

# Nordic Cormorant meeting, Mariehamn, Åland, 9-11 November 2021

## List of participants

Jepsen Niels, Technical University of Denmark  
Juslin Robin, Åland Provincial Government  
Kettunen Anni, Akordi  
Norrback Markus, Ostrobothnian Fisheries Association  
Nygqvist Marina Ostrobothnian Fisheries Association (organiser)  
Peltonen Lasse, Akordi  
Veneranta Lari, Natural Resource Institute Finland  
Vestergaard Mikkelsen Caroline, Danish Nature Agency

### Online:

Andersen Oddgeir, Norwegian Institute for Nature Research  
Mikander Nina, Ministry of the Environment of Finland  
Lundström Karl, Swedish University of Agricultural Sciences  
Westerman Maria, Centre for Economic development, Transport and the Environment

10.11.2021, 10-12 (online)

O'Briain Micheál, Nature Unit EU Commission  
Bregnballe Thomas, Aarhus University

Fisheries group of the Nordic Council of Ministers: Tapani Pakarinen, Orian Bondestam, Pia Smeds, Ole Thomas Albert, Thorbjørn Thorvik, Izabela Alias, Noël Holmgren, Magnus Andersson, Anna Larson, Jón Þrándur Stefánsson, Sigurjón Arason, Mads Nørgaard Larsen, Max Nielsen, Erling Larsen, Helge Paulsen, Katrin Vilhelm Poulsen, Simon Dahle Raunholm, Leon Smith, Simun Grønadal, Birgitte Jacobsen, John Biilman.

## Tuesday 9.10.2021, 15.00-17.15

### Going through the agenda for the upcoming meeting(s)

- Nordic research initiative
- introducing the seven Danish projects
- manager to manager discussions – between Denmark, Finland etc. What could different countries do together?
- About manager's meeting: for managers it's difficult to take initiative for Nordic collaboration without a mandate from above.

### What are the next steps for Nordic collaboration?

Stakeholder inclusion – to include stakeholders, e.g., Bird Life and fisheries groups in the Nordic collaboration could be an important next step.

Translations – important to translate documents in order to truly collaborate (e.g., new Danish management plan)

Recommendation - one fisheries researcher and one bird researcher working together – gives more credibility, the collaboration between researchers in Denmark is a good example.

## **Wednesday 10.10.2021**

10-12:00. Meeting (online) with EU Commission /O'Briain and Nordic working group on Fisheries

**Chair Lasse Peltonen**

### ***Opening and Welcome: Marina Nyqvist***

There is an identified need for collaboration among the Nordic countries. Due to a rapid increase in the cormorant population and a subsequent increase in damages to fisheries in Ostrobothnia the Ostrobothnian Fisheries Association has taken the initiative to the collaboration with the help of funding from Nordic council of ministers. Meeting opened at 10.05

### ***Nordic Cormorant workshops 2020-2021. The process and main findings. Lasse Peltonen (presentation attached)***

### ***Update on research findings and the need for a Nordic knowledge base. Presented by Niels Jepsen***

“Cormorants and fish populations – Documentation of effects”

Niels presented recent research results from Denmark on effects of cormorants on fish populations. Cormorants preying in rivers is a new phenomenon in Denmark. Cormorants have a very high impact on fish populations even in very 'pristine-like' rivers that are in a healthy ecological state. Not only smolts, but both juvenile fish (e.g., salmon and trout) and adult fish are threatened by cormorants. Small number of cormorants can cause a lot of damage to fish populations in a short time. As a conclusion, there is documentation that cormorants seem to be the main regulating factor for fish populations. Also, wild fish populations in restored, unimpacted rivers are threatened by cormorants.

Effects include economic loss (commercial and recreational fishing), cultural loss, biodiversity loss and problems in reaching requirements by the Water Framework Directive (WFD). Denmark has tried to deal with the cormorant problems locally, but with little success. Denmark uses the § 9-derogations to the full extent, but with little effect. Question remains: how can we protect our threatened fish populations?

In Denmark cormorants are a problem throughout the year due to wintering birds. All cormorants are a part of the same pan-European population. Conflicts are similar in each Nordic country. If all documentation must be produced locally, management will trail far behind.

What we need is a Nordic knowledge base - A shared burden of proof would benefit the process and save resources.

