



Lakeside News 2023



Welcome to a round up of what has been going on around our reservoirs in 2023



It's been another busy year on and around our reservoirs. Not only do lots of Bristol Water staff work hard to maintain our sites, but outside organisations and members of the public also help to improve our habitats for wildlife and help to keep our sites clean and safe. In terms of weather 2023 was very different to 2022. Our lake levels didn't drop anywhere near as low as in 2022, and both Chew and Blagdon are at capacity. There was no temporary suspension of public access at Cheddar reservoir this year, as temperatures didn't reach above 30 degree, whereas in 2022, they reached above 40 degrees!

People have also been enjoying using the new Chew Valley Lake recreational trail, which has now been open for more than a year, and has seen visitor numbers of around 80 000, since its opening in May 2022.

Here's hoping for another successful year at our reservoirs!

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2023 at Bristol Water Fisheries

With some great fishing, competitions, family days, lake records and a busy year at the fish farm, the fisheries team have been kept on their toes!

One of the first tasks of the year was moving all 60 of our fishing boats and rescue vessels back onto the water. Over the winter they are cleaned and repaired as part of our boat maintenance program. This not only keeps the boats in good working order, but it also allows us to remove microbial build up and organisms.

This fits in with one of Bristol Water's key objectives of enhancing our environment and promoting biosecurity, we use the CHECK, CLEAN, DRY guidance and aim to implement further measures such as dip tanks soon.

Bristol Water Fisheries have the well-established reputation as a premier Trout water and has produced many 10lb+ Trout this season. Our highest monthly average weight was 3lb 12lb and a monthly rod average high of 17 fish. Bristol Water also has arguably the best Pike fishing in the country at both Chew and Bladgon with Pike landed to 44lb 7oz this year!

Our largest Trout stocking commences in February before our fly season begins. Over the year we grow on around 70,000 Trout on our farm. These are stocked throughout the year into Chew Valley Lake, Blagdon Lake and Barrow tanks. The ranger team grade every single one of our Trout by hand prior to stocking; checking for any signs of disease and general wellbeing. Bristol Water's Trout husbandry dates back over 100 years!

Over 50 young anglers were introduced to the sport on our family day! Help and guidance came from both Bristol Water staff and the BRFFA (Bristol Reservoirs Fly Fishing Association) making it a great success and an annual event going on-ward.

Peter Yarrow, Senior Ranger



Wildlife Watch

Beaver spotted at Chew Valley Lake

There is a wild population of beavers that exist along the River Avon and in September 2023, a single beaver was spotted at Chew Valley Lake. Beavers can help to create thriving, carbon-absorbing habitats along the waterways they inhabit. They also help to: reduce flooding, prevent drought, clean water and increase plant and animal biodiversity, which is why we are so excited that one has been spotted at Chew Valley Lake. We have an expert from Natural England coming to survey the lake and surrounding woodlands in March to see if there is evidence of beavers making Chew Valley Lake their home.

Spotter's guide - what are the signs of beavers?

- Beaver lodge – a large pile of branches beside a watercourse can be a sign that a beaver is in residence.
- Gnawed wood – look out for wood that's been chewed, possibly with associated woodchips.
- Pencil tip – a log or branch gnawed to a point is a sure sign there are beavers about.
- Footprint – Beaver footprints are large and long. A clear print will display the outline of the web of skin connecting the toes.



Listening out for bats

Bristol Water took part in the 2023 North Somerset Bat Survey run by North Somerset Council and the University of Bath, to find out how many of these tiny flying creatures live at our sites.

Special sound recorders on sticks were installed, to capture the sounds made by bats over six nights. The recordings were then uploaded to an automatic sound analyser to identify the different species.

We were amazed to discover 15 different species of Bat at our sites, including Common Pipistrelle, Greater and Lesser Horseshoe bats.

Our lakes and reservoirs are the perfect environment for bats, with millions of insects breeding in the waters providing a great food source.

The data we collected will help the Bat Conservation Research Lab at the University of Bath understand these wonderful animals and protect them for the future.



Brown long eared bat at Blagdon Lake



Helping out wildlife around our lakes

We've been working with The Mendip Hills National Landscape (formerly Mendip Hills AONB) to build a home to encourage Britain's only venomous snake — the adder.

