



Save the Spring March 2025 Update





This month's update looks at the progress of fish in our smolt-to-adult supplementation pilot programme.

Save the Spring is a partnership between the River Dee and Atlantic Salmon Trust, supported by the University of Stirling and UHI Inverness.





riverdee.org.uk atlanticsalmontrust.org



Smolt-to-adult supplementation update

Wild salmon in our smolt-to-adult supplementation (S2A) pilot programme continue to grow well, though significant challenges lie ahead. We hope to be releasing fish as mature adults later in 2025 to support wild spawning.

In mid-March 2025 we travelled to the Marine Environmental Research Laboratory (MERL) operated by the University of Stirling Institute of Aquaculture to check in on the fish in our 'S2A' pilot.

As a reminder, these fish were captured as wild salmon 'smolts' from the River Muick in April 2024 and are being reared to adulthood in on-shore, closed containment saltwater tanks, with the aim of releasing them as mature adult salmon back into the Muick to spawn in the wild. These tanks use a flow-through system with natural seawater which is filtered and then UV-sterilised.

This is a highly novel approach to wild salmon conservation, with certain elements not tried before. We're working to understand whether the method is a viable one which could be used to support individual populations of wild salmon with critically low numbers of spawning adults. By bypassing the marine lifestage of these fish, (where we know present losses are around 97%), our aim is to maximise the number of spawning adults available from the number of smolts collected. The focus is on supporting wild spawning behaviour and wild-hatched juveniles which are shown to survive better over the course of their lifecycle compared to hatchery-raised stocked fish bred in captivity.

We're pleased to report that our 80 fish are growing well and the expert team at MERL is now looking for possible signs of maturity. Such signs, if identified, would indicate that fish may be ready for release as hoped later this year. When first captured, the smolts (87 originally) measured around 12cm in length and 18g in weight. As of March 2025, the largest fish in the group are now approximately 45cm in length and 1.5kg in weight.



The expert fish husbandry and veterinary team at MERL performing a measurement on a sample of fish from the programme.

They are now looking for possible signs of maturity which would indicate if fish can be released back into the Muick later this year as planned.



Challenges and unknowns lie ahead

While signs so far are positive, it's important to note that there are a number of challenges which lie ahead. These include the logistical challenges of safely transporting mature adult salmon back to the River Muick, transitioning them back from saltwater to freshwater, as well as unknowns concerning how our fish will behave when released.

The River Dee and Atlantic Salmon Trust teams are now planning ahead to prepare for the release of fish later in the year. This will include logistics planning, thorough pre-release health assessments, and a radio tagging and tracking plan to enable us to monitor the movements of fish post-release. Our hope is that they will remain in the areas in which we would like them to spawn, and that we can document spawning behaviour on camera. Follow up work in future years will survey the area for juveniles and, through genetic analysis, determine what contribution the fish from this pilot have made to the population. From here, we will begin to build an understanding of whether this can be a viable method for supporting wild salmon populations.

We are extremely grateful to the team at MERL for their hard work and dedication - shown clearly in the excellent condition of our fish.



When first captured, our smolts measured around 12cm in length and 18g in weight. As of March 2025, the largest fish in the group are now approximately 45cm in length and 1.5kg in weight.

For a closer view, watch our new video filmed inside the tanks in March 2025.

Find it on our social channels, websites, and on YouTube.







Preparing for this year's smolts and further habitat work

At present, the River Dee team is preparing to capture a second cohort of wild smolts from the Muick to bring into the S2A pilot programme this year. This has involved putting two rotary screw traps back into the river in advance of the smolt run which can safely capture smolts for collection.

The River Dee team is also preparing for further habitat work in upper catchment tributaries this year, having secured the necessary funding to allow this to take place. This element is key to Save the Spring's long-term vision for a resilient catchment, with restored natural processes to allow for smooth flows and a healthy environment of cold, clean water. We look forward to updating you on this work later in the year.



The River Dee team has installed two rotary screw traps in the river Muick in preparation for this year's smolt run.





Join us for a spring celebration Milton of Crathes, Sat 12th - Sun 13th April

We're pleased to announce that the River Dee and Atlantic Salmon Trust teams will have a stand at the upcoming spring celebration next weekend.

We'll be on hand with Save the Spring information, and the River Dee Trust will be leading with a range of exciting activities to engage children. These include origami fish crafting, the 'beat the buzz' fish challenge, pebble painting, colouring sheets, and the chance for youngsters to become aquatic detectives getting up close and personal with river invertebrates!

The weekend event is also set to feature food stalls, fly tying demonstrations, as well as free fly casting tuition all weekend from the team at TwinPeakes Fly Fishing. Attendance is free we hope to see you there!

Milton of Crathes Banchory AB31 5QH

How you can help Save the Spring

For wild salmon, for nature, for people

Save the Spring needs your continued support if we are to expand the programme and achieve our long-term vision. Contact us to donate as an individual, organisation or business.

Want to help spread the word?

Contact us at **info@riverdee.org** to arrange a delivery of our new Save the Spring information leaflets - perfect for fishing huts, hotels and businesses.





SUPPORT US

Individuals

To support Save the Spring as an individual, contact the River Dee team at **info@riverdee.org**

Corporate support

Find out how your business can play a positive role in shaping the future of the catchment, aligning with your own environmental and sustainability strategy.

Contact the Atlantic Salmon Trust's Corporate Ambassador, Mark Cockburn, at mark.cockburn@atlanticsalmontrust.org

Spread the word

Follow and share our **#SaveTheSpring** social media posts to help us reach an even wider audience.