### ***National management efforts and the prospect of Nordic co-operation: Caroline Vestergaard Mikkelsen and Nina Mikander***

#### ***Denmark – Caroline Vestergaard Mikkelsen***

Denmark has a long history of cormorant management.

A new management plan is about to be launched; it is more or less the same as the current one. The focus has been to make it more reader-friendly and understandable to local marine fishermen. In Denmark it is possible to regulate cormorants with the right reasons, e.g., to prevent damage to vulnerable fish stocks. Compared to other Nordic countries Denmark regulates more, around 6000

individuals and 9000 oiled eggs per year. We are doing a lot, but it seems that it's not enough. Due to migrating cormorants, Denmark has a lot of cormorants throughout the year.

Denmark is interested in Nordic collaboration and exchange of experiences and research results. Denmark is not interested in a joint management plan between Nordic countries, but in a minor level management plan focusing on the overview of cormorant populations in the Nordic countries and in cormorants' effects on fish stocks. Denmark regulates more than other countries, and we'd like to see if how that affects the situation in other Nordic countries. Denmark would like to share the results.

In Denmark the momentum is now high for resolving the cormorant conflict. The Minister of Environment is interested in finding a solution.

Seven different research projects are considered reasonable to implement for which Denmark is trying to find money for. Denmark is also willing to share the results if the funding can be secured. Denmark is also interested in sharing the experiences with other Nordic countries, related to e.g., fishing gear in shallow waters or cormorant-safe fishing gear. Denmark is very interested in keeping this group alive.

#### Finland – Nina Mikander

It's been a great opportunity to see how cormorant issues are dealt with in different Nordic countries. The Ministry of Environment is interested in keeping this process going. So far it has been just a scratch on the surface.

Although we are all (except Norway) bound by the EU Birds Directive, there are also national legal systems that do bind us in terms of the management options in each Nordic country. Therefore, it's not just a copy-paste-situation where we could adapt all the best practices. Some things can be adopted, whereas some things cannot.

In Finland we have a national cormorant strategy adopted in 2019. The strategy highlights the need for more Nordic collaboration. The Ministry is trying to increase the capacity, particularly within the environmental administration, to deal with the cormorant issues.

A new compensation scheme will soon come in place for compensation of damage caused by protected species. The new scheme is focusing not only on compensating the damage that has happened, but also providing opportunities to seek funds for avoiding damage in advance. Linked to this new legislation there will be research on cormorants. It will focus on damages caused by the cormorant on commercial fishing installations.

The Ministry of Environment is supporting the idea of continuation of Nordic collaboration and research. Nordic knowledge database is a very good idea. We should try on setting this up, so that we are aware of what's going on in other countries in terms of research and measures.

For activities that would be implemented particularly in the Finnish waters, the Ministry is open to looking for funding for this. The Ministry's priority is funding research that supports the competent authority in their knowledge needs with regards to the derogations.

From the Finnish point of view, it would be very beneficial to get additional guidance on the use of the derogations. This would support us and give more confidence to the competent authorities in the derogation issues.

In addition to continuing Nordic collaboration, we could consider reviving a cormorant task force under HELCOM. This could be a way to enhance cooperation with other countries around the Baltic Sea. In terms of the research, it would be useful to have an overview of population level effects of the derogations implemented in the countries and how the populations are evolving overall in all Nordic countries.

***EU Commission's perspective and outlook and responses: Micheál O'Briain / DG Environment, European Commission***

We very much welcome this kind of debate and bringing together managers and researchers from different countries. I've been involved in the cormorant issues in many contexts during the past year. Therefore, I'm very aware of the topic.

From EC point of view, it is challenging to get a definitive view on these matters and give comprehensive answers in a short time. EC is a very broad organization and needs time to formulate the responses. Therefore, today's responses are preliminary.

The EU Birds directive is the basis for EU to approach these matters. The Migratory Birds Convention is also relevant. Cormorant is protected under the directive. Background: In 1992 the continental sub-species of cormorant was listed in Annex 1 of the Directive, yet in 1997 the recovery of the population had taken place and cormorant was removed from the Annex 1 of the Birds directive.

EC has recognized that the recovery of the population has brought it into a different system of how we see the management of the species.

