The PISCATORIAL SOCIETY
Founded 1836

Annual Fisheries Report 2024

A review of the 2023 season

Bob Wellard - Director of Fisheries

The effects of climate change on our chalk rivers and biodiversity

A comment I occasionally hear from members is 'we're an angling club not a conservation group – and we should concentrate more on fishing.' A fair point but perhaps worth exploring in more detail...

Both renowned for their gin-clear water quality and lamented for their exposure to sewage and other pollutants, England's chalk streams are national icons due to their biodiversity, unique clearwater fishing and global rarity.

Celebrated for their ecological and cultural value (including fishing) of their perennial reaches, chalk streams undergo profound changes as they flow from source to sea, enhancing both river and landscape habitat diversity.

In their uppermost reaches, ephemeral flow occasionally inundates dry valleys. Moving downstream, winterbourne reaches experience gradual, seasonal shifts from wet winter phases to low flows, flow cessation and dry summer phases, while near-perennial reaches are transition zones that dry only during extreme droughts. In their perennial reaches, reliable groundwater inputs and surface run-off sustain all year-round flow.

These longitudinal shifts in flow permanence allow chalk streams to support high catchment-scale biodiversity in aquatic and terrestrial species. Some of these species are national rarities such as the winterbourne stonefly (Nemoura lacustrius) – whose lifecycles are timed to coincide with winterbourne wet and dry phases – and plants such as water crowfoot (Ranunculus) which thrive in steeper gradients where improved water velocity >10 m3/s (over 10 cubic metres per second) comes at a premium. Chalk streams also support biodiverse fish communities including wild brown trout, grayling and our now endangered Atlantic salmon.

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Front cover image by John Dart of the Society's Photographic Group, whose members took all the other photos

Extremes

Clearly we don't have to look too far back to see extreme events are already having an impact on our fishing – floods and droughts are becoming far more frequent, more severe and lasting longer. The effects are far reaching but they vary for each section of the river catchment – the effects of flooding being something we've all witnessed in recent months. We need to understand more about the increased risks we are facing and like any business we need to be clear about our vulnerabilities and how sustainable some of our fishing might be in the future.

In the uppermost reaches – Dry phases can often continue for years, with channels becoming increasingly like adjacent terrestrial land. In wetter periods, usually dry valleys and wider floodplains are inundated with ephemeral flow in the channel.

In winterbourne reaches – Dry phases become unusually long in space and time, and moisture declines in subsurface sediments. Short-term flow pulses cause rapid dry-to-wet shifts that interrupt or end seasonal dry phases.

In near-perennial reaches – Rare drying events can still occur, including reaches previously considered perennial. Conversely, floods can sometimes have comparable effects to those in perennial reaches.

In perennial reaches – In dry periods, water depths and flow velocities decline, along with a loss of fast flowing riffles and inundated marginal habitats, whilst in wet periods water depths and flow velocities increase, and large quantities of sediments may be mobilised, creating clean gravel habitat in fast flowing areas and sediment deposition in slack water areas.

Temperatures – Hot spells and heatwaves are increasing, with temperatures continually breaking records, particularly in southern England. Whilst our summers are getting hotter, our winters are getting milder, solar radiation is increasing surface water temperatures, groundwater temperatures will rise more slowly. On Christmas day 2023 - temperatures across much of the UK were in the mid-teens!

At the same time, we see increasing pressures from farm run-off, urban run-off, invasive non-native species, water abstraction, sewage inputs, and physical modification.

Higher temperatures are expected to increase the length of the plant growing season, causing temporal changes in the occurrence of individual species and in community composition. Plants influence flow, velocities and sediment composition, and habitats may thus change, altering communities including aquatic invertebrates. Filamentous algae (Cladophora) growth may increase in warm, slow flowing rivers, especially where nutrient concentration is elevated.

On average, our southern English winters are projected to be wetter and milder, with fewer cold days, but cold, dry winters may also occur. Our summers are expected to be hotter and drier, with more frequent heatwaves, although high-intensity rainfall events may become more common and wet summers may still occur. Any changes to total summer rainfall volumes remains uncertain.

Challenges

In 2022 it was low water and high temperatures that caused a lot of headaches for the keeper team. Conversely, in 2023 it was heavy rain and exceptionally high river levels that really caused us problems. The fact that this was exacerbated by the Environment Agency pulling out of weed extraction on the Avon, at the very last minute; being unable to cut weed in a such a high water year had a serious knock-on effect on so many fronts.

In providing suitable conditions for Ranunculus to thrive (pinching-in to improve flow velocities to generate >10 m3/s stimulating healthy growth early in the year), where we can enjoy the changes it brings in terms of improved river ecology and fish communities, this presents more challenges in terms of how we manage prolific growth in high water years.

We are witnessing first-hand the effects of climate change and our fishing is pretty much guaranteed to be disrupted by more frequent extreme events of floods and droughts. Putting it bluntly, if we are to continue to provide an excellent fly-fishing experience for our members we need to be agile and embrace the challenges ahead. We need to ensure our rivers can function more naturally in floods and droughts and grab every opportunity to future proof them against a rapidly changing climate. However, this has to fit with the prevailing landscape – it's not a one size fits all scenario. For example, the River Test at Freefolk is a very different animal to the Wylye - water levels of the Test might see <1m variation between a flood and a drought, whereas on the Wylye the variation can be >4m, and this is even more exaggerated on the Avon.

We will continue to carry out river restoration projects on our waters that by their nature create more sustainable conditions for Ranunculus to thrive, however, by the same token we must be ready and able to manage it effectively. Moreover, we must ensure angler access remains a high priority in our future planning – and this includes designing-in angler access at the project conception before we put spades on the ground. It makes no sense trying to address these problems retrospectively when the weather or the regulator sends us a curve ball. Our plans for providing greater resilience to extreme events includes members having a reasonable expectation to get onto our rivers and to be able to fish safely. That said, members also need to recognise and understand the challenges faced by the keepers. Wading chest deep in the river to cut weed is extremely hard work so there needs to be mechanisms in place that allow them to do their work safely without feeling pressured. Whilst there will be some parts of our rivers that "aren't the way they used to be" I'm sure there will be others that are "greatly improved".

Velocity is universally regarded as of prime importance to the growth and distribution of Ranunculus.

What else can we do to make our rivers more resilient to climate change?

It's really important that we continue to ensure that the work we are doing on our rivers is actually having the positive impact we hope it is on our fishing, which is why the Society continues to gather evidence to support its efforts to improve and enhance the chalk stream environment and works collaboratively with many partners and stakeholders towards achieving mutually agreed outcomes. Our ongoing ambition is to build on the principle of 'proof of concept' as we see this as key to the future of sustainable wild fisheries at a time when weather, rainfall and flow volumes are so unpredictable.

Having our say in the way our rivers are managed is really important and, as has happened in the past, the Society engaged with the regulators and local authorities in shaping the various strategies that have been delivered over the years – in more recent times these included:

- The National Trout and Grayling Strategy (Environment Agency 2003);
- The National Chalk Stream Restoration Strategy (2021) and Implementation Plan (2022).

Introduced by the Environment Act 2021, Local Nature Recovery Strategies (LNRS) are a new system of plans for nature recovery covering the whole of England. They are established by clauses 100 to 104 of the Environment Bill and are designed as tools to drive more coordinated, practical and focussed action to help nature. Each Strategy will, for the area that it covers;

- agree priorities for nature's recovery,
- map the most valuable existing areas for nature
- map specific proposals for creating or improving habitat for nature and wider environmental goals.

The production of each LNRS will be evidence-based, locally led and collaborative, to create a network of shared plans that public, private and voluntary sectors can all help to deliver. The Government anticipates that there will be roughly 50 Local Nature Recovery Strategies which together will cover the whole of England with no gaps and no overlaps.

The Environment Bill, in addition to establishing Local Nature Recovery Strategies, will make delivering Biodiversity Net Gain (BNG) a mandatory part of the development process. Off-site habitat enhancement will be required when a development is not able to accommodate the required increase in biodiversity on the development site itself.

Local Nature Recovery Strategies are also intended to support the delivery of wider environmental objectives. "Nature based solutions" refers to the use of nature and natural processes to address wider environmental or societal problems. Examples include restoring peatlands to slow the flow of water into river systems to reduce the risk of flooding, or planting trees near rivers to limit soil erosion that impacts on water quality.

A key feature of the River Anton (& Westfair) Restoration Project is that it will also provide opportunities for BNG, which goes some way towards meeting the needs of the landowner at the same time meeting government incentives. Whilst there isn't an external process or mechanism that specifically focuses on improving rivers for angling, central to the design of the Anton project is providing access for angling during high flows. Much of this is focused around designing-in footpaths that will remain dry (maybe a little damp) when the river starts to rise above normal levels. Climate resilience is achieved by creating a variety of habitats that meet the needs of wild brown trout, grayling (Atlantic salmon - freshwater) life stages. The work we are doing on the Westfair and main river Anton aims to provide optimised flows, which we hope will deliver the following outcomes:

- **Modified Channels** – Reinstate natural processes and function to the engineered channel by reinstating and optimising key features such as flow velocity, gradient and sinuosity.

- **Greater Resilience** - Improve climate change resilience of the Westfair channel to low flow and drought conditions and to ensure habitat continuity in the event of such events.

- **Building Relationships** - Strengthen relationships between delivery partners and catchment stakeholders through collaborative working and providing opportunities for education and community engagement.

- **Proof of Concept** - Continue to expand on the Piscatorial Society's ambition to deliver a flagship project, backed up by scientific evidence, to further the Society's commitment to sustainable wild fishery habitats and to estab-

lish a Wild Fish Protection Zone throughout the River Anton catchment

▪ **Improved Connectivity** - Help to address additional issues/pressures that are preventing the achievement of good ecological SSSI status on the Lower River Anton.

Other efforts we are currently involved in include:

▪ Riverfly (monthly) and SMART Rivers (spring and autumn) monitoring on the Avon, Wylye, Test, Itchen and Anton (and Westfair);

▪ The Wylye Grayling & Trout Study and support for data analysis in future. It is envisaged that we will continue to collect the data and submit this for evaluation every 5-10 years as demonstrated by our support of Dr Jess Marsh's work which has resulted in 2 publications with implications for our river management for grayling;

▪ The River Anton Restoration evaluation; initially with a 3 year PhD studentship started Autumn 2022 in collaboration with the Univ. of Southampton "Monitoring the physical, chemical and ecological response of the River Anton to a chalk stream habitat restoration programme" and now a 2nd PhD starting in 2024 that will focus on continuing with the above as well as changes in hydrogeology, temperatures and climate;

▪ Engaging with the Angling Trust Water Quality Monitoring Network (WQMN) and other activities as and when required including, for example, sewage discharge monitoring and monitoring other sources of pollution (this is incorporated into the River Anton project);

▪ Logging water temperatures – Following the extreme temperatures recorded in the summer of 2022 we will continue to gather water temperature data across all of our waters;

▪ Representation of our findings to responsible bodies.

As many of you will know, the Society is working very closely with Southampton University – funding 50% of the cost of PhD student Hannah King. Hannah's recent report in the Society's journal (autumn 2023 No 151) gives some indication of the impact climate change is having on a small section of the River Anton – it will be interesting to see how things develop over time. On a similar note, I'm pleased to report we have secured 100% funding from the Test and Itchen Catchment Partnership (TICP) for a second PhD student who will continue to look at the physical, chemical and ecological changes of the next phase (III) of the project, with a particular focus on hydrological changes in a 'restored' wetted landscape.

We need to be inside the tent shaping the future of angling – not outside the tent waiting for others to decide what's best for us. Be in no doubt - chalk stream conservation is at the heart of what we do!

LogBook
Catch Return Data

We no longer use paper catch returns
ALL catch returns need to be entered using LogBook.

The following information has been compiled using data collected from the Society's online catch returns system – LogBook.

