

Esk Rivers & Fisheries Trust:

Angus Esk Spring Survey 2026



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Sites

1: Rottal Burn

2: Prosen Water

3: Lemno Burn

4: Noran Water

5: Dalgety

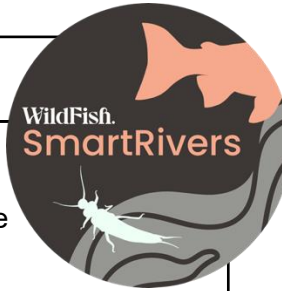
Summary

Water Quality Scores:

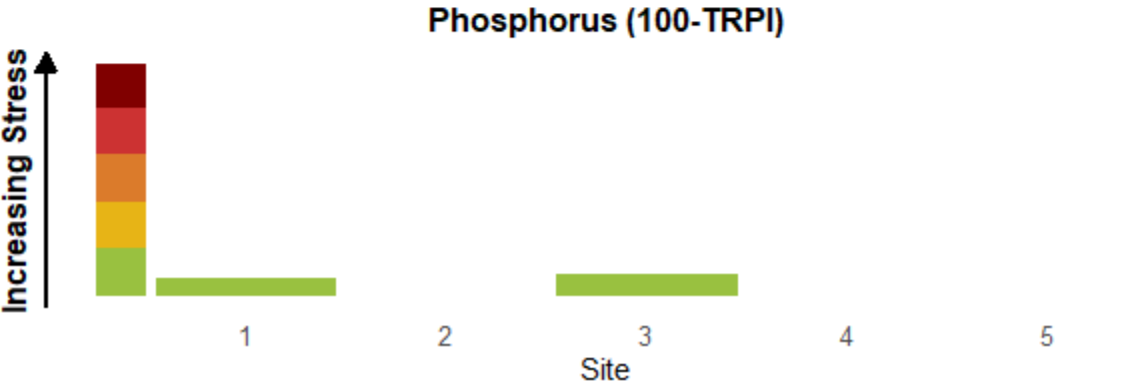
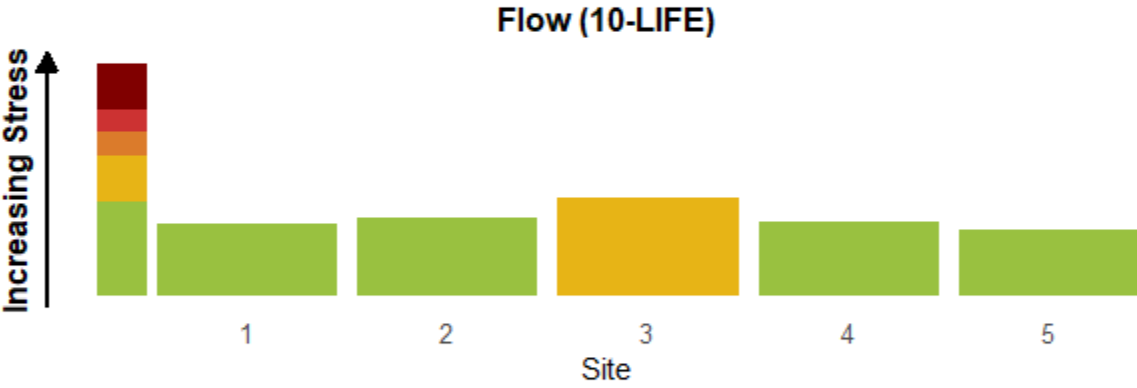
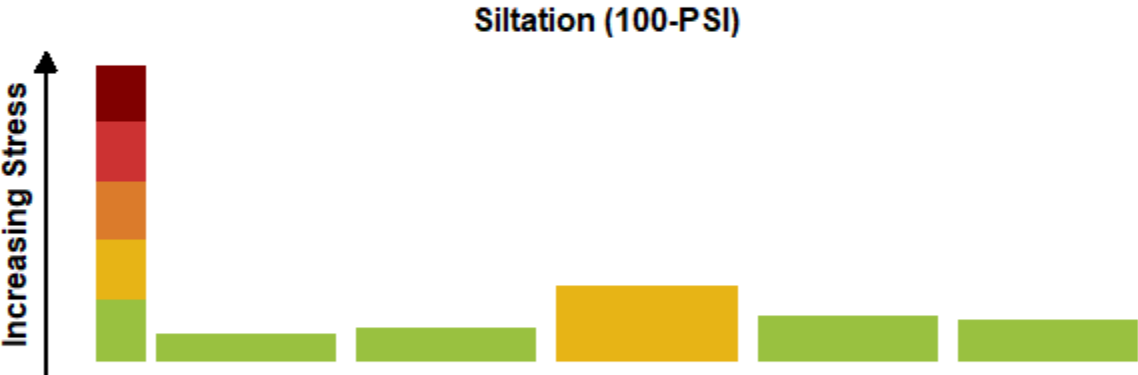