EC is aware of conflicts that are present in different member states. Many of these are local and many of the solutions must be found on the regional or local level. But maybe we must change our view that the conflicts are not of a local but of a broader scale.

EC has supported many initiatives to help member states. Ultimately, it is the competent authorities that are responsible for the implementation and taking the decisions in relation to applying the Birds Directive and making use of the flexibility.

The framework for the conservation of the wild birds does provide the necessary balance and flexibility where this is justified in the context of derogation from strict protection. The commission has developed guidance (The Great Cormorant 2013) to try to help member states apply derogations. We have also tried to strengthen the knowledgebase - we've set up this EU cormorant platform, CorMan, to give support to different initiatives. Currently, there aren't any research projects going on. In the EU platform EC has tried to bring as much information about the conflicts and gather a knowledge base to inform the decision making.

**In relation to the derogations:** When we talk about derogations the starting point is to explore as far as possible to what extent you can avoid the use of derogation through preventative measures in terms of mitigating damages. It's important that before lethal controls you can demonstrate that you have examined the non-lethal methods of control. Where these techniques don't work, member states can and should make use of the derogation provisions.

There have been discussions about adding the cormorant to the Annex II of the Birds directive, but this doesn't necessarily provide a solution. This only would allow to hunt the cormorant under a limited timeframe, whereas exercising the derogation is possible twelve months a year if this is justified. The flexibility that derogation system provides is much broader in the context of addressing the problem.

There are two relevant provisions in the context of the cormorant-fisheries conflict. It allows the use of derogations to prevent serious damage (reasonable basis to conclude that there will be serious damage if not intervened). Another provision is the protection of flora and fauna. It is on the competent authority's responsibility to decide on the derogations. EC does not authorize

derogations but monitors countries' reporting on the use of derogations, to examine whether the use of derogations is justified and proportionate in relation to the problems. To EC's understanding, member states are making a lot of use of the derogation system, even to the extent that some countries are controlling 10 000s of cormorants annually. Where this flexibility is required, the commission has not raised any issues.

**In relation to the existing guidance and need for additional guidance** EC is open to looking at further guidance if needed. EC is also open at looking at ways in which we can strengthen the knowledge base in relation to affective management. Controlling and regulating populations is a very sensitive topic – it's important to have good collaboration between different actors.

**How the EC views the threat** – I'd need to look more into the research results Niels has presented regarding cormorants' effects on fish populations in the Baltic Sea. One critical aspect is the importance of having a science-based underpinning in relation to any policy decisions that are taken, e.g. when indicating a serious damage, a solid science base is needed. A cormorant platform can be updated if needed.

**In relation to the WFD:** I didn't have a chance to discuss with the colleagues that are responsible for this, therefore I cannot give an answer to this. But of course, if this is a qualifying standard then it must be looked at by the authorities in relation to their duties to implement. In the context of river quality, I expect that the overwhelming issue is not the cormorant but the fuse pollution.

Niels Jepsen commenting on this:

We have documentation showing that fish populations (e.g., grayling) are decreasing, and there is only one explanation (cormorant) to this trend. We have research showing this trend. There should be no big doubt about this. The situation in Danish rivers is that they are in a better shape than in a long time. As soon as the cormorants are halted from the rivers, the fish populations come back. Therefore, it sounds very hollow that the EC and national authorities keep saying that it is a regional or local problem and should be dealt with accordingly.

Micheal O'Briain continues:

I'm not saying that the problem doesn't exist but in the context of the WFD implementation the problem is pollution rather than cormorant. I'm not eliminating your concern but just trying to put a broader perspective in relation to the WFD. If there are issues in relation to meeting standards that are required under the WFD they must be looked at seriously.

**In relation to opening the Birds Directive in the future** – the EC has committed a detailed assessment of the Birds Directive and the Habitats Directive. It was concluded that the EC would not propose opening the directive or its annexes in the foreseeable future.

The existing legal framework provides the flexibility that is needed to manage the conflict between cormorants and fisheries. Changing the legislation is not the solution but better understanding of the flexibility and how it works in practice in a way that addresses the conflicts but also ensures the conservation of cormorant.

If there is a specific gap in the guidance – try identifying what additional guidance is needed, we need to be clear what needs to be clarified.

