CDSFB

Index of Electric-fishing Sites (2013-15)

This document has been compiled as an aid to future electric-fishing survey work on the Caithness rivers. Between 2013 and 2015, CDSFB electric-fished 26 sites, as below. The photographic records and some of the measurements obtained during the first survey occasion were used to ensure that repeat sites were exactly replicated.

In 2015, the documentation process was taken a stage further. In particular, site areas were determined under standard conditions to replace the less accurate and non-standard values derived at the times of survey in 2013 and 2014.

All the values given in what follows are regarded as definitive and, where appropriate, they supersede previous values from which they differ.

River	Site name	O.S.	Altitude	Length left	Area (m ²)	Appendix
		position	(m)	bank (m)		
Forss	Cnoc-glas		110	28.8	192.7	1
	Shurrery		89	13.4	89.8	2
	Lythmore		24	17.5	183.8	3
Thurso	Rumsdale		159	22.7	181.6	4
	Dalganachan		147	29.2	148.9	5
	Dalnagleton		124	34.0	265.2	6
	The Fanks		91	14.0	141.4	7
	Smerrary		86	*	*	8
	Tacher		80	33.3	130.5	9
	Dalemore		70	50.0	268.5	10
	Inshag		68	23.3	110.9	11
	Ноу		23	*	*	12
Wester	Barrock Mill		11	22.4	173.2	13
Wick	Acharole		56	29.0	105.3	14
	The Clow		36	28.0	160.0	15
	Sheriff's		33	22.1	170.2	16
	Bilbster		9	26.0	387.4	17
Dunbeath	Achnaclyth		120	12.3	129.2	18
	Culvid		97	16.7	215.4	19
Berriedale	Gobernuisgach		250	18.4	131.1	20
	Corrichoich		200	12.5	133.8	21
	Braemore		156	13.8	179.4	22
	Strathcoull		38	11.8	115.6	23
Langwell	Wag		188	23.3	212.0	24
	Aultibea		125	16.0	240.7	25
	Coille Braigh		93	12.0	171.3	26

• Variable depending on operational conditions

In October 2015, the physical characteristics of the stream channel at each site were documented when river conditions were such that the normal stream channel was fully

wetted. Measurements were made at regular intervals from the upper limit of each survey site down to (or just beyond) its lower limit. The sites at Hoy and Smerrary are omitted because they are main river sites and, although the locations are fixed, the area fished is variable. Site area must therefore be measured on each survey occasion.

Wetted width measurements were generally categorised as any undercut on the right bank, open water and any undercut on the left bank. In Addition, any dry gravel bar or bedrock features in the wider stream channel were measured on the right or left banks and any major island features were also surveyed in. For each measurement interval, wetted width was calculated as the sum of the width of any undercut on the right bank, the open water width and the width of any undercut on the left bank. The total wetted area for each site was calculated as the length of the survey section times the average wetted width.

The uppermost panel on each of the site-pages that follows shows channel width in schematic form. The uppermost limit of the stream channel on the right bank (looking downstream according to convention) is fixed as the zero datum point. As a result, the length of the right bank lies along the x-axis at the bottom of the figure; the limit of the left bank position is not constrained and it lies at the top of the figure.

The central panel on each site page shows **stream depth**, measured at the same intervals moving downstream from the top of the site. Where necessary, depth values were obtained at the side of rather than on top of large stones to reach the streambed itself. Values are shown for the midline of the wetted width and also near the stream margins at ca. 10% and 90% of the wetted width. In wider streams, depth measurements were also made at 30% and 70% of the wetted width in order to sample the full range of values. These latter values are not shown graphically in the interests of clarity.

In the third panel, all the stream depth values have been combined to illustrate the frequency distribution of values over all the survey site area. The overall median value is also shown.

Taken together, the wetted width and stream depth define the survey site on the day that the measurements were made. If the wetted area values need to be repeated or checked in future, the median depth value can be used to standardise comparisons. In addition, there are SEPA gauging stations in Caithness although only at Halkirk on the Thurso River and Tarroul on the Wick River. For these rivers, the relevant stage values may aid any future comparisons of wetted areas.

The photographs and measurements of site length, with extra information on some of the physical features (eg. islands or bars) shown in the panels, can be used to precisely replicate survey sites assuming they remain physically stable. To date, all the documented sites have remained unchanged from year to year.

1. <u>Cnoc-glas, Forss Water</u>







Cnoc-glas.









2. Shurrery, Forss Water







Shurrery.









3. Lythmore, Forss Water





Lythmore.









4. Rumsdale, River Thurso







Rumsdale.









5. Dalganachan, River Thurso







Dalganachan.









6. Dalnagleton, River Thurso







Dalnagleton









7. The Fanks, Thurso River.







The Fanks









8. Smerrary, River Thurso







9. Tacher, River Thurso







Tacher.









10. Dalemore, River Thurso.







Dalmore.









11. Inshag, Thurso River.



Inshag.

12. Hoy, River Thurso

13. Barrock Mill, Wester River

Barrock Mill.

14. Acharole

Acharole.

15. The <u>Clow, Wick River</u>

The Clow.

16. Sheriff's, Wick River

Sherriff's.

17. Bilbster, Wick River

Bilbster.

18. Achnaclyth, Dunbeath Water

Achnaclyth.

19. <u>Culvid, Dunbeath Water</u>

20. Gobernuisgach, Berriedale Water

Gobernuisgach.

0 H B 11 01 04 03 05 Berrieda 259 Corrichoich Corrichoich Domestead ver 477 Ccarn Mo 3 Out 5 509 Smean

Corrichoich.

22. Braemore, Berriedale Water

Braemore.

23. Strathcoull, Berriedale Water

Strathcoull.

24. Wag, Langwell Water

25. Aultibea, Langwell Water

Aultibea.

26. Coille Braich, Langwell Water

Coille Braigh.