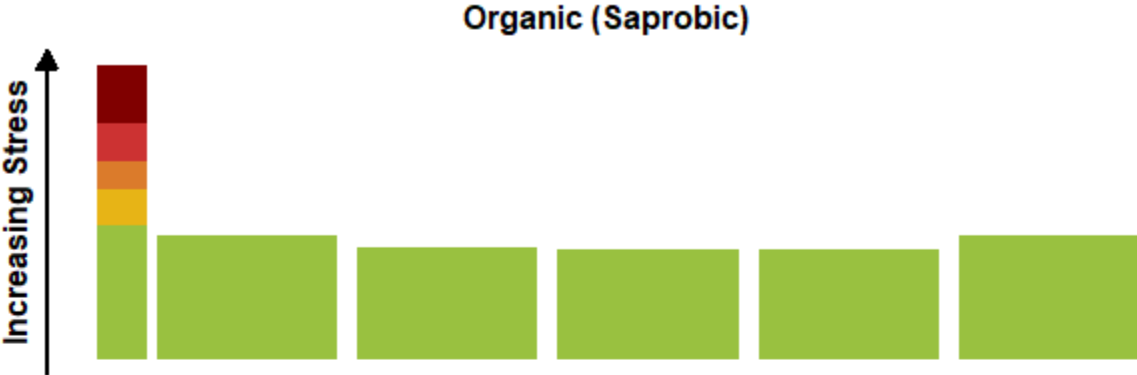
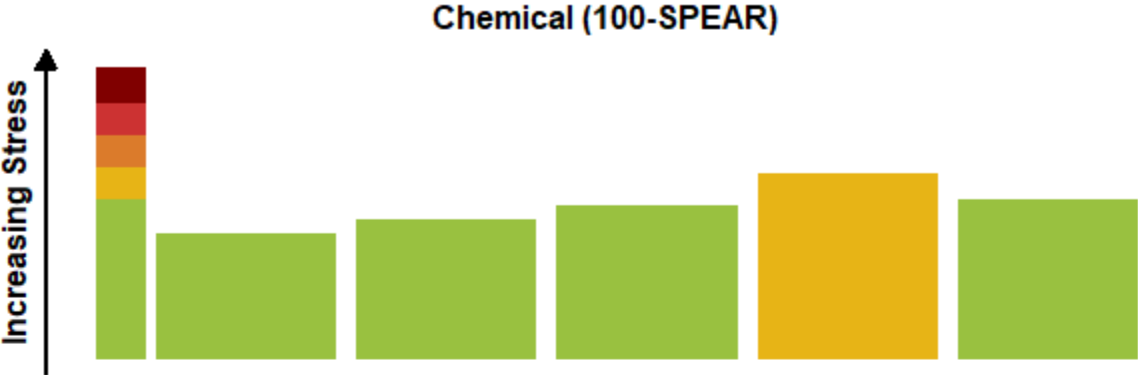
- Chemical Pressure: low impact at site 4; very low impact at the rest of the sites.
- Organic Pressure: very low impact at all sites.
- Sediment Pressure: low impact at site 3; very low impact at the rest of the sites.
- Flow Pressure: low impact at site 3; very low impact at the rest of the sites.
- Phosphorus Pressure: very low impact at all sites.

