Cormorant predation clearly underestimated so far - consequences for management demanded

It is well known that cormorants eat fish. However, there are different opinions about the daily quantities and the composition. Now a new study [1] has been published, which shows that the quantities are considerable and larger than previously estimated. And: commercially important species are also being significantly decimated.

The study was commissioned by the Schleswig-Holstein Ministry for Energy Transition, Agriculture, Environment, Nature and Digitalization and conducted by the Institute of Inland Fisheries in Potsdam-Sacrow. In this study, a total of 1093 cribballs were collected from cormorants at three different locations, analyzed microscopically, and a determination of the fish species eaten was made on the basis of detected hard structures (auditory stones, chewing plates, jaw bones, etc.). Their body size and biomass were also back-calculated. Remains of a total of 12574 fish were detected in the examined cribballs, which could be assigned to 33 different fish species.

Until now, it has been claimed by conservationists that cormorants have no impact on commercially exploited fish stocks because they mainly eat commercially uninteresting fish species and their food requirement per bird and day is only about 180 to 350 g.

This study demonstrates that these statements do not stand up to close scientific scrutiny and represent a systematic underestimation by conservationists. The recalculated fish biomass per bird and day was 455 g, 494 g and 787 g at the sites Schlei, Güsdorfer Teich and Dassower See, respectively. At some sites, cormorants ate mainly cod and herring during some months. This was particularly serious at Dassower See. In this brackish water bay of the river Trave at the border between Mecklenburg-Vorpommern and Schleswig-Holstein, cod even had the largest shares of the monthly total fish biomass with values between 25.1% and 96.1%. What is still not taken into account is that fish are often only injured by the sharp beaks when the birds search for food under water, but are still able to escape at first. Many of them later die as a result of the injuries.

Based on the data of the present study, the Dassow Lake, which is a year-round roosting site, is estimated to have a total cod removal of about 100 to 120 tons per year. This is more than the entire German cod quota for the current year in the western Baltic Sea at this location in the Bay of Lübeck alone! The German quota for cod in the western Baltic Sea for 2022 is 104 tons and is a pure by-catch quota.

The present study clearly demonstrates that the magnitude of fish losses due to cormorants after the population has increased due to excessive protection measures should now be of great importance for stock management.

There are reports from Danish colleagues that there have been plenty of small cod eaten away by the cormorant in coastal waters in recent years. Due to the eating away of the young fish in coastal

waters, there is no sufficient recruitment of the larger, catchable fish. Only recently, therefore, the Danish MEP and Vice-Chairman of the Fisheries Committee in the European Parliament, Søren Gade, called for the protection status of the cormorant to be changed for the benefit of fish stocks, biodiversity and fishermen. According to Gade, the cormorant is no longer an endangered species but, on the contrary, is so overprotected that it has become a nuisance to many.

The European Parliament has called for European management on several occasions. But the democratically elected representatives of the people always fail because of the reluctance of the EU Commission.

This is not changed by the fact that last year the German Federal Ministry of Food and Agriculture (BMEL), together with the German states, drew up a framework directive that would make it possible to compensate inland fishermen, aquaculture operators and small-scale coastal fisheries for damages of up to seven million euros.

"This is not a sensible use of natural resources if fishermen only receive aid money to produce bird feed for cormorants instead of valuable food," says Stefan Jäger, Chairman of the Cormorant Commission of the German Fisheries Association. According to the Lancet Commission (2019), in order to feed humanity in a climate-friendly way, fish production and consumption must increase by 50% in the future, because fish as food has a more favorable carbon footprint than many other sources of animal protein.

Exploiting the sustainable use potential of fish stocks is therefore a sensible component of a responsible climate policy. However, no progress can be made here without a turn by policymakers toward responsible management of formerly rare species.

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order to feed humanity in a climate-friendly way, fish production and consumption must increase by 50% in the future, because fish as food has a more favorable carbon footprint than many other sources of animal protein. Thus, exploiting the sustainable use potential of fish stocks is a reasonable component of a responsible climate policy. However, without a shift in policy toward responsible management of formerly rare species, no progress can be made here.

[1] Pietrock, M.; Sternberg, N. 2021. analysis of speiballs to determine the food composition of cormorants in the areas of Plöner Seen, Untertrave and Schlei. Report commissioned by the Ministry for Energiewende, Agriculture, Environment, Nature and Digitali-sation of the State of Schleswig-Holstein. Institute of Inland Fisheries e. V. Potsdam-Sacrow, 90 pp.

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