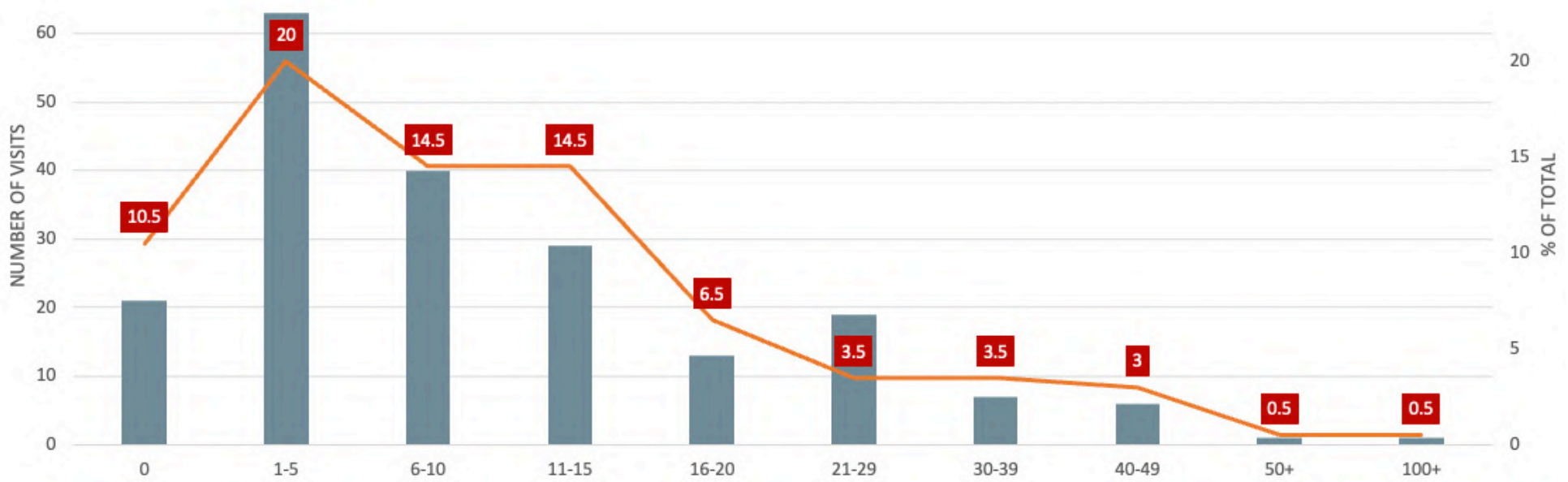
Members are reminded they need to submit a catch return before booking another beat on the Grange and Anton – However, we also need to collect catch data for non-bookable beats so please login to LogBook to upload catches, record observations and post images using the live feed – don't leave it to the end of the season.

Club Summary

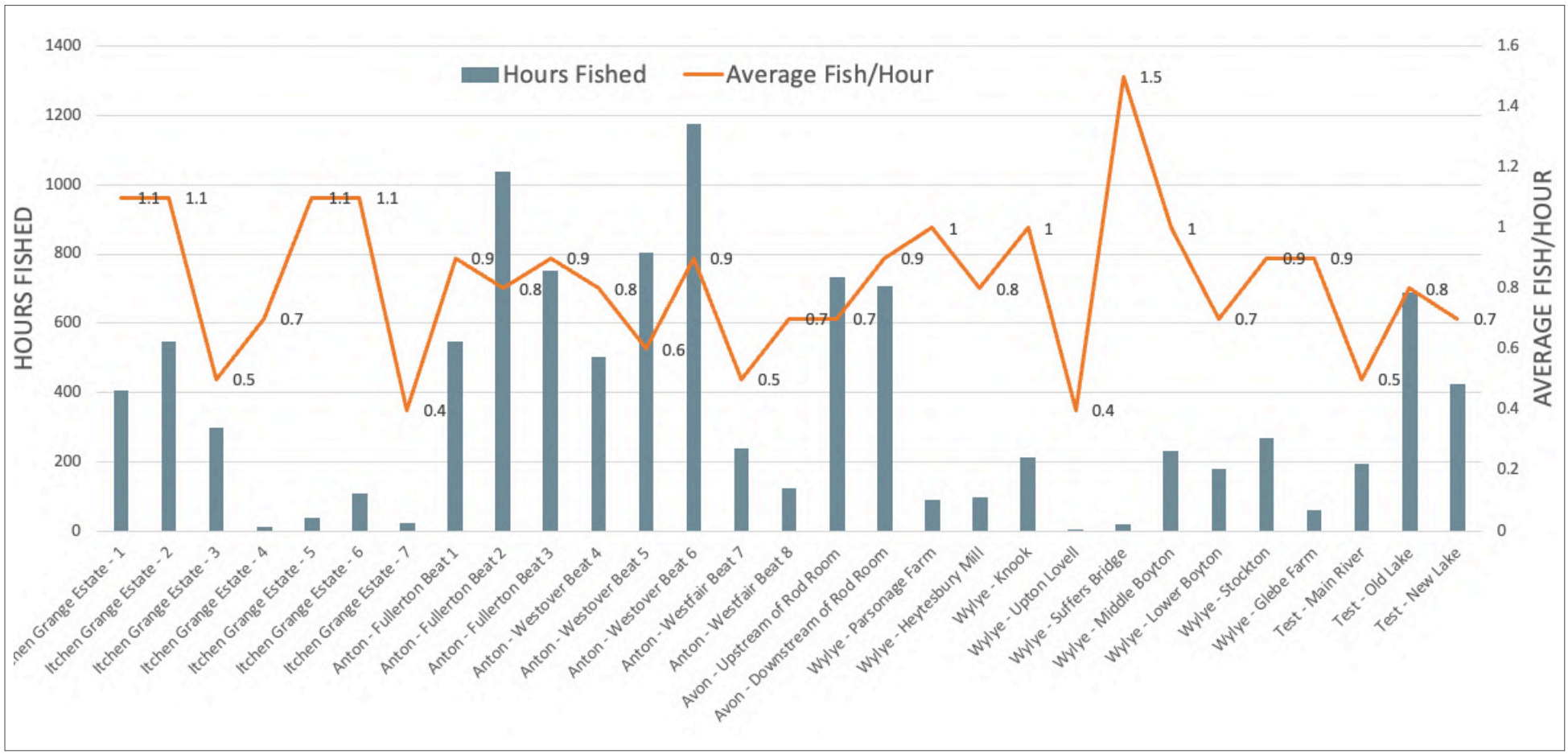
Number of Visits	2,306
Average duration of visit (hrs)	4.6
Average fish caught per hour	0.8

Average fish caught per visit	3.8
Percentage of catch returns completed	87%
Number of active members using LogBook	173

Number of Visits by Members / Percentage (%) of Total 2023

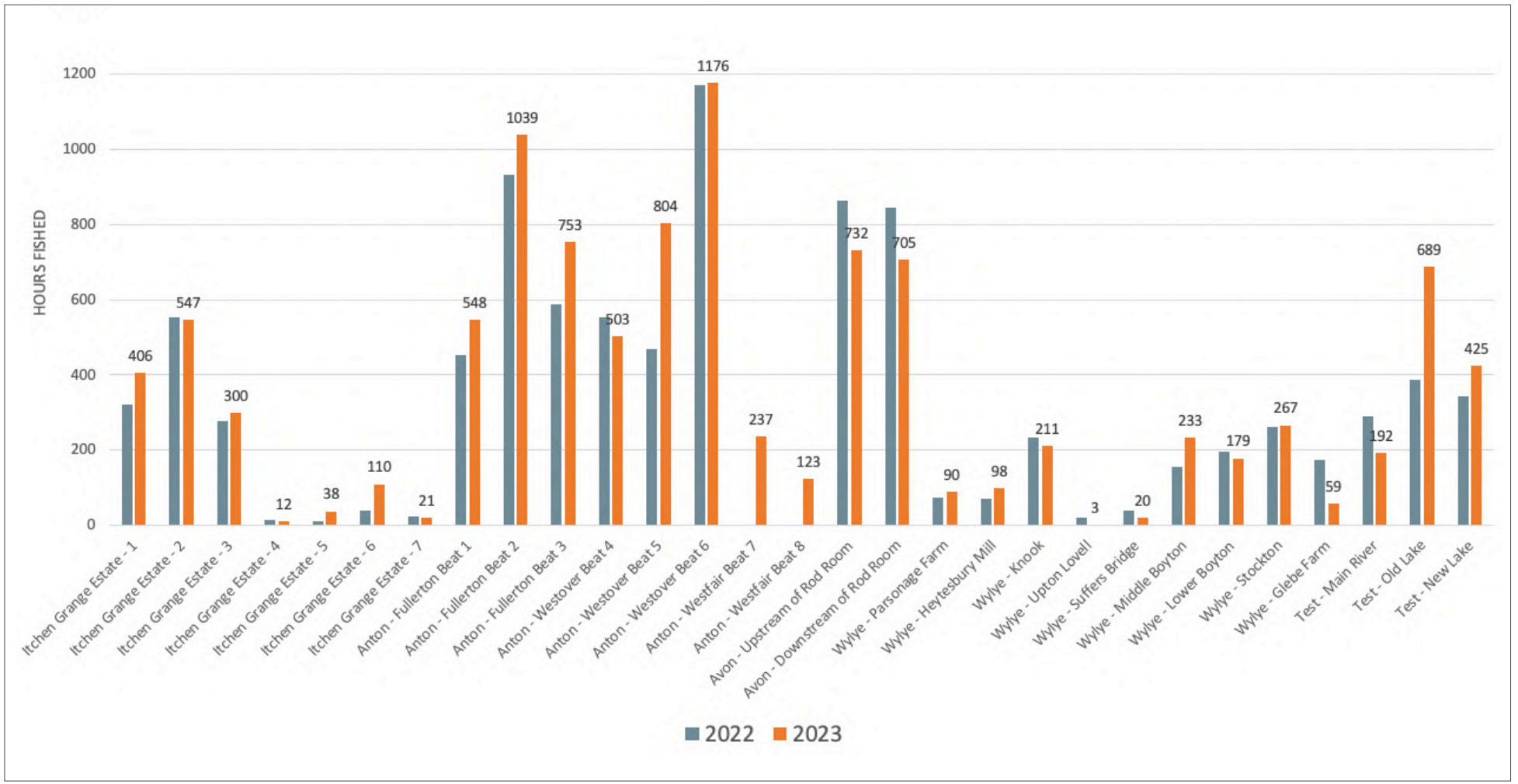


Fishing effort is recorded in terms of numbers of hours fished and the average number of fish caught per hour. In 2023, 10.5% of members did not fish at all, 20% members fished 1-5 times, 14.5% fished 6-10 times, 14.5% fished 11-15 times, 17.5% fished more than 16-20 times, 11% fished more 21 times, 1% fished more than 50 times. It is often said, 10% of the membership catch 90% of the fish and the Society is no exception.



Hours fished and average number of fish caught per hour across all waters.

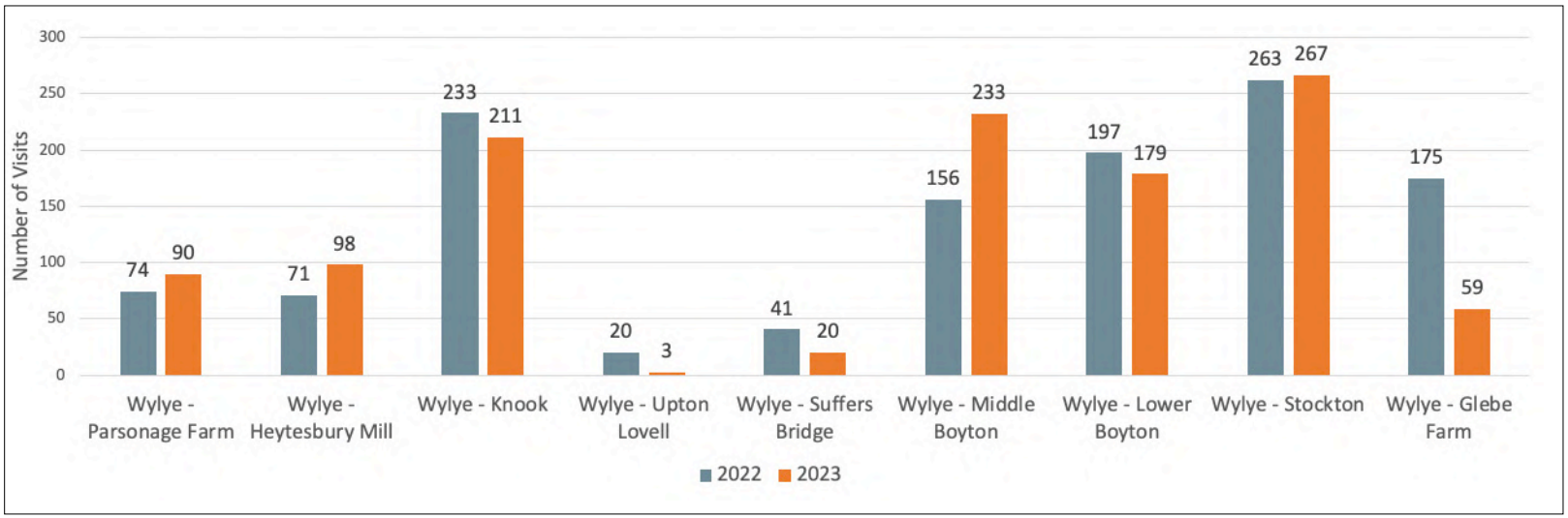
Hours fished/Beat



Westover Beat 6, which remains the most popular beat across all waters, recorded a total of 1,176 hours compared to 1,171 in 2022 – just 5hrs difference! However, fish catch/hr fell from 1.3 in 2022 to 0.9 in 2023.