**The issue of serious damage that must be determined** – what is needed is case by case judgments. 'Damage' refers to economic damage - this must be mentioned in the justifications. And it's preventative. Damage must be serious, and science based.

**In relation to cross-border management** – Initiatives like yours are very important in relation to sharing knowledge, experience, and expertise. Yet, each country has its own system and countries have to have their own mechanisms – derogations are exercised by the competent authorities, not at the Baltic Sea level. Under the Birds Directive the EC cannot foresee a situation where cross-border management (e.g., Sweden making a derogation in Lithuania) takes place, this is too challenging. The more the countries share information, the better it is.

We welcome this kind of cooperation, and it seems to make sense, but it's not a substitute for what e.g., the Finnish authorities are doing in the context of their cormorant strategy. Nature bilateral discussions between Finland and the EC will continue.

Population recovery – wintering populations of cormorants is quite complex.

Be careful before launching debates about trying to get a jointly agreed plan – ultimately, it's up to each country to decide and take measures.

The derogation system in EU has become more transparent: information is available.

**In relation to the support for cormorant management and research:** e.g., the CorMan platform – we would be open to supporting further work that would be strategically valuable to member states, but it needs to be very carefully scoped.

**Possible research funds:** REDCAFE, INTERCAFE. The European Maritime and Fisheries Fund for a range of measures such as preventive and compensation measures. In terms of funding related to fisheries management it is the European Maritime Fisheries and Agriculture Fund (EMFAF) – special attention to the difficulties of small-scale fishermen. Worthwhile checking this funding instrument.

### ***Open discussion***

Markus Norrback: It's interesting that EC says that each member state should make use of the derogation system, but one of the problems is that the Birds Directive has been implemented in different ways in different countries. In Denmark you can get a derogation decision in a week whereas in Finland it can take up to nine months, even years. Guidance from the EC is only in English, and it should be translated into different languages. In Finland we are not at that point yet where derogations could be used to prevent serious damage (the Supreme Court requires clear evidence).

Micheal O'Briain: The Birds Directive is a directive, not a regulation, it has to be transposed into national law by the authorities. It allows flexibility. It's for each member state to put necessary systems in place, it's an inter-country debate. Derogation is not an obligation. It doesn't obligate countries to use derogations. But the flexibility is there. What the EC can do is to promote good practice – how countries can improve their operation of systems, but it's not for the EC to say to the countries how they should operate their administrative systems.

Guidance not being available in different languages – I'll convey that point internally. We do try to make the guidance available in different languages.

In relation to evidence and preventing serious damage – a very strong scientific basis underpinning derogations is needed before taking decisions. The work that Niels presented is critical.

Niels Jepsen: About the CorMan platform – it's not active anymore. Would it be possible for the EC to revive and update the platform? Currently it's not maintained.

Micheal O'Briain: this is a good point. The CorMan -platform includes important work. I take that message forward. Maybe you could signal to us how it could be improved.

Niels Jepsen: There is recent information and evidence that should be included in the platform, e.g., pollution is not a factor in the rivers, but cormorants are. This shows that there is no knowledge of that. One thing that is needed: an email address or a person who is responsible for threatened or vulnerable fish species. This is another type of conflict (between predators and other species, not fisheries), and it would be great to discuss this.

Micheal O'Briain: If you want to raise issues that are relevant to the conservation of species that are protected under the Habitats Directive you can talk to the Nature Unit.

***Comment and questions from the Fisheries group at the Nordic Council of Ministers, and Response and reflections from EC. Micheal O'Briain***

Question from the Fisheries Group: From the EC's point of view, is it a correct interpretation that member states may take measures to mitigate the conflict between fisheries and cormorants? For instance, scaring away birds etc. Is it up to member states to take the measures?

Micheal O'Briain: From an EU perspective – The Birds Directive provides the necessary flexibility to address the conflicts between fisheries and cormorants. The cormorant is a protected species – that protection regime is set out in the Bird directive, but there is flexibility set out in the derogation provisions. The starting point is to have evidence that there is risk or damage to fisheries if the problem is not addressed. There needs to be scientific basis for derogations. In relation to measures and trying to prevent damage. If the non-lethal measures are not enough, you can apply lethal control mechanisms – it's up to the competent authorities to decide based on good scientific evidence. Each country has to report about derogations that have been applied. If needed, we are open for providing further guidance.

