



Protecting, promoting, preserving for generations

## MARCH 2023 NEWSLETTER

Please note: If you do not want to receive further emails or have any questions on the content of this newsletter, or suggestions or comments, please contact our Secretary, John Ross, on email [sec@tayghillies.co.uk](mailto:sec@tayghillies.co.uk)

Welcome to our March 2023 Newsletter! It's been a while since our last newsletter so here is a quick catch-up!

The TGA is in good heart and ready for another season on the Tay. At the end of last season we held a Ghillies Social which was really well attended—over 80 people were there enjoying each other's company, a full bar, Hog Roast, a raffle and an auction. We raised £7500 for projects—a fantastic sum and sincere thanks to all those who donated prizes and lots, and who bought raffle tickets and bid for lots.

Our AGM in January was uneventful. Jim Henderson stood down as Secretary due to work commitments and John Ross was voted in as Secretary. Many thanks to Jim for all his hard work and a warm welcome back to John and best of luck in the Secretary role.

In late January we asked the members to consider a proposal to change the award criteria for the TGA sponsored Redford Trophy. The Trophy, was originally presented to the angler who caught the heaviest fish on the Tay opening day. With the scarcity of springers, the TGA committee proposed to change the criteria to be the heaviest fish caught on the first day of catches. The membership agreed and the trophy was duly awarded to Arnot McWhinnie who caught a sea-liced 21lb hen fish on 18 January on the Pitlochrie beat, Upper Scone. The award ceremony took place on

4 March at the Pitlochrie Beat hut.

Arnot was given the trophy by our own legend, George McInnes. Other notable guests were Davie Barwick who helped land the big fish, Robert Jamieson, Director of James Crockart & Son Limited, Blairgowrie who made a donation, plus friends and fellow anglers and ghillies. George and Arnot made



short speeches to mark the occasion with Arnot making a plea to anglers everywhere to write to their MSP asking them to lobby the Scottish Government to act quickly to save this iconic species and not just talk about it.

We continue to plough our own furrow and do what we believe we can do for our river without any interaction with the Board. Recent events appear to show the Board in some disarray with internal politics taking priority over necessary river actions. We took the right decision to ignore them.....



***Davie Barwick, Arnot McWhinnie, and George McInnes***



***Let the celebrations begin!!***

***The Tay Ghillies Association (TGA) is a Scottish Charity, No: SC029645,  
regulated by the Scottish Charity Regulator (OSCR).***

## **TDSFB Relations**

It was notable that, at the Proprietors' AGM, the Convenor stated that he very much wished that the Board could work with the TGA and enjoy the relationship held in the past. At our AGM his statement was discussed and it was decided that the TGA Secretary write to the Convenor and ask how he might want to re-engage. The Secretary wrote to him, asking the question and also pointing out that the previous condition to re-engage, laid down by the convenor, had not been acceptable. However, the TGA stood ready to hear his thoughts. Unfortunately, we are still waiting because the Secretary's mail, and a follow-up, have not been answered or even acknowledged! Obviously, the Convenor's statement was a soundbite for the proprietors and was not meant to be followed up. We carry on regardless.

We also note that the TDSFB home page gives details of 2022 meetings and the 2023 meetings are hidden under "Reports". How useful. Also, the Public meeting venue for Wednesday 15 March is to be confirmed.....!! They obviously do not want any attendees! How unprofessional.

## **History**

A comment was made at the Ghillies' social that we must capture thoughts and memories of our "elder statesmen" ghillies and record them for posterity. We have taken that further and have commissioned a video to record the thoughts of what it was like, what it is like now and what must be done. Ghillies and anglers have been interviewed. These threads will be woven between material describing the life cycle of our iconic fish and the problems it faces. It is intended to educate people on the plight of the salmon and is timely with so much focus on the environment right now. Timing of this is not fixed and will depend on financing. This is going to be a very professional video and the

material and editing will be costly. We are now focussing on further fund raising—more details later this month.

## **SmartRivers**

In late October last year we completed the autumn sampling on both the Ericht and Lochay. We had been delayed slightly due to rising levels on both rivers but eventually managed to take samples and send them off for analysis.

Again the results are very good for both rivers with some sites showing a little bit of stress due to low flows over the summer drought period. WildFish, the new name for Salmon & Trout Conservation, are pleased with the results and would like us to move to other rivers. We are currently looking at two different rivers and will let you know shortly where they are.

## **Marine Scotland Meeting**

On Friday, 10 March we met with Marine Scotland, Dr Antje Branding, Head of Salmon and Recreational Fisheries, Marine Scotland and Vanessa Brown, Policy Officer, Wild Salmon and Recreational Fisheries. The meeting took place at the Tayside Hotel. The meeting was hosted by Jim Henderson and Bob Mason who welcomed the visitors and thanked them for giving up time in their busy schedule.

Discussions centred around the process, or lack of, in Marine Scotland, which would allow the general public to make a complaint about the governance in District Boards and not rely on circular complaint resolution within the boards themselves — where boards basically "mark their own homework"! We also discussed fish counters and budget constraints and finished off with some TGA comments on the Wild Salmon Strategy Implementation Plan. The meeting overall was positive, extremely cordial and very useful from both sides. We would welcome Dr Branding and Vanessa back to the Tay at any time.

# SMARTRIVERS RESULTS

The results from WildFish analysis are below and they show the 2022 Autumn invertebrate count on the left and a pressure comparison between spring and autumn on the right.

While the Lochay and Ericht are in good shape invertebrate-wise, there are still major issues on both rivers. The Lochay suffers badly from hydro extraction especially in drought conditions and there must be real concern in the future over its status as a salmon river. We all know the issues on the Ericht—over-abstraction, failing lade gates, crumbling weirs, sewage discharges and the old dump. We understand there is an Ericht Focus Group, formed by the TDSFB, which is addressing these issues. We wish them luck. Solutions should be relatively easy—science is not required to sort them — management, and action, and money are required. Of course, the will of all parties to actually get it done.....