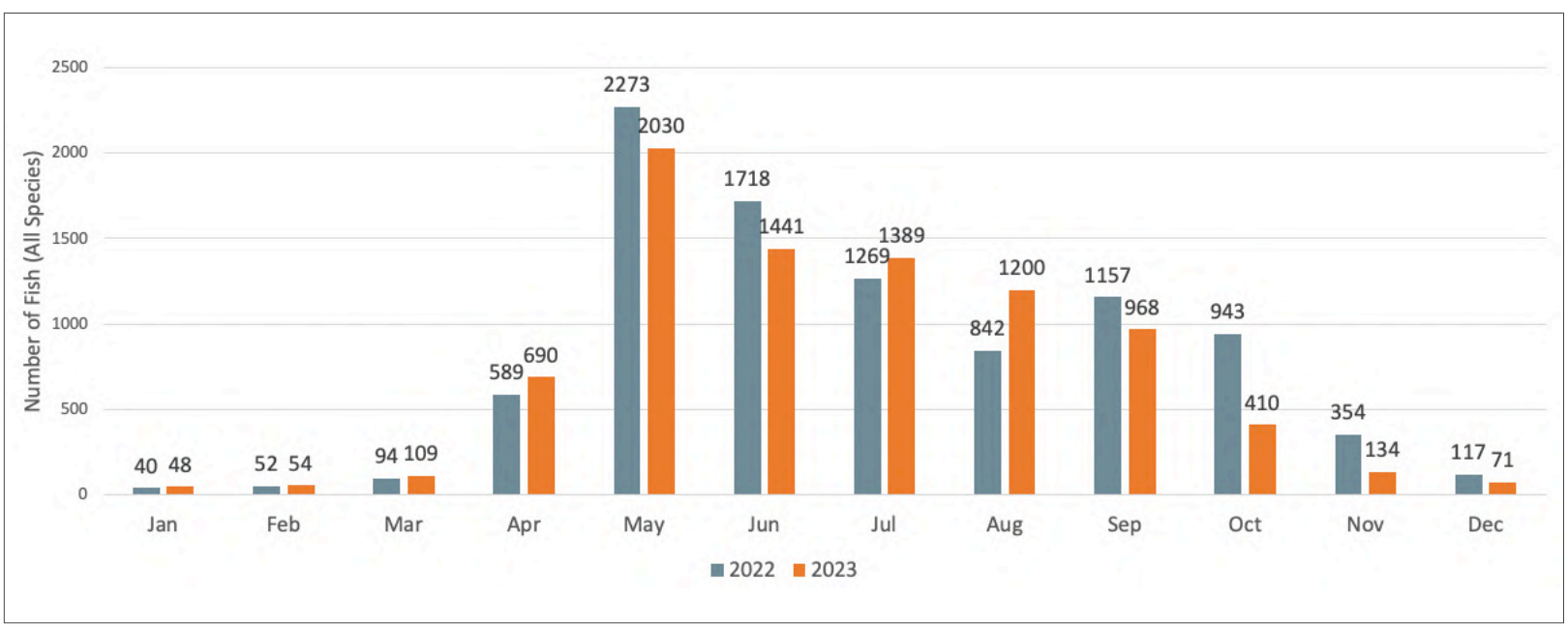
The Avon accounted for 1,437 visits compared to 1,710 in 2022 - This is most likely due to access issues with high water levels and no weed cutting in the early part of the season.

Visits to the Wylye 2022 and 2023



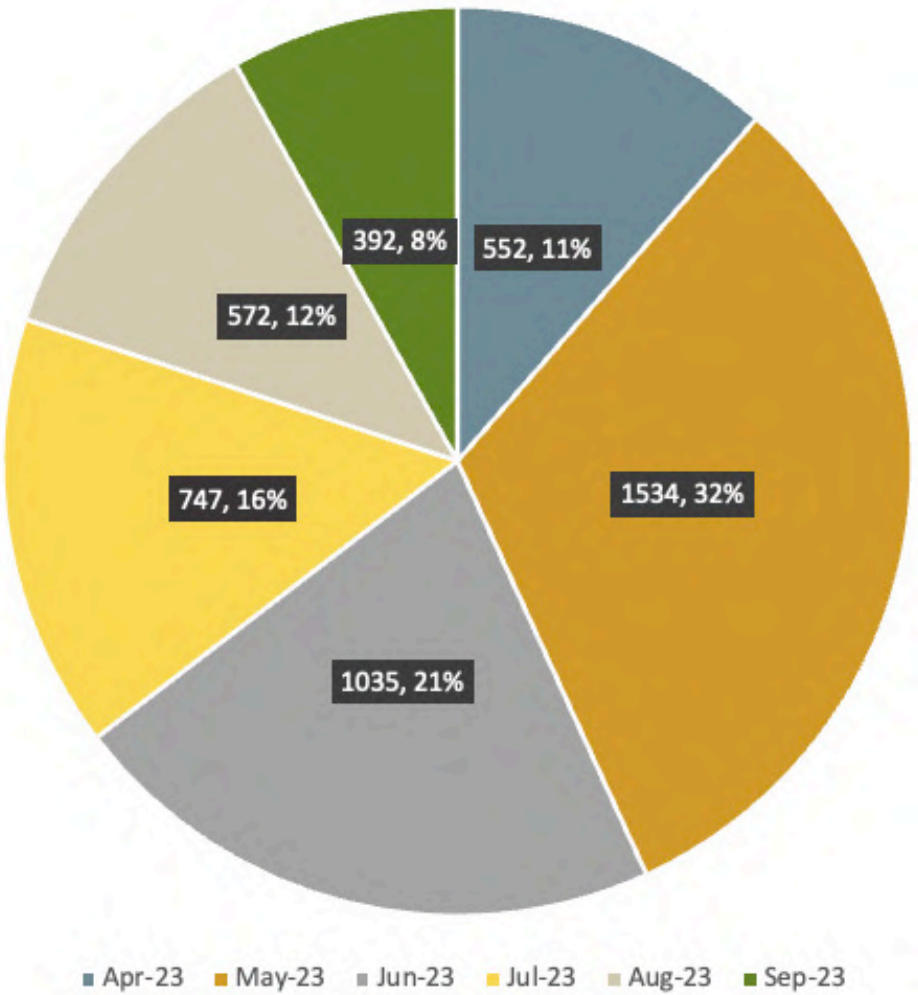
The Wylye accounted for 1,159 visits compared to 1,230 in 2022 - ditto above but compounded by no weed cutting at all due to high water and weed booms being deployed on the Avon in the latter part of the season

Monthly Catches - All Species/All Waters 2022 and 2023



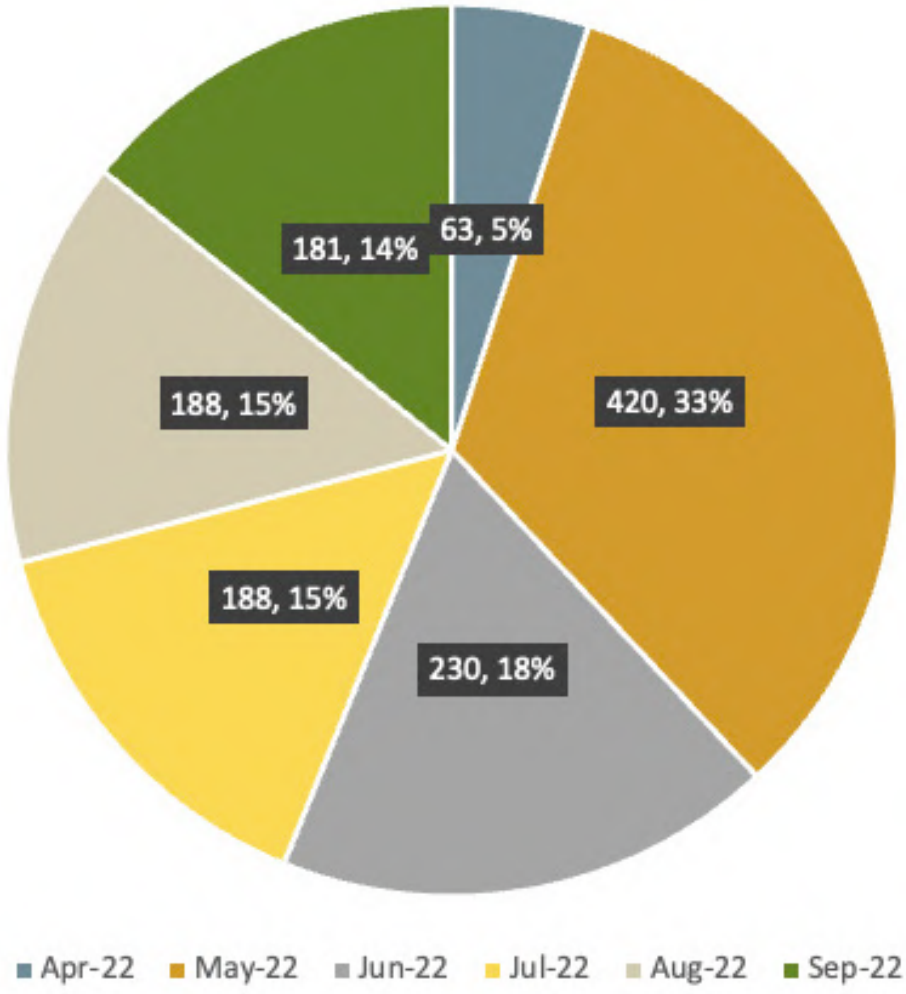
A year of UPS and DOWNS - May, June, Sept, Oct, Nov and Dec were down on last year - Jan, Feb, Mar, Apr, Jul, Aug were up on last year.

Wild Brown Trout Catches by Month 2023



Wild brown trout (Apr to Sep) - May and June produced 53% of the catch (2,569) of the total catch (4,832), with Jul to Sept producing 36% (1,747) of the total catch (4,832) - slightly up on last year.

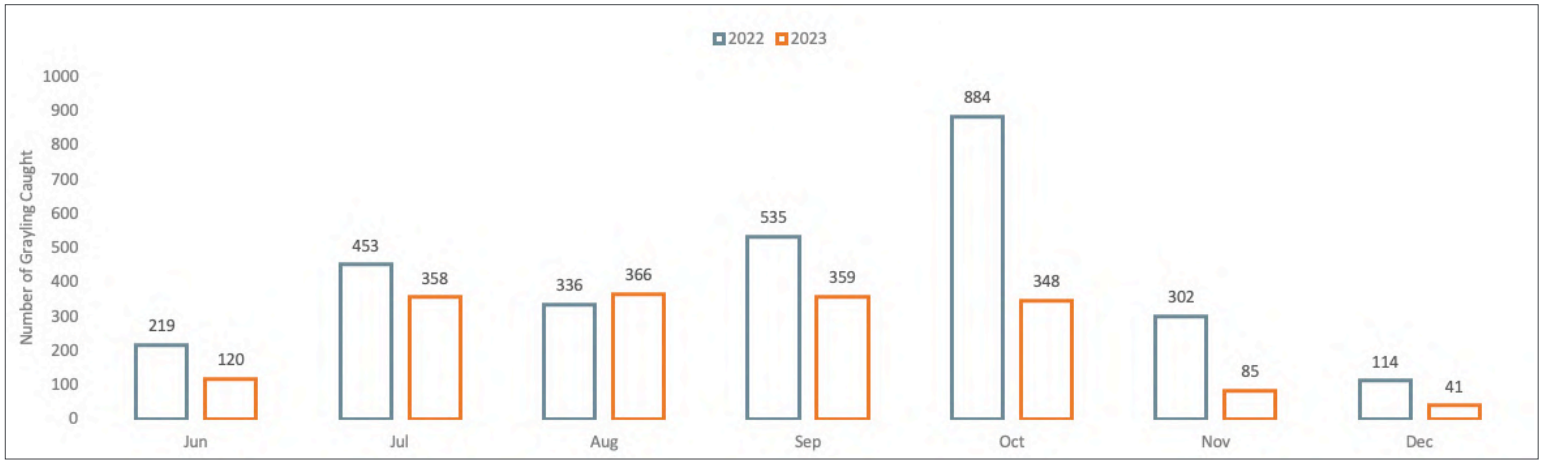
Stocked Brown Trout - Catches by Month 2023



Stocked brown trout (Apr to Sept) - May and June produced 51% (650) of the total catch (1,270), which is slightly down on last year (1,364).

