Fish in Rivers Factsheet

ShRBD

River Feale Catchment

Ireland's rivers, lakes and transitional waters. This report presents the results of a catchment-wide survey of the Feale River (excluding Brick and Galey) and in 2023.

Factsheet: 2023/06

The River Feale rises in the Mullaghareirk Mountains on the Cork–Limerick county border. It flows in a north westerly direction through Listowel and eventually into the sea south of Ballybunion, Co. Kerry. The River Feale provides some of the best sea trout and salmon fishing in Ireland (O' Reilly, 2002). The lower portion of the River Feale has been arterially drained, but the drainage scheme does not extend past Listowel. The Feale drains a catchment area of approximately 1145km². The main tributaries of the Feale are the Allaghaun, Brick, Clydagh, Galey, Owveg and Smearlagh.

Twenty-two sites were surveyed by electro-fishing (CEN 2003) on the Feale River Catchment from the 11th of September to the 14th September 2023.

Inland Fisheries Ireland conducts annual nationwide fish sampling surveys to assess the status of stocks in The survey methods included 10-minute timed Electro-Fishing (TEF₁₀) and Area Delineated Electro-Fishing (ADEF handset). All TEF₁₀ fish count results were converted to minimum population estimates according to Matson *et al.* (2018).



The River Feale at Barry's Bridge (Site 7).



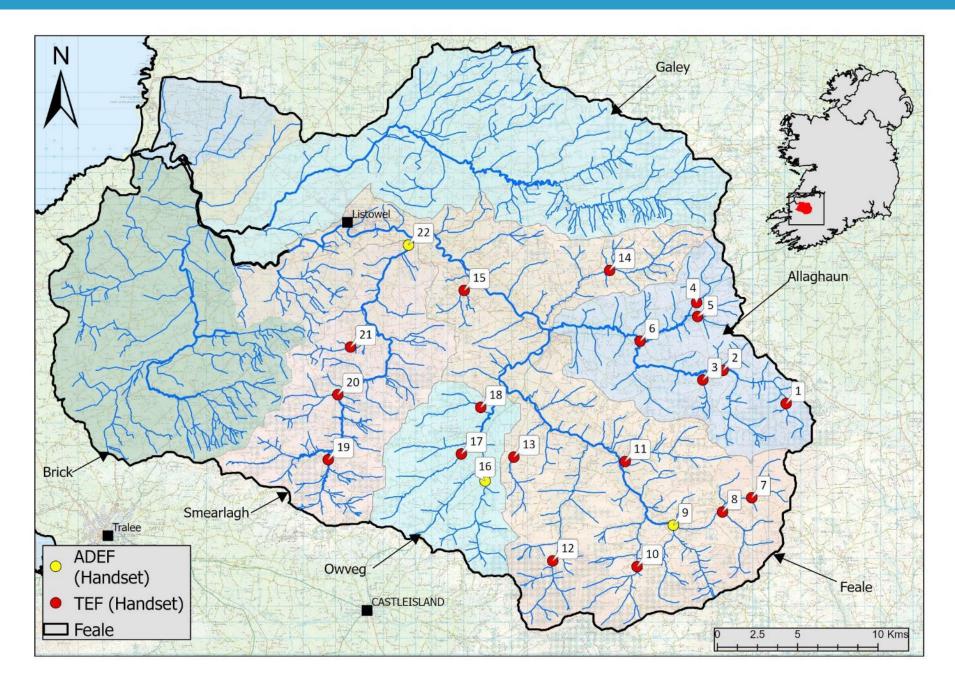


Figure 1. Location of electrofishing survey sites and sub-catchments, Feale Catchment, September 2023.

Factsheet: 2023/06

River Feale main channel, tributaries and Allaghaun sub-catchments

Six sites (site no. 1-6) were surveyed on the Allaghaun river and tributaries as well as nine sites on the Feale (main channel river (sites 7 and 8) and tributaries (sites no. 9-15) inlouding one on the (Oolagh (site 14) and one on the Islandboy (site 15)) in September 2023.

