

Fish in Rivers Factsheet

The Broadmeadow River flows eastwards from Dunshaughlin, Co. Meath, reaching the sea, just north of Swords, Co. Dublin. The geology of the catchment is limestone, with the land used primarily for agriculture. The river is located in the Eastern River Basin District and covers a catchment area of approximately 172km². Six sites (nos. 1 to 6) were surveyed on the Broadmeadow River between the 15th and 16th of July, 2017.

The Ward River is located within the Eastern River Basin District and covers an area of approximately 62km². The Ward River flows in an easterly direction, joining the Broadmeadow River, just north of Swords, before entering the sea at the Broadmeadow Estuary. The geology of this catchment is limestone, with the main land use type being agriculture. The lower end of the catchment has significant urban development. Six sites (nos. 7 to 12) were surveyed on the Ward River between the 14th and 16th of August 2017.



The Broadmeadow River at Lispopple Br. (Site 3)



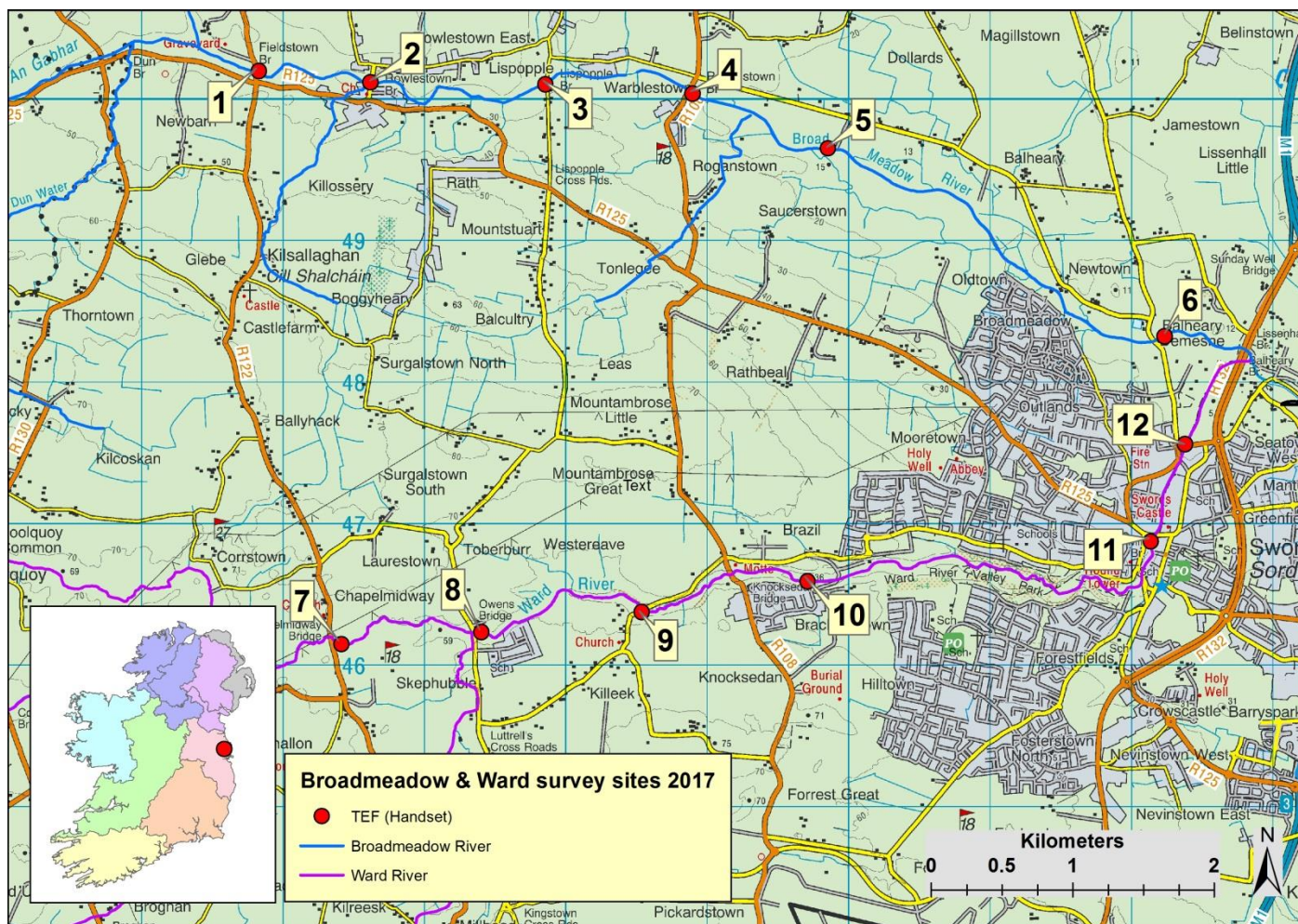


Fig. 1. Map of Broadmeadow & Ward Catchment electrofishing survey sites, 2017

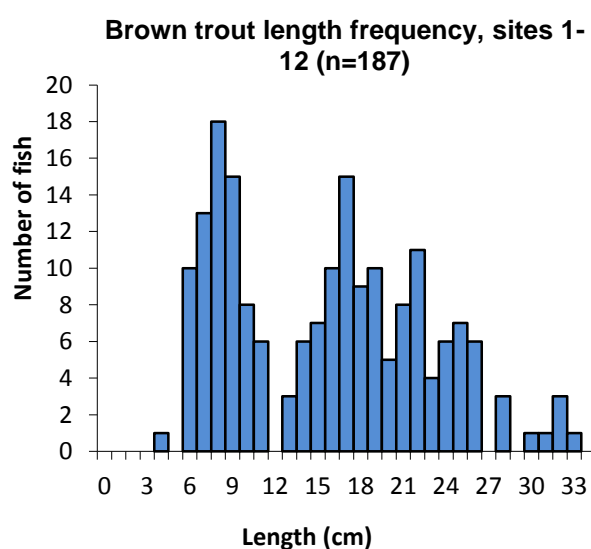
Site survey details, Broadmeadow & Ward Catchment, 2017

No.	River name	Site	Method	Date
1	Broadmeadow	Fieldstown Br.	TEF (Handset)	15/08/2017
2	Broadmeadow	Bowlestown	TEF (Handset)	15/08/2017
3	Broadmeadow	Lispopple Br.	TEF (Handset)	15/08/2017
4	Broadmeadow	Roganstown Br.	TEF (Handset)	15/08/2017
5	Broadmeadow	Saucerstown	TEF (Handset)	16/08/2017
6	Broadmeadow	Balheary Demesne Br.	TEF (Handset)	15/08/2017
7	Ward	Chapelmidway Br.	TEF (Handset)	14/08/2017
8	Ward	Owen's Br.	TEF (Handset)	14/08/2017
9	Ward	Westerleave SW	TEF (Handset)	14/08/2017
10	Ward	Brazil	TEF (Handset)	15/08/2017
11	Ward	Mill Br.	TEF (Handset)	16/08/2017
12	Ward	Scout Den	TEF (Handset)	16/08/2017

Method: TEF (Ten-minute electrofishing)

Minimum density estimates (no. fish/m²)

Site no.	1	2	3		4	5	6
Species	2017	2017	2011	2017	2017	2017	2017
Brown trout	0.018	0.056	0.005	0.014	0.043	0.081	0.032
0+ brown trout	0.018	0.043	0.002	-	-	0.050	0.008
1+ & older brown trout	-	0.013	0.002	0.014	0.043	0.031	0.024
