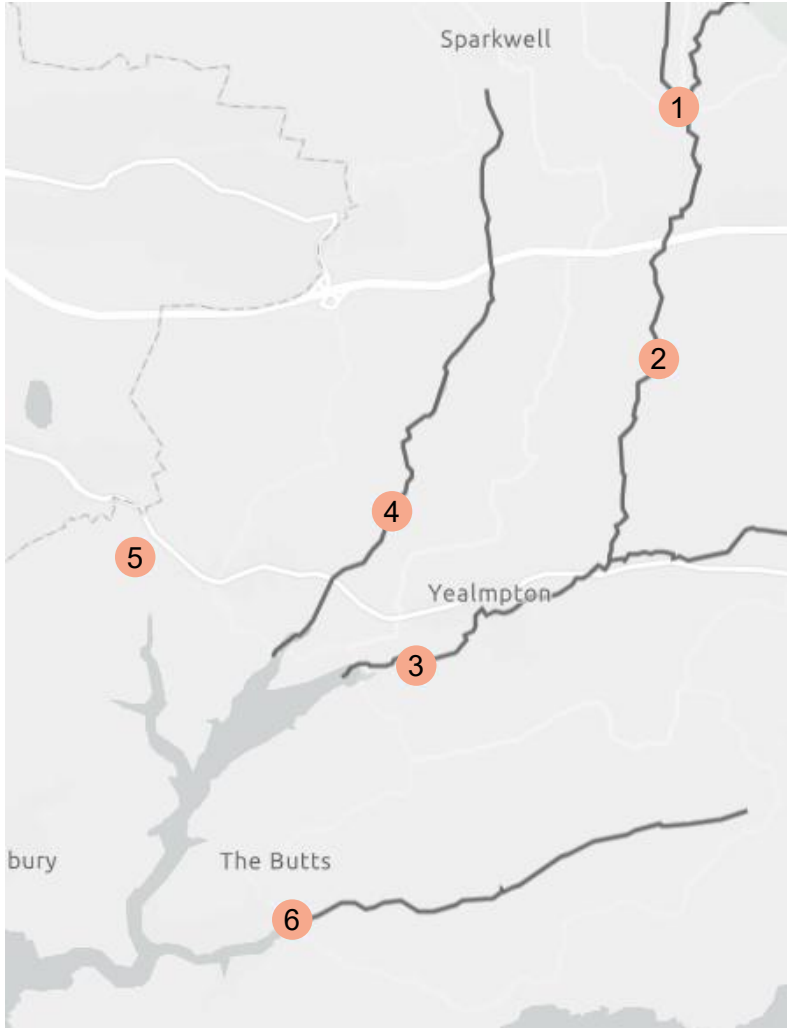


Yealm Estuary to Moor: River Yealm

Autumn Survey 2024



Sites

- 1: Piall at Marks Bridge
- 2: Popples Bridge
- 3: Puslinch Bridge
- 4: Silverbridge Stream
- 5: Cofflete Stream
- 6: Newton Stream

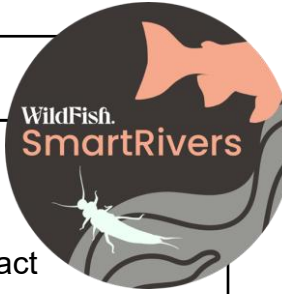
Summary

Water Quality Scores:

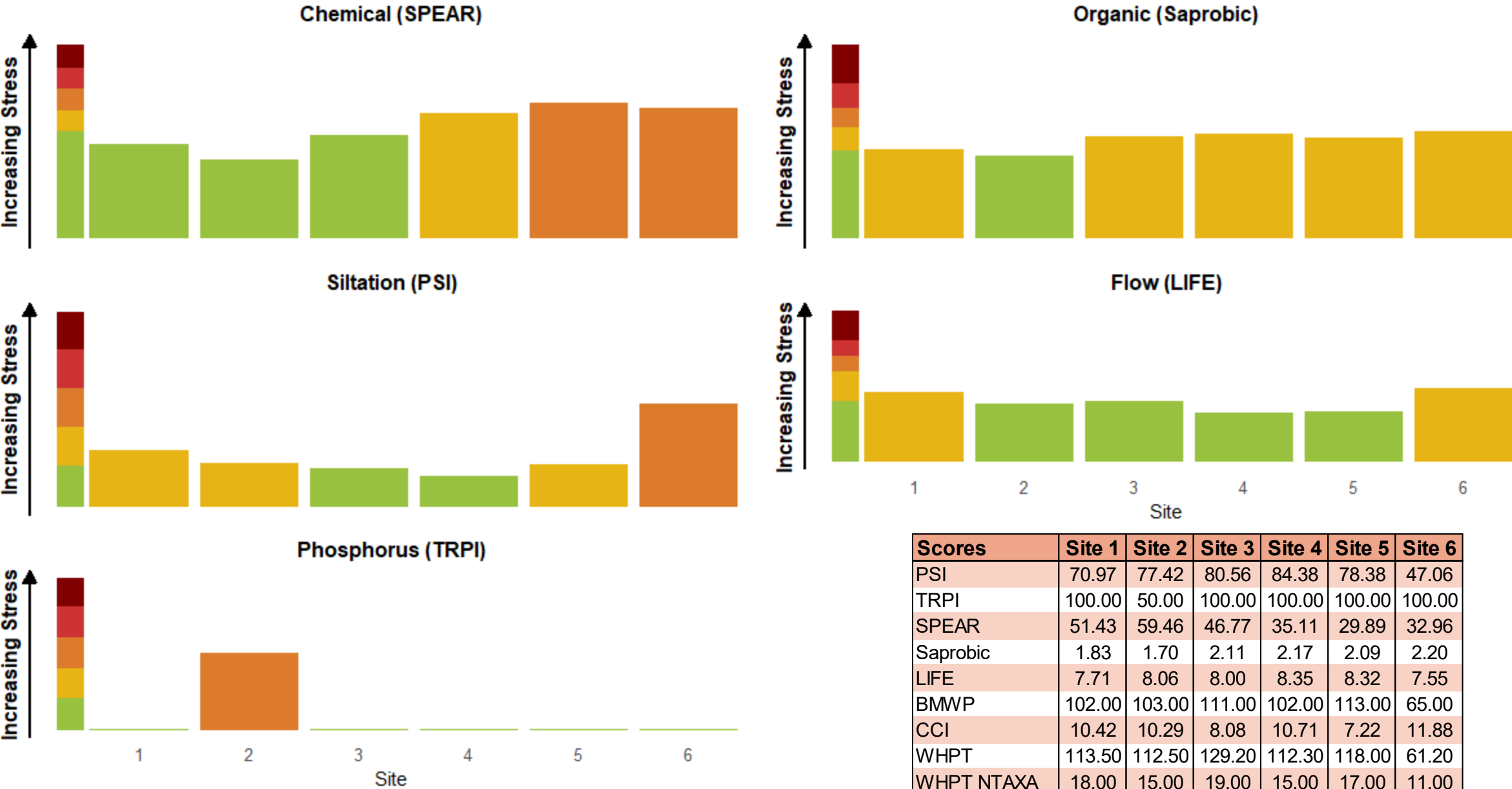
- Chemical Pressure: Unimpacted scores at sites 1 to 3. Low impact at site 4. Moderate impact at sites 5 and 6.
- Organic Pressure: Unimpacted score at site 2. Low impact at other sites.
- Sediment Pressure: Unimpacted scores at sites 3 and 4. Low impact at sites 1, 2, and 5. Moderate impact at site 6.
- Flow Pressure: Unimpacted scores at sites 2 to 5. Low impact at sites 1 and 6.
- Phosphorus Pressure: Moderate impact at site 2. Unimpacted scores at all other sites.