## SmartRivers Report

# WildFish.

Species	Spring	Autumn	Species	Spring	Autumn
<i>Agapetus fuscipes</i>		2	<i>Potamophyllax</i>		34
<i>Albogamus auricollis</i>	1		<i>Psychomyia pusilla</i>		3
<i>Anabolia nervosa</i>	1		<i>Rhithrogena</i>		8
<i>Ancyclus fluvialis</i>	1	4	<i>Rhithrogena semicolorata</i>	11	47
<i>Baetis muticus</i>	7	8	<i>Rhyacophila</i>	1	6
<i>Baetis rhodani/atlanticus</i>		55	<i>Rhyacophila dorsalis</i>		1
<i>Caenis</i>		1	<i>Sericostoma personatum</i>	5	8
<i>Caenis luctuosa</i>		1	<i>Sigara</i>	1	
<i>Centropitulum luteolum</i>		2	<i>Silo pallipes</i>		4
<i>Ceratopogonidae</i>	1		<i>Siphonoperla torrentium</i>	8	3
<i>Chaetopteryx villosa</i>	9		<i>Tanyptodinae</i>	6	1
<i>Chironomidae</i>	33	12			
<i>Clinocera</i>		1			
<i>Corixidae</i>		2			
<i>Dendrocoelum lacteum</i>	1				
<i>Dicranota</i>	1				
<i>Drusus annulatus</i>		1			
<i>Ecdyonurus</i>		30			
<i>Ecdyonurus dispar</i>		1			
<i>Ecdyonurus torrentis</i>	2				
<i>Ecdyonurus venosus</i>		1			
<i>Electrogena lateralis</i>	2				
<i>Elnis aenea</i>	8	4			
<i>Erbodella octocolata</i>	1	2			
<i>Esolus paralepipedus</i>	7	7			
<i>Gammarus pulex</i>	130	39			
<i>Gammarus pulex/fossarum</i>		213			
<i>Glossosoma conformis</i>	1				
<i>Halesus radiatus</i>	1				
<i>Haliplex lineatocollis</i>	2				
<i>Hydracarina</i>	8				
<i>Hydraena gracilis</i>		4			
<i>Hydropsyche instabilis</i>	2				
<i>Hydropsyche pellucidula</i>		6			
<i>Hydroptila</i>		5			
<i>Isoperla grammica</i>	2	2			
<i>Lepidostoma hirtum</i>	2	15			
<i>Leuctra</i>	14				
<i>Leuctra hippopus</i>		1			
<i>Leuctra inermis</i>	1				
<i>Limnephilidae</i>		80			
<i>Limnius volckmari</i>	12	52			
<i>Mystacides azurea</i>		1			
<i>Oligochaeta</i>	15	9			
<i>Oreodytes sanmarkii</i>	77	9			
<i>Oreodytes septentrionalis</i>	46	2			
<i>Oulimnius</i>		24			
<i>Paraleptophlebia submarginata</i>	1				
<i>Polycelis felina</i>	5	3			
<i>Polycentropus flavomaculatus</i>		2			

<b>YEAR</b>	<b>2022</b>
<b>CATCHMENT</b>	<b>Tay</b>
<b>RIVER</b>	<b>Ardle</b>
<b>SITE</b>	<b>River Ardle U/S Bridge at Pitcarmick</b>
<b>NGR</b>	<b>NO 08948 57007</b>
<b>TRPI RIVER TYPE</b>	<b>3</b>
<b>SPRING DATE</b>	<b>01/05/2022</b>
<b>AUTUMN DATE</b>	<b>13/10/2022</b>

	Spring	Autumn
BMWP	146	174
ASPT	6.35	6.69
WHPT	158.2	192.3
WHPT ASPT	6.33	6.87
Number of Taxa	23	26
EPT species	19	27
EPT abundance	73	328
TOTAL abundance	428	716
CCI	10.36	14.22
LIFE	8.19	8.08
PSI	78.57	78.38
SPEAR	43.39	58.00
TRPI	93.75	100.00
Saprobic	1.66	1.79

Chemical Pressure (SPEAR)

Sediment Pressure (PSI)

Phosphorus Pressure (TRPI)

Flow (LIFE)

Organic Enrichment (Saprobic)

**Notes**  
 Good autumn riverfly diversity. No considerable water quality stress indicated by the invertebrate community.

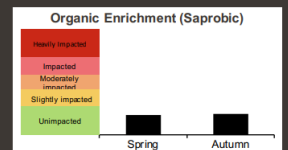
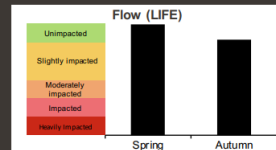
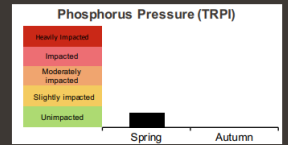
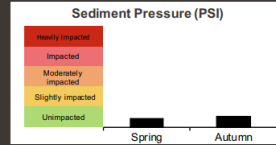
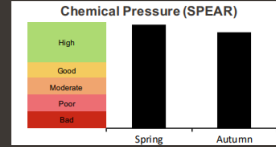
## River Ardle results 2022

