



## Outdoor Learning, Pandemic-Style

by Ruth Prince, Outdoor Learning Officer

With the mud well-dried on our rows of children's wellies, the exhibition area shut down and the classroom serving as a storage area during the café refurbishment, it looked to many as if Covid-19 had shut down our education programme. And it did in some ways—for over a year Edinburgh Council schools were unable to work with us or visit the Centre. But with the outdoors providing a safer space for children to socialize and to learn throughout the pandemic, our programme has stayed busy, supporting schools and families to get outdoors whatever the weather.

During the first lockdown in 2020, teachers were scrambling to upskill their technological abilities and to provide remote learning for their classes, with some children learning every morning on laptops and adequate WiFi while others scrambled to learn from their parents' phones and weak internet connection. Balgreen Primary School, a school we work with a lot, was encouraging pupils to get their John Muir Award and so we designed a worksheet for children to look out for wildlife along the river on their daily walk. We adapted some core activities like Survival Skills to activities that could be done in a back garden or a local park and we made 'how to' instructions for some of our art and design challenges and posted them on our website. It was a great resource to send out to teachers at the time but it's an equally useful resource for the future, giving wider online access to our programmes.

As soon as government restrictions eased in the summer of 2020, we were back outside with our summer events and, during the autumn term, with our newly formed Friday afternoon Kingfisher Nature Club. It took careful thought and seemingly endless rewriting of policy and risk assessments to figure out ways to give children the same experience out on the river and in the woods while also taking care not to spread Covid 19, but we created 'bubbles' for any shared equipment, delivered all our events outside whatever the weather, and we reduced the numbers of adults attending the events. We've also recruited some wonderful education volunteers who have supported our events, providing a second leader in addition to the WoLCT staff member.

Over the last academic year, schools have been under tremendous pressure to provide increased outdoor learning for their pupils while also maintaining a strict timetable in the playground to ensure that classes don't mix. While some teachers leapt at the chance to take their learning outside, others found it more difficult to find creative ways to teach maths or English outside of the four walls of the classroom. I was sent on six-week placements to Braidburn Special School and Kaimes Special School to deliver 'essential' outdoor learning to classes and to help teachers develop their own confidence and creativity to teach outside. This was a brilliant opportunity for me to work in these two lovely communities. At Braidburn, one of the barriers to outdoor learning was the inaccessibility of the woods to learners in wheelchairs and so our wonderful WoLCT conservation volunteers took a morning off from their river work and cleared the path so the learners could make it into the woods.

School visits began again in May and life began to feel a lot more like normal as classes and children climbed out of coaches with their lunch bags and excited grins. Our fully outdoor programmes feel like the norm now and we intend to keep them this way for the foreseeable future. Over the summer, in addition to our usual children's events, we've also delivered Scottish government-funded 'Wild Wednesdays', free, full day experiences on the river for children from targeted families who might need a little extra support after the pandemic.

### Adventures galore!



*Cody loving life*



*Grass sweeping*

## Outdoor Learning, Pandemic-Style *cont'd from front page*

All of us feel the need for some fun and adventure after the pandemic, and children are no exception. It's a joy to see the excitement of classes and groups of children as they are finally able to get back into the river and learn about the incredible and important life just below the surface. But we've also noticed a vital need for children to talk to each other, to make new friends and to play together, because that's how children learn: by exploring, trying new experiences and learning to work with different people. Outdoor learning gives children the opportunity to do this in a safe and healthy environment. Sometimes I find myself putting my learning plans to one side and letting them chat to a new friend as they turn over rocks looking for caddis fly larva.

These kids have had over a year of learning facts from screens. Now's the time for them to learn by exploring, sharing, running and laughing.

### 2021/22 Events

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

**Sunday 19th September – 11.00am**  
**The Dean Donder** – guided Walk around Dean Village and Stockbridge

**Sunday 3rd October—1-4pm**  
**Coalie Convention and Funday** - join us at the Leith end of the river for a fun afternoon of activities, guided walks and discover how the area could be transformed. Free Event no tickets required just come along to Coalie Park off Coburg Street, Leith

**Monday 4th October - 7.30pm**  
**Trust AGM online**  
Members only event –plus a presentation by Helen Brown and Charlotte Neary about our Giant Hogweed and Coalie Park project.  
Email [admin@waterofleith.org.uk](mailto:admin@waterofleith.org.uk) for link to Zoom

**Sunday 17th October – 11.00am**  
**The Slateford Saunter** - guided walk around Slateford and the Dells

**Monday 22nd November—7.30 pm**  
**Members Evening and Talk at the Centre.**  
**The Eel - A Forgotten Fish**  
Delve into the wonderful world of the eel with Jack Wootton, a Freshwater Ecologist and Eel Specialist for the Forth Rivers Trust. We will explore everything from the intricate life cycle of the eel to its influence throughout history. It'll be weird and slightly unbelievable, but the eel is never dull.