Invertebrates:

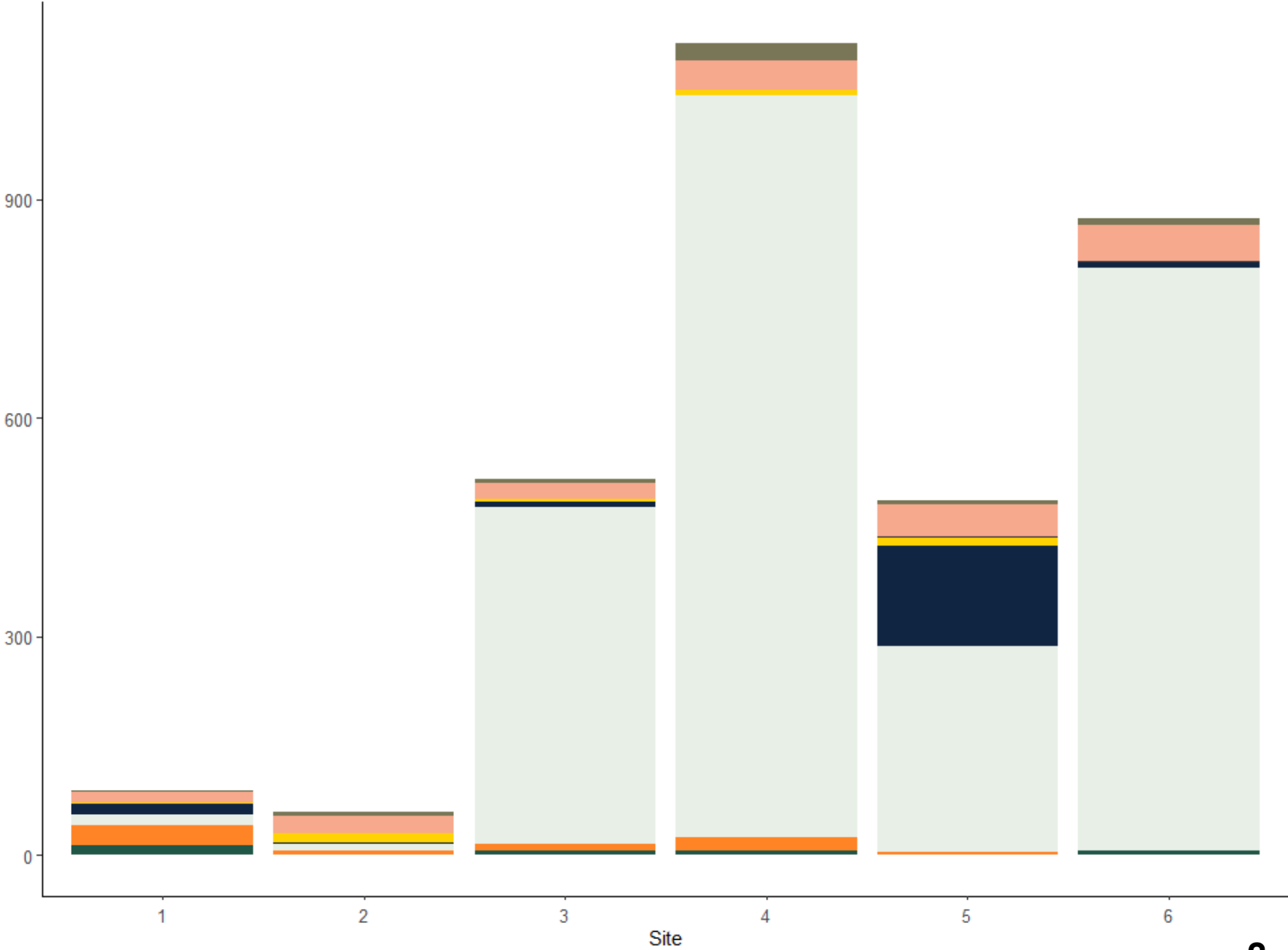
- Total species richness was highest at sites 1 and 3 (21) and lowest at site 6 (13). Site 1 had higher diversity in misc. taxa, stonefly, and true fly groups, Site 3 had the highest caddisfly diversity.
- Total abundance was highest at site 4 (1114) and lowest at site 2 (59). Greater abundance at site 4 due to high numbers of New Zealand mud snail (*Potamopyrgus antipodarum*) dominating the sample. This is also true for sites 3, 5, and 6.
- Riverfly species richness was highest at sites 2 and 3 (12) and lowest at site 6 (3). Site 2 had higher mayfly and stonefly diversity, while site 3 had higher caddisfly diversity. No mayflies or stoneflies at site 6.
- Riverfly abundance was highest at site 4 (65) and lowest at site 3 (35). Riverfly abundance generally quite low. Higher relative numbers at site 4 due to a combination of caddisflies (*Hydropsyche siltalai* and *Philopotamus montanus*) and stoneflies (*Leuctra fusca*). Highest number of stoneflies at site 1.