Our understanding is that the Finnish authorities are taking this matter very seriously. This sort of debate between countries where you can learn from each other is a good initiative.

If for example a compelling case was made for changing the Birds Directive that you cannot address the problem, then of course it has to be looked at by the EC. The EU has concluded that we would not open the legislation, but we'll work for its implementation. Flexibility is there in the directive.

Question from the Fisheries Group: Protecting threatened fish species (e.g. salmonids) from cormorant predation – how do we manage this?

Micheal O'Briain: There is a derogation for protection of flora and fauna - in relation to these protected species (e.g., salmon) – the flexibility is there and can be applied.

Nina Mikander's final comments: In Finland there are lots of things that we still need to improve nationally. Resource questions are to be addressed nationally. Guidance - being more specific – take-home-message for us. Finnish Ministry of Environment is not interested in a joint management plan since we don't think that it would be a useful process at the moment.

Fisheries Group: What we understood from Micheal O'Briain, derogation has flexibility, but we need to find ways to apply it. The lead times of derogation applications must be cut down.

Micheal O'Briain's final comments: We recognize that there is a challenge. We believe that this forum that you have created is a useful and a good forum. One critical thing: success is linked to the capacity, human and financial resources, that you secure for dealing with these matters. If you don't have the public administrative capacity and the financial resources, you'll be constrained and limited. Talk to the ministers and to people who influence the financial and human resources, and those who are dealing directly with the funding instruments, e.g., European Maritime and Fisheries fund.

**Meeting closed at 12.00**

### **Debrief regarding meeting with the Commission and take-home messages**

#### Derogation measures and scientific basis:

- O'Briain said that derogations must be made based on science, it should be clarified, what type of scientific evidence and how detailed? Who defines what is specific enough? There are differences between the countries and how the directive is interpreted in different countries.
- It's wrong to discard the pan-European management plan as not functional. In the derogation report it is clearly stated what is 'serious damage'. What type of documentation; and what are the measures what you can accept (e.g. poisoning).
- It is important for countries to see how other countries have interpreted the directive, what documentation is needed, how it is done elsewhere. Learning from other countries is an important part of Nordic collaboration.
- Scientific evidence – interesting to look how the directive has been interpreted in different countries. In Sweden there are also regional differences in cormorant management. In some areas there are no scientific evidence due to a lack of studies.
- The flexibility of the directive is good, each country can apply it up to its needs.
- Since the CorMan project 2013, the EC's website on cormorants is not up to date.
- It was clear that the commission was not up to date of the recent results.
- Considering Danish research, O'Briain mentioned that maybe the EC does need to reconsider whether cormorant conflicts are a broader scale problem, not only local.
- O'Briain mentioned that some countries are controlling 10 000's of birds annually, which is acceptable by the EC – practices are different although all countries are under the same directive.
- National cooperation is supported by the EC, does this even mean cross-border management?

#### The Birds Directive:

O'Briain said that opening the Bird directive doesn't seem likely, but that if there is a case and we can show that the Birds directive is a problem, there might be a possibility to open the directive.

Danish authorities: Opening the directive is not necessary from our point of view. We want to keep management local, and we are not interested in a joint management plan. Documentation for marine fishermen is needed. If Finland or other countries wants to hear from our experience or get some tips from us, we are happy to share. We need multilateral and bilateral cooperation.

The Birds Directive article 9 – in relation to opening the directive and making the cormorant a huntable species - there is a lot of uncertainty related to this.

### Nordic collaboration:

The terminology between the countries varies (e.g., skyddsjakt). Cross-border communication is needed. There are regional differences in the derogation policies. We need support for this. The policies should be transparent.

### Importance of national capacity (funding and human resources)

Finnish authorities: O'Briain underlined the importance of resource capacity - 100 applications pending at the moment in Finland – there is a lack of human resources to make decision in a due time. This is a big problem. More funding staff should be allocated to handle the applications. Requiring opinions and collecting scientific evidence takes a lot of time. A comparison – In Denmark the derogation system has an efficient electronic system, whereas if Finland we don't. We have requested an electronic system form the ministry.

O'Briain emphasized the power to make decisions within the country, but cooperation between the countries at the same time. In Finland we must consider court cases, we cannot ignore what the court says.

