

The Predation of Atlantic Salmon: Suggestions for Future Management

7th January 2020



Introduction

- The Atlantic salmon is in crisis, the causes for which are multi-factorial.
- Predation is one of those causes – by sawbill ducks such as Goosanders and Mergansers, by Cormorants and by Seals (Grey and Common).
- On some Scottish rivers, the Atlantic salmon is a protected species. So too are these predators! This can present a dilemma.
- Despite this, there are things we can do to actively reduce predation of our iconic salmon and protect our fish.
- There has to be a balance between the conservation needs of our iconic Atlantic salmon - a species in crisis - and biodiversity.

Predation by Piscivorous Birds

- Piscivorous birds include Goosanders, Mergansers and Cormorants.
- These birds are protected and can inflict significant losses on salmon, particularly during the smolt migration in April/May.
- They can be moved off rivers to protect fish by “Shooting to Scare”, which is undertaken under licence from Scottish Natural Heritage (SNH).
- The licensing system is under review. SNH has indicated it is unduly onerous for fishery managers.
- The Scottish Government can assist: urging the completion of the licensing review would be helpful.



Piscivorous Bird Licence Applications

- To better understand the impacts of fish-eating birds and to support applications, the Spey Board and others undertake extensive bird counts throughout the year.
- 120Km of the mainstem River Spey is surveyed from canoes or counted by walking and driving. Hope to expand this to tributaries as well.
- These surveys require significant resource and investment. Many District Salmon Fishery Boards (DSFBs) simply do not have the resources to undertake such work.
- The Scottish Government can help here too. Licences with nominal quotas for DSFBs who lack the resources to undertake counts, perhaps using count data from adjacent rivers, would help.



Seal Predation

- Like fish-eating birds, Grey Seals and Common/Harbour Seals are protected species.
- Scotland-wide, the number of Common Seals is declining, whilst the number of Grey Seals is increasing.
- Moray Firth Seal Management Plan was developed in 2005, in partnership with the Sea Mammal Research Unit.
- Research showed that some seals develop specialist behaviour, breaking away from the main colonies and penetrating well into rivers to predate on salmon and sea trout.
- Only a small proportion of seals – but a disproportionate and significant impact on migrating and spawning fish.



Management of Seal Predation

- We need effective means to reduce predation of our iconic salmon by seals.
- Preventing or discouraging seals from entering rivers is our preferred option – but Acoustic Deterrent Devices (ADDs) have so far never been completely effective.
- Some work is underway to incorporate new, effective ADDs within acoustic fish counters.
- This needs to be promoted and accelerated – and the Scottish Government can support this.



FMS: A Proactive Approach

- Fisheries Management Scotland has formed a Predation Committee:
 - Marine Scotland (Policy)
 - Marine Scotland Science
 - SNH Licensing
 - Centre for Ecology & Hydrology
 - District Salmon Fishery Boards
 - and Science & Advice for Scottish Agriculture.
- These organisations are working together to better understand the impact of avian and seal predation and to develop effective management outcomes.
- An effective marriage of the Public and Private Sectors. More needs to be done, though.



Conclusion

- The Atlantic salmon is in crisis, the causes for which are multi-factorial and predation is one of those causes.
- Some predators are protected. Despite this, there are things we can do to actively reduce predation of salmon and protect our iconic fish.
- There has to be a balance between the conservation needs of our iconic Atlantic salmon - a species in crisis - and biodiversity.
- The Scottish Government can assist further:
 - Urge the completion of the revision of the piscivorous bird licensing process;
 - Nominal quotas and licences for piscivorous bird control by DSFBs;
 - and development of effective Acoustic Deterrent Devices for seals.
- There has never before been a more pressing need to protect the Atlantic salmon – and predation control is one thing we can actually do something about!

Thank You for Your Attention