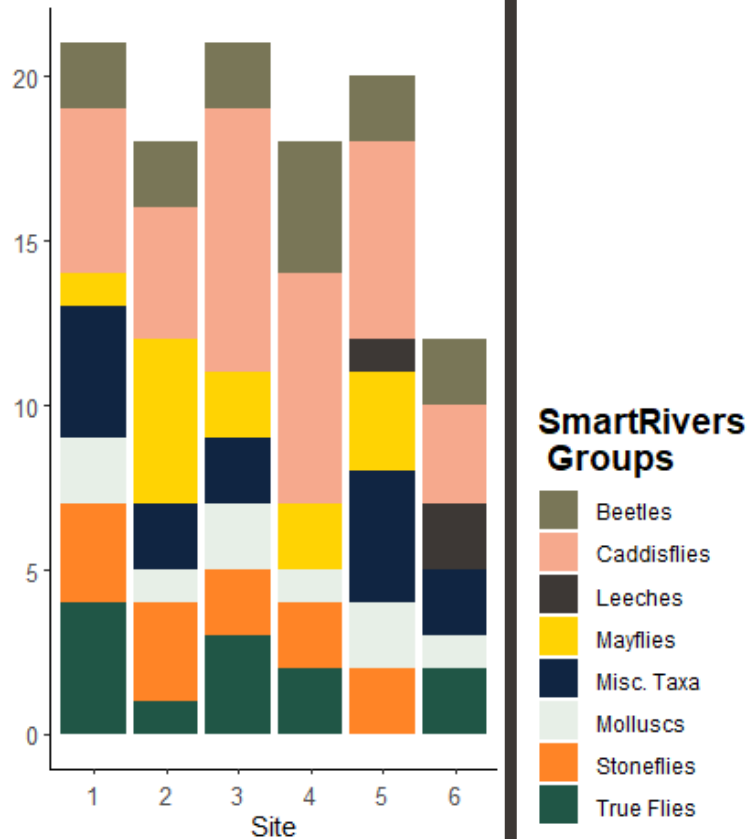
Water Quality Scores



Total Abundance



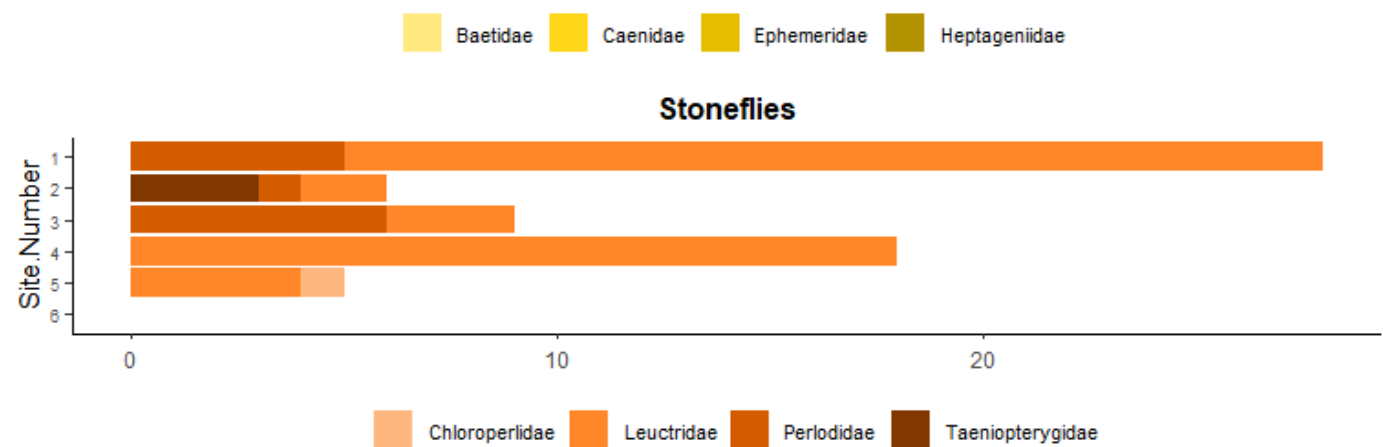
