

## Monthly Report – November and December 2021

### Loch na Croic Adult Fish Trap

In 2020, to combat declining catches, the adult Fish trap at Loch na Croic was opened two weeks earlier resulting in the highest trap catch since 2012. After the successful operation in 2020, the board opened the trap a further week earlier in 2021, opening the trap on the 7<sup>th</sup> of October. The broodstock operation went smoothly, with <2% mortalities and good fish health across the season. The end number of fish caught was above the 5 year average, with an end catch of 861 fish.

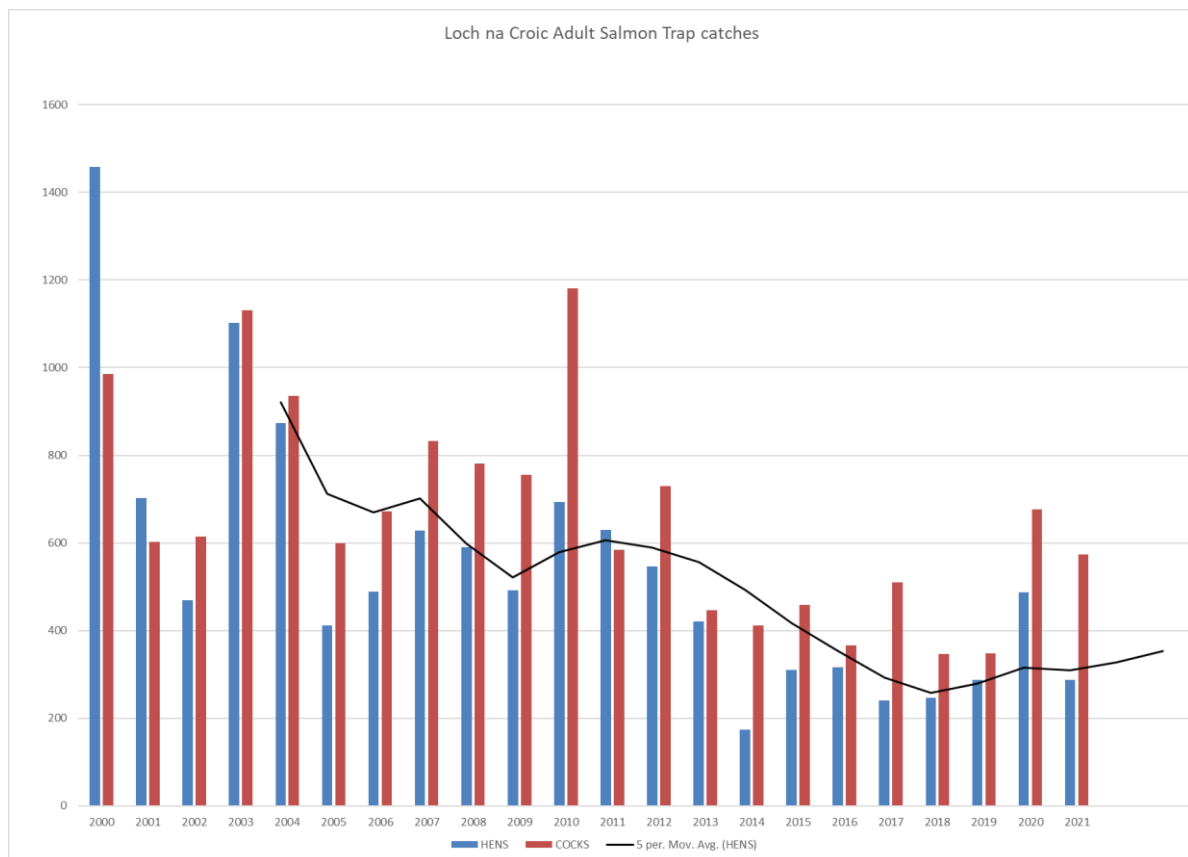


Figure 1. A chart showing the number of hen and cock salmon caught annually at Loch na Croic since 2000.