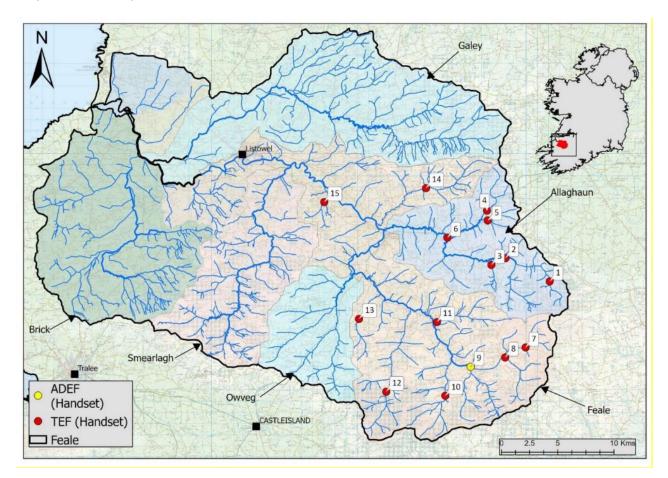


Figure 2. Allaghaun (sites 1-6) and Feale main channel (sites 7-15) catchments, September 2023.

Table 1. Site survey details for the Allaghaun and Feale (main channel) subcatchments, September 2023.

No.	River	Site	Method	WFD	Date					
	Allaghaun subcatchment									
1	Allaghaun	Cleanglass East	TEF (handset)	No	13/09/2023					
2	Allaghaun	Tour Bridge	TEF (handset)	No	13/09/2023					
3	Allaghaun (trib)	Knocknadiha	TEF (handset)	No	13/09/2023					
4	Eeghaun	Ballymurragh West	TEF (handset)	No	14/09/2023					
5	Ballymurragh East	Rathcahill West	TEF (handset)	No	13/09/2023					
6	Eeghaun	Tulligoline	TEF (handset)	No	13/09/2023					
		Feale ar	nd tributaries							
7	Feale	Barry's Bridge	TEF (handset)	No	14/09/2023					
8	Knockahorrea East	Rockchapel	TEF (handset)	No	14/09/2023					
9	Feale	Knockaclarig Bridge	ADEF (Handset)	No	12/09/2023					
10	Breanagh	Tooreenfineen	TEF (handset)	No	14/09/2023					
11	Caher	Mountcollins	TEF (handset)	No	14/09/2023					
12	Glengariff	Mount Eagle	TEF (handset)	No	14/09/2023					
13	Glashacooncore	Knockbrack	TEF (handset)	No	14/09/2023					
14	Oolagh	Crataloe	TEF (handset)	No	14/09/2023					
15	Islandboy	Glashamore Bridge	TEF (handset)	No	13/09/2023					

Factsheet: 2023/06

Table 2. Minimum density estimates of fish (no. fish/m²), Feale Catchment, September 2023 (sites 1-15) (previous results are shown where applicable).