Invertebrates:

- Total species richness was highest at site 3 (48) and lowest at site 4 (27). Caddisflies were the most diverse group at all sites, except at site 1, where stoneflies had the highest diversity.
- Total abundance was highest at site 5 (1,123) and lowest at site 4 (188). At site 5, mayflies were the most abundant group (53% of the total abundance).
- Riverfly species richness was highest at site 3 (27) and lowest at site 4 (15). At site 3, there were 13 caddisfly, six mayfly and five stonefly species.
- Riverfly abundance was highest at site 5 (679) and lowest at site 4 (88). At site 5, Large Dark Olives (*Baetis rhodani/atlanticus*) and Olive Uprights (*Rhithrogena semicolorata*) were the most abundant taxa, with 200 and 161 specimens collected, respectively.
- The non-native, invasive New Zealand Mud Snail (*Potamopyrgus antipodarum*) was found at sites 3 and 5.
- Of interest are the Saddle Case Maker caddisfly *Agapetus delicatulus* (830 records in the UK); the Milk-white Planarian *Dendrocoelum lacteum* (723 records); the Short-palped Crane Fly *Hexatoma* (647 records); the under-recorded Non-biting Midge *Brillia bifida* (403 records); 2 species of Black Flies: *Simulium argyreatum/variegatum* (730 records) and *Simulium cryophilum* (399 records).
- Water quality scores were generally good, with site 3 having the highest quality macroinvertebrate community. This is also evidenced by the highest abundance of stoneflies (the most sensitive riverflies) and caddisflies.