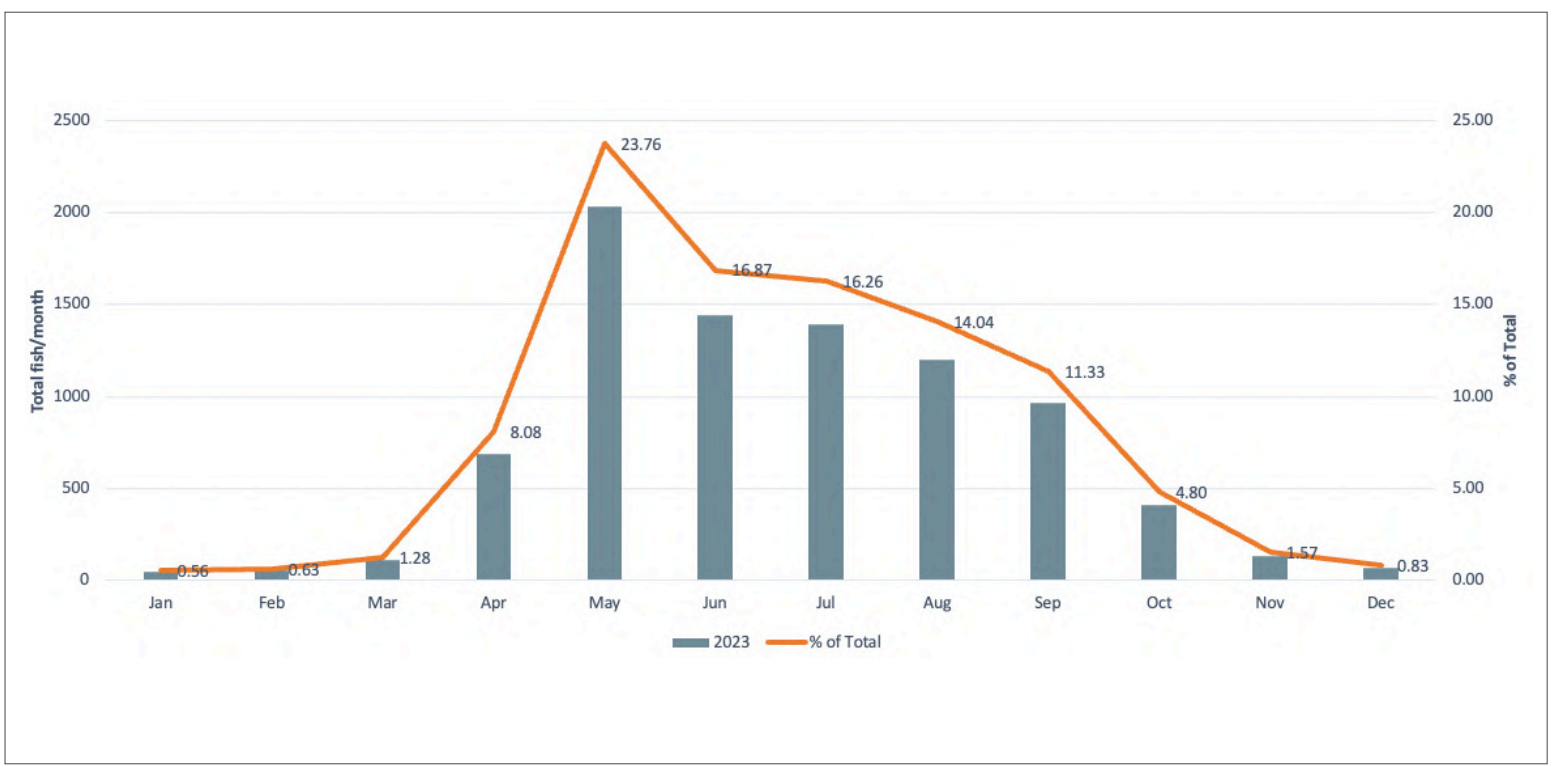
These figures are particularly useful when it comes to managing stocking, especially where members take the odd fish, which we actively encourage, especially in the latter part of the season.

Grayling 2022 and 2023



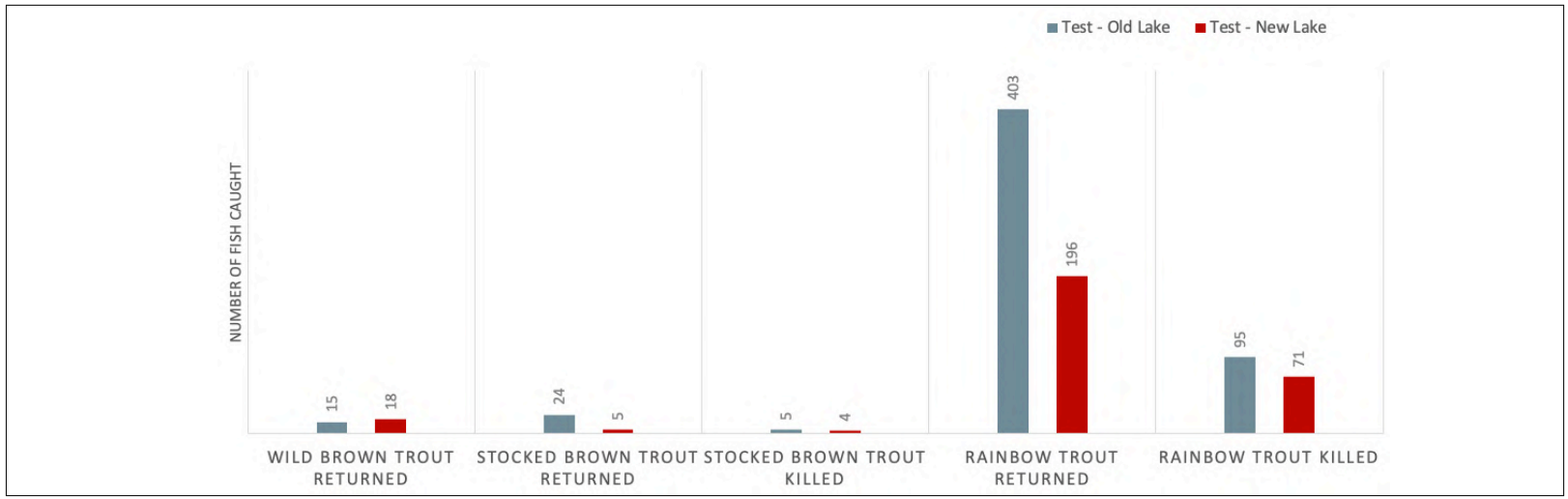
Not included in the graph are grayling recorded out of season (81) in April, May and early June. Members are kindly reminded to try to avoid catching grayling out of season - and not to record them!

Monthly totals - All fish across all waters 2023



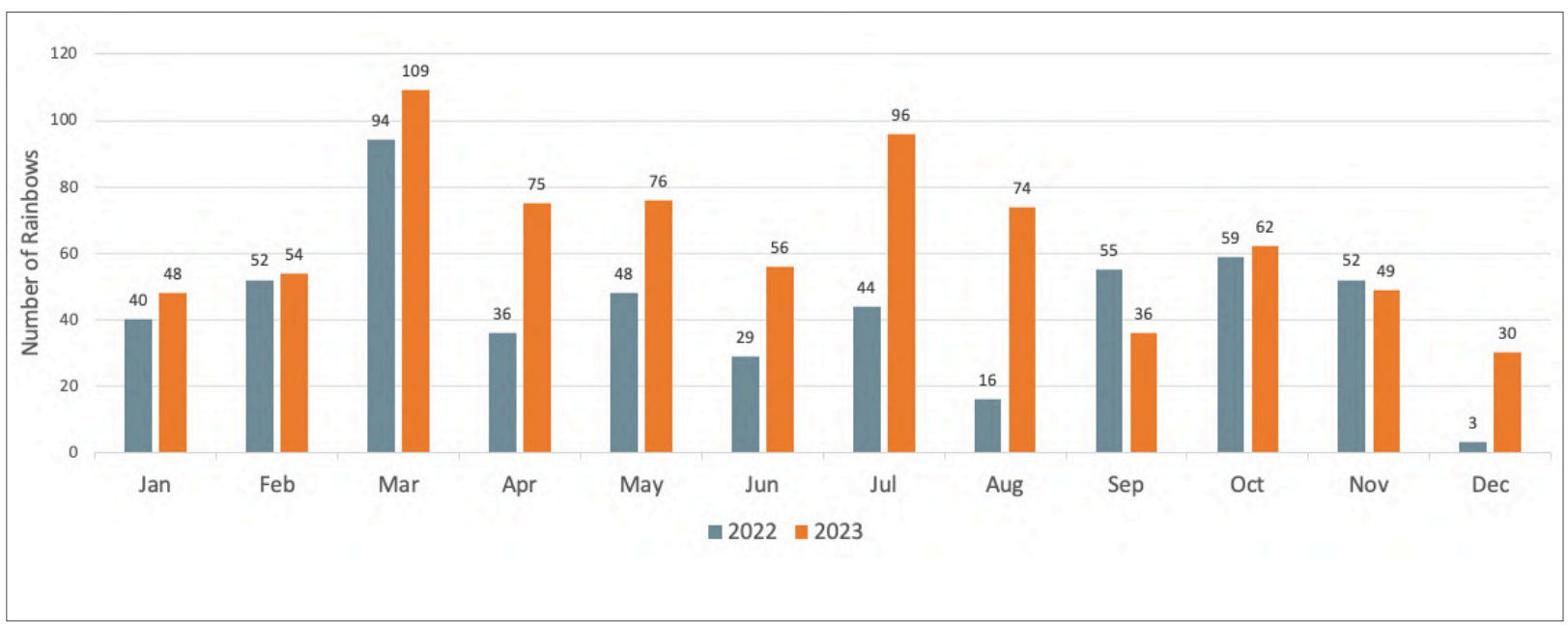
Of all the fish (trout, grayling and rainbows) caught across all of our waters, including the lakes, 23.76% were caught in May, 16.87% were caught in June, 16.26% in July, 14.04% in August and 11.33% in September. January was the quietest month on the lakes with 0.56% caught, followed by February 0.63%, and March 1.28%. With the Anton, Avon and Wylye impacted by flooding the period October to December accounted for just 7.20% of the total.

Freefolk Lakes - Brown Trout and Rainbows 2023



Freefolk lakes produced a total of 836 fish. The New Lake produced 294 and the Old Lake 542 with 91.51% of fish caught being rainbows. Just 21% of stocked rainbows and browns were taken.