Danish participants suggested a 'catalogue' for cases – you don't have to start from scratch. The first case is always the hardest.

It was considered complicated to get a common solution to this problem – European problem that must be solved locally? Capacity – is this a wrong arena to solve this problem? Maybe lobbying? Maybe we should consider the way we are working on this problem.

How different processes operate in different countries is this something that we should look into more here during the meeting. Action point: Figure out a time for this meeting - improving the derogation processes: experiences from Denmark.

14:30 – 15:30 Group work on research & managers' co-operation

### **Next steps at Nordic level**

### **DK research project ideas and research initiatives – what could be meaningful?**

Denmark has interest in finding money for several research projects. Does Finland for example have possibilities to support projects financially? Denmark has seven different research initiatives that have not been funded yet but could be used as a 'steppingstone' for research collaboration. Are there linkages between the ongoing research between the countries? e.g., FIN-DEN

Seven research (A-G) initiatives in Denmark:

### **Project A – this one is relevant in the context of Nordic collaboration**

- The impacts that the cormorants have on the coastal fish stocks. Removing cormorants from one area results in an increment of fish stocks? Interest is in marine areas (emphasis has been more and more in protecting the freshwater fish in DK recently). Fishermen's efforts are now on scaring the cormorants. If we get money, we'll cooperate with the coastal sector.
- The approach consists of establishing a number of 'case studies' in Denmark and hopefully also in other Nordic countries.
- Four experimental areas and four goals:  
To establish and test a methodology to effectively reduce the predation of cormorants in a given area by means of predominantly voluntary efforts.  
To monitor the effect of the regulation on the number of birds in the given area.

To monitor the effect of the regulation on the fish stock in the given area (one problem is monitoring the fish population, game cameras can help monitoring)

To assess the effect of the regulation on fishing and the future opportunities.

- The approach consists of establishing a number of 'case studies' in Denmark and hopefully also in other Nordic countries (all these ideas could be replicated elsewhere in Nordic countries). These must cover and represent the places where conflicts between cormorants and fishing interests are experienced.
- Budget: 1,75 DKK, three years

**Project B** – What fish species are eaten and threatened by the cormorant? (e.g., cod)

- To what kind of fisheries do the cormorants pose a potential threat?

Karl: Fishing regulations for cod in Sweden – problems finding cod that's big enough– interested in collaborating, ecosystem-based management case study area, quantifying the impact of cormorant

**Project C** - How many cormorants are there in the different parts of the Danish waters throughout the year?

- Counting cormorants in different areas of the country, how many cormorants there are, estimations of the consumed fish in different areas, identifying the conditions that are determining why cormorants appear to certain areas

**Project D** - Modeling the effect of cormorants on fish stocks

- Difficult to monitor because fish populations are small.

**Project E** - Can cormorants be kept away from the fishing gear?

- Outside of the breeding season

- Do the measures (e.g. shooting) have an effect?

- Is there any new evidence since 2015 with regard to scaring the birds

**Project F** – regulation of 6000 cormorants– what are the effects and consequences? Do the ring-marked cormorants give information?

**Project G** - (analysing the data we already have) Whether the number and distribution of cormorants can be controlled via management measures at the breeding grounds? Oiling off eggs.

### **Discussion about possible aligning interests from other Nordic countries**

Finland - One paper about how much catch loses cormorants cause in the area. Research for next year: how to manage cormorants, spatial approach. Interesting research topic is the removal of cormorants; is it affecting the fish stocks, how long it takes for the fish stocks to recover? One question related to removal of cormorants is getting the permissions for taking a thousand cormorants away from some area – are we likely to get the permits? Another thing: what is 'the serious damage', how much can the fisheries tolerate?

Easier to get permissions for the monitoring and experimenting purposes?

Perch-cormorant issue is interesting, also how much biomass cormorants are removing

Marine related questions are highly relevant in Sweden, e.g., monitoring of fish, impacts on fish populations, reducing predation in some areas, numbers of cormorants – building understanding,

spatial aspects are interesting. Also one aspect to look at: cormorant's behavior and feeding areas, e.g. where do cormorants find bigger cod

Cormorants' colonies, system and dynamics, distribution of nests etc. System has changed a lot; up-to-date knowledge is needed.