European eel	-	0.023	0.054	0.011	-	-	0.028
Flounder	-	-	-	-	-	-	0.012
Minnow	0.152	0.083	0.005	0.021	0.033	0.300	0.353
Nine-spined stickleback	-	-	0.002	-	-	-	-
Sea trout	-	-	-	-	0.003	-	-
Stone loach	0.121	0.020	0.093	0.147	0.013	0.112	0.045
Three-spined stickleback	-	-	0.302	0.021	-	0.085	-
All Fish	0.290	0.159	0.461	0.214	0.093	0.578	0.471
Site no.	7	8	9	10	11	12	
Species	2017	2017	2017	2017	2017	2017	
Brown trout	0.334	0.066	0.261	0.572	0.391	0.263	
0+ brown trout	0.199	0.049	0.055	0.196	0.044	0.055	
1+ & older brown trout	0.135	0.016	0.206	0.375	0.347	0.208	
European eel	-	-	0.018	-	0.072	-	
Flounder	-	-	-	-	-	-	
Minnow	-	0.565	0.788	0.250	0.011	0.246	
Nine-spined stickleback	-	-	-	-	-	-	
Sea trout	-	-	-	-	-	0.004	
Stone loach	-	-	0.055	0.036	0.011	-	
Three-spined stickleback	0.635	0.278	0.097	-	-	-	
All Fish	0.969	0.909	1.219	0.857	0.485	0.513	



Salmonid age class structure, Broadmeadow & Ward Catchment, 2017

Species	Site No.	% of catch			
		0+	1+	2+	3+
Brown trout	1	100	-	-	-
	2	75	-	25	-
	3	-	-	100	-
	4	-	-	100	-
	5	60	-	30	10
	6	25	-	25	50
	7	60	40	-	-
	8	75	25	-	-
	9	24	33	38	5
	10	36	6	55	2
	11	12	32	53	3
	12	21	7	45	28



Fish ecological status, Broadmeadow & Ward Catchment

Site No.	2011	2017
1	-	Poor
2	-	Poor
3	Moderate	Poor
4	-	Poor
5	-	Poor
6	-	Poor
7	-	Moderate
8	-	Poor
9	-	Moderate
10	-	Moderate
11	-	Good
12	-	Moderate

Summary

Six fish species and sea trout (a separate 'variety' of trout) were recorded across the 12 sites surveyed on the Broadmeadow & Ward River rivers in 2017. Brown trout was the most abundant species captured followed by minnow. Four age classes of brown trout (0+, 1+, 2+ and 3+) were present. Flounder was recorded at site 6 due to its close proximity to the sea. Sea trout were recorded at Sites 4 and 12. In general, brown trout densities were much higher in the Ward River, than in the Broadmeadow River.

All sites surveyed on the Broadmeadow River and one site on the Ward River were assigned a fish ecological status of poor. Four sites on the Ward River achieved moderate status, while site 11 achieved good fish status.

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