Allaghaun									Fea	ale		
Site no.	1	2	3		4		5		6	7		8
Species	2023	2023	202	23	202	3	2023	3	2023	202	3	2023
Brown trout	0.200	0.066	0.53	31	0.03	9	0.280)	0.043	0.65	53	0.114
0+ brown trout	0.148	0.038	0.37	70	0.03	9	0.127	7	-	0.14	14	0.053
1+ & older brown trout	0.052	0.028	0.16	51	-		0.154	4	0.043	0.50)9	0.061
Salmon	_	0.315	0.07	70	0.27	'6	0.679	9	0.483	0.26	51	0.282
0+ salmon	_	0.202	0.07	70	0.25	0	0.552	2	0.397	0.02	26	0.175
1+ & older salmon	_	0.113	_		0.02	26	0.127	7	0.087	0.23	35	0.107
European eel	_	_	_		_		_		-	0.02	20	_
Sea trout	-	_	_		_		_		_	_		_
All fish	0.200	0.381	0.60	01	0.31	.6	0.959	9	0.527	0.93	34	0.396
			Feale									
Site no.	9	10)	1	1		12		13	14		15
Species	2023	202	23	20	23	2	023	2	2023	2023		2023
Brown trout	0.033	0.0	58	0.1	03	0.	019	0	.215	0.105		0.704
0+ brown trout	0.013	0.03	37	0.0	24	0.	012	0	.115	0.008		0.537
1+ & older brown trout	0.021	0.02	21	0.0	79	0.	800	0	.100	0.097		0.167
Salmon	0.199	0.50	61	0.2	90	0.	054	0	.700	0.081		0.334
0+ salmon	0.140	0.43	34	0.2	18	0.	800	0	.639	0.050		0.281
1+ & older salmon	0.059	0.17	27	0.0	73	0.	046	0	.062	0.031		0.053
European eel	0.002	-		-	-		-		-	-		0.053
Sea trout	-	_		0.0	06		-		_	-		-
All fish	0.234	0.63	19	0.3	99	0.	073	0	.916	0.186		1.091



The Allaghaun River at Cleanglass East (Site 1)

Table 3. Salmonid age class structure Allaghaun sub-catchment and Feale main channel and tributaries, September 2023.

Species	Site No.		% of cat	ch	
Species	Site No.	0+	1+	2+	3+
Brown trout	1	75	25	-	-
	2	57	14	29	-
	3	71	29	-	-
	4	100	-	-	-
	5	50	50	-	-
	6	-	75	25	-
	7	23	73	4	-
	8	50	50	-	-
	9	38	62	-	-
	10	67	33	-	-
	11	25	50	25	-
	12	67	-	-	33
	13	60	13	20	7
	14	8	77	15	-
	15	79	19	2	-
Salmon	2	66	34	-	-
	3	100	-	-	-
	4	90	10	-	-
	5	82	18	-	-
	6	82	18	-	-
	7	10	90	-	-
	8	63	37	-	-
	9	70	30	-	-
	10	79	21	-	-
	11	75	25	-	-
	12	14	86	-	-
	13	92	8	-	-
	14	64	36	-	-
	15	84	16	-	-

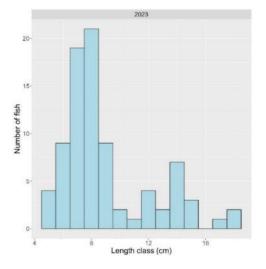


Figure 3. Length frequency distribution for brown trout (N=84) in the Allaghaun sub-catchment, September 2023 (No. sites=6).

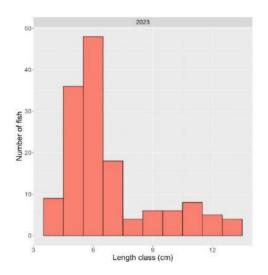


Figure 4. Length frequency distribution for salmon (N=144) in the Allaghaun sub-catchment, September2023 (No. sites=6).

Owveg River and Smearlagh sub-catchments

Three sites (sites 16-18) were surveyed on the Owveg sub-catchment and four sites (sites 19-22) on the Smearlagh sub-catchment in September 2023. One long-term Water Framework Directive (WFD) surveillance monitoring (SM) site was included on the Owveg River (site 16) (Figure 3 and Table 4).

