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**Paul Holme Strays Monitoring
Programme 2010: Benthic Invertebrate
Monitoring**

Report to Halcrow Group Ltd.

Institute of Estuarine and Coastal Studies
University of Hull

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Author(s): A. Franco & K. Mazik

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**Institute of Estuarine & Coastal Studies
(IECS)**

The University of Hull
Cottingham Road
Hull
HU6 7RX
UK

Tel: +44 (0)1482 464120
Fax: +44 (0)1482 464130

E-mail: iecs@hull.ac.uk

Web site: <http://www.hull.ac.uk/iecs>



THE UNIVERSITY OF HULL

Institute of Estuarine and Coastal Studies (IECS)

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APPENDIX 6. REPLICATE BIOMASS DATA (G / M²)

	1B1_10	1B2_10	1B3_10	1C1_10	1C2_10	1C3_10	2A1_10	2A2_10	2A3_10	2B1_10	2B2_10	2B3_10
Nemertea	0	0	0	0	0	0	0	0	0	0	0	0
Nematoda	0	0	0	0.01273	0.01273	0.01273	0.10186	0.01273	0.01273	0.26738	0.08913	0.01273
<i>Eteone flava/longa</i>	0	0	0	0	0	0	0	0	0	0.01273	0	0
<i>Hediste diversicolor</i>	0.01273	0	29.59009	16.18287	0.53476	4.45634	25.3884	16.80676	14.88417	0	0	0
<i>Pygospio elegans</i>	0	0	0	0	0	0	0	0	0.01273	0	0	0
<i>Streblospio shrubsolii</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Manayunkia aestuarina</i>	0	0	0	0.01273	0.01273	0	0.75121	0.17825	0.85307	0.12732	0.01273	0.0382
<i>Paranais litoralis</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Heterochaeta costata</i>	0	0	0	0	0.01273	0	0	0	0	0	0	0
<i>Tubificoides benedii</i>	0	0	0	0	0	0	0	0	0	0	0	0
Enchytraeidae	0.01273	0	0	0.01273	0.07639	0.01273	0.89127	0.12732	0.31831	0.40744	0.07639	0.01273
Copepoda	0	0	0	0	0	0	0	0	0	0.01273	0	0
Ostracoda	0	0	0	0	0	0	0	0	0	0	0	0
<i>Neomysis integer</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Carcinus maenas</i>	0	0.07639	0	0	0	0	0	0	0	0	0	0
<i>Corophium volutator</i>	0	0	0	0.15279	0	0	0	0	0	0	0	0
<i>Cyathura carinata</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Hydrobia ulvae</i>	1.96079	0.35651	0.52203	0.44563	1.64248	0.0382	3.1831	0	0.33104	0	0	0
Tellinoidea	0	0	0	0	0	0	0	0	0	0	0	0
<i>Macoma balthica</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Abra tenuis</i>	0	0	0	0	0	0	0	0	0	0	0	0
Acarina	0.01273	0	0	0	0.01273	0.53476	0	0	0	0.01273	0.01273	0.01273
Collembola	0	0.01273	0.67482	0	0.01273	0.01273	0.01273	0	0.01273	0.0382	0.17825	0.01273
Diptera larvae	0.63662	0.29285	0.01273	0.11459	0.59842	0.53476	0.36924	0.45837	0.06366	0.59842	0.40744	0.15279
TOTAL B	2.63561	0.73848	30.79966	16.93409	2.91572	5.60225	30.69781	17.58344	16.48845	1.47696	0.77668	0.24192

REPLICATE BIOMASS DATA (G / M²) (CONT.)