Rainbows Caught in the Lakes by Month

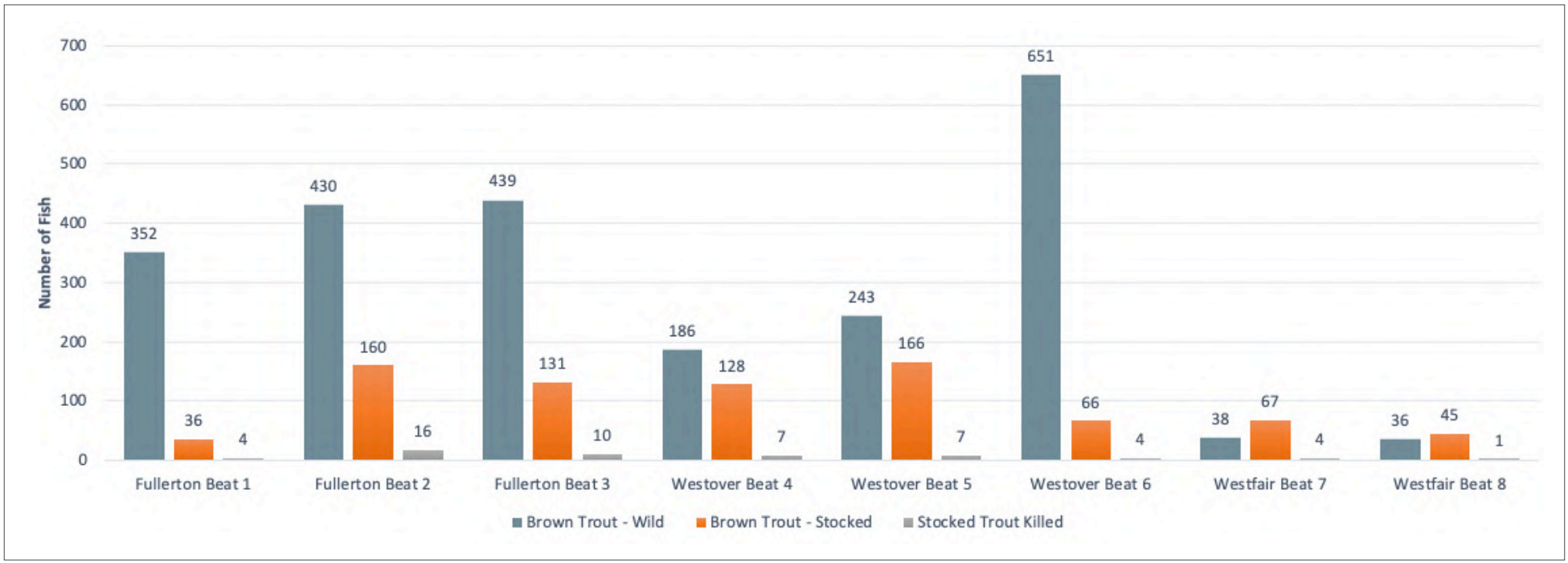


March was the most popular month, producing 109 rainbows compared to 94 last year. With the exception of September and Novembers catches were up on last year.

The fish we caught

As mentioned previously, the Society only stocks the Avon and Anton – all of these fish are >12 inches in length and yet members continue to record fish below this size. I have therefore added these numbers to the total catch of stocked fish – assuming they were actually stocked fish that were incorrectly sized.

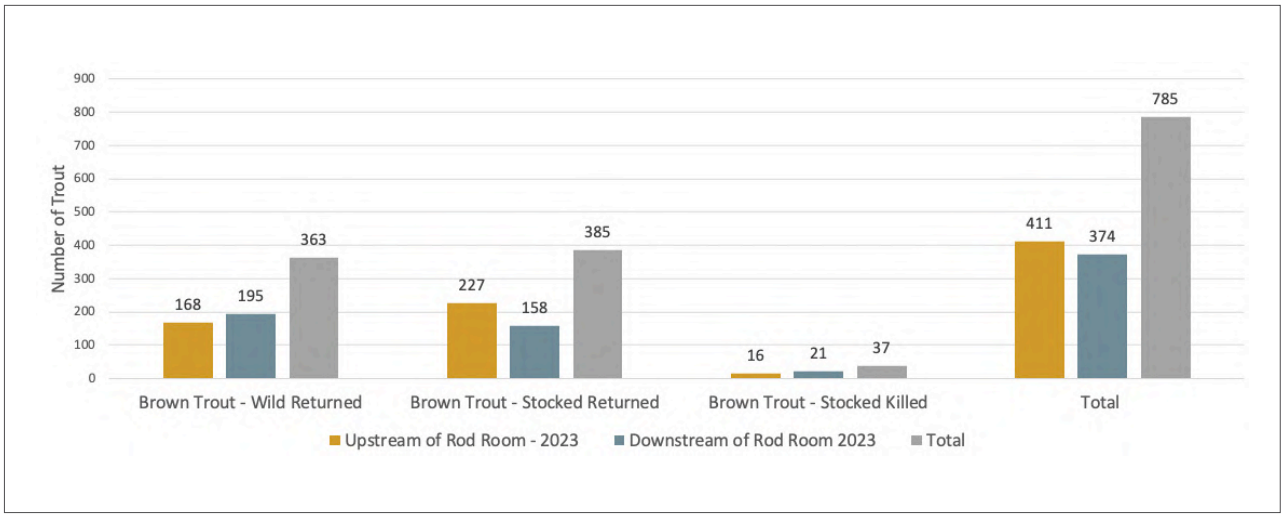
River Anton catches (all fish) 2023



Brown trout (stocked and wild) caught on the river Anton (beats 1-8) totalled 3,227 compared to 2,909 in 2022 - an increase of 318. Of the total wild brown trout caught and released (2,404) 395 (16.4%) were >12" in length. As was the case last year, Beat 6 produced the largest number of wild brown trout of all the beats (651) accounting for 27.2% of the total wild catch. Despite Beat 6 not being stocked for a second year, 66 stocked trout were recorded, of which only 4 were taken.

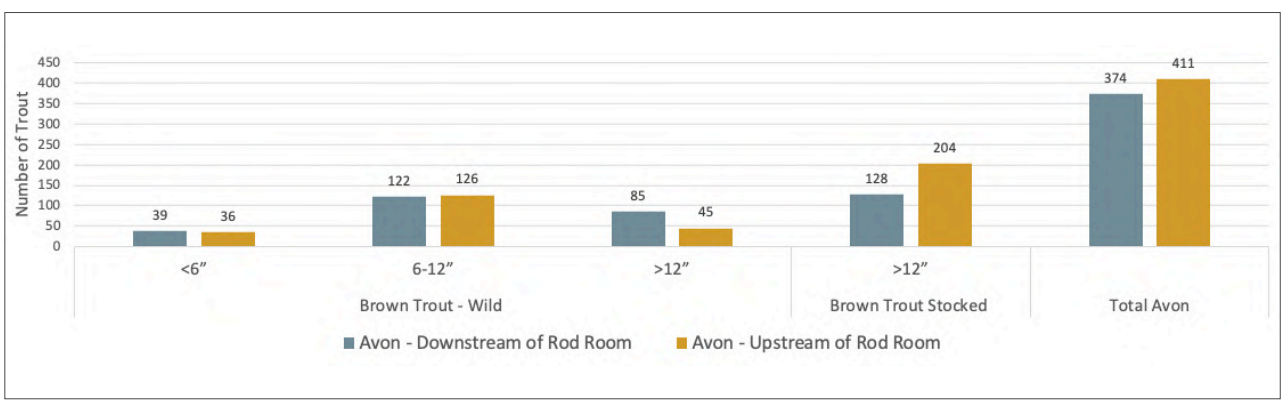
Members are encouraged to take an occasional stocked fish - for more details on 'how to identify the difference between wild and stocked brown trout' visit the Society's online library where you will find a PowerPoint presentation by Richard Sankey and Stuart McTeare. Most of the stocked fish on beat 6 will have migrated from above and below - the number (66) is less than half what it was in 2022 (148). Fullerton Beat 3 was the 2nd best performing beat in terms of wild brown trout caught and released (439), accounting for (18.6%) of the total, closely followed by beat 2 with 430 (18.14%),

River Avon - Brown Trout (Stocked and Wild)



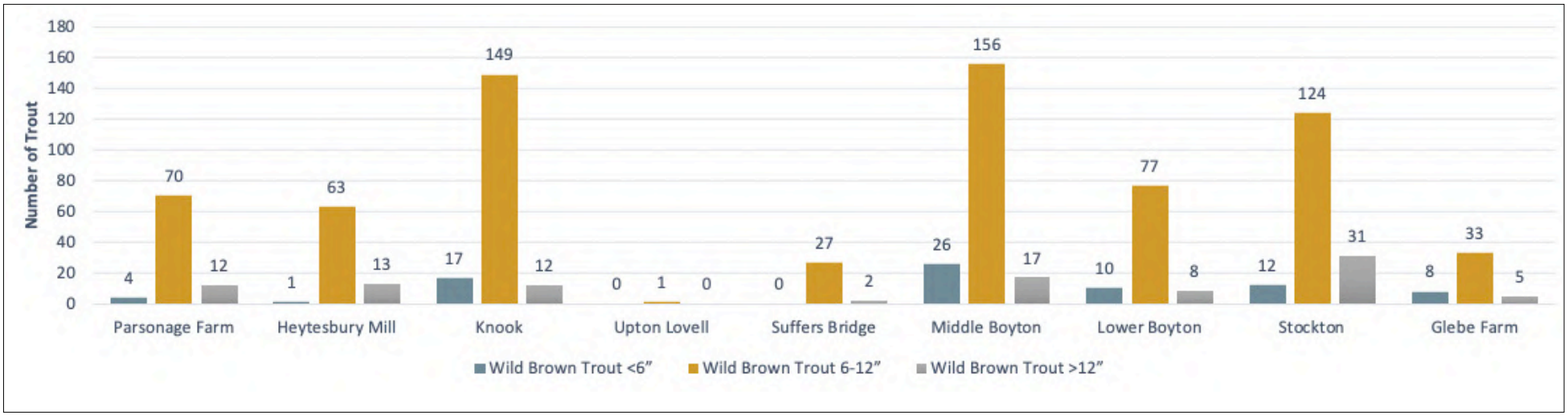
On the Avon a total of 785 brown trout were caught of which 46% were wild with the remaining 54% (422) stocked. Areas up-stream of the Rod room (Leat, Normanton, and Top Water) produced 411 (52%) wild and stocked trout, whilst those areas down-stream (Hatch Pool, Durnford, Broads Right & Left) produced 374 (48%). Of the 700 stocked trout introduced by the Society in 2023 (plus an unknown number introduced by neighbours) only 37 (4.7%) were taken (killed), a 1.5% increase on last year.

River Avon - Brown Trout (Stocked and Wild) - Fish Length



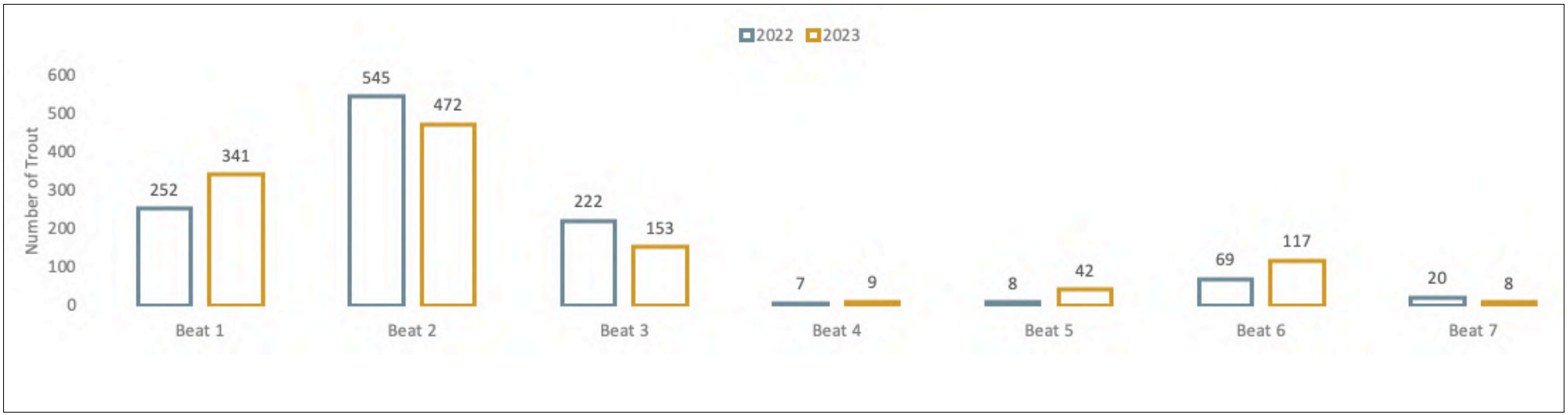
Of the wild trout caught on the Avon 130 of them were >12", 248 of them were between 6-12" and 75 of them were <6". All stocked trout are >12". We will continue to maintain our current stocking levels for the 2024 season. Members are encouraged to take an occasional stock fish.