**Sunday 12th December – 11.00am**  
**Mills, Spills and Trills** - guided walk from Currie to Colinton Tunnel

**Monday 24th January – 7.30pm**  
**Members Evening and Talk at the Centre.**  
**Bridgescapes**- a journey through history celebrating Scotland's bridge-building heritage. Bruce Keith, a retired surveyor, presents an illustrated talk on some of Scotland's iconic bridges, including several on the Water of Leith. Bruce has spent much of his life in Edinburgh and is a keen conservationist of both the built and natural environment.

**Monday 21st Feb – 7.30 pm Members Evening and Talk at the Centre TBC**

### Children's Events (7-11 years only)

**Book :** [www.waterofleith.org.uk/whats-on](http://www.waterofleith.org.uk/whats-on)

**Wear your wellies. Drop off event**

**19th Oct – 2pm Winter Survival**

Build a shelter, forage for food and learn to create fire in the toughest season of all.

**21st Oct – 2pm River Life**

Water water everywhere but what lives along its banks and under its surface

### River News round up

- Funding has been identified to take forward the replacement of two bridges in the Dells: Colinton Dell Footbridge (Rustic) and Kate's Mill Pipeline. The City of Edinburgh Council are now investigating design options and suppliers and we are hopeful work will start this year.
- Excitingly work has started on the landslide site at Dean Path. The path between Sunbury Place and Dean Path Steps remains closed and the diversion must be followed at all times.
- The Scottish Water CSO work at Kate's Mill and Juniper Green has been completed and the diversion and compounds along the river removed. Works continue on the project in Balerno and Kinauld Farm but these should not affect the walkway
- Early August saw our resident female otter reappear with a new cub. Follow our social media accounts for regular wildlife updates @wolct
- Thanks to a funding boost from the National Lottery's Awards for All scheme we plan to build on the 'Coalie Conservations' we had back in the springtime and begin the transformation of the Coalie Park area in Leith led by the responses from the consultation. If you are interested in this project please email [helen.brown@waterofleith.org.uk](mailto:helen.brown@waterofleith.org.uk)

# Research flags up contrasting levels of Giant Hogweed along the river

## by Charlotte Neary – Community and Volunteers Officer

Giant Hogweed is strongly competitive and can reduce species richness and diversity of other plants growing around it. It is also a public hazard as its sap contains photosensitizing chemicals which can cause serious blistering of the skin. Little information is available to compare efficiency and practicality of alternatives to the use of herbicide. If a river is infested with this plant, control by the fastest means is all that is possible in the short time frame between the plant emerging (late April) and setting seed (mid July). We are in a unique situation on the Water of Leith as plant numbers are low enough to allow time for a pioneering and much needed research project looking at alternatives to the use of Herbicides.

Since 2018 the Trust has been researching into control methods with Napier University. Four methods for control have been selected :

- 1 Normal concentration of herbicide
- 2 Burning,
- 3 Root cutting
- 4 Reduced concentration of herbicide



*Hogweed survey in action*

During the research project we have been mapping and controlling all the Giant Hogweed plants between Slateford and Currie (location of most upstream plants) so that we can ensure the survey plots are not accidentally sprayed. In these 3 miles we have 47 four meter square quadrats. All higher plant and bryophyte species in each survey plot are noted before and three weeks after treatment. We hope to determine the efficiency of each treatment and its effects on all surrounding higher plants, mosses and liverworts population not just after the initial treatment but years later once the Giant Hogweed is gone.



*Map showing the hot spots of the giant hogweed on the river*

To help this year we received funding from The Wildflower Society to fund plant biologist Jay MacKinnon from Napier University to make us a specific training course for our quadrat survey. 15 dedicated volunteers undertook 30 hours of training and since have surveyed all 47 quadrats twice to complete the field work for year four of this study. We have also had two MSc students from the University working on the field work and are now inputting and analysing the data so far.

In 2018 there were 1205 Giant Hogweed Plants between Currie and Slateford. Of these, 764 plants were within the field plots. In 2021 there are now 202 Giant Hogweed plants, 68 in the quadrats. In total that is an 83% decrease of plants on 3 miles of river and a 91% decrease of plants within the quadrats. After the first year it was apparent that burning did not work and so this was abandoned as a control method. The other three methods do work. Digging takes eight times longer than spraying but is as effective as using a herbicide. We have been looking at worldwide management guidance. It appears that if you have 200 plants or less digging is a viable management option. To dig Giant Hogweed is very labour intensive and potentially dangerous. Volunteers need to be specially trained and provided with full protective equipment to do this work. The plants must be removed from site and composted safely, but it is possible.