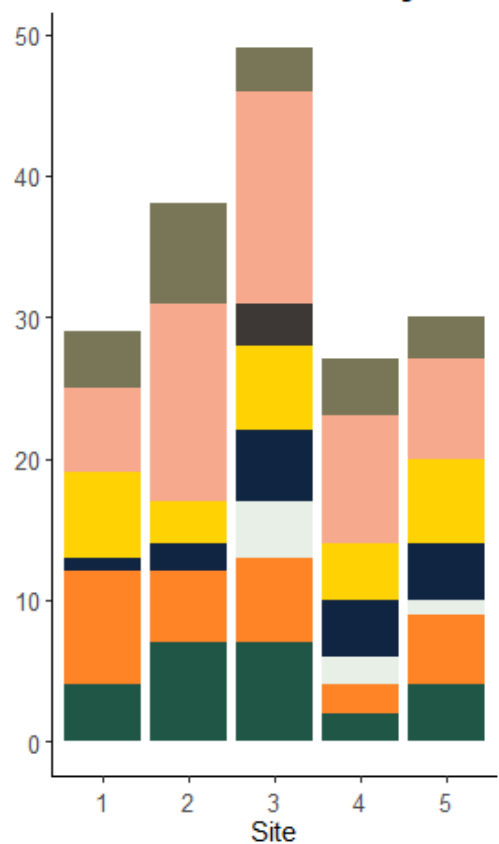


Water Quality Scores



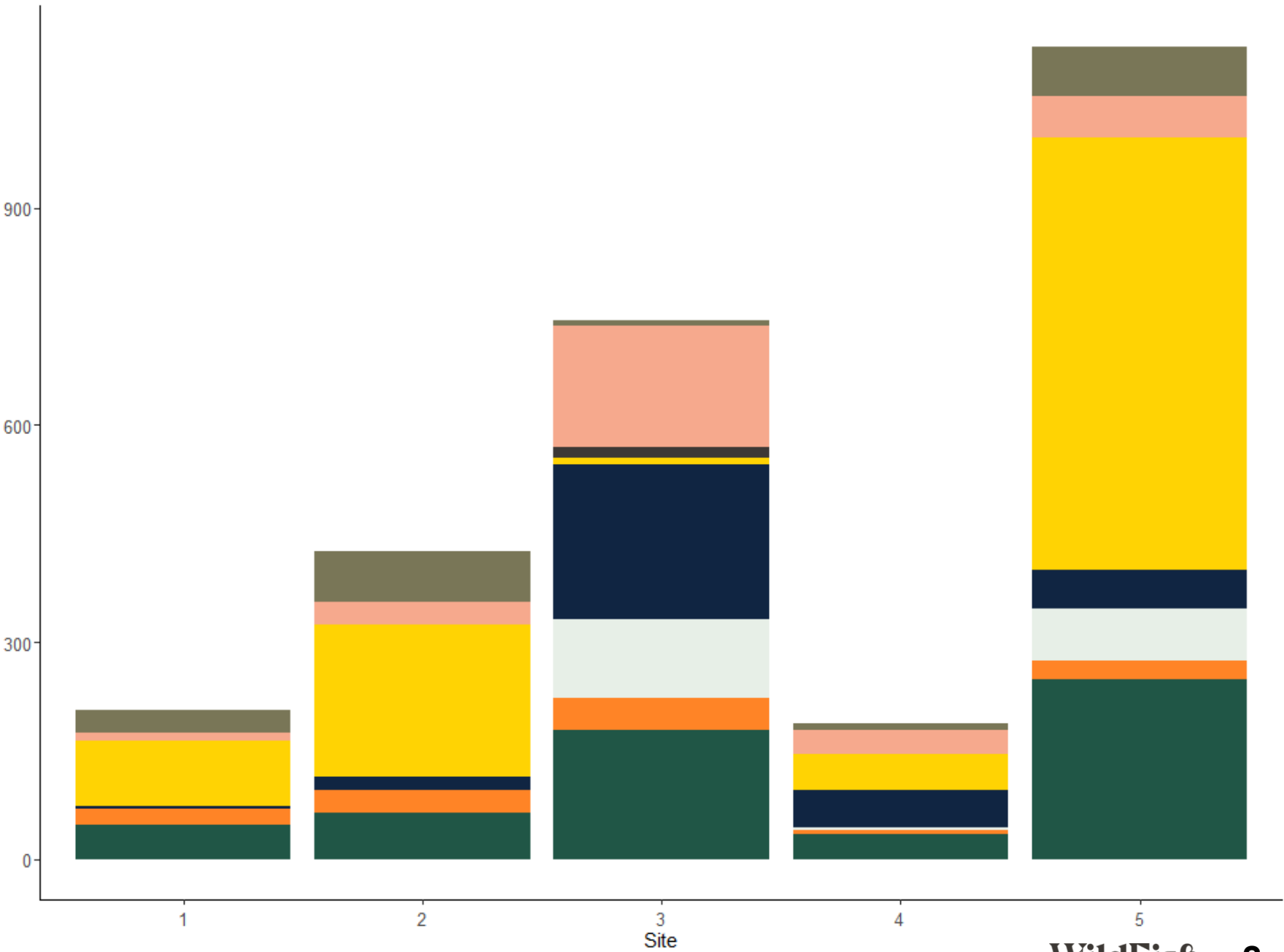
Water Quality Scores By Site					
Water Quality Metric	Site 1	Site 2	Site 3	Site 4	Site 5
SPEAR	57.04	52.48	47.47	36.90	45.58
Saprobic	1.69	1.52	1.49	1.50	1.69
PSI	90.70	88.52	74.32	84.44	86.21
LIFE	8.44	8.34	7.88	8.43	8.59
TRPI	92.31	100.00	90.48	100.00	100.00
BMWP	114.00	151.00	203.00	118.00	134.00
WHPT	128.50	190.20	213.70	125.50	148.10
WHPT NTAXA	17.00	26.00	34.00	19.00	21.00
WHPT ASPT	7.56	7.32	6.29	6.61	7.05
CCI	11.43	15.75	21.67	11.14	10.71