Mendip Hills volunteer team helped to build a hibernaculum (a structure of rocks and logs) for the snakes to spend winter in on the edge of Blagdon Lake.

The adder hibernaculum project resulted in 15 new over-wintering sites for the reptiles being built across the Mendip Hills. Three different styles were built; a 'round barrow', a 'long barrow' and a horseshoe, each hibernaculum contain several tonnes of stone and logs constructed with voids in the middle to allow the adders to stay protected from the cold. The hibernacula face south to absorb the sun's warmth and are near scrub or bracken so the snakes can bask in the spring. Each hibernaculum has a tube built into it that allows volunteer rangers to drop a temperature and humidity gauge down to monitor the insides. The best type of hibernaculum site can then be replicated in other areas. This hibernaculum will increase the potential for reptiles, amphibians, small mammals and insects.

It is hoped these structures dotted across the Mendips will increase numbers of this beautiful and endangered snake. Adders are Britain's only venomous snake and are considered a 'threatened' species. This is one of the reasons the Mendip Hills National Landscape has chosen it as one of the 'champion species' of the area to focus conservation work on. The hibernaculum project was funded through a grant from Natural England's Species Recovery Fund.



Unfinished hibernaculum with tube showing to measure temperature and humidity



Completed hibernaculum at Blagdon Lake

Helping out a critically endangered species

The European eel is one of the most endangered species in the UK. Over 95% of the eel population has disappeared in the last 40 years.

The European eel inhabits our reservoirs and surrounding waterways, but not much is known about this mysterious creature.

At Blagdon Reservoir we have an eel trap. Last year we transferred **691 eels** into Blagdon Lake, and in total around **8 000** eels have been transferred into Blagdon Lake.

Due to the dam, the eels can not continue their migration up the River Congresbury Yeo into Blagdon Lake. The eel trap allows the eels to travel up the passages into the tank at the edge of the river. The passages have water flowing down them that the eels follow, and they are filled with bristles, to allow the eels to travel up the passages into the tank. Once the eels are in the tank, they are fished out with a net and transferred into the lake, where the eels can remain for around 15 to 20 years, before making the return journey back to the Sargasso Sea to spawn, a trip of around **4 000** miles!

Bristol Water are also currently working on a project to put in a new eel pass at Chew Valley Lake to allow the continued migration of eels up the River Chew into Chew Valley Lake.



Eelers released from Blagdon trap into Blagdon Lake



Eel trap showing passages from the water to the trap

Ash dieback

Tree showing signs of Ash dieback



Blagdon Lake is a major asset within the Bristol Water estate. The Northern lake area has extensive peripheral woodland through which permissive trails and public rights of way pass. The Southern area of the lake is subject to restricted access and as such public risk from dysfunctional trees is considerably lower. The lake grounds are accessible at several points. A high level of public usage and enjoyment of the Northern lake area facilities are a common feature of the area.

Ash dieback is prevalent, and an increasing number of dysfunctional and potentially dangerous trees can be seen in the local landscape. The Blagdon Lake area is not exempt from Ash dieback and as such a tree action plan has been devised to provide a structured response, promoting safety and timely mitigation works as they become necessary.

The Blagdon Lake area is a designated site of Special Scientific Interest (SSSI). The Northern area of the site, which is open to public access, has been subject of a walkover survey to identify, map and tag the Ash tree stock within the asset area. The presence of Ash dieback has been noted within individual trees and all data obtained is now held on the Bristol Water's Otiss tree survey database. A total of 114 trees have been recorded of varying age, stature, and health. The majority of the Ash trees surveyed have been identified as having varying levels of dysfunction due to the presence of the fungus *Chalara fraxinea*.

Enquiries were initiated to prepare for targeted tree removals within this SSSI site. These removals have focussed on dysfunctional trees that present an intolerable risk of harm to third parties. The lake grounds have been subject of a professional Ecological survey to record and interpret the nature of the local environment. Extensive consultation undertaken with contractors and ecologists, together with representatives of Natural England devised a scope of works to minimise environmental impact. Ash Trees within the site, were planned for mechanically felling utilising a tree shear system on an outrigger platform. This system ensured that felled trees would not impact upon existing understorey and habitats. The cut timber being mechanically handled from point of removal to a pre-agreed processing area. Individual trees requiring removal along the public access points being either monolithed (reduced to its main stem) or dismantled avoiding excessive ground disturbance.