Increases in plant biodiversity are also being recorded. In one of our quadrats we recorded 52 different plant species in 2021. In 2018 this field plot contained 9 Giant Hogweed plants and only 34 different plant species.

Up to 2019 we only controlled the plants around the research project, but last year, due to Covid, the City of Edinburgh council did not have the staff resource to spray Slateford - Leith (7 miles) so to ensure this vital work continued we mapped and treated all the plants on the whole river. We were shocked to discover the dramatic increase in Giant Hogweed numbers downstream of Longstone and from the mapping we located a major seed source - The Murrayburn.

This year there were 2566 plants between Slateford and Leith, a significant increase compared to the research project area. In fact, if you compare it to the area of river that has been managed as part of the study with a heat map (hot spots highlight greater numbers of plants), it is barely perceptible compared to the concentration of the plant downstream.

However, none of this compared to the infestation on the Murrayburn. We recorded over 50,000 plants in less than a mile.. We felt that any further control on the river would never reap a reduction in plants if this area was constantly being re-seeded from Longstone downstream. So in 2021 we have been working with all the different landowners along the Murrayburn to make sure the Giant Hogweed is being managed and treated.

Sometimes we get complaints from members of the public about our use of herbicide but would like to reassure people that we are using the only herbicide approved for use in the aquatic environment. We are use as little as possible and spot treating or stem injecting the plants directly. All this work is about transitioning away from using herbicide in the future. Our research project and mapping has started to hint towards this being a very real possibility for the river. We really hope to start seeing a reduction in plants not just upstream but also downstream in 2022.

## Future proofing the Trust

The pandemic has meant the Water of Leith Conservation Trust has analysed its finances and governance more closely than ever before and has implemented new policies and practices to adapt to a changed world. This has highlighted a number of key areas for development to improve our sustainability in the coming years, as government support is withdrawn and local authorities' budgets are squeezed. This has led to the Trustees identifying and agreeing the following areas for investment, with funding being drawn from the Trust's reserves or grants sought.

- **New Website**

Launched in August, this wonderful new site means bookings for events and group visits can be made online, streamlined volunteer registrations, new ways to join and donate and of course better information and resources for visitors including an upgraded 'Audio Trail'.

- **Membership recruitment and development**

Our membership has been fairly static at around 300 for decades and the price has not increased since 2008. So, in conjunction with the website, we have revolutionised our membership, enabling better online joining and new perks, hoping to build our community of river supporters. We hope both new and existing members will choose to support us through monthly giving and also consider legacies to help secure our future.

- **Income generation through the Visitor Centre**

The importance of tea and a pee for walkers has become very apparent since we re-opened the Centre after lockdowns but we are also aware of the function it plays in helping loneliness and isolation of our volunteers and users. With investment in the new Café servery already paying off we hope to upgrade the exhibition area in the near future to improve visitor experiences.

- **New Trustees.**

Looking forward, the diversity and experiences within our Board of Trustees is vital to the successful functioning of the Trust. To this end we are seeking people with a background in biological surveying, river / conservation work, human resources and IT. Does this interest you? Call Helen or Chair Pat for a chat.



*Improved café and Visitor Centre*

**For more information or to subscribe to our**

**blog visit [www.waterofleith.org.uk](http://www.waterofleith.org.uk)**

**Water of Leith Visitor Centre, 24 Lanark**

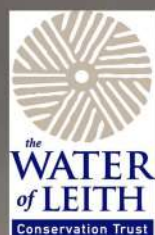
**Road, Edinburgh, EH14 1TQ**

**Tel 0131 455 7367**

**Email : [admin@waterofleith.org.uk](mailto:admin@waterofleith.org.uk)**

### Leave a gift in your will and help keep our work flowing....

The Water of Leith Conservation Trust works with volunteers to maintain the walkway, create and manage habitats for wildlife and enable everyone to enjoy and learn more about this precious natural asset for Edinburgh. Each year the Trust has to raise considerable funds to protect the Water of Leith. Donations and legacies help us achieve our aims.



To include a gift in your Will all you need to do is give your solicitor our name, address and registered charity number, as follows:

The Water of Leith Conservation Trust, 24 Lanark Road, Edinburgh, EH14 1TQ. Scottish Charity Number SC000015

Another valuable and positive way to celebrate the life of a loved one is to ask for donations instead of flowers at their funeral

[www.waterofleith.org.uk](http://www.waterofleith.org.uk) [admin@waterofleith.org.uk](mailto:admin@waterofleith.org.uk)  
or call in confidence on 0131 455 7367

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