Total Diversity



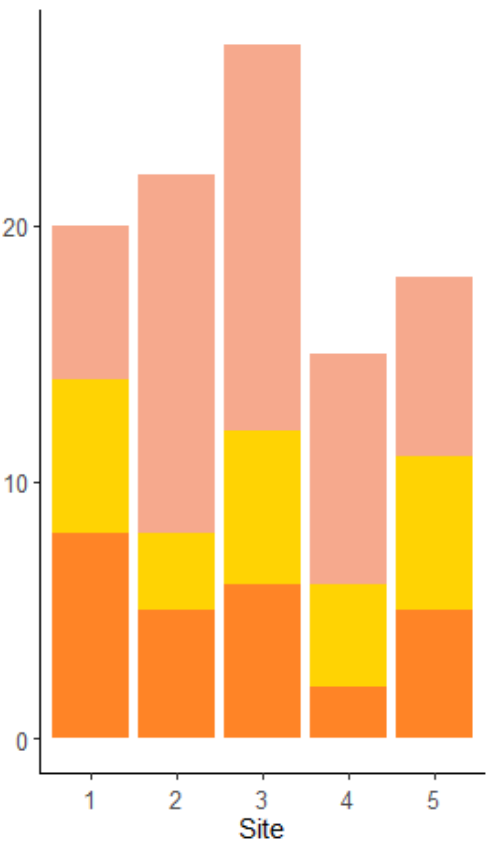
Total Community		
Site	Diversity	Abundance
1	29 (1)	204
2	37 (6)	424
3	48 (3)	744
4	27 (0)	188
5	30 (3)	1123

Total Abundance



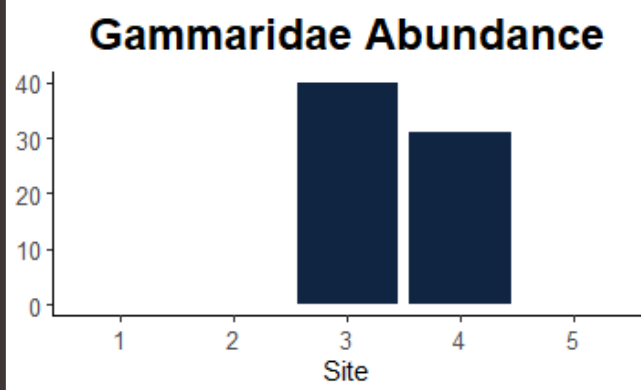
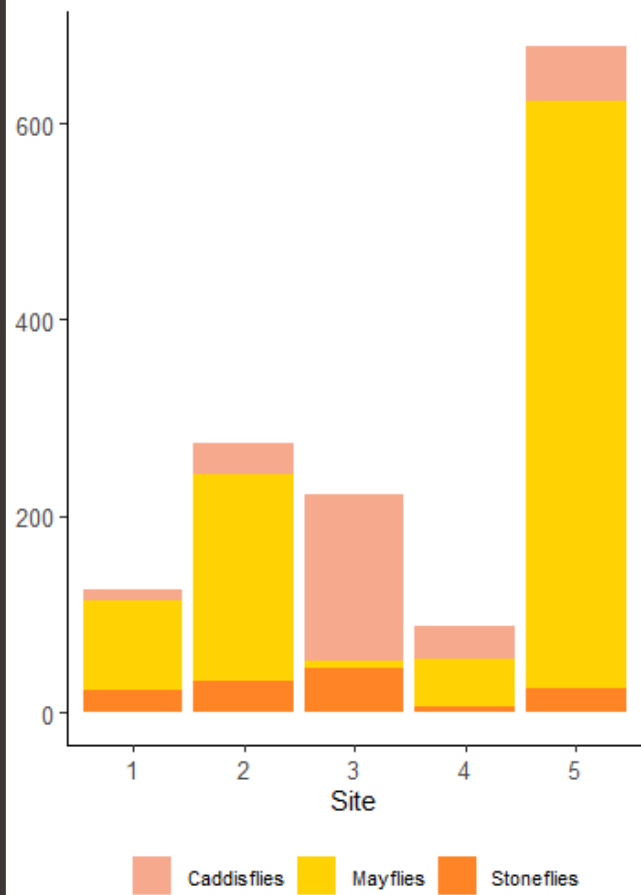
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EPT Diversity