All initial felling works were completed during December 2023 with isolated follow up activity scheduled for early 2024. All felling and removal activity was supervised by an Ecologist performing as clerk of works. Any trees presenting as high ecological value were individually pre-checked by the on-site ecologist to ensure no disturbance of European protected species.

Post felling, the site was prepared for a tree establishment scheme to restock the area thinned by proactive mitigation. This scheme will compensate for tree removal, introduce native deciduous stock of mixed species, and increase the area Biodiversity index. Proactive tree and Hedge establishment to mitigate those felled will commence in mid-January 2024.

Simon Hughes, Bristol Water's Treescape Officer



Contractors in progress of mechanically felling.



Chew Valley Bird Ringing Station



To some extent the ringing station has been able to get back to a more normal pattern of activities. This has been helped by several keen new members joining although, as with many organisations, this has been balanced by losing members who drifted away due to the covid pandemic and two of our stalwart, older members sadly passed away. Ringing has taken place on most weekends using the garden feeding station in the winter and spreading out into the reed beds as the lake level went down in the summer. As usual, we hosted several ringing demonstrations from youngsters in Black2Nature to seniors in local natural history groups. The year's total of 3,600 birds handled comprised 2,400 ringed plus 1,200 recaptures of 48 species. Habitat management mainly focussed on keeping the track lanes clear for using our mist nets.

The Breeding Season.

One of our main projects is to take part in a national programme that tracks the fortunes of 24 common songbirds. This includes residents such as Dunnocks and Robins and summer migrants such as Reed and Sedge Warblers. The study involves over 120 Constant effort Sites (CES) in the U.K. and gives a year-on-year comparison about how bird populations are faring. We can also look at the adult : young ratio. This gives a measure of 'productivity' and a way to compare the success (or otherwise) of each year's breeding season. CVRS has taken part in this project since it began in 1983.

Nest Recording.

347 nests for 28 species were monitored and details submitted to the BTO's Nest Recording Scheme. These nests accounted for 738 nestlings being ringed before fledging. The largest numbers of nests were found for Reed Warbler (154), Blue Tit (32) and Great Tit (30). Owls had a relatively good year with 2 nests each for Barn and Tawny monitored, all in nest boxes. 4 youngsters of each species were ringed. A pair of Kestrels bred in an owl nest box but failed at the egg stage when they were usurped by one of the Barn Owl pairs. Highlight for the year was finding a Spotted Flycatcher nest (the first since 1977) but it failed very early on. Three Spotted Flycatcher nest boxes have since been erected in the vicinity of the failed nest in the hope that they may be attracted back next year.

The Canada Goose roundup.

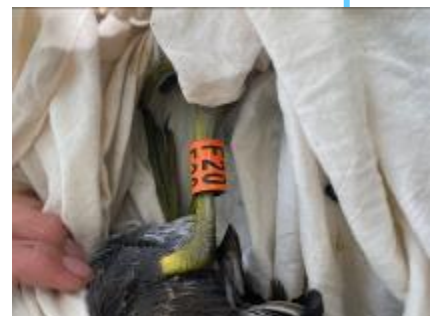
We felt that it would again be sensible to cancel the annual roundup of the Canada Geese. This usually takes place at the end of June during their flightless, moulting period and involves corralling the birds together. The concern, of course, being that this would inevitably put them in close-proximity to each other and just one sickly bird could pass the disease to the rest. The Covid pandemic also prevented it happening in 2020 and 2021.

Moorhens.

This year we have joined a national colour-ringing scheme to study the movements of Moorhen (pictured right). Colour ringing greatly increases the reporting rate, especially for birds such as Moorhen with long legs and which spend much of their time paddling and walking around the edge of water.

Mike Bailey, Chairman

Kingfisher



Biosecurity at our reservoirs



It's been a brilliant year in the Chew Valley in 2023.