Species	Spring	Autumn	Species	Spring	Autumn
<i>Amphinemura sulcicollis</i>	3	9			
<i>Aniocha</i>	1				
<i>Baetis</i>	14	2			
<i>Baetis muticus</i>	14	2			
<i>Baetis rhodani/atlancticus</i>	25	5			
<i>Caenis rivulorum</i>	2				
<i>Chironomidae</i>	8				
<i>Chironominae</i>		1			
<i>Chloroperla tripunctata</i>		2			
<i>Corixidae</i>		1			
<i>Dicranota</i>	1	5			
<i>Ecdyonurus dispar</i>		1			
<i>Ecdyonurus venosus</i>	2				
<i>Elmis aenea</i>	12	2			
<i>Esolus parvilepipedus</i>	93	6			
<i>Glossosoma</i>	7				
<i>Hydracarina</i>	3				
<i>Hydropsyche</i>	1	2			
<i>Hydropsyche pellucidula</i>	1	1			
<i>Hydroptila</i>	5	4			
<i>Isoperla grammatica</i>	2	4			
<i>Lepidostoma hirtum</i>		1			
<i>Leuctra</i>	39	2			
<i>Leuctra hippopus</i>	7				
<i>Limnephilidae</i>		9			
<i>Limnius volckmari</i>	9	6			
<i>Neolimnomyia</i>	3				
<i>Odontocerum albicorne</i>		1			
<i>Oreodytes sanmarkii</i>	2	5			
<i>Oreodytes septentrionalis</i>		1			
<i>Oulimnius</i>	16	24			
<i>Perla bipunctata</i>	3	5			
<i>Perlodes mortoni</i>		1			
<i>Philopotamus montanus</i>	2				
<i>Polycentropus flavomaculatus</i>	11				
<i>Potamophyllax latipennis</i>	1				
<i>Protonemura</i>		1			
<i>Psychomyia pusilla</i>	1				
<i>Rhithrogena semicolorata</i>	31	6			
<i>Sericostoma personatum</i>		1			
<i>Serratella ignita</i>	1				
<i>Simulium</i>		2			
<i>Siphonoperla torrentium</i>	31	1			
<i>Tanyptodinae</i>	2				

Notes  
*Perlodes mortoni* an endemic species. Healthy site, minimal water quality pressure indicated.

YEAR	2022
CATCHMENT	Tay
RIVER	Shee Water
SITE	Glen Lochside Burn at Spittal of Gleneshe (DIS hotel septic tank outlet)
NGR	NO 11001 70023
TRPI RIVER TYPE	3
SPRING DATE	01/05/2022
AUTUMN DATE	13/10/2022

	Spring	Autumn
BMWP	143	136
ASPT	7.15	7.16
WHPT	155.4	142
WHPT ASPT	7.77	7.47
Number of Taxa	20	19
EPT species	21	20
EPT abundance	200	60
TOTAL abundance	350	113
CCI	11.25	11.05
LIFE	8.46	8.07
PSI	90.57	88.64
SPEAR	68.33	63.39
TRPI	85.71	100.00
Saprobic	1.56	1.60



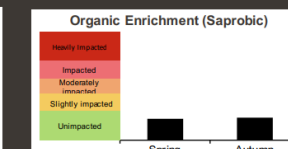
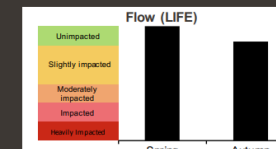
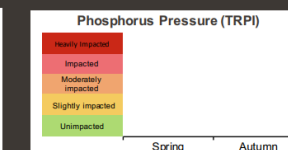
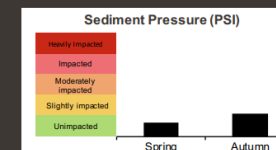
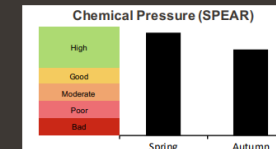
Shee Water results 2022

Species	Spring	Autumn	Species	Spring	Autumn
<i>Agapetus fuscipes</i>	1				
<i>Amphinemura sulcicollis</i>	1				
<i>Ampullaceana balthica</i>		1			
<i>Anabolia nervosa</i>	1				
<i>Athripsodes</i>		1			
<i>Baetis muticus</i>	8	31			
<i>Baetis rhodani/atlancticus</i>	24	4			
<i>Ceratopogonidae</i>	2				
<i>Chironomidae</i>	15	31			
<i>Chironominae</i>		8			
<i>Chloroperla tripunctata</i>	9	2			
<i>Corixidae</i>		1			
<i>Crangonyx pseudogracilis/floridanus</i>		2			
<i>Dicranota</i>	1				
<i>Dinocras cephalotes</i>	1				
<i>Ecdyonurus torrentis</i>	3				
<i>Eisenella tetraeda</i>		1			
<i>Elmis aenea</i>	1	5			
<i>Elophiella</i>		1			
<i>Esolus parvilepipedus</i>	20				
<i>Gammarus pulex/fossarum</i>	5	22			
<i>Glossosomatidae</i>		10			
<i>Haplagenia sulphurea</i>	1				
<i>Hydracarina</i>	4				
<i>Hydropsyche</i>		2			
<i>Hydropsyche angustipennis</i>	3				
<i>Hydropsyche instabilis</i>		1			
<i>Hydropsyche siltalai</i>		2			
<i>Isoperla grammatica</i>	13	2			
<i>Lepidostoma hirtum</i>	1	12			
<i>Leuctra</i>	20	8			
<i>Leuctra hippopus</i>		6			
<i>Leuctra inermis</i>	2				
<i>Limnephilidae</i>		2			
<i>Limnius volckmari</i>		4			
<i>Oligochaeta</i>	17	4			
<i>Oreochilus villosus</i>		1			
<i>Oulimnius</i>		14			
<i>Oulimnius tuberculatus</i>	7				
<i>Pisidium</i>		1			
<i>Polycentropus</i>	2	7			
<i>Polycentropus flavomaculatus</i>	2	5			
<i>Polycentropus kingi</i>	1				
<i>Potamopyrgus antipodarum</i>		9			
<i>Protonemura meyeri</i>		1			
<i>Psychomyia pusilla</i>	2				
<i>Rhithrogena</i>	56	107			
<i>Rhithrogena semicolorata</i>	195	24			
<i>Siphonoperla torrentium</i>	15	1			
<i>Tanytarsini</i>	4	12			

Notes  
Presence of stonefly *Dinocras cephalotes* suggests good water quality for quite a while as has 3 year life cycle. Healthy site, no considerable pressure indicated in stress metrics.