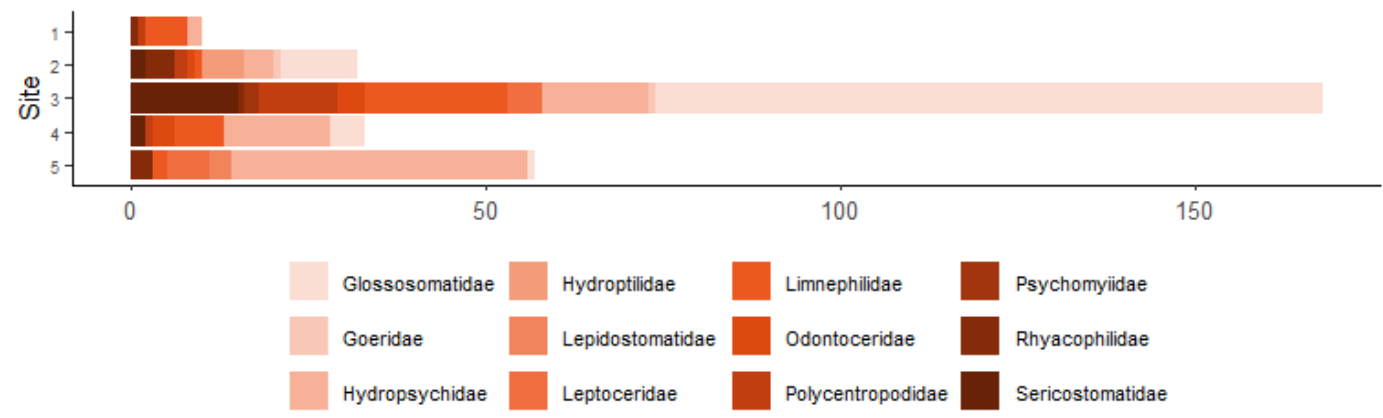


Riverfly Community		
Site	Diversity	Abundance
1	20 (1)	124
2	22 (5)	274
3	27 (3)	221
4	15 (0)	88
5	18 (2)	679