As part of the AQUA biosecurity accreditation scheme we have been surveying the Upper Chew at Litton and Coley and can happily say we did not catch any invasive species at all, the ones we are trying to avoid include: signal crayfish, zebra mussel and the Killer shrimp to name but a few!

The same result was found after surveying the Blagdon Yeo and the Lower Chew at Pensford, nil result, happy days!

We have also been very active on Chew Valley Lake, checking over 380 artificial refuge traps and 3 nights of baited trap nights, looking for signal crayfish, again nil results so really happy and that included the hitlist of other invasive species stated above. Here is out placement student, Adam 'Stubbsy' Stubbs modelling the latest in crayfish survey chic.



At Chew Magna reservoir, our signal crayfish control project we are not quite so lucky, checking over 100 traps every two weeks, in all sorts of weather conditions, we have managed to catch 750 crayfish in 2023. However, this is 400 odd less than 2022 so the pilot control could be working!

Here is Adam again with one of the offending crayfish.



One of the real fun days at Chew Valley Lake during invasive species week in March, was chatting to anglers and engaging them with the AQUA biosecurity project, invasive species ecology and how they can help out by being very careful with kit and adhering to the Check, Clean & Dry protocols, really great group of fishers!

Like I said, it's been a busy but great year in and around the lakes, really looking forward to 2024 and all the surveys, various species and people I meet along the way! Remember CHECK, CLEAN & DRY in 2024!

Neil Green, UK Conservation Officer, Bristol Zoo

Bristol Water are currently working on plans to install dip tanks for angler equipment at Chew Valley and Blagdon Lakes to further reduce the chances of invasive species entering our reservoirs. We have also set up a site guardian scheme, which involves Bristol Water employees and local volunteers keeping an eye on our reservoirs and the surrounding land for any new invasive species.



Bristol Water and Bristol Avon Rivers Trust (BART) working in partnership with local farmers

Philippa Gist, BART Farm advisor has been working with landowners and farmers in the Chew, Congresbury Yeo and Winford catchments on the Bristol Water capital grant scheme. This scheme provides opportunities for farmers looking to make land management changes or farm improvements that give cost effective improvements in water quality.

Grant funding is available for:

- Guttering
- Watercourse fencing & troughs
- Roofing manure stores
- Concrete
- Ponds, wetlands and much more

Watercourse fencing funded through the Bristol Water Grant Scheme



Fencing can significantly improve habitat that is being damaged by livestock, such as cows or sheep. Livestock kept in fields adjacent to the river trample the river banks and in some instances defecate in the watercourse impacting water quality. This causes erosion to the river banks and widening of the river channel; it also contributes high quantities of fine sediment into the water course which smothers river bed gravels and potential fish spawning locations. An effective measure to prevent the impact of livestock is the installation of fencing. Fencing protects the river banks from livestock trampling, reduces sediment input and livestock waste from entering the watercourse and allows plants to flourish which help filter sediment, nutrients and runoff. Cattle poaching and subsequent bank erosion have also led to serious declines in populations of the European water vole which depend on bank structure for its refuge.

Farmyard infrastructure improvements

Water quality can also be impacted by contaminated run-off from farm yards. BART offers **free** farm advisory visits for farmers whenever funding is available. Visits look at a wide range of improvement opportunities that can save farmers time and reduce the risk of pollution incidents.

Matt Pitts, who has recently left Bristol Water has been working on the Lakeside Partnership Scheme for the last 9 years. Matt has worked with local farmers to make their farms more sustainable, and water quality data has shown an improvement in water quality in the reservoirs with fewer algal blooms and a reduction in phosphorus levels.

At the start of December BART organised a training workshop led by independent soils expert Neils Corfield. He led a training workshop and farm walk on improving soil and pasture health to help combat the challenges of our changing climate. The workshop covered:

Soils monitoring Compaction Pasture monitoring Grazing management
Grass production (how to double output & UK data showing close relationships with rainfall) Advice: interventions & solutions

It also explored options for rainwater harvesting to save on water bills with representatives from Enduramaxx and others to demonstrate kit and ways to make farms more water resilient.

