



the  
**WATER of LEITH**  
Conservation Trust

**NEWSLETTER Issue 81**

**Autumn - Winter 2022**



*This summer's highlight has been a mother and two cubs learning to fish in the river. Thank you to Tom Kelly for the amazing photo of our newest resident*

## *Tales from the Riverbank — a fun day with a serious message*

As you can see from our feature photo, otters continue to breed successfully along the river. Many cubs have been born since the otters returned in 2008 but their life, and that of other wildlife inhabiting the river is not easy. This became the theme of our first large scale event since 2022.

Family groups joined a trail of enactments and activities where they met some of the river's characters. Firstly the **Slippery Eels** which could not swim upstream due to the high weirs blocking their route. After learning about their outlandish life cycle the children helped to weave an eel climbing rope. Next they visited our **Swan** family who sadly had grown poorly and sluggish after eating too much white bread. After selecting a 'good' treat to feed the swan they helped her make a nest and find her cygnets. Then on to visit the **Grumpy Ranger** who was despairing at all the discarded dog poo bags and litter there was along the walkway. Ten minutes with the litter picker and our visitors soon had it cleaned up. At Redhall they were met by the **Guardian of the Woodland** realm who showed them the damage humans can do to natural spaces and encouraged them to do something positive to help. Then the **Butterflies** needed help to find native wildflowers and nectar sources and **Mother Otter** demonstrated the skills needed to catch fish in the river if you were a baby otter. Next was the **King-fisher, Scientist and Fisherman** who explained how important plants, insects, fish and predators are to the food chain of the river, and how humans must be careful about what they put into drains and down toilets. Finally they met the **Beaver** who was hoping to make a return to a river from which it was made extinct hundreds of years ago. It was great fun to be back with our volunteers having fun with the public but there is a serious message around all of the activities they took part in.



*Kat as the Guardian of the Woods*



*Eel rope making and meadow cutting photo by Swithun Crowe*

Creating a functioning 'nature network' for Edinburgh has been the focus of a three year project to create thriving greenspaces in our city. It focuses on creating a well-connected, healthy, resilient ecosystem supporting Edinburgh's wildlife and people. There is now a wonderful map you can explore and a powerful tool that provides a strategic approach to prioritise environmental enhancements and nature-based solutions to tackle the threats of climate change and biodiversity loss. It highlights areas of the city with the highest demand for things like planting trees, which provide the oxygen we breathe, or creating areas of wetland to hold water and reduce flooding. The Trust has contributed extensively to the project. As one of Edinburgh's key wildlife corridors, the river has a vital role to play. More available online — search *Edinburgh Nature Network*.

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## Heatmaps and Hogweed

We have just completed the third year of treating giant hogweed on the whole length of the river. The most upstream plant is in Currie, so this work requires the management of 10 miles of river. Every plant that is treated is GPS mapped so that at the end of the season we can look more closely at the data and work out what is the impact we are having and whether our management of this plant is working. Heat maps are a visual representation of the plant data, which show the density of plants on the whole river. The area of the map which looks white hot are where there are the highest number of plants in relation to the distribution of plants along the whole length of the river. When looking at the data in this way it is possible to see potential seed sources on the river.

In 2020 the white hot area of the map revealed that the Murrayburn was inundated with giant hogweed and was not managed, so these seeds were spreading into the river downstream from Longstone. This is why since 2021 the Trust has been managing plants on the Murrayburn with Forth Rivers Trust and various land owners. We are already seeing the impact of this because in 2022 the densest area for giant hogweed is now Murrayfield. In 2022 we recorded 5757 plants on 10 miles of river.



Giant Hogweed Currie - Leith WOL 2020

0 0.5 1 mi

There are now only 111 plants between Currie and Longstone (4 miles of river) which indicates the success of the Trust's previous management. This is represented by the fading colour on the heat map in 2020. In 2022 it is no longer showing up, as 98% of all giant hogweed plants can be found between Longstone and Leith (6 miles of river). We are feeling very encouraged by the results of the heat map as you can see the hotspot for giant hogweed moving further and further downstream, which means that there is less river that can be re-seeded by giant hogweed plants in the future. Next year we need to take a closer look at Murrayfield and work out why this area is a hotspot. Could it be that, due to the two stage flood defence channel, the river deposits seeds as it widens in flood situations? Could it be that there is another seed source yet to be discovered – perhaps from the railway or tramline? Although we would not say that this battle is over, the results show that we are certainly moving in the right direction !