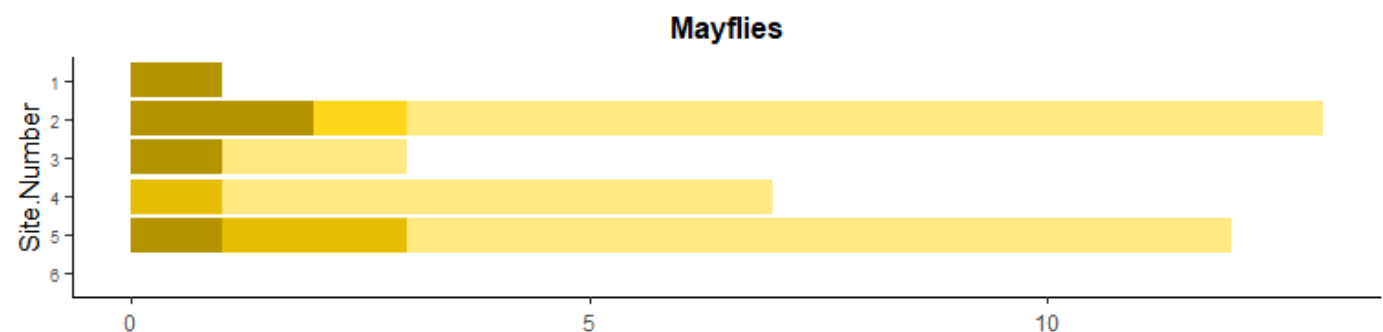
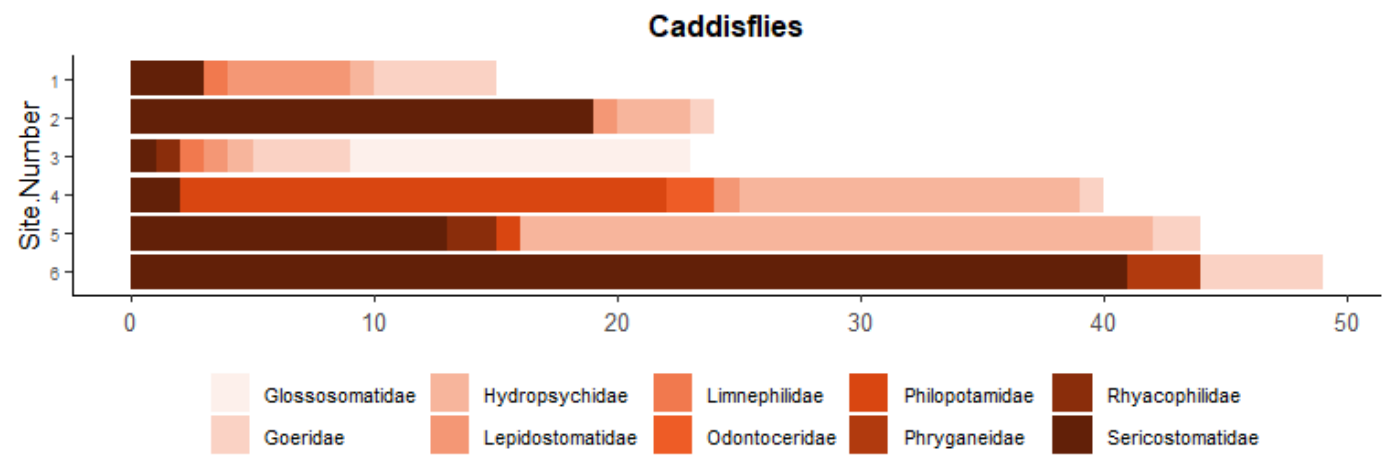
Total Species



