



Save the Spring August 2024 Update



Save the Spring is a 20-year programme of work to restore and futureproof the upper River Dee catchment - heartland of its spring salmon.

It is a partnership between the River Dee Trust, Dee District Salmon Fishery Board and Atlantic Salmon Trust, supported by the University of Stirling and UHI Inverness.

riverdee.org.uk atlanticsalmontrust.org



Positive progress with post-smolts

4 months into our smolt-to-adult supplementation work, we're pleased to report that our young wild Atlantic salmon are doing well.

Following several months focused on habitat restoration work in Save the Spring priority tributaries, in our last update we announced that we'd revisit the other half of the programme's strategy in our August update – wild fish repopulation. We're now pleased to bring you up to speed with the status of our smolt-to-adult supplementation (S2A) work.

This element of the programme works alongside the habitat work being carried out in the upper River Dee catchment. Our wild fish repopulation efforts aim to preserve the Dee's spring-run wild salmon genetic 'portfolio', giving populations in the upper catchment the best chance to adapt to changing environmental conditions and thrive once again in the future. Our focus is therefore on supporting wild spawning adults and wild hatched offspring. The S2A work has this principle in mind.

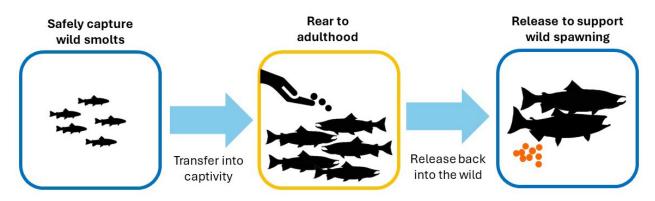
For this year's piloting of the technique, in April 2024, 87 wild salmon smolts were captured from the River Muick priority area during their downstream migration and moved into captivity in partnership with the University of Stirling Institute of Aquaculture. After transitioning them from freshwater to saltwater in the University's on-shore marine facilities, they are now being reared to maturity with the aim being to release them back into the wild as adults in a future spawning season in order to allow them to spawn in the wild.

To support the Muick's fragile salmon population, these fish will be released at the same location from where they were captured, and future tracking and genetic analysis of juveniles present in the area will enable us to assess the impact of our actions over time. Our aim is to be able to step back and leave behind a self-sustaining population of wild fish. By working this way, as opposed to with traditional hatchery methods, the fish we are interacting with as smolts have all been hatched in the wild and have undergone around two years of natural selection prior to capture. By rearing these fish to adulthood in captivity and then releasing them to spawn, we are bypassing the marine migration lifestage where we know survival rates are currently very low, with the aim to have more adult salmon spawning in the area than would have occurred naturally. By allowing the fish to spawn in the wild, they will in turn create wild-hatched offspring, better able to adapt to a changing environment than fish bred in captivity.

Wild fish in our S2A rearing programme.



Wild is best - our efforts are focused on supporting wild salmon spawning and wild hatched offspring.





While this method is a trial and the team is learning as we go, we are delighted to report that to date there have been minimal losses from this group of fish, with over 80 wild fish currently in the programme.

Growth rates have been excellent, with the largest fish, now regarded as 'post-smolts', already around 25cm in length. For comparison, the average length of smolts captured just 4 months ago was around 11-13cm in length. This growth has been achieved thanks to the outstanding animal husbandry and care of the team at the University of Stirling Institute of Aquaculture, along with specialist veterinary oversight. Feed composition and quantity is continually assessed by the team to ensure good health and wellbeing.

Video footage has been highly encouraging and has really helped to inspire us all, showing the fish taking feed with real enthusiasm which is great to see, as well as seeing our fish transforming into their bright silver marine lifephase appearance. Visit the River Dee or Atlantic Salmon Trust YouTube channels to view recent video clips.



Tree planting in the River Muick priority tributary.

Looking Ahead

The team is highly optimistic about the S2A work progress at present, although we are proceeding through every step of the journey with the utmost care and caution. Future updates will look to provide another status report on the condition and growth of our fish. If all goes well, we hope to be releasing mature adult salmon back into the Muick to spawn in late 2025, creating wild hatched juveniles which can inhabit areas where native woodland restoration, peatland and wetland restoration has also occurred.

We are also working as part of the Science and Evidence Board to guide the Scottish Government's Wild Salmon Strategy, by helping to develop methods of wild fish repopulation feeding positively into Scotland's wider salmon conservation policies. Growth rates have been excellent with the largest fish, now regarded as 'postsmolts' already around 25cm in length. Losses have been minimal, with over 80 wild fish currently in the programme.



SUPPORT US

Fundraising

You can support Save the Spring as an individual or an organisation. Contact the Atlantic Salmon Trust's Corporate Ambassador, Mark Cockburn, to see how you can help.

mark.cockburn@atlanticsalmontrust.org

Volunteering – Boots on the ground

If you would like to register your interest as a project volunteer, either for the habitat restoration or fish capture elements of the programme, please contact the River Dee team at **info@riverdee.org**

Spread the word – Your voice matters In order to maximise the potential of the Save the Spring initiative, we need you to help spread the word! Follow and share our **#SaveTheSpring** social media posts to help the project reach an even wider audience.