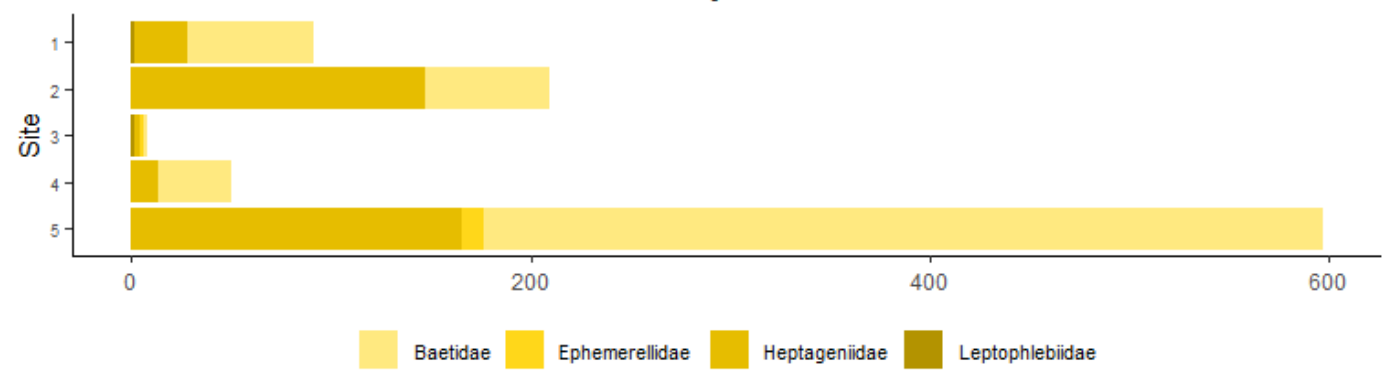
EPT Abundance



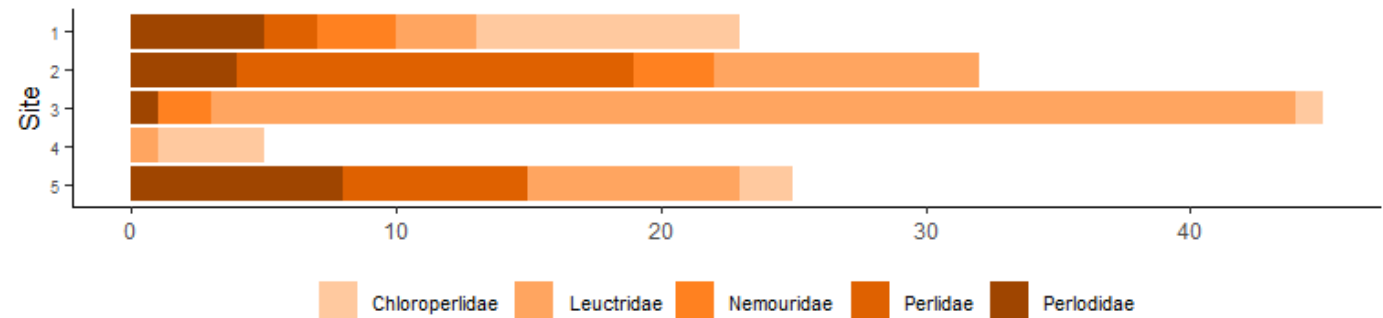
Caddisflies



Mayflies



Stoneflies



Esk Rivers & Fisheries Trust: Angus Esk *Spring 2026*



SmartRivers Invertebrate Counts

Beetles							
Order*	Family*	Taxon	Site 1	Site 2	Site 3	Site 4	Site 5
Coleoptera	Dytiscidae	Oreodytes sanmarkii	25	18	2	3	0
	Elmidae	Elmis aenea	1	12	2	1	2
		Esolus parallelepipedus	1	14	0	1	2
		Limnius volckmari	5	23	3	4	65
	Gyrinidae	Orectochilus villosus	0	1	0	0	0
	Hydrophilidae	Cercyon impressus	0	1	0	0	0
	Scirtidae	Contacyphon	0	1	0	0	0
		Total Diversity	4	7	3	4	3
		Total Abundance	32	70	7	9	69

Mayflies							
Order*	Family*	Taxon	Site 1	Site 2	Site 3	Site 4	Site 5
Ephemeroptera	Baetidae	Alainites muticus	0	14	1	1	150
		Baetis	0	0	0	0	70
		Baetis rhodani/atlanticus	54	49	0	36	200
		Centroptilium luteolum	9	0	1	0	0
	Ephemerellidae	Serratella ignita	0	0	2	0	11
	Heptageniidae	Ecdyonurus	2	0	0	0	5
		Ecdyonurus torrentis	0	0	1	0	0
		Electrogena lateralis	5	0	0	1	0
		Rhithrogena semicolorata	20	147	2	12	161
	Leptophlebiidae	Paraleptophlebia	0	0	1	0	0
		Paraleptophlebia submarginata	1	0	0	0	0
		Total Diversity	6	3	6	4	6
	Total Abundance		91	210	8	50	597

Leeches							
Order*	Family*	Taxon	Site 1	Site 2	Site 3	Site 4	Site 5
Arhynchobdellida	Erpobdellidae	Erpobdella octoculata	0	0	7	0	0
Rhynchobdellida	Glossiphoniidae	Glossiphonia complanata	0	0	1	0	0
		Helobdella stagnalis	0	0	7	0	0
Total Diversity		0	0	3	0	0	
Total Abundance		0	0	15	0	0	

* Some 'Order' and 'Family' groupings relate to higher classifications. Database is undergoing updates.

Caddisflies							
Order*	Family*	Taxon	Site 1	Site 2	Site 3	Site 4	Site 5
Trichoptera	Glossosomatidae	Agapetus	0	6	0	0	0
		Agapetus delicatulus	0	4	0	4	0
		Agapetus fuscipes	0	1	94	0	0
		Agapetus ochripes	0	0	0	1	0
		Glossosoma boltoni	0	0	0	0	1
	Goeridae	Silo pallipes	0	1	1	0	0
	Hydropsychidae	Hydropsyche	0	1	0	0	0
		Hydropsyche instabilis	0	0	0	15	0
		Hydropsyche siltalai	2	3	15	0	42
	Hydroptilidae	Hydroptila	0	6	0	0	0
	Lepidostomatidae	Lepidostoma hirtum	0	0	0	0	3
	Leptoceridae	Athripsodes	0	0	4	0	3
		Athripsodes albifrons	0	0	0	0	3
		Athripsodes bilineatus	0	0	1	0	0
	Limnephilidae	Anabolia nervosa	4	0	0	0	0
		Chaetopteryx villosa	0	0	7	0	0
		Drusus annulatus	0	0	2	5	0
		Ecclisopteryx dalecarlica	1	1	0	1	0
		Halesus digitatus	1	0	0	0	0
		Halesus radiatus	0	0	7	0	0
		Limnephilidae	0	0	2	0	0
		Potamophylax latipennis	0	0	2	1	2
	Odontoceridae	Odontocerum albicorne	0	1	4	3	0
	Polycentropodidae	Polycentropus	1	1	11	0	0
		Polycentropus flavomaculatus	0	1	0	1	0
	Psychomyiidae	Tinodes waeneri	0	0	2	0	0
	Rhyacophilidae	Rhyacophila	0	2	0	0	0
		Rhyacophila dorsalis	1	2	1	0	3
	Sericostomatidae	Sericostoma personatum	0	2	15	2	0
		Total Diversity	6	14	15	9	7
		Total Abundance	10	32	168	33	57

