingtrust.net/page.asp?section=1764&sectionTitle=Fishery+Management+Advisors
>
> **However this is very resource intensive for volunteers who for an Area Based Licence average 1,900 volunteer hours per annum.**

Theme E – Record keeping

This section to be answered by you if applicable.

Theme F – Your views on the role of general licences to manage wild birds

The Angling Trust will be submitting the following response to the two questions in this section:

> **We have proposed that the cormorant should be added to the general license however we are also concerned that this should not impact on it's conservation status. Unique for birds the population is monitored under an Adaptive Management Strategy on an annual basis with populations modelled by APHA from WeBs data which gives population trends. This therefore provides a safety net as should trends threaten the conservation status a resultant reduction in shooting would very quickly restore numbers as has been seen by the recovery of cormorant populations through its natural range following the ban on the use of DDT.**

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