	2C1_10	2C2_10	2C3_10	2D1_10	2D2_10	2D3_10	2F1_10	2F2_10	2F3_10	3A1_10	3A2_10	3A3_10
Nemertea	0	0	0	0	0	0	0	0	0.11459	0	0	0
Nematoda	0.01273	0.01273	0.01273	0.01273	0.01273	0	0.01273	0.19099	0.25465	0.01273	0.01273	0.01273
<i>Eteone flava/longa</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Hediste diversicolor</i>	14.76958	21.03392	8.88721	0.11459	0	0	11.65014	5.4622	23.73319	18.34738	4.53273	15.57172
<i>Pygospio elegans</i>	0	0	0	0	0	0	0.26738	0.73848	0.08913	0	0	0
<i>Streblospio shrubsolii</i>	0	0	0	0.01273	0	0	0	0.01273	0	0	0	0
<i>Manayunkia aestuarina</i>	0.01273	0	0.01273	0	0.01273	0	0.02546	0.01273	0.01273	0.01273	0.01273	0.01273
<i>Paranais litoralis</i>	0	0	0	0	0	0	0	0.01273	0	0	0	0
<i>Heterochaeta costata</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Tubificoides benedii</i>	0	0	0	0.01273	0	0.01273	0	0	0	0	0	0
Enchytraeidae	0.01273	0.01273	0.01273	0	0.01273	0	6.328	3.64147	0.01273	0.07639	0.29285	0.05093
Copepoda	0	0	0	0	0.01273	0.01273	0.01273	0.01273	0	0.01273	0.01273	0
Ostracoda	0	0	0	0	0	0	0	0	0	0	0	0
<i>Neomysis integer</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Carcinus maenas</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Corophium volutator</i>	0	0	0	0.01273	0	0	0	0	0	0	0	0
<i>Cyathura carinata</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Hydrobia ulvae</i>	0	0	0.73848	0.05093	0	0	0.01273	0.01273	0.81487	0.48383	0	1.08225
Tellinoidea	0	0	0	0	0	0	0	0	0	0	0	0
<i>Macoma balthica</i>	0	0	0	0	0	0	15.16428	38.60462	58.14885	0	0	0
<i>Abra tenuis</i>	0	0	0	0	0	0	0	0	0	0	0	0
Acarina	0.01273	0	0.01273	0	0.01273	0	0	0	0	0.0382	0.01273	0
Collembola	0.01273	0	0.01273	0	0.01273	0	0.01273	0.25465	0.01273	0.15279	0.14006	0.01273
Diptera larvae	0.33104	0.22918	0.95493	0.01273	0	0.22918	0.58569	0.01273	1.27324	0.89127	0.01273	0.33104
TOTAL B	15.16428	21.28857	10.64428	0.22918	0.07639	0.25465	34.07189	48.96879	84.46671	20.02806	5.0293	17.07414

REPLICATE BIOMASS DATA (G / M²) (CONT.)

	4A1_10	4A2_10	4A3_10	4B1_10	4B2_10	4B3_10	5A1_10	5A2_10	5A3_10	5B1_10	5B2_10	5B3_10
Nemertea	0	0	0	0	0	0	0	0	0	0	0.01273	0
Nematoda	0	0.01273	0.01273	0.01273	0.01273	0.01273	0.01273	0	0.01273	0.01273	0.01273	0.01273
<i>Eteone flava/longa</i>	0	0	0	0.01273	0.01273	0.01273	0	0	0	0	0	0
<i>Hediste diversicolor</i>	1.8462	0.29285	7.00282	12.37589	21.98885	13.92924	1.47696	3.09397	17.69803	53.94716	60.93724	69.11144
<i>Pygospio elegans</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Streblospio shrubsolii</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Manayunkia aestuarina</i>	0	0.01273	0.01273	0.66208	0.44563	1.26051	0	0	0	0.62389	1.24777	0.72575
<i>Paranais litoralis</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Heterochaeta costata</i>	0	0.01273	0	0	0	0	0	0	0	0	0	0.01273
<i>Tubificoides benedii</i>	0	0	0	0	0	0	0	0	0	0	0	0
Enchytraeidae	0.01273	0.01273	0.02546	1.14592	0.76394	1.04406	0.01273	0	0.01273	0	0	0.01273
Copepoda	0	0	0	0	0	0	0	0	0	0	0	0
Ostracoda	0	0.01273	0	0	0	0	0	0	0	0.01273	0.01273	0.01273
<i>Neomysis integer</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Carcinus maenas</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Corophium volutator</i>	0	0	0	0.14006	0	0	0	0	0	0	0	0
<i>Cyathura carinata</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Hydrobia ulvae</i>	2.16451	6.53172	1.34963	0.17825	0.84034	1.03132	0.01273	0	0	0	0.01273	0.59842
Tellinoidea	0	0	0	0	0	0	0	0	0	0	0	0
<i>Macoma balthica</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Abra tenuis</i>	0	0	0	0	0	0	0	0	0	0	0	0
Acarina	0	0.01273	0.01273	0	0	0.01273	0	0	0	0	0	0
Collembola	0.01273	0.10186	0.21645	0.01273	0.01273	0.01273	0	0	0.01273	0	0	0.01273
Diptera larvae	0.01273	0.17825	0.29285	0.40744	0.48383	1.19685	0	0	0.17825	0.35651	0	0.01273
TOTAL B	4.0489	7.18107	8.92541	14.94783	24.56079	18.5129	1.51516	3.09397	17.91448	54.95302	62.23595	70.51201