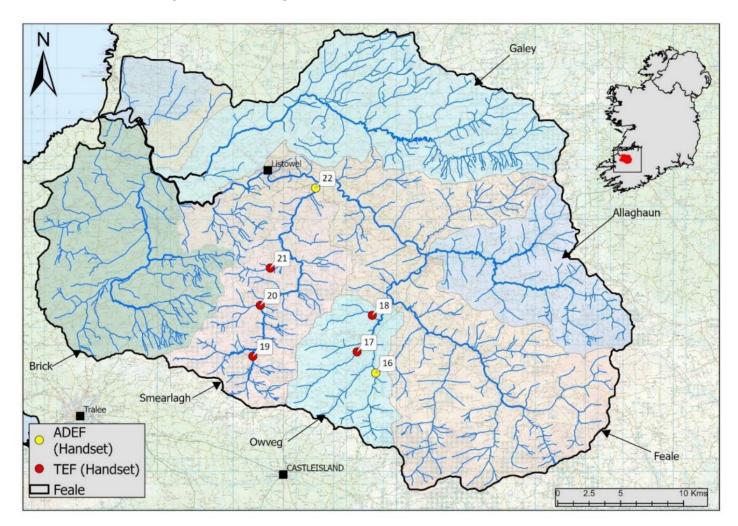


Figure 5. Owveg (sites 16-18) and Smearlagh (sites 19-22) sub-catchments, September 2023.

Table 4. Site survey details for the Owveg and Smearlagh sub-catchments, September 2023.

No.	River name	Site	Method	WFD	Date			
Owveg sub-catchment								
16	Owveg	Owveg Bridge	ADEF (Handset)	Yes	11/09/2023			
17	Tullaleague	Talbots Bridge	TEF (handset)	No	13/09/2023			
18	Cloghboola	Glena Bridge	TEF (handset)	No	14/09/2023			
	Smearlagh sub-catchment							
19	Smearlagh	Reanagowan	TEF (handset)	No	13/09/2023			
20	Lyracrumpane	Lyracrumpane	TEF (handset)	No	13/09/2023			
21	Patch	Glanaderhig	TEF (handset)	No	13/09/2023			
22	Smearlagh	Kennelly's Bridge	ADEF (Handset)	Yes	12/09/2023			



The Cloghboola River at Glena Bridge, Owveg sub-catchment (Site 18).

Table 5. Minimum density estimates of fish (no. fish/m²), Owveg and Smearlagh sub-catchments, 2023 (previous results are shown where applicable).

Ow	Smearlagh							
Site no.	1	6	17	18	19	20	21	22
Species	2012	2023	2023	2023	2023	2023	2023	2023
Brown trout	0.044	0.065	0.137	0.102	0.060	0.323	0.260	0.009
0+ brown trout	0.017	0.043	0.101	0.043	0.020	0.279	0.095	0.007
1+ & older brown trout	0.026	0.022	0.036	0.059	0.040	0.044	0.165	0.002
Salmon	0.344	0.418	0.294	0.380	0.275	0.378	0.035	0.183
0+ salmon	0.236	0.342	0.294	0.301	0.195	0.279	0.035	0.153
1+ & older salmon	0.108	0.076	_	0.078	0.080	0.098	-	0.030
European eel	_	-	_	-	-	-	-	0.009
Sea trout	-	-	_	ı	ı	-	-	-
All fish	0.387	0.483	0.432	0.481	0.335	0.700	0.295	0.205

Table 6. Salmonid age class structure for Owveg and Smearlagh sub-catchments 2023.

Species	Site No.		% of catch					
Species	Site No.	0+	1+	2+	3+			
Brown trout	16	76	15	9	-			
	17	76	24	-	-			
	18	46	46	8	-			
	19	33	50	17	-			
	20	88	12	-	-			
	21	36	57	7	-			
	22	60	20	20	-			
Salmon	16	85	15	-	-			
	17	100	-	-	-			
	18	80	20	-	-			
	19	73	27	-	-			
	20	78	22	-	-			
	21	100	-	-	-			
	22	78	22	-	-			

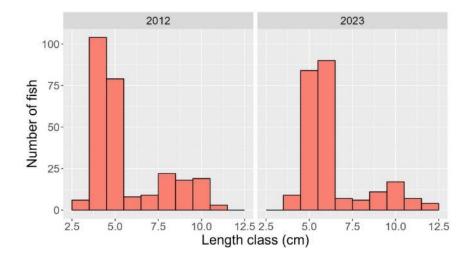


Figure 6. Length frequency distribution of salmon (2012 n= 268, 2023 n=235) in the Owveg sub-catchment at Site 16 (Owveg Bridge).