YEAR	2022
CATCHMENT	Tay
RIVER	Ericht
SITE	River Ericht above Blairgowrie weir (US fish farm, sewage outlet and old dam)
NGR	NO 18041 45369
TRPI RIVER TYPE	3
SPRING DATE	01/05/2022
AUTUMN DATE	13/10/2022

	Spring	Autumn
BMWP	124	135
ASPT	6.89	6.14
WHPT	142	152.7
WHPT ASPT	7.47	6.64
Number of Taxa	18	22
EPT species	21	20
EPT abundance	361	220
TOTAL abundance	437	348
CCI	11.36	10.95
LIFE	8.50	8.09
PSI	86.27	77.42
SPEAR	66.27	55.27
TRPI	100.00	100.00
Saprobic	1.61	1.64



River Ericht above the bridge results

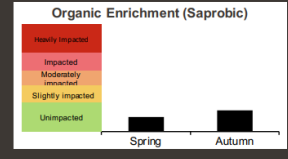
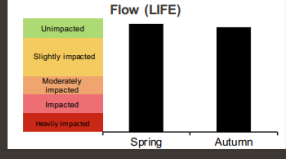
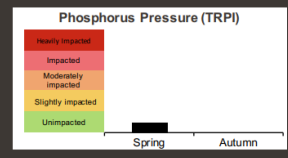
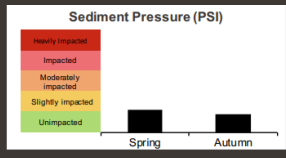
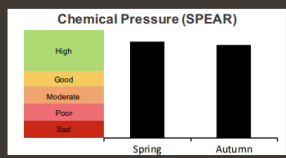
# SmartRivers Report



Species	Spring	Autumn	Species	Spring	Autumn
Agapetus	10		Polycentropus flavomaculatus	5	1
Agapetus ochripes	2		Potamopyrgus antipodarum		19
Amphinemura sulcirostris	12	3	Protonemura meyeri		7
Antocha	1		Psychoda	1	
Athripsodes	1	2	Psychomyia pusilla	1	
Baetis	5		Rhithrogena	142	101
Baetis muticus	104	36	Rhithrogena semicolorata	430	34
Baetis rhodani/atlancticus	7	46	Rhyacophila		1
Caenis rivulorum	4		Rhyacophila dorsalis		1
Ceratopogonidae	16		Rhyacophila fasciata		1
Chaetopteryx villosa		2	Simulium	3	1
Chironomidae	108	10	Siphonoperla torrentium	113	1
Chironominae		1			
Chloroperla tripunctata		7			
Corixidae	1	1			
Crangonyx pseudogracilis	1				
Crangonyx pseudogracilis/floridanus		29			
Cyphon	2				
Dicranota	2	6			
Ecdyonurus		12			
Ecdyonurus torrentis		1			
Elmis aenea		1			
Esolus parviflaxipes	138	3			
Gammarus pulex	2				
Gammarus pulex/fossarum		10			
Hydracarina	14				
Hydraena gracilis	1				
Hydropsyche	6				
Hydropsyche angustipennis	1				
Hydropsyche instabilis	2				
Hydropsyche siltalai	1	13			
Hydroptila	1				
Isonychia marginata		1			
Isonychia grammica	4	8			
Lepidostoma hirtum	5	12			
Leuctra	37	4			
Leuctra hippopus		4			
Leuctra inermis	143				
Leuctra nigra	1				
Limnephilidae		1			
Limnius volckmari	14	24			
Oligochaeta	56	9			
Oreochilus villosus		2			
Oreodytes septentrionalis		3			
Oulimnius	15	8			
Perla bipunctata	27	9			
Pisidium		1			
Polycentropus	5				

YEAR	2022
CATCHMENT	Tay
RIVER	Ericht
SITE	River Ericht at Willows Pool (D/S sewage outlet and old dump)
NGR	NO 19874 44590
TRPI RIVER TYPE	3
SPRING DATE	01/05/2022
AUTUMN DATE	13/10/2022

	Spring	Autumn
BMWP	160	152
ASPT	6.67	6.33
WHPT	190.9	183.8
WHPT ASPT	7.07	7.07
Number of Taxa	24	24
EPT species	25	23
EPT abundance	1069	307
TOTAL abundance	1444	436
CCI	15.59	15.46
LIFE	8.37	8.29
PSI	77.63	81.94
SPEAR	62.77	60.42
TRPI	90.48	100.00
Saprobic	1.42	1.60



**Notes**  
Good water quality site. Minimal pressure exhibited by the invertebrate community.

## River Ericht Willows Pool results 2022 Spring and Autumn

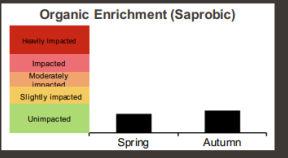
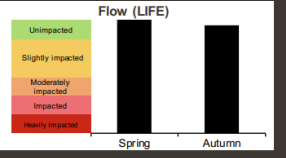
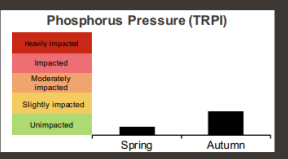
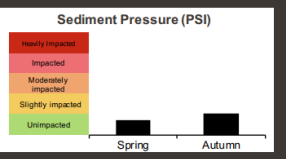
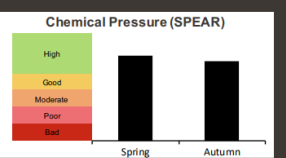
# SmartRivers Report



Species	Spring	Autumn	Species	Spring	Autumn
Agapetus	68	113	Polycentropus	1	11
Agapetus ochripes	32	3	Polycentropus flavomaculatus	1	8
Amphinemura sulcirostris	1		Potamopyrgus antipodarum	66	102
Ampullaceana balthica		7	Protonemura meyeri		11
Ancylus fluviatilis	11	56	Psychomyia pusilla	39	3
Aseilus aquaticus	3		Rhithrogena	65	35
Athripsodes	2	84	Rhithrogena semicolorata	305	
Athripsodes bilineatus	3	5	Rhyacophila	2	15
Athripsodes cinereus		3	Rhyacophila dorsalis	3	8
Baetis muticus	44	10	Sericostoma personatum	4	4
Baetis rhodani/atlancticus	45	56	Silo pallipes	1	5
Brachycentrus subnubilus		1	Simulium	324	6
Caenis rivulorum	2		Simulium argyreatum		1
Ceratopogonidae	9		Siphonoperla torrentium	9	1
Chironomidae	165	8	Tanytarsini	33	
Chloroperla tripunctata	1	2	Tipula	1	1
Corixidae		4			
Dendrocoelum lacteum		1			
Dicranota		5			
Ecdyonurus		3			
Ecdyonurus torrentis		1			
Ecdyonurus venosus	1				
Eiseniella tetraeda		20			
Elmis aenea	1	21			
Esolus parviflaxipes	180	108			
Gammarus pulex	54	31			
Gammarus pulex/fossarum		253			
Glossosoma conformis		2			
Goera pilosa		4			
Hoptagenia sulphurea	3				
Hydracarina	25				
Hydraena gracilis	1				
Hydropsyche pellucidula	17	32			
Hydropsyche siltalai	29	49			
Hydroptila		1			
Isonychia marginata	4	9			
Isonychia grammica	13	2			
Lepidostoma hirtum	11	47			
Leuctra	46				
Leuctra geniculata	1				
Leuctra inermis	12				
Limnephilus	1				
Limnius volckmari	52	98			
Odontocerum albicorne		2			
Oligochaeta	27	30			
Oreochilus villosus		8			
Oulimnius	30	71			
Oulimnius tuberculatus		14			
Perla bipunctata	7	11			
Pisidium		1			
Polycelis felina	1				