REPLICATE BIOMASS DATA (G / M²) (CONT.)

	5C1_10	5C2_10	5C3_10	5D1_10	5D2_10	5D3_10	6A1_10	6A2_10	6A3_10	7A1_10	7A2_10	7A3_10
Nemertea	0	0	0.20372	0	0	0	0	0	0	0	0	0
Nematoda	0.01273	0.01273	0.01273	0.3947	0.38197	0.75121	0.01273	0.01273	0	0.01273	0.01273	0.01273
<i>Eteone flava/longa</i>	0.25465	0	0.11459	0	0.07639	0.11459	0	0	0	0	0	0.19099
<i>Hediste diversicolor</i>	56.03527	69.26423	73.18581	21.05938	26.10141	28.64789	2.11358	0.12732	0	37.81521	9.40924	25.97409
<i>Pygospio elegans</i>	0	0	0	0.42017	0.01273	0.15279	0	0	0	0	0	0
<i>Streblospio shrubsolii</i>	0.53476	0	0.4329	0.01273	0	0	0	0	0	0	0	0
<i>Manayunkia aestuarina</i>	0.54749	0.70028	0.15279	0.99313	0.02546	0.85307	0.01273	0	0.02546	0.01273	0	0.01273
<i>Paranais litoralis</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Heterochaeta costata</i>	0	0	0.01273	0	0	0	0	0	0	0	0	0
<i>Tubificoides benedii</i>	3.51414	3.08124	1.808	0.22918	0.01273	0	0	0	0	0	0	0
Enchytraeidae	0.01273	0.01273	0.01273	1.74434	1.55335	3.28496	0.01273	0	0	0.01273	0.16552	0.01273
Copepoda	0	0	0	0	0	0	0	0	0	0	0	0
Ostracoda	0	0	0	0	0	0	0	0	0	0	0	0
<i>Neomysis integer</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Carcinus maenas</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Corophium volutator</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Cyathura carinata</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Hydrobia ulvae</i>	0.78941	0.42017	5.99696	0.10186	0.82761	0.25465	0	0	0	0	0	0
Tellinoidea	0	0	0	0.49656	0	0	0	0	0	0	0	0
<i>Macoma balthica</i>	0	0	0	0.01273	0.26738	0.05093	0	0	0	0	0	0
<i>Abra tenuis</i>	0	0	1.18411	0	0	0	0	0	0	0	0	0
Acarina	0	0	0	0	0	0	0	0	0	0	0	0
Collembola	0	0	0	0	0.01273	0	0.01273	0.01273	0.01273	0.01273	0.01273	0
Diptera larvae	0	0	0	0.14006	0.57296	0.01273	0	0	0	0	0.30558	0.16552
TOTAL B	61.70119	73.49139	83.11708	25.60485	29.84473	34.12282	2.16451	0.15279	0.0382	37.86614	9.9058	26.36879

REPLICATE BIOMASS DATA (G / M²) (CONT.)