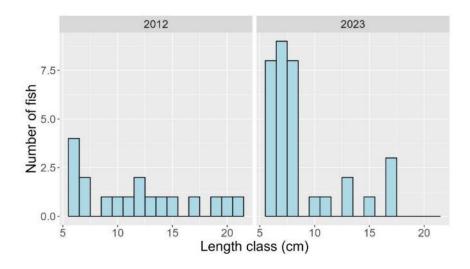


Figure 7. Length frequency distribution of brown trout (2012 n= 18, 2023 n=33) in the Owveg sub-catchment at Site 16 (Owveg Bridge).

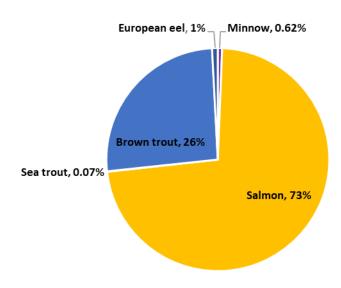
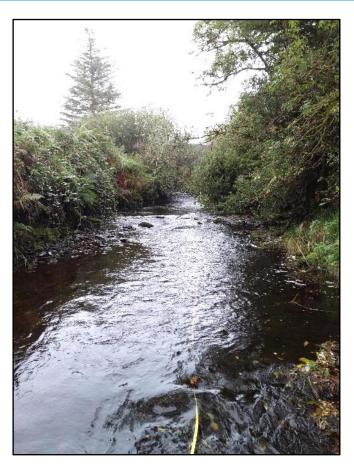


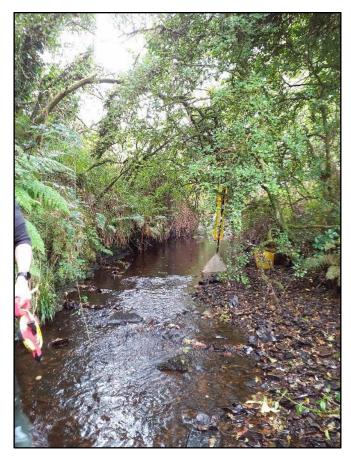
Figure 8. Fish species composition (%), Feale Catchment, September 2023.

Table 7. Fish ecological status for the River Feale Catchment, September 2024. Previous results are shown where applicable.

Site No.	2009 2012		2023						
Allaghaun sub-catchment									
1	-	-	Moderate						
2	-	-	Moderate						
3	-	-	Good						
4	-	-	Moderate						
5	-	-	High						
6	-	-	Moderate						
	River Feale an	d tributaries							
7	-	-	High						
8	-	-	Good						
9	-	-	Moderate						
10	-	-	Good						
11	-	-	Good						
12	-	-	N/A						
13	-	-	High						
14	-	-	Moderate						
15	-	-	High						
	Owveg sub-	catchment							
16	Good	Good	Good						
17	-	_	Moderate						
18	-	-	Good						
	Smearlagh sul	o-catchment							
19	-	-	Moderate						
20	-	-	High						
21	-	-	Moderate						
22	-	-	Moderate						



Owveg River at Owveg Bri (site 16)



Patch stream at Glanaderhig, Smearlagh subcatchment (Site 21.)

