

Monthly Report – August 2024

Orrin Gravel Restoration

We are pleased to confirm that the gravel reintroduction project on the river Orrin has now been completed. It is amazing to see so much spawning habitat created in this once productive tributary. We will follow up with a full aerial survey and then instruct a freshet to monitor how the gravel responds to higher flows. There will be a period of settling and downstream movement, it will be interesting to see where the gravel is deposited, potentially creating good spawning habitat throughout the middle river.



Whoosh Smolt Guidance system

When smolts migrate through any body of standing water they are subjected to far greater mortality as a result of increased predation pressure and navigational challenges, delaying their migration. In May and June 2024, the Cromarty Firth Fishery Board, working in partnership with SSE and Whooshh Innovations, trialled a smolt guidance system on Loch Meig.

The system was designed by Whooshh Innovations and consisted of an underwater electrical barrier that would guide smolts towards the loch exit and safe passage downstream. The Board trapped smolts in rotary screw traps at the usual site, upstream of Loch Meig, surgically inserted a PIT tag into each fish and then released them approximately 300m from the dam wall. A PIT decoder within the fish pass would then register the fish exiting the loch. The system was turned off/on according to a preplanned schedule and the effectiveness of the system was assessed.

In total 1,074 fish were tagged and released in Loch Meig. As of the end of June a total of 183 fish had been recorded exiting the loch with no clear difference between the system being turned on or off. The initial results are disappointing to say the least, firstly that only 17% of the smolts released were recorded exiting the loch (to the end of June) and secondly that the system had little bearing on whether the smolts were successful.

Whooshh engineers will fully analyse the data and may make some interesting observation and suggested improvements but, for the time being, our view is that 17% survival is not good enough and that significant, demonstrable improvements would need to be made for us to consider trialling a more hands-off system like this in the future.

Going forward, The Board will continue to trap and truck smolts past loch Meig and Achonachie to maximise the number of fish making a successful seaward migration. Night release of all smolts will continue.



Electrofishing

The team continues to undertake electrofishing surveys across the district and during August completed sites on the lower Alness, the Blackwater and Genuig. Juvenile densities were excellent on the lower Alness with multiple age classes present across all four sites. Densities were also good on the Blackwater indicating good recruitment from our stocking program. Genuig was disappointing with no salmon recorded across the three sites fished. This is not surprising as Genuig is the very top of the river Meig and fish have to ascend Corrie Feol fish pass to access several miles of excellent habitat. With few fish ascending the fish pass it is likely that spawning occurs further downstream as there is so little competition. We will get a fuller picture when we survey additional sites from Strathconon in September.



SISI report

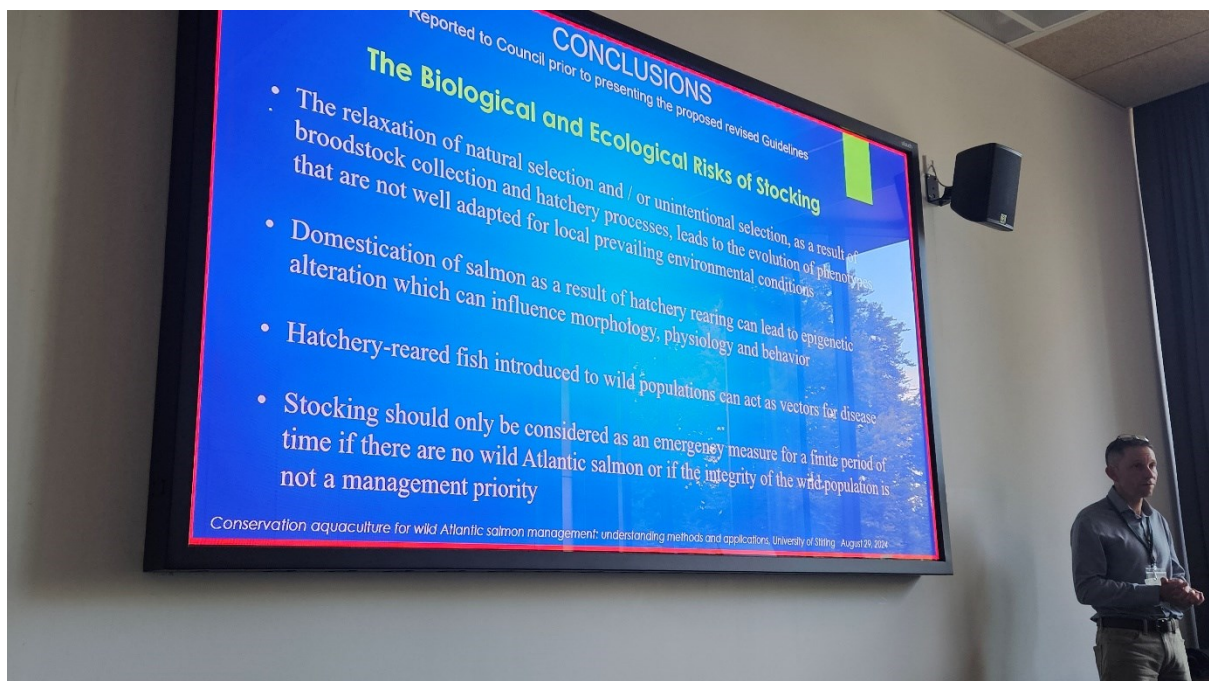
Trudi is keeping busy this month concentrating on expanding the Mink control network pretty much north of the great glen and up. Every red pin is either a mink trap or raft!



Conferences & workshops

In late August, The Board attended a conservation aquaculture workshop in Stirling where leading fishery managers, hatchery owners and representatives from government and industry were present to discuss best practices and methodologies going forward. This was a highly constructive event and it is clear that both hatcheries and aquaculture facilities will play an important role in salmon conservation.

Whilst we obviously rely heavily on the Conon hatchery for mitigation stocking on the Blackwater. The current consensus from NASCO is that there are severe risks associated with stocking and for enhancement purposes there is a real risk that the production and stocking of eggs into a naturally sustaining river may do more harm than good. Certainly, food for thought especially in a local context.



Bailiff report

At present, Cromarty Firth Fishery Board have 5 warranted water bailiffs. With this comes the flexibility to cover different parts of the catchment at any time of day. Our priority this season has been to run a rota with early, daytime and late shifts. This has increased our vigilance but also allows staff to rota in and out of fieldwork and restoration commitments.

We have removed several members of the public from Alness and Conon Rivers this month and continue routine patrols of fish passes and other important target areas. As ever, if you see any thing suspicious on our rivers call one of the team.