### Local Companies Volunteer to help the river.

This spring and summer we have seen a surge in interest from corporate groups, wanting to swap working from home for getting out into the river and making a difference. So, who are we to turn down the extra hands and also generate some income to pay for running costs and buy extra biscuits for our regular volunteers. Since April we have welcomed 18 teams from local companies including Baillie Gifford, ABRDN, Cirrus Logic, JP Morgan, Mearns & Company and Anthesis. Raising more than £8,000. In fact over the past few years philanthropy and sponsorship programmes from businesses

have become an important source of funds as income from statutory sources dries up. Recently we received support from sales of Lush charity hand cream,; we were delighted to be nominated by staff from John Lewis and Waitrose to be their in-store charities, Aberdeen Asset Management helped us to buy £2000 worth of new tools for projects along the walkway, Alpkit gave significant discounts for staff work-wear and in the coming week we are set to benefit from sales of a Leith-themed-beer advent calendar.

Our biggest supporter at the moment has to be Baillie Gifford who are helping to make our operations more sustainable by investing in projects to reduce our energy and fuel use, increase income at the centre and supporting salary costs. We were invited to a special celebration at the National Museum of Scotland where our Trust Manager got to meet many of the other charities the group supports and enjoy an evening of talks and hospitality. Often in the voluntary sector we do not spend time to celebrate our achievements or even look around at what other groups and charities are doing. So this proved to be a very interesting and informative evening.



## Electrofishing the River with Charlotte and Forth Rivers Trust.

To give the river a much-needed health check, Charlotte worked with Forth Rivers Trust in July to carry out an electrofishing survey of the river. The report is now available to be downloaded from our website but the results are summarised below

In the last 10 years the Water of Leith has gone through a lot of changes:

- In 2021 the river stopped being stocked with farmed Brown Trout.
- A major flood defence scheme has been rolled out between Murrayfield and Bonnington.
- Otters have started to breed on the river.
- More extreme weather events are occurring due to climate change.

The electrofishing team went back to 18 sites previously surveyed by Clyde River Foundation between 2009 and 2012 (Leithhead Mill in the Pentlands to Bonnington) prior to the construction of the flood defence scheme. By comparing this year's data with the previous surveys, we are able to get an idea of how the river is adapting to all this change and it helps us make decisions about the river's management going forward.

Brown trout, bullhead, lamprey, minnow, stickleback, stone loach and the European eel were found during the survey. Bullhead are the most dominant fish in the river, its populations have increased at all sites surveyed.

In general, the river is in much better condition upstream of Balerno where there are fewer barriers (weirs) and less sewage, substrate compaction (downstream of weirs), silt (upstream of weirs) and better habitat for fish.

The survey has highlighted a need for improving trout habitat between Gorgie and Belford. This requires providing cover - which can take the form of tree stumps and or logs, undercut natural banks, large boulders and perhaps more willow spiling projects. We will need to balance putting these into the river in suitable locations where they will not cause a flood risk or litter trap.

The presence of the critically endangered European eel in the survey is a good sign. However, eels were present at 8 sites in the 2009-2013 surveys, but only 3 sites in 2022. Opening up their habitat could be achieved using natural eel ropes on all large weirs and spat ropes at Leith Harbour Gates and Damhead weir.

The above techniques to help trout and eels are very manageable goals in the short term for the Trust's Conservation team. In the long term, it would be great if we could remove all the barriers where possible, but Leith Docks and the listed weirs at Dean Village will always be problems we have to work around. For these major barriers mitigating measures must be looked at and invested in to reduce their impact on the rest of the river.

We should all continue to plan to reduce the sewage that gets into the river as this is the major reason for poor water quality and potential biological decline. New housing is plumbed into a Victorian sewerage network and the system cannot cope. Especially as we see temperatures rise in the spring and summer, leading to drought conditions so sewage cannot be diluted; also more floods in the autumn and winter with increased Combined Sewage Overflow (CSO) venting; both being due to climate change. Improving fish passage upstream opens up their habitat and allows a means of escape from the declining water quality that builds up downstream and is impounded by the artificial harbour gates in Leith.