Swedish researchers interested in software, AI technology, image / shape analysis, and collaboration related to these topics

Norwegian research interests: ring marking, migration. In Norway we have money for GPS related project. Also interest in projects that estimate the economic impacts of cormorants on fisheries

Ostrobothnian Fisheries Association conducted a pre-study with SLU and Helsinki university 2020. We did a project plan which included estimating the commercial value of the fisheries and the effects of cormorants and seals. Interest is in Bothnian bay.

One aspect related to economic impacts is also the cost of the conflicts, e.g. from court cases – the cost-benefit ratio is weak in relation to the time consumed and outcomes gained in the cormorant-related matters.

Lasse suggested that we would work on a common (English) document that lists and summarizes these ideas and identifies linking elements between the countries. The idea is that this document could be used for applying funding, etc. in the future. Niels and Lari agreed to work on a first draft, and we agreed to continue discussions and circulating the ideas on Thursday.

## 15:40 Cormorant management in Åland Islands (Robin Juslin)

Presentation by Robin Juslin

- interest in re-doing the interview study among the Ålandska fishermen related to cormorant-caused conflicts – suspecting that there would be different results this time – there are no conflicts with cormorants, or with nature conservation agencies in Åland
- shooting is an efficient way to scare the birds
- In Åland, cormorants are not an issue, but seals are
- white-tailed eagles – threat to cormorants – affect the cormorant colonies?

## Thursday 10.11.2021

### Research initiative – developing a draft

Niels introduced the draft: list of projects in Denmark - integrating these with other countries – funding? Focus in the coastal area in DK, FIN, SWE. Approach BACI: monitoring indicators before, making a change, then controlling. A simple approach. reducing the number of cormorants, monitoring whether it has an effect in fish populations or not. Funding estimation: < 600 000 euros.

Lari wrote the Finnish sub-section – it's on idea level – one question remains: is it possible to remove cormorants from a certain area? Research design is simple and feasible. Basic assumption – cormorants have an effect in fish stocks. Monitoring the stocks for 3-5 years to see if there are any changes.

Maria: Research and research results are needed. Knowledge and database are missing. So far, I encourage research, problem is funding and permissions – what kind of research can be funded, also derogations for research. As a general outline, research permits come quicker. As long as we have a solid and scientific knowledge base no statements are needed from other institutions to require permits.

#### **Research proposal - next steps:**

Niels, Thomas, and Lari together develop the research proposal a bit further before circulating it around. Thomas' comments to the proposal via email will be integrated in the proposal. Lari promised to can circulate research proposal in Luke (Natural Resources Institute Finland), and then in Syke (Finnish Environment Institute) to see if it's possible to get removal permissions (the research area is inside a regulated area which is a critical point). Niel promised to circulate the proposal in other Nordic countries.

#### **Derogation process development DK & FIN – next steps**

Maria: It's a fruitful idea to share experiences related to derogation permitting processes and challenges related to this – Denmark has an efficient digital system. There is lot to take from Danish experience. What about regional differences in Sweden – comparing what we could do better, what we need, what are the steps to make it more efficient?

Caroline: Regarding who should be involved in the meeting: FIN Maria and/or Nina, or others who are working with this matter. Inviting SWE on board as well – sending invitations to Swedish members (Per) as well. What about regional representation?

**Caroline agreed to send the invitation, after Christmas preferably.** Caroline also agreed to find out details regarding getting permissions in Denmark.

#### **Translating the Danish management plan – next steps:**

Niels has volunteered to translate the DK management plan. Around 56 pages (translation of the sections, not necessarily the annexes). Caroline has checked and not possible to get funding for this. From Finnish perspective it would be helpful to have a translation.

#### **Project report to Fisheries group – What Marina needs**

- more of a technical report in nature
- reporting according to the three aims that this group had
- a joint management plan not something that is realistic, not as an aim for this group – this should be explained in the report
- breaking down the collaboration measures etc. that are needed in the future
- summarizing the Nordic collaboration and what it includes – also summarizing why a joint management plan is not meaningful
- annexes in the report: meeting minutes, also schedules etc.
- Niels can disseminate information about this Nordic collaboration group (report) among his network – another platform for the documentation of this project (in addition to Österbottens Fiskarförbund)

#### **Building blocks of the next phase in Nordic collaboration:**

**Nordic collaboration is something we want to continue - what would you take from / change compared to this round?**

Contact information to participants (ministries, researchers etc.) – Marina has agreed to collect these

Level of structuration – regularity, formal organization, not just ad-hoc action – how should this look like?