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Molluscs							
Order*	Family*	Taxon	Site 1	Site 2	Site 3	Site 4	Site 5
Littorinimorpha	Tateidae	Potamopyrgus antipodarum	0	0	64	0	72
Ph. Mollusca	Lymnaeidae	Ampullaceana balthica	0	0	0	2	0
	Planorbidae	Ancylus fluviatilis	0	0	39	1	0
		Bathyomphalus contortus	0	0	1	0	0
Sphaeriida	Sphaeriidae	Pisidium/Euglesa/Odhneripisidium	0	0	4	0	0
Total Diversity			0	0	4	2	1
Total Abundance			0	0	108	3	72

Misc. Taxa							
Order*	Family*	Taxon	Site 1	Site 2	Site 3	Site 4	Site 5
Amphipoda	Gammaridae	Gammarus pulex	0	0	40	31	0
Crassicitellata	Lumbricidae	Eiseniella tetraeda	0	0	0	0	6
Isopoda	Asellidae	Asellus aquaticus	0	0	51	0	0
Subcl. Oligochaeta	Subcl. Oligochaeta	Oligochaeta	0	15	118	6	45
Tricladida	Dendrocoelidae	Dendrocoelum lacteum	0	0	0	0	1
	Planariidae	Polycelis felina	0	0	1	15	2
Trombidiformes	Hydrachnidia	Hydrachnidia	3	3	5	1	0
Total Diversity			1	2	5	4	4
Total Abundance			3	18	215	53	54

Stoneflies							
Order*	Family*	Taxon	Site 1	Site 2	Site 3	Site 4	Site 5
Plecoptera	Chloroperlidae	Chloroperla tripunctata	2	0	0	0	1
		Siphonoperla torrentium	8	0	1	4	1
	Leuctridae	Leuctra	1	4	10	1	8
		Leuctra geniculata	0	0	1	0	0
		Leuctra inermis	0	6	0	0	0
		Leuctra inermis/hippopus	2	0	0	0	0
		Leuctra nigra	0	0	30	0	0
	Nemouridae	Amphinemura sulcicollis	3	3	2	0	0
	Perlidae	Dinocras cephalotes	1	0	0	0	0
		Perla carlukiana	1	15	0	0	7
	Perlodidae	Isoperla grammatica	5	4	1	0	8
	Total Diversity		8	5	6	2	5
	Total Abundance		23	32	45	5	25

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True Flies							
Order*	Family*	Taxon	Site 1	Site 2	Site 3	Site 4	Site 5
Diptera	Ceratopogonidae	Ceratopogonidae	2	1	0	0	0
	Chironomidae	Brillia bifida	0	2	70	0	0
		Chironomidae	36	54	100	33	120
	Empididae	Chelifera	0	0	1	0	0
		Clinocera	0	1	0	0	0
		Hemerodromia	0	0	1	0	0
	Limoniidae	Hexatoma	8	0	0	0	0
	Pediciidae	Dicranota	1	2	2	0	1
	Simuliidae	Simulium	0	1	3	0	38
		Simulium argyreatum/variegatum	0	3	0	0	90
		Simulium cryophilum	0	0	0	2	0
	Tipulidae	Tipula	0	0	1	0	0
		Total Diversity	4	7	7	2	4
		Total Abundance	47	64	178	35	249

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