YEAR	2022
CATCHMENT	Tay
RIVER	Ericht
SITE	River Ericht at tail of Cement Dykes
NGR	NO 22331 44371
TRPI RIVER TYPE	3
SPRING DATE	01/05/2022
AUTUMN DATE	13/10/2022

	Spring	Autumn
BMWP	185	201
ASPT	6.85	6.48
WHPT	219.1	234.5
WHPT ASPT	7.30	7.11
Number of Taxa	27	31
EPT species	29	30
EPT abundance	768	532
TOTAL abundance	1752	1390
CCI	15.81	23.71
LIFE	8.63	8.35
PSI	85.56	78.85
SPEAR	55.60	51.79
TRPI	92.31	76.92
Saprobic	1.53	1.61



**Notes**  
The highest riverfly diversity of all the Ericht sites. Good water quality site with minimal impact indicated from stress metrics.

## River Ericht Cement Dykes results 2022 Spring and Autumn

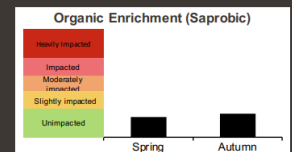
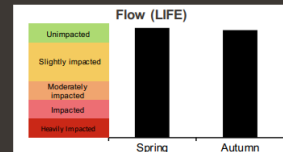
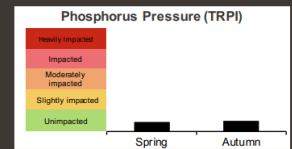
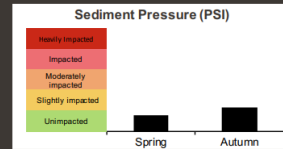
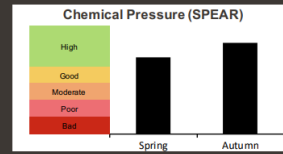
The Tay Ghillies Association (TGA) is a Scottish Charity, No: SC029645, regulated by the Scottish Charity Regulator (OSCR).

Species	Spring	Autumn
Agapetus	4	2
Agapetus ochripes	1	
Amphinemura sulcipectus	13	9
Ancylus fluviatilis		3
Antocha	2	1
Baetis muticus	39	20
Baetis rhodani		
Baetis rhodani/atlancticus		10
Brachyptera putata		2
Brachyptera risi	6	
Caenis rivulorum	2	1
Centroptilum luteolum		11
Ceratopogonidae		1
Chironomidae	6	7
Chloroperla trijunctata		8
Cyphon	52	133
Ecdyonurus dalectarica		2
Ecdyonurus		17
Ecdyonurus torrentis	1	6
Ecdyonurus venosus		
Eiseniella tetraeda	1	11
Eloeophila		
Esolus parralelepipodus	27	15
Gammarus pulex	1	
Gammarus pulex/fossarum		13
Hemerodromia	7	6
Heptagenia sulphurea	2	24
Heptageniidae		48
Hydracarina	2	
Hydraena gracilis	4	2
Hydraena pallidula	8	17
Hydropsyche siltalai	15	14
Hydroptila	3	8
Ibisia marginata	11	
Isoperla grammatica	5	5
Lepidostoma hirtum	9	135
Leuctra	33	7
Leuctra fusca		1
Leuctra inermis	5	
Limnius volckmari	22	22
Odontocerum albicorne		2
Oligochaeta	60	19
Orectochilus villosus	1	
Oulimnius	8	19
Oulimnius tuberculatus	2	4
Perla bipunctata	1	2
Perlodes microcephala		1

Species	Spring	Autumn
Perlodes mortoni		1
Pisidium		1
Polycelis felina	2	1
Polycentropus		1
Polycentropus flavomaculatus		2
Potamophylax latipennis	1	
Proasellus meridianus		1
Prosimulium hirtipes	8	
Protonemura meyeri	1	22
Rhithrogena semicolorata	96	16
Riolus	1	
Sericostoma personatum	2	5
Silo pallipes		1
Simuliidae	80	
Simulium	484	3
Siphonoperla torrentium	21	5
Taeniopteryx nebulosa		1
Tanypodinae	14	6

YEAR	2022
CATCHMENT	Tay
RIVER	Lochay
SITE	River Lochay below hydropower station
NGR	NN 55414 34594
TRPI RIVER TYPE	3
SPRING DATE	30/04/2022
AUTUMN DATE	12/10/2022

	Spring	Autumn
BMWP	167	201
ASPT	6.68	6.70
WHPT	208.4	237
WHPT ASPT	7.72	7.41
Number of Taxa	25	30
EPT species	23	31
EPT abundance	356	405
TOTAL abundance	1151	673
CCI	18.34	27.58
LIFE	6.36	8.33
PSI	84.42	76.40
SPEAR	49.80	58.98
TRPI	90.91	90.00
Saprobic	1.56	1.65



**Notes**  
 Taeniopteryx nebulosa = Taeniopteryx nebulosa subsp. britannica, a sub-species endemic to Scotland.  
 Brachyptera putata also an endemic species of significance. Excellent water quality site, minimal impacts exhibited by the invertebrate community.