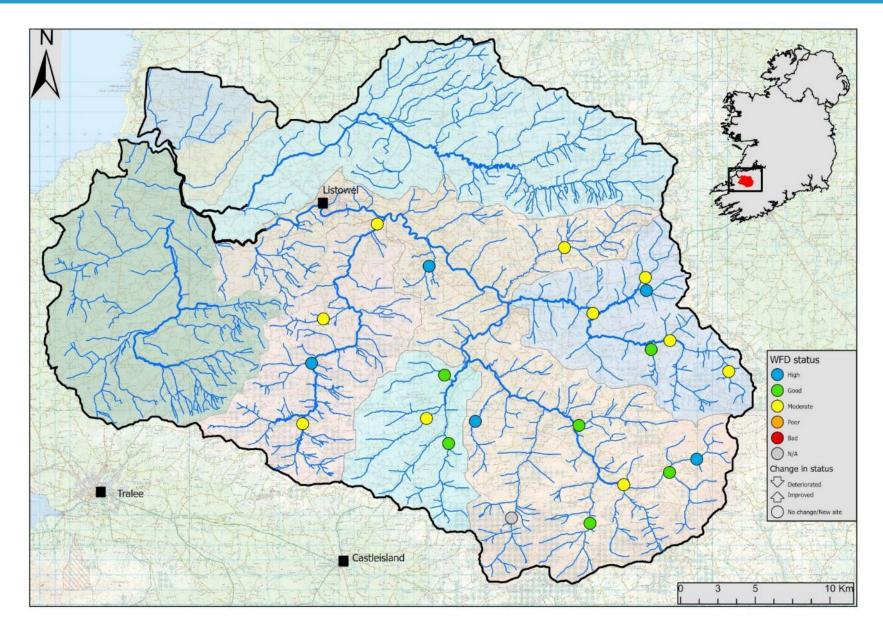


Figure 9. Fish ecological status in the Feale Catchment, 2023.

Summary

A total of four fish species and sea trout (a separate 'variety' of trout) were recorded at twenty two sites fished on the Feale River Catchment in 2023.

Brown trout was the most common species present (twenty two sites, 100%), followed by salmon (twenty one sites, 95%), European eel (four sites, 18%) and minnow and sea trout (one site each, 4.5%).

Salmon was the most abundant species recorded, captured at twenty one sites, followed by brown trout, European eel, minnow and sea trout.

Salmon ranged in length from 3.5 to 13.5cm. Two age classes were present (0+ and 1+), with 0+ being the most abundant cohort. The highest density of salmon (all ages combined) (0.700 fish/m²) was recorded at Site 13 at Glashacooncore River at Knockbrack, with the highest density of 0+ salmon (0.639 fish/m²) also recorded at Site 13. The highest density of 1+ and older salmon (0.235 fish/m²) was recorded at Site 7 on the Feale River at Barry's Bridge.

Brown trout ranged in length from 4.3 to 21.1cm. Four age classes were present (0+, 1+, 2+ and 3+), with 0+ being the most abundant cohort. The highest density of brown trout (all ages combined)(0.704 fish/m²) was recorded at Site 15 on the Islandboy River at Glashamore Bridge, with the highest density of 0+ brown trout (0.537 fish/m²) also recorded at Site 15. The highest density of 1+ and older brown trout (0.509 fish/m²) was recorded at Site 7 on the Feale River at Barry's Bridge.

A Water Framework Directive fish classification tool (FCS2) was developed for Irish rivers in 2011 (SNIFFER 2011). The tool works by comparing various fish community metric values within a site to those predicted for a site under un-impacted conditions. In general, a site will achieve High status if indicator species (e.g. both salmonid cohorts 0+ and 1+ and older) are present and in expected numbers. Status will decline if such cohorts are missing, are in poor abundance, or if more tolerant species proliferate.

Fish ecological status was assigned to 21 sites surveyed in the Feale Catchment during 2023 (Table 7 and Figure 9). Five sites achieved High status, with six sites Good, ten Moderate. One site was surveyed previously on this

and assigned fish ecological status. When compared with the previous surveys, the site has remained unchanged at Good status (Table 5).

The reasons for the failures (i.e. moderate status) in fish ecological status were due to lower-than-expected abundance of type specific indicator species (e.g., salmon and trout), absence of certain age cohorts indicating recruitment failures. Failures and deteriorations in fish ecological status can be caused by pressures such as nutrient enrichment, habitat modification and fish passage issues.

References

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Inland Fisheries Ireland: 3044 Lake Drive, Citywest Business Campus, Dublin, D24 Y265, Ireland

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