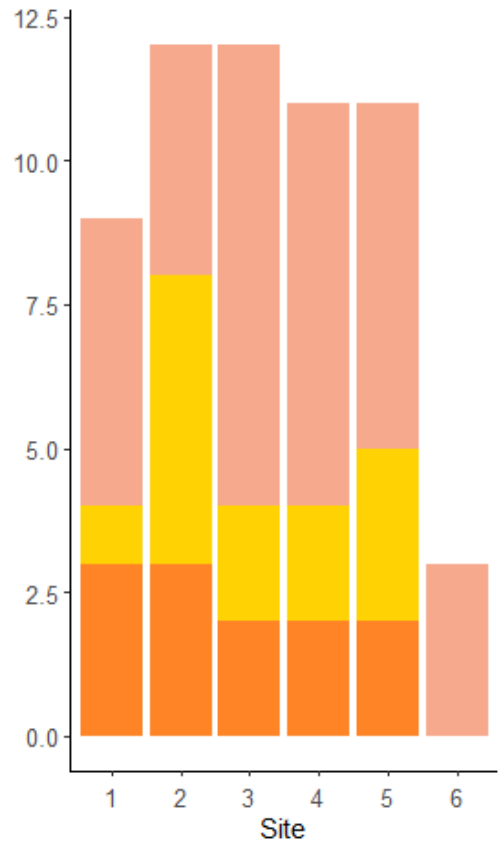
Site	Total Species	Total Abundance
1	21	89
2	18	59
3	21	516
4	18	1114
5	20	486
6	13	873

X shows potential repeat observations.
These are highlighted grey on pg.4.

EPT Abundance



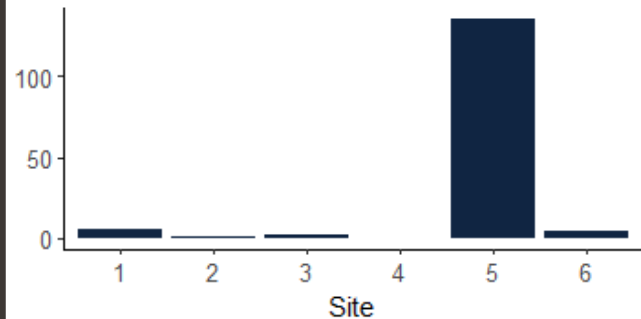
EPT Species



	EPT		EPT
Site	Species		Abundance
1	9	1	44
2	12	0	43
3	12	1	35
4	11	1	65
5	11	0	61
6	3	0	49

x shows potential repeat observations.
These are highlighted grey on pg.4.

Gammarus Abundance



Invertebrate Samples

Autumn 2024

SmartRivers Group	Order	Family	Taxon	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
Beetles	Coleoptera	Elmidae	Elmis aenea	0	1	2	4	3	1
			Limnius volckmari	1	4	3	18	2	8
			Oulimnius	1	0	0	0	0	0
		Gyrinidae	Orectochilus villosus	0	0	0	2	0	0
		Scirtidae	Elodes	0	0	0	1	0	0
					2	5	5	25	5