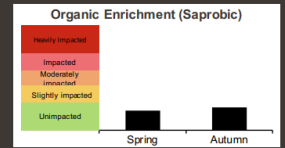
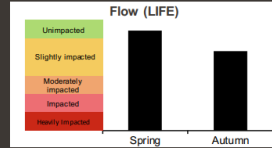
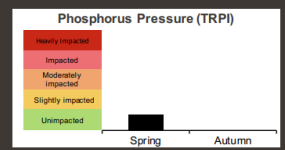
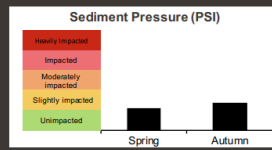
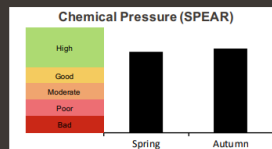
River Lochay below Hydro Power Station

Species	Spring	Autumn
Agapetus	16	
Agapetus ochripes	1	
Amphinemura sulcipectus	4	4
Ampullaceana balthica		4
Ancylus fluviatilis	1	7
Athripsodes bilineatus	1	
Baetis	18	
Baetis muticus	52	2
Baetis rhodani/atlancticus	65	10
Beraea maurus		1
Caenis rivulorum	9	
Centroptilum luteolum		1
Ceratopogonidae	20	5
Chironomidae	36	
Corixidae		1
Cyphon	19	3
Dicranota		1
Ecdyonurus	1	3
Eiseniella tetraeda	2	1
Eloeophila	2	1
Esolus parralelepipodus	28	
Gammarus pulex/fossarum		6
Habesius digitatus	2	1
Hemerodromia	2	1
Hydraena gracilis	1	1
Hydropsyche siltalai	1	1
Hydroptila	4	90
Ibisia marginata	4	1
Isoperla grammatica	3	2
Lepidostoma hirtum	18	17
Leuctra	12	3
Limnephilidae	1	2
Limnius volckmari	19	8
Mystacides azurea		2
Nemoura avicularis		5
Oligochaeta	45	2
Orectochilus villosus	3	1
Oreodytes sanmarkii	1	
Oreodytes septentrionalis	3	3
Oulimnius	1	15
Paraleptophlebia	1	
Pericoma	1	
Pisidium		8
Platambus maculatus	1	
Polycentropus		6
Potamophylax latipennis		1

Species	Spring	Autumn
Protonemura meyeri		3
Radix balthica	2	
Rhithrogena	50	12
Rhithrogena semicolorata	4	
Sericostoma personatum	12	9
Simulium	1	1
Siphonoperla torrentium	8	
Tanypodinae	2	
Tipula		4

YEAR	2022
CATCHMENT	Tay
RIVER	Lochay
SITE	River Lochay at campsite (US hydropower station)
NGR	NN 53916 35190
TRPI RIVER TYPE	3
SPRING DATE	30/04/2022
AUTUMN DATE	12/10/2022

	Spring	Autumn
BMWP	165	159
ASPT	6.60	6.36
WHPT	205.5	195.3
WHPT ASPT	7.09	6.98
Number of Taxa	25	25
EPT species	20	20
EPT abundance	282	181
TOTAL abundance	474	248
CCI	18.00	18.90
LIFE	8.22	7.67
PSI	77.27	71.93
SPEAR	53.84	56.23
TRPI	85.00	100.00
Saprobic	1.56	1.66



**Notes**  
 Minimal stress exhibited by the invertebrate community in spring. Some flow and sediment stress evident in autumn. Lack of dilution/velocity can exacerbate impact from excess fine sediment.

River Lochay Campsite above Hydro Power Station

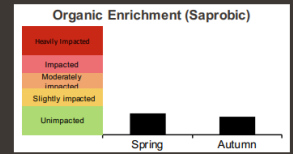
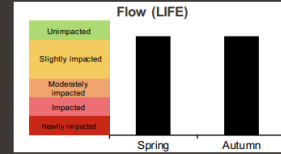
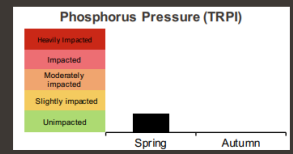
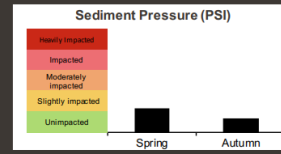
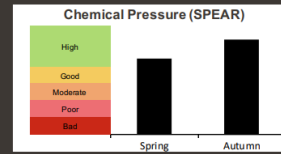
Species	Spring	Autumn
<i>Adicella reducta</i>	1	1
<i>Agapetus</i>		2
<i>Amphinemura sulciollis</i>	3	6
<i>Antocha</i>	3	
<i>Baetis muticus</i>	23	4
<i>Baetis rhodaniatlanticus</i>	55	13
<i>Beraea maurus</i>		2
<i>Caenis rivulorum</i>	1	
<i>Centroptilum luteolum</i>	1	
<i>Chellifera</i>	1	
<i>Chironomidae</i>	14	4
<i>Chloroperla tripunctata</i>	1	2
<i>Cyphon</i>	48	10
<i>Dicranota</i>		1
<i>Dryops luridus</i>		1
<i>Ecdyonurus</i>		8
<i>Ecdyonurus torrentis</i>	1	2
<i>Eiseniella tetraëda</i>		5
<i>Elmis aenea</i>		1
<i>Elodes</i>		3
<i>Esolus parollepepedus</i>	57	7
<i>Glossosoma</i>		1
<i>Hemerodromia</i>	1	
<i>Hydracarina</i>	1	
<i>Hydraena gracilis</i>	6	7
<i>Hydropsyche saltalai</i>	2	1
<i>Hydroptila</i>	5	1
<i>Ibisia marginata</i>		1
<i>Isoptera grammatica</i>	5	5
<i>Lepidostoma hirtum</i>	6	12
<i>Leuctra</i>	12	7
<i>Leuctra fusca</i>		1
<i>Leuctra inermis</i>	2	
<i>Limnephilidae</i>		5
<i>Limnius volckmari</i>	4	6
<i>Oligochaeta</i>	24	3
<i>Orectochilus villosus</i>	1	5
<i>Oreodytes samarkii</i>	1	
<i>Oreodytes septentrionalis</i>		1
<i>Oulimnius</i>	2	9
<i>Oulimnius tuberculatus</i>	1	
<i>Paraleptophlebia</i>	1	
<i>Perla bipunctata</i>	6	1
<i>Plectrocnemia conspersa</i>		1
<i>Polycentropus flavomaculatus</i>		1
<i>Potamophylax latipennis</i>		1
<i>Protonemura meyeri</i>		12
<i>Psychomyia pusilla</i>	1	