Wild Brown Trout - Lengths - River Wylye



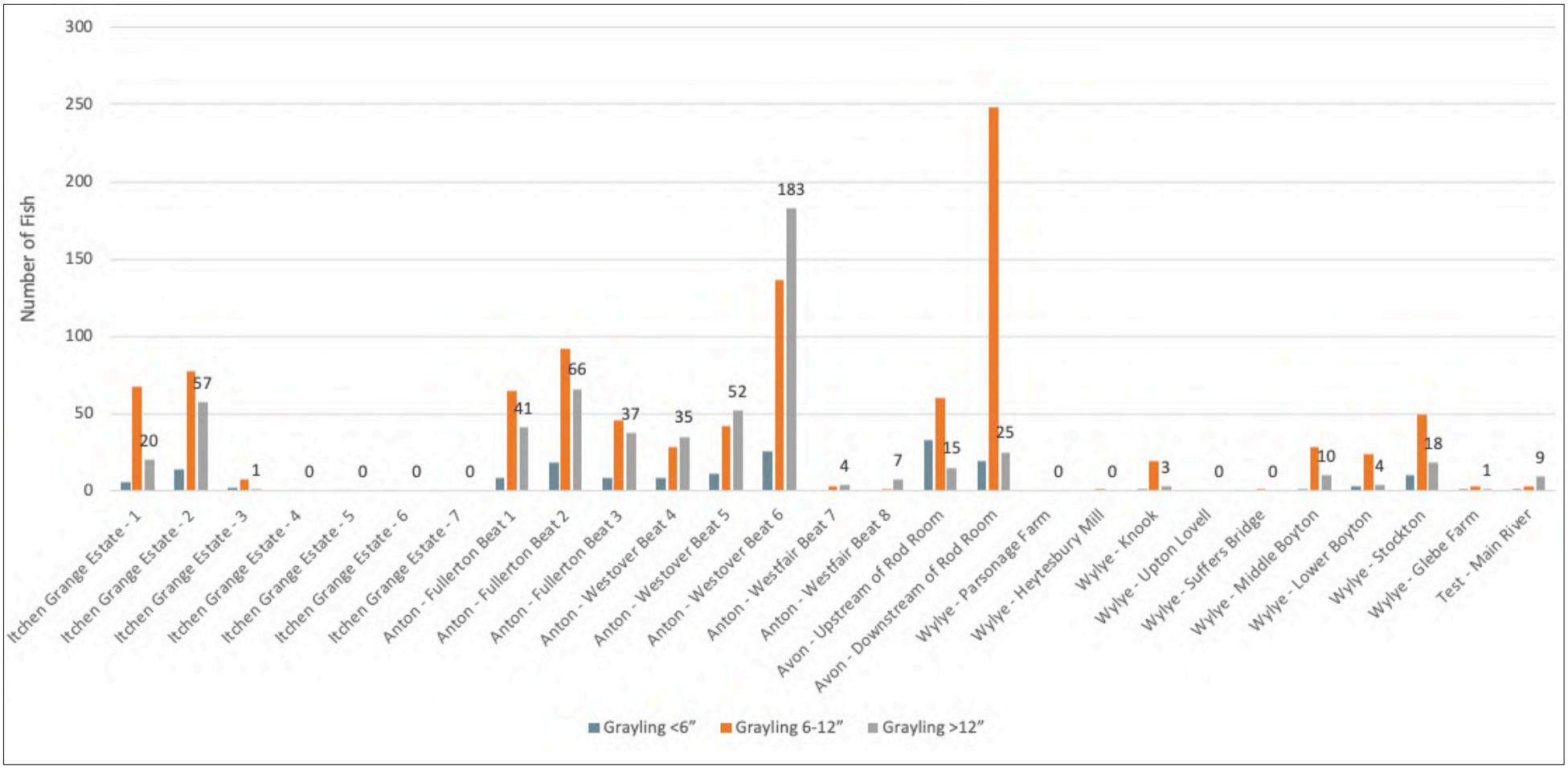
The total catch for the Wylye (878) was well down on previous years (1,292 in 2022). Middle Boyton produced the largest number of wild brown trout (199) accounting for 22.7% of the total, closely followed by Knook 178 (20.27%), Stockton 167 (19.02%), Lower Boyton 95 (10.82%), Parsonage 86 (9.79%), Heytesbury 77 (8.77%), Glebe Farm 46 (5.24%), Suffers Bridge 29 (3.30%) and finally Upton Lovell produced just one fish (0.11%) for the season. In line with previous years, Stockton produced the highest number of larger wild trout with 31 fish >12", Middle Boyton produced 17, Heytesbury 13, Parsonage and Knook 12, Lower Boyton 8, Glebe Farm 5, Suffers Bridge 2, with none >12" at Upton Lovell. Glebe Farm, impacted by prolific weed growth, fell from 136 in 2022 to 46 in 2023.

Grange Estate - Beat Catches 2022 and 2023



The total catch for the Grange came to 1,142. Once again, Beat 2 produced the largest number of wild brown trout (472) accounting for 41% of the total catch compared to 2022 (545, 48.5%). Beat 1 produced 341 (29.86%), River Alre - Beat 3 153 (13.40%), Candover Beat 6 produced 117 (10.25%), Beat 4 (9), 5(42) and 7 (8) totalled 59 (5.17%). Compared to 2022 (total catch 1,123) , Beat 1 performed best increasing from 252 in 2022 to 341 in 2023. The Candover Beats 5 and 6 also performed well with 42 fish caught on beat 5 compared to just 8 in 2022. On Beat 6 we saw an increase from 69 to 117, whereas beats 2, 3 and 7 were down on last year.

Grayling - All Waters



Beat 6 on the Anton by far produced the most grayling over 12" with 183 caught. This was followed by Anton beat 2 (66), Grange beat 2 (57), Anton beat 5 (52), Anton beat 1 (41), Anton beat 3 (37), Avon d/s of the rod room (25), Grange beat 1 (20), Wylye at Stockton (18), Avon u/s of the rod room (15) and Wylye at middle Boyton (10) – with everywhere else recording single (or zero) figures for grayling >12".

Summary of 2023 season

The challenges of a wet season are to some extent reflected in the summary spreadsheet (below) with catches and visits/day down on both the Avon and Wylye, much as anticipated.

Clearly the Anton and Grange saw more visits/day than they did in 2022, however, catches at both of these fisheries remained consistent and not overly exploited as we thought they might be.

It's also interesting to note the number of trout released on the Anton increased by 271 compared to 2022 despite a reduction in stocked trout – the 700 trout stocked includes trout stocked in the Westfair, acquired in 2023.

Water	Year	Trout		Stocked	Grayling	Visits/ Day	Guests	Trout
		Kept	Released		Jun-Sept			Catch/Visit
Anton	**2023**	**53**	**3121**	**700**	**917**	**6.07**	**95**	**3.00**
	2022	59	2850	900	1543	5.51	0	3.12

Water	Year	Trout		Stocked	Grayling	Visits/ Day	Guests	Trout
		Kept	Released		Jun-Sept			Catch/Visit
Avon	**2023**	**37**	**748**	**700**	**400**	**1.96**	**55**	**3.00**
	2022	23	748	700	995	2.27	71	2.01
	2021	49	1149	700	861	2.66	59	2.94
	2020	63	1072	700	265	4.21	56	1.91
	2019	100	1705	700	243	5.19	143	2.06
	2018	98	1762	700	797	5.42	148	2.02
	2017	106	2033	700	544	5.33	162	2.37
	2016	116	1825	700	364	5.01	150	2.35
	2015	104	1674	700	475	4.74	140	2.22
	2014	100	1966	700	646	4.31	120	3.13
	2013	180	2430	630	434	5.69	166	2.72

Water	Year	Trout		Stocked	Grayling	Visits/ Day	Guests	Trout
		Kept	Released		Jun-Sept			Catch/Visit
Wylye	**2023**	N/A	**878**	N/A	**177**	**1.47**	**36**	**3.11**
	2022		1292		296	1.85	38	4.14
	2021		1550		289	2.18	40	4.18
	2020		1106		205	2.70	31	2.89
	2019		661		108	2.15	31	1.82
	2018		657		144	1.90	41	2.04
	2017		1097		138	2.30	53	2.83
	2016		1118		149	2.08	43	3.18
	2015		1152		102	2.16	51	3.16
	2014		938		114	1.76	35	3.48
	2013		1048		92	2.15	56	2.88

Water	Year	Trout		Stocked	Grayling	Visits/ Day	Guests	Trout
		Kept	Released		Jun-Sept			Catch/Visit
Itchen Grange Estate	**2023**	N/A	**1142**	N/A	**251**	**2.37**	**10**	**2.00**
	2022		1123		339	1.69	2	4.30
	2021		1207		321	2.75		2.59
	2020		647		151	1.40		2.78
	2019		603		143	1.51		2.36
	2018		526		217	1.42		2.19
	2017		588		118	1.09		3.20
	2016		761		129	1.41		3.18
	2015		758		156	1.30		3.45
	2014		682		184	1.44		3.10
	2013		757		133	1.30	N/A	3.44

Water	Year	Trout		Stocked	Grayling	Visits/ Day	Guests	Trout
		Kept	Released		Jun-Sept			Catch/Visit
Test Freefolk	**2023**	N/A	**91**	N/A	**13**	**0.46**	**5**	**1.00**
	2022		75		23	0.54	16	0.81
	2021		143		17	0.73	15	1.14
	2020		223		21	1.11	15	1.22
	2019		162		15	1.04	7	0.93
	2018		159		18	1.00	9	0.94
	2017		126		28	0.79	5	0.95
	2016		196		20	0.95	8	1.22
	2015		221		24	1.04	10	1.25
	2014		218		45	1.15	13	1.15
	2013		314		16	1.40	22	1.32

Water	Year	Trout		Stocked	Grayling	Visits/ Day	Guests	Trout
		Kept	Released		Jun-Sept			Catch/Visit
Total Rivers	**2023**	**90**	**5980**	**1400**	**1758**	**2.47**	**201**	**1.00**
	2022	82	6170	1600	3205	2.12	142	2.50
	2021	61	4430	900	1579	1.76	116	2.40
	2020	88	3384	900	704	1.96	130	1.89
	2019	140	4009	1100	549	2.15	236	1.7
	2018	141	3789	1100	1248	2.10	255	1.65
	2017	168	4645	1100	991	2.04	283	2.11
	2016	159	4622	1100	750	2.00	247	2.18
	2015	143	4524	1100	915	2.02	293	2.19
	2014	136	4251	1100	1078	1.77	186	2.39
	2013	199	5116	980	746	2.18	273	2.22

Water	Year	Trout		Stocked	Grayling	Visits/ Day	Guests	Trout
		Kept	Released		Jun-Sept			Catch/Visit
Freefolk Lakes *All Year* *Apr-Jan	*2023*	175	661	570	N/A	1.05	28	1.5
	2022	141	412	550		0.75	21	2.01
	2021	113	392	550		0.50	22	2.77
	2020	196	474	550		1.13	33	1.61
	2019	185	492	550		0.98	36	1.9
	*2018	121	660	550		2.17	43	1.8
	*2017	147	483	550		1.16	31	1.85
	*2016	116	435	550		1.05	31	1.8
	2015	113	384	550		1.52	20	1.61
	2014	135	385	550		1.15	34	1.64
	2013	162	454	550		1.88	25	1.94

LogBook & Hordern Presentation

Our online LogBook system provides interesting reading in 'the Feed.' As always, there's a mixed bag of comments, but mostly there were some useful tips shared when members enjoyed success, so always worth having a look to see what flies are being used successfully on our waters. I'm particularly grateful to those who provided news about catches and images of our waters. It's been a challenging year with high water, however, in most cases, members still managed to catch a few fish.

I'd like to say a big thank you to Dick Hawkes and Tony Diment for stepping in at the last minute whilst I was unwell and for delivering an excellent presentation – I gather all who attended thought it was most enjoyable day and, I dare say, a lot better than my efforts!

For more details please download their Hordern Presentation 2023 – available in the online library here.

Summary

There were 182 active members using LogBook. The total number of fish (all species) caught in 2023 was 8,717, which is down on last season (9,739)– This included 4,814 wild brown trout, 1,404 stocked brown trout of which 85 (6.10%) were killed, and 2,993 grayling.

The lakes produced 528 rainbows of which 138 (26.10%) were killed. Society member visits total was 2,078 with an average of 4.6hrs / visit with 3.8 fish caught/visit – an average of 0.8 fish/hr. 89% of 'Bookable Beat' catch returns were recorded. 749 wild trout and 855 grayling over 12" in length were caught and released.

Changes & Clarifications for 2024

The most important change I should probably mention is that Westover Beat 5 and Westfair Beat 8 will be closed on the river Anton as we continue the next phase of the Anton river restoration project.

As well as our longer-term strategy for restoring the Anton beats, we remain keen to ensure the fishery is not over-exploited by excessive footfall. We want all members to have the very best experience possible, be that fishing alone, fishing with a fellow member or fishing with a guest. So let me clarify the Anton rod/guest rules:

From 15 April to 30 June:
All Anton beats will operate as single or two rod beats – where the second rod must be another member.
No guests allowed.

From 1 July to 31 December:
All Anton beats will operate as single or two rod beats – where the second rod may be another member or a guest.

No more than two rods may fish any beat at the same time.