Philippa Gist, Farm Advisor with Bristol Avon Rivers Trust

Farm walk looking at improving soil and pasture



Cheddar Watersports



It's been a busy and eventful year at Bristol Corinthian/ Cheddar Watersports. We held our first ever Fin and Foil festival in May, a number of very successful sailing events including a large multi day Sea Cadet event, and as ever our paddlesports members have been out on their boards and kayaks throughout the year.

Windsurfing and wing foiling are proving very popular with the reservoir being ideally suited for all abilities, it's a great place to learn the basics but also to hone those more advanced skills and as all board sailors will tell you the before and after chat in the carpark is just as important and once again we are an ideal venue.

Dinghy sailing continues to provide the backbone of the club with many exciting events during 2023. From beginners to advanced we have successfully catered for everyone. The lake being suitable for those just starting out whilst our many open meetings, Sunday and Wednesday evening race series continue to challenge those with a competitive spirit.

We are home to a large paddlesports community, not only our members but also several local groups using our lake for training from beginners to advanced.

The Sea Cadets have also been busy with two very large events when they welcomed cadets from across the South and South West. The local groups that maintain the hub have continued to enjoy the fabulous environment the club and water offer and can be seen out on the water most days during the spring and summer months.

It is always great to see our junior members out on the water in all our disciplines and around the club, their numbers are growing steadily and next year we have plans for youth days and racing for our younger members.

In 2023 we welcomed youth organisations from the Bristol area to our amazing facilities and helped give many youngsters a new and hopefully amazing experience, one they may not have had the opportunity to experience previously.

Looking ahead to 2024 we have another packed programme of events from beginner classes to advanced workshops Wing foiling to Dinghy sailing there is bound to be something for everyone.

During the summer months we are fortunate to have seven days a week access to the water enabling our members to get out on the water as frequently as they wish in buddy groups, no matter the weather if you're ever walking around the lake you will likely see some our members out enjoying themselves.

Details of what we are up to and membership can always be found at BCYC.org.uk

Malcolm Williamson, Commodore



Chew Valley Lake Sailing Club



It has been another wonderful year for the sailing club, which has again seen us host a wide range of waterborne events ranging from cruising, to full on National level racing. With sailing open to members on Wednesdays, Thursdays and Saturdays and a full racing program on Sundays, the clubhouse has been busy and often full of sailors swapping tales of their on-the-water adventures.

The cold winter months at the start of the year once again saw a relatively small but very hardy group of sailors taking to the water, many choosing to compete in our Sunday morning 'Frostbite' series. February and March saw our University and School Groups hosting a number of large Team racing events with competitors travelling not just from the region, but from throughout the UK, and ensuring our caterers were kept busy with supplies of hot drinks and food.

Over the milder and sunnier Spring and Summer months club activity ramped up, with more cruising and Junior training groups taking to the water, a range of family and racing regattas and the ever popular Wednesday evening racing in particular attracting upwards of 100 sailors onto the lake.

For those non members wanting to sail, our pay and play initiative was once again very popular throughout the year, giving an opportunity for anyone interested in sailing to enjoy a taster session, or for new sailors to gain experience and confidence with an experienced club member at an agreed time for a small fee. Details of the scheme can be found at:

<https://www.chewvalleysailing.org.uk/training/payandplay/>

Also for non-members, our annual "Discover Sailing Day" in June saw over 100 people sign up to come along on the day to see the facilities at the club and enjoy a short session on the water, an initiative that we hope will help attract people to enjoy our wonderful sport. Keep an eye out on our website and local social media sites if you would like to come along this year.

As is always the case, we always face the odd challenge along the way and 2023 was not the exception. One notable and unexpected challenge was when our committee boat, the 32ft motorboat used to run our racing, broke its mooring in an Autumn storm and washed onto the dam at the Northern end of the lake. The damage to the hull was significant and the boat sadly written off, although I am pleased to report the arrival not too long after of a replacement which has already proved its worth in running some major autumn events.

Finally, an exciting new initiative towards the end of the year saw us purchase two new electric powered boats to help support our training and coaching activity. We are increasingly conscious of how we can minimise the impact we have on the beautiful environment we are lucky to enjoy, and while the electric boats don't have the power and speed of our petrol powered RIBs, they do benefit from not only being 'cleaner' but also much less noisy, and we hope become the go to boat for our training and coaching.

Andy Jones, Commodore