Species	Spring	Autumn
<i>Rhithrogena</i>		4
<i>Rhithrogena semicolorata</i>	84	6
<i>Rhyacophila</i>		1
<i>Sericostoma personatum</i>	1	
<i>Simulium</i>	7	
<i>Simulium argyreatum</i>		1
<i>Siphonoperla torrentium</i>	2	2
<i>Tanytopodinae</i>		3

**Notes**  
Good water quality site, in both seasons no considerable pressures were indicated from stress metrics.

<b>YEAR</b>	<b>2022</b>
<b>CATCHMENT</b>	<b>Tay</b>
<b>RIVER</b>	<b>Lochay</b>
<b>SITE</b>	<b>River Lochay at Corrycharmaig</b>
<b>NGR</b>	<b>NN 52874 36011</b>
<b>TRPI RIVER TYPE</b>	<b>3</b>
<b>SPRING DATE</b>	<b>30/04/2022</b>
<b>AUTUMN DATE</b>	<b>12/10/2022</b>

	Spring	Autumn
BMWP	155	166
ASPT	6.74	6.64
WHPT	178.6	204.7
WHPT ASPT	7.44	7.58
Number of Taxa	23	25
EPT species	19	26
EPT abundance	212	102
TOTAL abundance	383	170
CCI	18.96	15.88
LIFE	8.11	8.11
PSI	76.47	86.36
SPEAR	49.14	61.50
TRPI	82.35	100.00
Saprobic	1.61	1.50



River Lochay Corrycharmaig

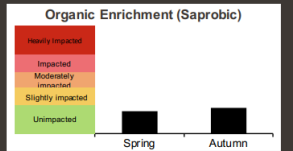
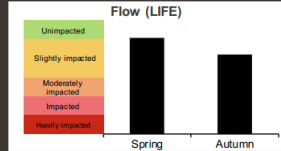
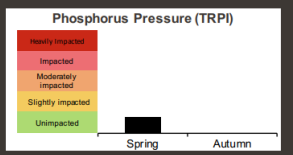
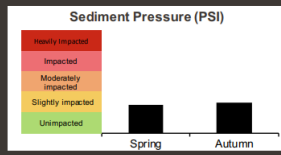
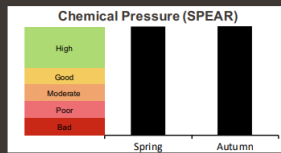
Species	Spring	Autumn
<i>Agapetus</i>	14	
<i>Agapetus ochripes</i>	7	
<i>Amphinemura sulciollis</i>	31	1
<i>Anabolia nervosa</i>	2	
<i>Ancylus fluviatilis</i>	1	
<i>Athripsodes bilineatus</i>	8	
<i>Baetis</i>	18	
<i>Baetis muticus</i>	65	9
<i>Baetis rhodaniatlanticus</i>	106	3
<i>Caenis rivulorum</i>	56	7
<i>Centroptilum luteolum</i>	15	4
<i>Chironomidae</i>	19	
<i>Chironominae</i>	11	
<i>Cordulegaster boltonii</i>	1	
<i>Cyphon</i>	1	
<i>Dicranota</i>	10	
<i>Ecdyonurus</i>		7
<i>Ecdyonurus torrentis</i>	3	2
<i>Elmis aenea</i>	2	
<i>Elodes</i>	1	1
<i>Eloeophila</i>	6	
<i>Esolus parollepepedus</i>	2	
<i>Halesus radiatus</i>	9	
<i>Heptagenia sulphurea</i>		8
<i>Heptageniidae</i>	3	
<i>Hydropsyche saltalai</i>	49	7
<i>Hydroptila</i>	2	
<i>Ibisia marginata</i>	8	
<i>Isoptera grammatica</i>	57	9
<i>Lepidostoma hirtum</i>	12	4
<i>Leuctra</i>		2
<i>Leuctra fusca</i>	5	
<i>Leuctra inermis</i>		12
<i>Limnephilidae</i>	1	
<i>Limnophilus lunatus</i>	9	1
<i>Limnius volckmari</i>	1	1
<i>Mystacides</i>	1	1
<i>Mystacides azurea</i>	1	1
<i>Oligochaeta</i>	29	12
<i>Oulimnius</i>	7	1
<i>Oulimnius tuberculatus</i>	3	
<i>Paraleptophlebia</i>	1	
<i>Paraleptophlebia submarginata</i>	2	
<i>Polycelis felina</i>	2	
<i>Polycentropus</i>	1	
<i>Rhithrogena semicolorata</i>	76	
<i>Rhyacophila dorsalis</i>	1	
<i>Sericostoma personatum</i>	2	
<i>Serratella ignita</i>	1	
<i>Simulium</i>	15	

Species	Spring	Autumn
<i>Siphonoperla torrentium</i>	9	3
<i>Tanytopodinae</i>	3	1
<i>Tipula</i>	1	3

**Notes**  
Excellent riverfly diversity and minimal water quality impacts exhibited in spring. Some flow stress evident in autumn. Slight sediment stress also indicated this season.