## Members Events 2022

For details and information on how to book visit  
[www.waterofleith.org.uk/whats-on/](http://www.waterofleith.org.uk/whats-on/)

### Guided Walks

**Sunday 2<sup>nd</sup> October – Warriston to Bonnington – 2pm**

**Sunday 13<sup>th</sup> Nov – Balerno to Juniper Green – 11am**

### Winter Talks

**At the Visitor Centre starting at 7.30pm, no need to book. Free to Members, Guests £4**

**Monday 28<sup>th</sup> November**

#### **My Life with Otters with Ross Lawford**

18 years ago Ross's life was saved by an otter. He was in a dark place until he met a special female otter who changed everything. Since then he has been travelling all over Britain tracking, photographing and writing about otters. Now settled in Edinburgh, he has spent the last three years filming and photographing the otters on the Water of Leith. This will be the focus of his next book "The Urban Otter".

**Monday 23<sup>rd</sup> January**

#### **Raptors in Lothian and Borders with Ian R Poxton**

Ian, Professor Emeritus (Microbial Infection and Immunity) at the University of Edinburgh Medical School is a keen birder and wildlife photographer. He is a long-standing member of Scottish Raptor Study Group (SRSG) Lothian and Borders branch and will talk to us about local birds of prey populations, concentrating on merlins and hen Harriers and the ongoing debate on managed grouse moors and raptor persecution.

**Monday 27<sup>th</sup> February**

#### **Artists along the Water of Leith – Dr Joanna Soden**

This illustrated talk will take the form of a virtual stroll along the Water of Leith. On our route we shall explore the variety of ways that artists and photographers have been inspired by this watercourse and its surroundings, from source to the sea. Dr Joanna Soden is a specialist in Scottish art and also a life-long walker and lover of the outdoors. Now retired, she has worked for museum services in Dundee, Perth and Edinburgh and finally at the Royal Scottish Academy of Art and Architecture where she was responsible for the management and development of the academy's nationally-important collections.

**Monday 27<sup>th</sup> March**

#### **The History of Bonnington & Leith, with Helen Brown and Sandie Boyle**

With projects happening in the lower reaches of the river, Helen and Sandie reflect on the long and turbulent history of the river as it nears the Firth of Forth

### Children's Autumn Events

Fun activities for 4 to 12 year olds. Booking essential - £7 per child, accompanying Adult Free  
1.30pm to 3.30pm

**Tuesday 18th October**

#### **SAS - Special Autumn Survival**

Learn the skills needed to survive in the wild as the weather turns colder

**Thursday 20th October**

#### **Rotten!!**

Delve in to the decomposing worlds of fungus, compost and poo. A 'rotten' event which promises to leave you mucky

## Path resurfacing project from Balerno to Slateford hits a snag

The walkway project which was headline news in our last newsletter encountered problems this summer as the chosen surface 'ultratrec' did not bind correctly, leading to very gravelly and unstable sections of path. All areas have been given a top dressing of whin dust and this seems to have fixed the problem. However, the project has been halted at Juniper Green until another suitable surface material can be sourced. This project is being coordinated by Edinburgh and Lothian Green-space Trust and City of Edinburgh Council.

### **Wading back to the classroom**

The Autumn term began in earnest as the High School field studies programmes were taken up by classes from across the city. Drummond, Tyne-castle and Boroughmuir Community High Schools were among the 20 classes who have visited this term, exploring the biology and geography of the river. All field work helps the student achieve their National 5 and Higher level exams.

### **Scythe matters**

#### **- at least for our meadows it does**

As the last of the summer flowers go to seed, our Scything Team heads out to manage the 7 meadows we now have spread along the river. This skilled team has received beginner and advanced level training from Rob Brodie, of [quieter-times.org](http://quieter-times.org) over the summer, funded by a private donation and we have a lovely new collection of sharp scythes from the Paths for All fund. Like many organisations, especially those from an environmental field, we are trying to set an example by reducing our impact and moving away from using fossil fuels on the walkway and greenspaces that surround it, which means limiting our use of petrol trimmers. So keep your eyes open for our scything team cutting the walkway edges with their scythes while singing songs.

### **AGM is soon and Annual Report and Accounts are available online**

Our first in-person AGM since 2019 will be held at the Visitor Centre on 10th October from 7.30pm. All our papers can be seen at [www.waterofleith.org.uk/the-trust/](http://www.waterofleith.org.uk/the-trust/). After the main business of the AGM, Trustee Charles Everitt will give an audio-visual presentation of his latest photographic work on the river. "Water of Leith: Another Perspective". We do hope our members can join us.

For more information or to subscribe to our blog visit  
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