It would be beneficial if an authority could take over the convener's role / lead. For example, the Ministry of Environment could be possible leader/ convener. Or maybe a shared responsibility – each country takes lead in its turn.

Commitment from the ministries is required to enable participation of all relevant parties. For example, for managers it's difficult to take initiative for Nordic collaboration if they don't have a mandate from above. Commitment doesn't mean a joint management plan but exchange of information / collaboration. Regarding the level of commitment: the less to do the easier it is to commit.

It's important to get everyone on board, Mr O'Briain also stressed this. Getting representatives from both the Finnish Ministry of Environment and the Ministry of Agriculture and Forestry on board.

Also, getting other countries' authorities on board?

The broader the stakeholder base, the better.

Lesson to learn: if you want to ensure participation – double check!

Funding and drafting an application for funding is the first step to take before anything. Taking Mr O'Briain on board and involving the EC? Getting money from the EC?

Reviving the CorMan -platform - Help from the EC to this? Nils would be happy to start discussions with the EC.

Option: continued funding from Nordic Fisheries Group – the least bureaucratic fund

Summary: Convener and sponsorship needed – doesn't have to be the same unit.

Finnish Ministry of Environment as a leader? Sponsorship from EU or Nordic fisheries?

Who should attend? Which stakeholders? Should e.g., the Bird Association be involved to balance the group?

Facilitator – Akordi is interested in this work – process design etc.

### **Discussion about the main themes of Nordic collaboration**

As soon as corona situations is stable: arranging an international conference together – Nordic countries but also other countries along the migration routes are invited. For researchers and managers and stakeholders.

Funding for arrangements – with fees, also support from the EU? Arranging a conference is a lot of work but needed and beneficial. Possibly would attract a lot of stakeholders from different countries. 2 days (1 day for research, 1 day for management). A lot of time for discussion as well. Different kind of activities, versatile programme.

Reviving the CorMan-platform – also a European level issue.

Scope and need for a broader research programme.

Protection of the threatened fish species: Lack of organizational power and infrastructure of protection of the fish species – it would be relevant to approach WWF, GP or another nature conservation agencies to activate them also in this topic. Freshwater fish are one of the most vulnerable species in the world. In Finland the WWF has paid attention to this in relation to migrating fish and dams, but not conflicts between different species.

One thing is to improve dialogue between the NGOs in this topic (conflict between different protected species)? In Denmark there has been a frog-trout -case. Trout were killed to protect the frog, although the fish is also threatened. Why this can't be the opposite way around?

It's important to have a neutral party on board, leading the discussion.

Next time more attention to socio-economic aspects of fisheries and research on this topic, also serious damage.

Fisheries group of the Nordic Council of Ministers is looking forward to our report – applying funding for continuation? The system for applying for funding is easy: four meetings a year (check the times of meetings!), one month before meeting the application must be submitted.

### **Round of feedback – final reflections on the process: highlights, things to improve etc.**

Finnish authority: There is a lot to learn from other countries, hope for continuation of meetings and broadening of the group. More participants from the governmental side (authorities).

Danish authority: positives: good networking, possibility to meet Mr O'Briain. Negative aspects: No other managers came to this meeting. Cooperation is needed, but with other managers on board as well. Maybe establishing managers' own small group?

Researchers: sharing and updating information, networking, collaboration between managers and researchers. Hope for continuation of meetings. Looking forward to what's coming up out of these research project ideas. Including Norway also in the discussions. Interesting process, main finding: concretizing the different management approaches in different countries to improve the derogation process in Finland. Now urgent need to get funding for the continuation of the work. Need to bring forward new research methods. Difficulties in getting representation from all countries and all important organizations.

Ostrobothnian Fisheries Association: The meetings enabled bilateral discussions, research initiatives, collaboration, the first stage of collaboration between authorities has been taken. An authority would be a better convener for the continued collaboration, as conveners they would be more invested in developing collaboration.

Akordi: In the future it would be meaningful to have a jointly commissioned process. Process design is important right from the beginning. Akordi is interested in the future perspective we hope that we've been helpful in this process.