By managing the footfall in this way, members who prefer a more solitary experience will have the option to book a beat exclusively for themselves, while members who enjoy fishing with a companion (or a Family Rod member) will have the option to book a beat and fish two rods. Those members who want to bring a guest may do so from 1 July onwards.

In all cases, only a single booking will be required, and the member who makes that booking will be responsible for submitting an on-line catch return – *for all who fished on the day* – before they can book another beat on the same water.

All beat bookings and logging guests through the normal process using LogBook.

Members must submit a catch return before booking another beat on the same water. Booking is also required on the Grange beats 1,2 and 3. There is no requirement to book the Avon, Test, Wylye or Grange beats 4,5,6 and 7, however, members are reminded to submit online catch returns for both bookable and non-bookable beats, and the lakes, as soon after fishing as possible – don't leave it to the end of the season!

Members are advised ALL of the Westfair will be closed on Thursdays – to accommodate educational site visits and to rest it for a day each week.

Anton beats 1, 2, 3, 4, 6 and 7 will remain open at all times – less any days booked in advance by the owner. As already mentioned above Westover Beats 5 and Westfair Beat 8 will be closed this coming season.
For more details visit the website and Log-Book calendar.

Access to the Westover Beat 4 remains the same as before, via the main entrance following the disused railway line and signs for Beat 4. Please note, the lower reach is not really suited to low slung vehicles – so an alternative option is to park near the bridge. Parking for Westover beat 6 is now using the new car park just inside the gate by the main entrance. The hut normally shared between beats 5 and 6 will be closed for the duration of the 2024 season.

Updated maps and instructions are available to download from the library and are available in the *Year Book*. Please be sure to read up on local instructions before fishing.

River Levels

Members who fished in 2023 will no doubt be reflecting on a year where just about all chalk river levels were very high and riverbanks very wet, especially towards the end of the season. Whilst we will make every effort to ensure our fisheries remain open for fishing from day one (15th April), it's possible we may need to close some areas that are flooded-out and potentially dangerous.

That said, I am firmly of the opinion we need to be able to let common sense prevail and to allow members to make their own decisions when accessing other areas that remain open and deemed 'reasonably safe' for our more intrepid members. Bottom line, we want members to enjoy their fishing but to take extra care when river levels are high – one suggestion is to fish with another member (or guest – where guests are allowed) and to keep each other in view, as much as possible, during your visit.

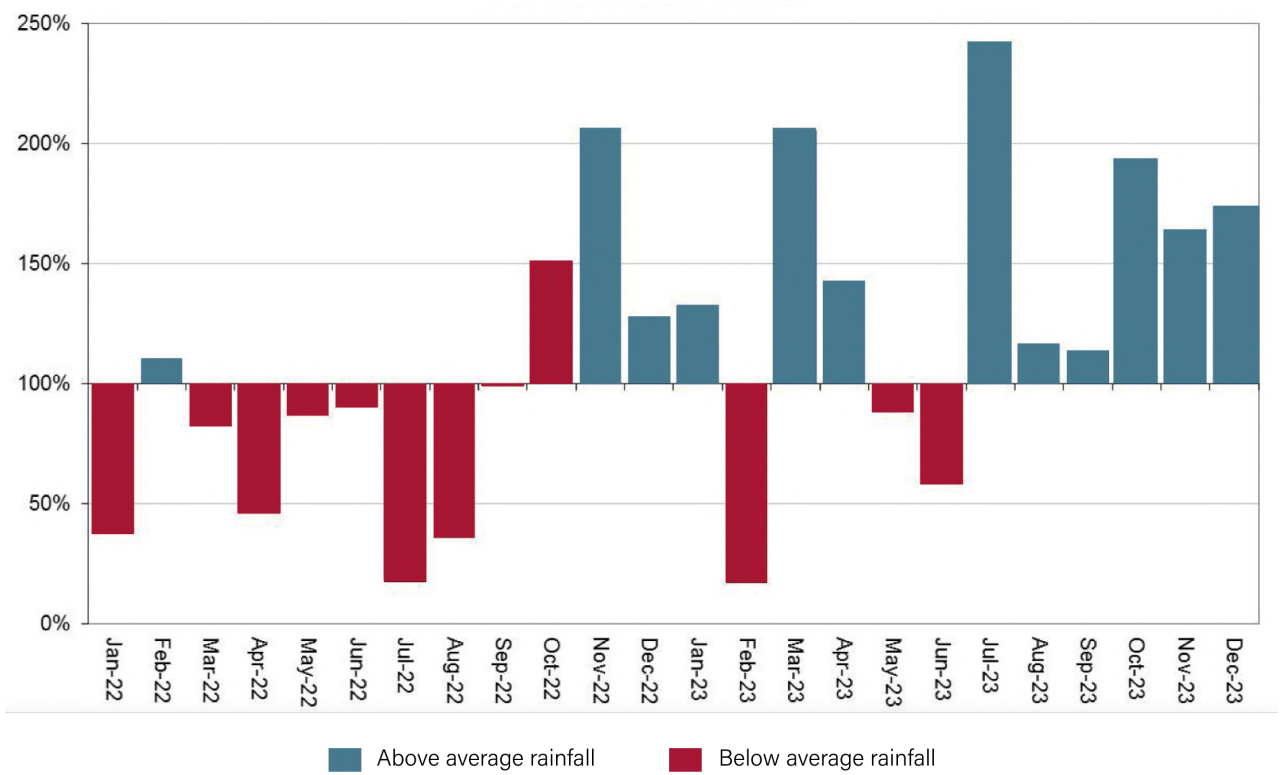
If you do run into problems, please make sure you have someone you can contact to raise the alarm.

The Environment Agency's monthly water situation report for December recorded monthly rainfall totals for the past 24 months (shown here) as a percentage of the 1961 to 1990 long term average highlights just how wet it has been over the last year compared to 2022.

Wet weather continued across Wiltshire and Hampshire with December being reported as the sixth month in a row to receive above average rainfall. An average of 164mm fell in December, which is 174% of the long term average (LTA).

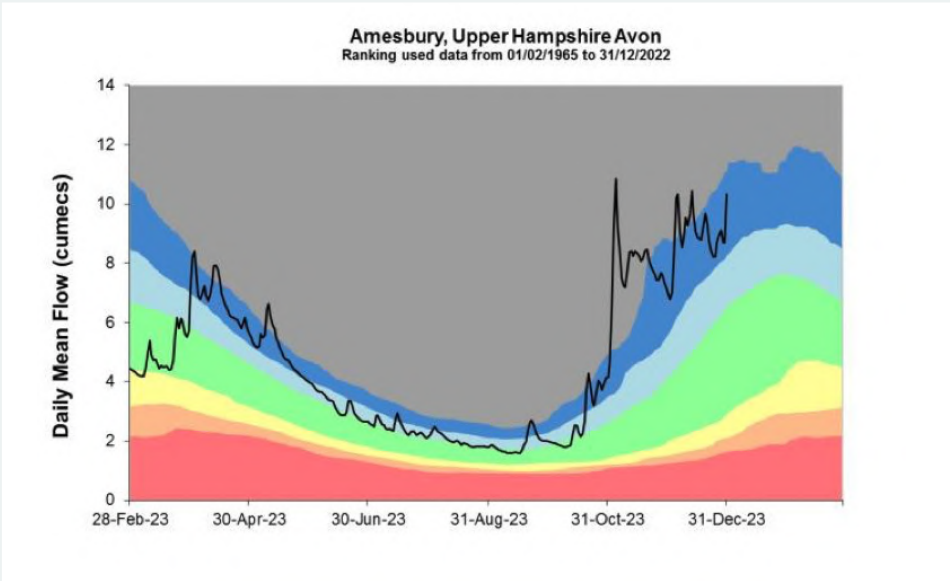
1 - Month Period for Wessex

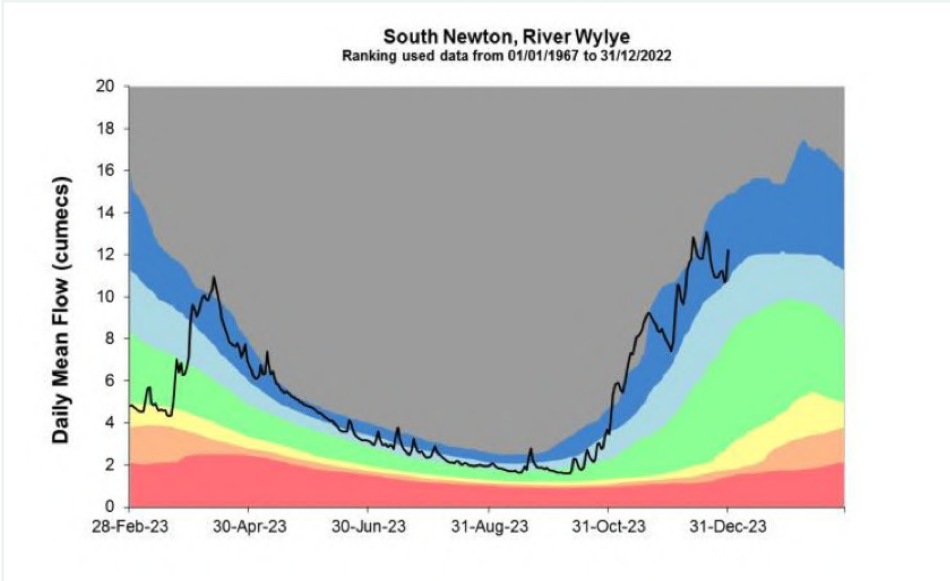
Most of the rivers with chalk catchments ended the year with notably high daily mean flows, while catchments with other geologies had exceptionally high daily mean flows. There was an overall increase in groundwater levels at most reporting sites as a result of recharge from the rainfall in December and the preceding months. Groundwater levels at the end of December ranged from normal to exceptionally high.



Rainfall data for 2023, extracted from Environment Agency Water Situation report 15.01.24 – For more details click here

Avon & Wylye – Mean Flow 2023





As I'm sure you'll all be aware our rivers were already full at the end of the season. Almost continuous rain throughout October, November and December has brought flooding across the country – as I start to write this report in early January already weather presenters on the TV are reporting that Wessex has seen 60% of its monthly rainfall in the first three days of January.

Water quality

Combined sewer overflows (CSOs) are a priority water pollution concern because they discharge a combination of stormwater, untreated human and industrial waste, and other stormwater pollutants into our waterways. According to data given by the water companies to the Environment Agency (EA), water companies discharged raw sewage into rivers and coastal waters across England more than 372,000 times in 2021 for a combined total of 2.6 million hours, via storm overflow (SO) pipes, also known as Combined Sewer Overflows (CSOs).

With a sequence of storms hitting the UK throughout the autumn and winter – Babet, Ciarán, Debi, Elin, Fergus and Gerrit – we have a landscape resembling a sopping wet sponge and most of it contaminated in some shape or form by human waste and toxic chemicals – with water companies operating road tankers to take away excess groundwater infiltration from local sewage networks to main water treatment works.

As storm Henk brought yet more intensive rainfall to an already flooded landscape we're now seeing our rivers polluted on an industrial scale - Victorian domestic sewage waste pipes and local waste water treatment works are being inundated on an 'industrial' scale we've not seen for the last 10yrs. Whilst CSOs are a necessary part of the existing sewerage system, preventing sewage from flooding homes and businesses, the elephant in the room is that most towns and cities have experienced significant population growth and wastewater systems have not received funding for infrastructure improvements on a scale that's anywhere close to what's needed.

According to researchers at Imperial College London 'Between 2000 and 2008 just over 1% of the sewers in England and Wales were replaced or rehabilitated. Considering that much of the infrastructure was built with a lifespan of 60-80 years, at that rate of replacement, it would take 800 years for this to happen for all the sewers in England and Wales.' – which gives some idea of the mountain the water companies (and us?) need to climb.

On 24th January I received reports from the Test and Itchen Association that Southern Water were seeking to enact over-pumping operations, due to the exceptionally high ground water levels and to pump so-called 'treated effluent' into the River Test at Longparish and Chilbolton and other villages – this was also reported on our website forum. Here's what the Environment Agency (Romsey) had to say...

We never recommend over pumping as the first option for controlling overloaded sewerage systems as flood waters contain diluted sewage. However, after a much wetter than average summer and autumn, groundwater levels are high and without immediate action many communities will soon be unable to drain their domestic water (including flushing toilets, taking baths and using washing machines).

We treat every occurrence of over pumping as a pollution incident. We require Southern Water to act in accordance with their published Infiltration Reduction Plans, developed in response to our requirements and agreed by us. Please be assured that the situation is being monitored.