There has been a steady shift in the ratio of male: female fish caught at the adult trap with more male fish caught at the trap than hens. 2021 was a particularly prominent year with only 33% of the fish caught at the adult trap being hens (see Figure 1).

The Loch na Croic broodstock facility has automated alarms that inform on-call staff of any power or pump failures with staff on call 24/7. 2021 highlighted the importance of the on-call system, with 8 incidents of power or pump failure during November and December. Staff responded quickly and effectively, managing to ascertain and respond to each issue resulting in a continuous supply of freshwater to all the tanks. The board are working with SSE to mitigate against any future interruptions to the water supply.

The success of the broodstock operation has led to an estimated 1092001 salmon eggs being laid into the flow through hatchery in Contin. These will be incubated until February, where they will then be stocked out as eyed ova in artificial redds as part of mitigation stocking.



Board staff were assisted by four ghillies from Brahan Fishing syndicate, Upper Fairburn and Coul, and Fairburn Estate. This is the second year the local ghillies have assisted the board during the adult trap operations and once again this has provided a great opportunity to discuss the work of the Board and to form good working relationships with the ghillies. The board hugely appreciated the hard work of the ghillies during this time.

### **River Peffery Restoration Project**

The project to re-meander the River Peffery was put on hold for 2021. However, baseline electrofishing surveys were carried out in September to allow the impact of future habitat improvement works to be assessed. High abundances of juvenile trout were detected in the river, but juvenile salmon abundance was low. It is hoped that re-meandering will create the diversity in habitat required to support better numbers of juvenile salmon. The board completed a report on the juvenile assessments. A second “phase” of the Peffery restoration project has been proposed and is aimed at looking at the catchment as a whole. The board are open to the project and look forward to future discussions with Forest and Land Scotland, NatureScot and Agri-environmental.

### **SISI**

Board staff have continued to combat the spread of invasive non-native species in the catchment. Board staff worked with local landowners to treat Japanese knotweed and Himalayan knotweed across the catchment. In November, our Operations Manager Edward Rush demonstrated how to correctly identify and treat Japanese Knotweed with the Evanton Community Woodland group. The board has offered equipment and further training to continue to eradicate the Japanese knotweed.

### **Bailiff report**

In between trapping duties board staff continued with patrols looking for those fishing illegally. The patrols focused on areas where historically fishing has taken place during the close season as well as those areas where fishing for freshwater fish by illegal methods has taken place. A report was received regarding illegal salmon fishing at Achnasheen and patrols in the area were stepped up, but nothing was seen. In November one incident was dealt with when 2 persons fishing by rod and line were spoken to and advice was given.

With reduced daylight hours, fishery officers have been equipped with night vision technology to aid in patrols. Contact was maintained with Police Scotland and a joint patrol was planned

to take place with them towards the end of November. Unfortunately, this coincided with the arrival of Storm Arwen and with rising river levels it was called off. It is hoped we can reschedule the patrol for another date in the near future.

### **Other news**

The board has been contacted by the British Trust for Ornithology in Scotland regarding a pilot survey trial with a particular emphasis on improving monitoring of fish-eating birds which is being run on the Teith, Forth, Spey and Conon. The board has contacted volunteers, fishermen and ghillies to gauge interest. The BTO received a remarkable response with each section of the river covered by more than one volunteer.

The University of St Andrews deployed a fixed temporary platform at Garrie Island to collect river sonar data of animals (primarily seals, but also fish, otter, birds etc) to provide data for a machine learning project looking to automate the detection of animals in rivers. The work is currently focused on the potential to develop a detect and deter system for seals in rivers.

In November, the fishery board biologist, Ben Seaman, provided a presentation to the Bran Fishing Syndicate AGM. This was titled "A year in the life of the Cromarty Firth Fishery Board", explaining the board's role in active fisheries management and how the management of our fisheries has changed over the last few years.