SmartRivers Group	Order	Family	Taxon	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
Caddisflies	Trichoptera	Glossosomatidae	Glossosoma	0	0	13	0	0	0
			Glossosoma boltoni	0	0	1	0	0	0
		Goeridae	Silo nigricornis	0	1	0	1	0	5
			Silo pallipes	5	0	4	0	2	0
		Hydropsychidae	Hydropsyche siltalai	1	3	1	11	4	0
			Hydropsyche pellucidula	0	0	0	3	0	0
			Hydropsyche instabilis	0	0	0	0	22	0
		Lepidostomatidae	Lepidostoma hirtum	0	1	0	0	0	0
			Lepidostoma basale	5	0	0	1	0	0
			Crunoecia irrorata	0	0	1	0	0	0
		Limnephilidae	Limnephilidae	1	0	1	0	0	0
		Odontoceridae	Odontocerum albicorne	0	0	0	2	0	0
		Philopotamidae	Philopotamus montanus	0	0	0	20	1	0
		Phryganeidae	Phryganeidae	0	0	0	0	0	3
		Rhyacophilidae	Rhyacophila dorsalis	0	0	1	0	2	0
		Sericostomatidae	Sericostoma personatum	3	19	1	2	13	41

SmartRivers Group	Order	Family	Taxon	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
Leeches	Arhynchobdellida	Erpobdellidae	Trocheta subviridis	0	0	0	0	0	1
			Erpobdella octoculata	0	0	0	0	1	0
	Rhynchobdellida	Glossiphoniidae	Glossiphoniidae	0	0	0	0	0	1
Total				0	0	0	0	1	2

SmartRivers Group	Order	Family	Taxon	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
Mayflies	Ephemeroptera	Baetidae	Baetis rhodani	0	4	0	0	0	0
			Baetis scambus	0	6	0	0	0	0
			Baetis rhodani/atlanticus	0	0	2	6	9	0
		Caenidae	Caenis luctuosa	0	1	0	0	0	0
		Ephemeridae	Ephemera danica	0	0	0	1	2	0
		Heptageniidae	Ecdyonurus torrentis	0	1	0	0	0	0
			Rhithrogena semicolorata	0	1	0	0	0	0
			Ecdyonurus	1	0	0	0	0	0
			Rhithrogena	0	0	1	0	1	0

SmartRivers Group	Order	Family	Taxon	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
Misc. Taxa	Amphipoda	Crangonyctidae	Crangonyx pseudogracilis/floridanus	1	0	0	0	0	0
		Gammaridae	Gammarus pulex	0	1	0	0	9	4
			Gammarus pulex/fossarum	6	0	2	0	127	0
	Isopoda	Asellidae	Asellus aquaticus	0	1	0	0	0	0
	Odonata	Cordulegasteridae	Cordulegaster boltonii	0	0	0	0	0	3
			Eiseniella tetraeda	1	0	0	0	0	0
			Oligochaeta	8	0	6	0	1	0
	Tricladida	Planariidae	Polycelis felina	0	0	0	0	1	0
Total				16	2	8	0	138	7

SmartRivers Group	Order	Family	Taxon	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
Molluscs	Ph. Mollusca	Ancylidae	Ancylus fluviatilis	0	0	0	0	2	0
		Hydrobiidae	Potamopyrgus antipodarum	12	8	461	1018	279	800
	Veneroida	Sphaeriidae	Euglesa casertana	1	0	0	0	0	0
			Pisidium	0	0	1	0	0	0
			Total	13	8	462	1018	281	800

SmartRivers Group	Order	Family	Taxon	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
Stoneflies	Plecoptera	Chloroperlidae	Siphonoperla torrentium	0	0	0	0	1	0
		Leuctridae	Leuctra geniculata	0	2	0	0	0	0
			Leuctra	1	0	0	1	0	0
			Leuctra fusca	22	0	3	17	4	0
		Perlodidae	Perlodes mortoni	5	1	6	0	0	0
		Taeniopterygidae	Brachyptera risi	0	3	0	0	0	0
		Total			28	6	9	18	5

SmartRivers Group	Order	Family	Taxon	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
True Flies	Diptera	Athericidae	Atherix ibis	0	1	0	0	0	0
			Ibisia marginata	0	0	1	0	0	0
		Chironomidae	Chironomidae	1	0	0	1	0	1
		Dixidae	Dixa puberula	1	0	0	0	0	0
		Pediciidae	Dicranota	9	0	4	0	0	5
		Simuliidae	Simulium	3	0	1	5	0	0
Total				14	1	6	6	0	6

WildFish.