If members of the public are concerned about the over pumping we recommend that in the first instance they contact Southern Water. If they see signs of pollution they should call the Environment Agency's Incident Hotline on 0800 807060.

Further information

Groundwater infiltration occurs when groundwater finds its way into the underground water and sewerage system, which can result in sewer flooding. When groundwater levels rise above the level of the foul sewerage network, large quantities of fresh water can enter the sewer through leaking pipes, manholes and private drains. This reduces the capacity available for foul drainage and can overload the system, causing manhole covers to lift and restricting the use of toilets, sinks and showers or even causing them to back up and overflow into properties and streets.

Southern Water leads on providing drainage facilities, and we are responsible for regulat-

ing its activities and the impact they have on the environment. This is particularly relevant where Southern Water opts to 'over pump' flooded sewers to local rivers and streams to control an emergency situation.

We continue to work with Southern Water across Hampshire and Sussex in tackling the high groundwater and sewerage issues, helping to find a long-term solution to this historic problem. Lead local flood authorities, county councils and unitary authorities hold the responsibility for addressing surface and groundwater flooding problems. However, resolution is only possible with a true partnership approach that also includes lower tier local authorities and community led flood action groups.'

Statement from Wessex Rivers Trust

Wessex Rivers Trust has been made aware of imminent plans by Southern Water to over-pump screened and diluted but untreated wastewater from its sewage network directly into the River Test at Chilbolton and Longparish. This is unacceptable, and sadly indicative of historic failings and mismanagement of sewerage infrastructure.

The Trust has been in dialogue with Southern Water, the Environment Agency, and stakeholders, including landowners and river keepers, and has highlighted the potential for significant environmental harm should the company proceed with over-pumping into the River Test, a globally significant chalk stream. We appreciate that extremely high groundwater levels are contributing to the infiltration of the sewer network in and around these locations, but also consider the network to be excessively vulnerable to such infiltration.

We echo the concerns expressed by the riparian community that they have not been consulted during the implementation of preparations for over-pumping. We do recognise the risks to homes and property of flooding through the network, and the considerable challenges of alternative options.

However, the Trust believes that the only acceptable short-term option is to scale-up the removal of wastewater by tankers, to facilities with both equipment capacity and to fully treat it before returning it to the environment. As a sustainable solution, we urge for greater and more urgent investment in sealing and/or upgrading of the sewage network where groundwater is a high risk.

The Trust is aware that the option for over-pumping is included in Infiltration Reduction Plans but urge that every effort is made to ensure it is only used as a very last resort. We understand that Southern Water will be working with the Environment Agency, the regulator, to evaluate impacts and risks. We will be actively monitoring the situation over the coming days.

So what are we doing?

The Society continues to work with a number of NGO's including the Wessex Rivers Trust, Wildlife Trusts, Angling Trust, WildFish and fisheries associations gathering water quality data in order to provide evidence to combat pollution of our rivers. See below the latest report compiled by David Holroyd, Patrick Heaton-Armstrong, and Andreas Topintzis who form the water quality sub-group for the Wiltshire Fishery Association.

Water companies need to deliver upgrades where they have meaningful ecological benefit to chalk streams, reducing pollution from dumping sewage but also by removing phosphate wherever it has the greatest impact – particularly in headwater streams.

Wiltshire Fishery Association Water Quality Group Annual Report 2023

Background

2023 saw even more media exposure of the performance of Water Companies and the extent of illegal discharges alongside a background of excessive dividends and Chief Executive's bonuses.

There was further exposure of the lack of investment and enforcement by the government and its agencies both historically and within the term of the existing Government.

As an example, our research has illustrated the dramatic reduction the Environment Agency's water quality monitoring activates and it dependence upon the Water Company's monitoring, both locally and nationally.

The Water Quality Group continues to work with WildFish as it key partner and in collaboration with the Wessex River Trust, to drive local campaigns to improve the water quality of the upper Avon catchment areas.

We continue to use WildFish's SmartRivers programme (33 sampling sites – Avon, Wylye & Nadder - we are extremely grateful to those volunteers who go out month after month to carry out this important work) to monitor the water quality trends and is the key data for illustrating the need for action. An analysis undertaken by WildFish's science team of the last five years data has been used to prove further to the Environment Agency, and more recently to Natural England, that there is continued deterioration which requires urgent attention. The key areas continue to be Durrington (below the fish farm), West Amesbury (below two Sewage Treatment Works), Upper Wylye, below Warminster (various sources) and Upper Nadder (various sources) and River Till (Shrewton Sewage Treatment Works).

This work has also been used to illustrate the failure of the current Water Framework Directive to protect special rivers like the Avon. Just to remind everyone, the Avon catchment is a SSSI and SAC, which are the highest categories of importance and protection nationally and internationally. We are presently pressing the Environment Agency to use our data and 5 year trend analysis of the Avon as a case study to illustrate the need to change or replace the Water Framework Directive.

A typical kick sample will often produce over 1,000 individuals. It's a painstaking process to clearly identify every single species and to count them. All aquatic macroinvertebrate analyses are undertaken to a minimum of routine Environment Agency standards.

Summary of Action

SmartRivers programme – 33 sampling sites on the Avon, Wylye and Nadder.

All samples collected and analysed Spring and Autumn

Deliverables – arising out of influencing and lobbying.

▪ Wessex Water's £3m investment in Ratfyn & Amesbury Sewage Treatment Works.

▪ Legal action by Wildfish – Wessex Water (WxW) failing to meet conditions of discharge permit.

▪ Construction of reed bed system – Shrewton Sewage Treatment Works. Work ongoing to ensure WxW meet the conditions of their discharge permit.

▪ Bio-swale systems being installed at Barford Sewage Treatment Works and Fovent sewer overflow into the River Nadder.

▪ Environment Agency commissioning of Portsmouth University to undertake Chemcatchers analysis pilot study – West Amesbury and Upper Wylye .

▪ Agreement between the Portsmouth University and WFA/SADAC, in November, to initiate an ongoing annual Chemcatchers survey of the key 'hotspots' sites defined by WFA not the Environment Agency. This will deliver chemical analyses of these sites which can be reviewed alongside the SmartRivers data to identify important pollutants and their impact on invertebrate life and river water quality.

▪ Assisted Tisbury Parish Council to challenge a Planning Appeal for a large development using SmartRivers data.

▪ Wylye Farmers Group – monthly chemical monitoring throughout the Wylye Valley. A similar scheme is being considered by Nadder Valley Farming group.

▪ Proposed housing development in Amesbury not included in the county plan.

▪ Lobbied for the Avon Catchment - in the WxW's Asset Management Plan 2025/2030 which will see all STWs in the Avon Catchment Area having to reduce their phosphate discharge levels down from 1mg/l to 0.25mg/l.

▪ Manage monthly invertebrate monitoring. Established a River monitor WhatsApp group. Delivered a river monitor train in course, four new sampling teams (SADAC).

Influencing Activities

▪ BBC National News feature on impact of dairy farming on rivers.

▪ BBC Wiltshire Radio – impact of muck spreading on river life.

▪ Presentations on the need for action on the Avon

- Cambridge Chalk stream Conference.
- CPRE – Wiltshire AGM.
- Tisbury Village meeting.
- Wylye Famers Group presentations.
- Nadder Farmers Group presentations.

▪ Regular meeting with Environment Agency and Natural England.

▪ Regular meetings with Wessex Water.

▪ Member of Avon Catchment Partnerwship.

▪ Liason with Danny Kruger MP for Devizes – offer to help directly.

▪ Challenge to John Glen MP's article in the Salisbury Journal, illustrating the inadequacy of the government control of the water companies' activities and their environmental policies and priorities to protect the Avon.

▪ Looking closely and challenging Wessex Water - Water Resources Management Plan.

▪ Feargal Sharkey's attendance at WFA's AGM and water quality presentation to all participants.

Working Collaborative Relationships for 2024

▪ Wildfish – SmartRivers – key partner for resources and expertise.

▪ Wessex River Trust – access to stakeholders.

▪ Windrush Against Sewage Pollution - access to analysis of sewage works discharges.

▪ Portsmouth University – Chemcatchers programme.

▪ Natural England – developing the standards expected of the Avon as a Special Area of Conservation.

Priorities for 2024

1. Press for EA to change WFD to be effective in driving the improvement of the Avon and agree minimum standards with Natural England for the Avon as SAC.

2. Press the EA to review the impact and the standard of fish farm operations within the Avon.

3. Continue to develop our understanding of the impact of expanding housing developments, water abstraction and WxW's Water Resources Management Plan, which we consider to be unrealistic.

4. Work with Wessex Rivers Trust and other parties like the Wylye Farmers group to develop a common format/process for reviewing the various forms of water quality data.

And here are few words from Ali Morse (Hampshire & Isle of Wight Wildlife Trust) on phosphate...

'In freshwaters, phosphate is the pollutant causing the greatest number of failures against ecological standards. It's a reason that more than half of England's rivers, and three quarters of lakes, are assessed as not being in good health. Currently, here is no driver to monitor phosphate discharges, let alone reduce them.'

'Of particular concern is the impact of phosphate pollution upon England's chalk streams.

Globally rare and extremely rich in wildlife, to say that the 'jewels in the crown' of our freshwater environment have lost their sparkle is an understatement of epic proportions. Blighted by nutrient pollution, chemicals, abstraction, man-made alterations and invasive species, endless campaigns and practical efforts have to date failed to stem their decline, let alone ensure their recovery. The problems they face are vast, and conservationists and (most) campaigners acknowledge that it won't be fast, easy or cheap to change this.

However, we must take every opportunity to try – and the Environment Act water targets should present just that opportunity. One of these targets will see water companies work to reduce phosphorus from treated wastewater by 80% by 2038, relative to a 2020 baseline. There is an interim target of 50% by January 2028.

These are big numbers, that could bring big nature benefits. Imagine if the target drove action at all treatment works on chalk stream waterbodies that currently fail phosphate targets…

…Improving discharges in small headwater streams can make a big difference to the sensitive ecology; every kilogram of phosphate removed in a headwater stream could see a meaningful fall in in-river concentrations, whilst the same load removed in downstream reaches may have a negligible effect given the far, far larger flow volumes available to dilute pollution.

Ofwat (the Water Industry regulator) has established an industry performance metric to further encourage companies to reduce phosphate pollution. The metric enables the inclusion of treatment works even if they don't have a phosphorus licence limit, by assuming a 2020 baseline concentration of 5mg/l against which any improvements would be counted. The industry target may therefore incentivise companies to take action at these smaller works.'

The reality

If we weren't engaged in all of this conservation work our rivers would have died a slow death many years ago. It's thanks to the hard work of our keepers and many other conservation minded individuals that we continue to gather evidence to challenge those industries who pollute and lobby by those who are charged with regulating them. We have a huge mountain to climb but it's only by working collaboratively we will change things for the better – we must continue to play our part in all of this.

Further reading

Environment Agency - Combined Sewage Overflows -

Government - The Environmental Targets (Water) (England) Regulations 2023 (legislation.gov.uk)

Government - State of the water environment indicator B3: supporting evidence (publishing.service.gov.uk)

Hampshire & Isle of Wight Wildlife Trust - Ali Morse – Water Policy Manager – HIWWT - Blog

Hampshire Chronicle - Southern Water plans to pump wastewater into River Test

Imperial College London - Sewage overspills result from lack of infrastructure investment, research shows

Stubbington R, Dimon J, England J and Watts G. 2022. Chalk streams of the future: the effects of climate change on biodiversity in England's iconic river ecosystems.

And finally...

A comment made by one of our waterlords I thought worth sharing "It's not what the Society pays in rent that is so important, it's what you bring to the table in terms of your technical knowledge and practical delivery of chalk river management and river restoration that counts"...(Anon)

A great deal of credit for such an endorsement comes as a result of a lot of hard work and guidance from our retiring President Paddy Douglas-Pennant. Had it not been for Paddy, we would not have secured the River Anton fishery and everything else that comes with it. I very much hope we, the fisheries team, will continue to build on his legacy and that Paddy finds plenty of time to enjoy fishing all of our waters.

And finally, I'd like to say a big thank you to Stuart, Craig, Joe and our team of contractors, and to the Board, for all their hard work and support throughout the year. It's been a busy time for all of us and there's been plenty of challenges, however, I'm confident all their hard work will pay dividends this coming season.

Time is precious – go fishing.

Bob Wellard MIFM – Director of Fisheries
The Piscatorial Society
31 January 2024