<b>YEAR</b>	<b>2022</b>
<b>CATCHMENT</b>	<b>Tay</b>
<b>RIVER</b>	<b>Lochay</b>
<b>SITE</b>	<b>River Lochay below ford at Innishoarach</b>
<b>NGR</b>	<b>NN 49256 36797</b>
<b>TRPI RIVER TYPE</b>	<b>3</b>
<b>SPRING DATE</b>	<b>30/04/2022</b>
<b>AUTUMN DATE</b>	<b>12/10/2022</b>

	Spring	Autumn
BMWP	182	99
ASPT	7.00	6.60
WHPT	212.6	102.8
WHPT ASPT	7.59	6.85
Number of Taxa	26	15
EPT species	30	16
EPT abundance	566	80
TOTAL abundance	689	99
CCI	15.40	10.91
LIFE	8.05	7.60
PSI	72.84	69.70
SPEAR	70.64	75.79
TRPI	84.62	100.00
Saprobic	1.63	1.74



River Lochay below ford at Innishoarach

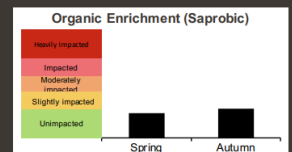
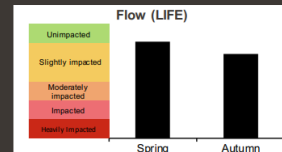
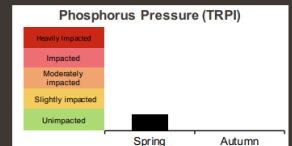
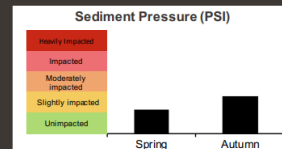
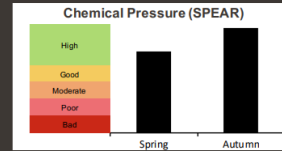


Species	Spring	Autumn	Species	Spring	Autumn
<i>Amphinemura sulcicollis</i>		3	<i>Psychomyia pusilla</i>	5	
<i>Ampullaceana balthica</i>		1	<i>Rhithrogena semicolorata</i>	7	6
<i>Antocha</i>	4		<i>Riolus cupreus</i>	1	
<i>Athripsodes</i>		6	<i>Sericostoma personatum</i>	3	1
<i>Athripsodes bilineatus</i>		6	<i>Simulium</i>	12	
<i>Baetis muticus</i>	35	5	<i>Siphonurus lacustris</i>	1	
<i>Baetis rhodani</i>	58		<i>Siphonoperla torrentium</i>	15	2
<i>Baetis rhodani/atlancticus</i>		4	<i>Tanytopodinae</i>	45	2
<i>Caenis rivulorum</i>	3	10	<i>Tanytarsini</i>		1
<i>Centropitium luteolum</i>		21	<i>Theromyzon tessulatum</i>		1
<i>Ceratopogonidae</i>	2		<i>Tipula</i>		4
<i>Chaetopteryx villosa</i>	1				
<i>Chironomidae</i>	43	3			
<i>Chironominae</i>		1			
<i>Cordulegaster boltonii</i>	1				
<i>Cyphon</i>	47	3			
<i>Dicranota</i>	1	3			
<i>Ecdyonurus dispar</i>		4			
<i>Ecdyonurus torrentis</i>		3			
<i>Ecdyonurus venosus</i>	1				
<i>Eisaniella tetraeda</i>		6			
<i>Eloeaophila</i>		1			
<i>Esolus parralelepipedus</i>	6	1			
<i>Helobdella stagnalis</i>		1			
<i>Heptagenia sulphurea</i>	5	1			
<i>Heptageniidae</i>		8			
<i>Hydracarina</i>	7				
<i>Hydraena gracilis</i>	2	1			
<i>Hydropsyche pellucidula</i>	2	1			
<i>Hydropsyche siltalai</i>	2				
<i>Hydroptila</i>	13	16			
<i>Ibisia marginata</i>	2				
<i>Lepidostoma hirtum</i>	31	19			
<i>Leptophlebia marginata</i>		1			
<i>Leuctra</i>	84	2			
<i>Leuctra hippopus</i>		2			
<i>Limnephilidae</i>		9			
<i>Limnius volkmari</i>	4	1			
<i>Mystacidis azurea</i>		10			
<i>Nemoura</i>		1			
<i>Oligochaeta</i>	55	3			
<i>Oreochilus villosus</i>	2	2			
<i>Oreodytes septentrionalis</i>		1			
<i>Oulimnius</i>	3	2			
<i>Oulimnius tuberculatus</i>	2	1			
<i>Paraleptophlebia</i>	1				
<i>Paraleptophlebia submarginata</i>		1			
<i>Polycentropus</i>	4				
<i>Polycentropus flavomaculatus</i>		1			
<i>Polycentropus Kingi</i>	2				

**Notes**  
Some flow stress and sediment stress indicated in autumn, minimal water quality impacts exhibited by the invertebrate community in spring.

<b>YEAR</b>	<b>2022</b>
<b>CATCHMENT</b>	<b>Tay</b>
<b>RIVER</b>	<b>Lochay</b>
<b>SITE</b>	<b>River Lochay at Kenknock</b>
<b>NGR</b>	<b>NN 46698 36361</b>
<b>TRPI RIVER TYPE</b>	<b>3</b>
<b>SPRING DATE</b>	<b>30/04/2022</b>
<b>AUTUMN DATE</b>	<b>12/10/2022</b>

	Spring	Autumn
BMWP	155	152
ASPT	6.74	6.33
WHPT	187.4	163.9
WHPT ASPT	7.50	6.83
Number of Taxa	23	24
EPT species	20	24
EPT abundance	274	142
TOTAL abundance	513	181
CCI	19.48	16.96
LIFE	8.03	7.70
PSI	76.79	63.33
SPEAR	52.37	67.92
TRPI	84.21	100.00
Saprobic	1.69	1.81



**River Lochay Kenknock**

**SMARTRIVERS THANK YOU!!**

The TGA would like to thank the following people for their unwavering support of our SmartRivers project on the Rivers Ericht and Lochay:

**ERICHT:**

- Grant Kellie
- Clare Cooper
- Henry Ingram
- Kate Everett
- Paul Cumberland
- Peter Lock

**LOCHAY:**

- Alex Stewart
- Bob Mason
- Jim Henderson

And on both rivers—All the Riparian Owners who allowed us access—your support is essential and appreciated—thank you!