	7B1_10	7B2_10	7B3_10	7C1_10	7C2_10	7C3_10	7D1_10	7D2_10	7D3_10	8A1_10	8A2_10	8A3_10
Nemertea	0	0	0	0	0	0	0	0	0	0	0	0
Nematoda	0.01273	0.01273	0.01273	0.02546	0.28011	0.53476	0.05093	0.87854	0.0382	0.01273	0.01273	0.01273
<i>Eteone flava/longa</i>	0	0	0	0	0	0.84034	0	0	0	0	0	0
<i>Hediste diversicolor</i>	3.66693	0.08913	0	28.58423	19.73521	51.24789	7.1938	7.01555	0	51.20969	44.30874	30.07392
<i>Pygospio elegans</i>	0	0.02546	0	0	0	0	0	0	0	0	0.01273	0
<i>Streblospio shrubsolii</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Manayunkia aestuarina</i>	0.01273	0.01273	0.01273	0.02546	0.35651	0.21645	0.02546	0.21645	0.20372	0.05093	0.25465	0.02546
<i>Paranais litoralis</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Heterochaeta costata</i>	0	0	0	1.36237	0.8658	1.22231	0	0	0	0	0	0
<i>Tubificoides benedii</i>	0	0	0	0	0.01273	0	0	0	0	0.20372	0	0
Enchytraeidae	1.94806	1.18411	3.87065	1.20958	4.39268	5.69138	0.76394	1.45149	0.38197	0.01273	0.01273	0.01273
Copepoda	0	0	0	0	0	0.01273	0	0	0	0.01273	0.01273	0.01273
Ostracoda	0	0	0	0	0	0	0	0	0	0	0	0
<i>Neomysis integer</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Carcinus maenas</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Corophium volutator</i>	0	0.01273	0	0	0	0	0	0	0.01273	0	0	0
<i>Cyathura carinata</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Hydrobia ulvae</i>	0	0.01273	0	0.82761	0.01273	1.18411	0	2.10085	0.38197	0.904	0.5093	0
Tellinoidea	0	0	0	0	0	0	0	0	0	0	0	0
<i>Macoma balthica</i>	0	0	0	0	0	0	0	0	0	0	0.4329	0
<i>Abra tenuis</i>	0	0	0	0	0	0	0	0	0	0	0	0
Acarina	0.01273	0.02546	0	0	0	0	0	0	0	0	0	0
Collembola	0.02546	0.02546	0.02546	0.01273	0	0.01273	0	0.01273	0.01273	0	0.01273	0
Diptera larvae	0.01273	0.19099	0.21645	0.48383	0.33104	0.73848	0.35651	0.16552	0.05093	0.70028	0.07639	0.22918
TOTAL B	5.69138	1.59155	4.13803	32.53127	25.98682	61.70119	8.39065	11.84113	1.08225	53.10682	45.64564	30.36676

REPLICATE BIOMASS DATA (G / M²) (CONT.)

	9A1_10	9A2_10	9A3_10	10A1_10	10A2_10	10A3_10
Nemertea	0	0	0	0	0	0
Nematoda	0.01273	0.01273	0.01273	0.01273	0.02546	0.01273
<i>Eteone flava/longa</i>	0	0.56023	0	0.49656	0.92946	1.10772
<i>Hediste diversicolor</i>	45.91302	19.70975	37.56057	21.56868	23.0329	17.40518
<i>Pygospio elegans</i>	0	0	0.01273	0.05093	0.28011	0.84034
<i>Streblospio shrubsolii</i>	0	0	0	0.01273	0.06366	0.01273
<i>Manayunkia aestuarina</i>	0.02546	0.01273	0.02546	0.02546	0.07639	0.01273
<i>Paranais litoralis</i>	0.05093	0	0	0	0	0
<i>Heterochaeta costata</i>	0	0	0	0	0	0
<i>Tubificoides benedii</i>	0	0	0	0.76394	1.22231	2.50828
Enchytraeidae	0.01273	0.01273	0.01273	0.01273	0.01273	0.01273
Copepoda	0	0	0	0	0.01273	0
Ostracoda	0	0	0	0	0	0
<i>Neomysis integer</i>	0	0	0.22918	0	0	0
<i>Carcinus maenas</i>	0	0	0	0	0	0
<i>Corophium volutator</i>	0	0	0	0	0	0
<i>Cyathura carinata</i>	0	0	0	0	0	0.12732
<i>Hydrobia ulvae</i>	1.01859	0.01273	0	1.8462	3.03031	1.43876
Tellinoidea	0	0	0	0.01273	0	0.01273
<i>Macoma balthica</i>	0.57296	0	0	1.99899	2.13904	4.53273
<i>Abra tenuis</i>	2.33003	0	1.09499	15.04969	49.04519	42.51347
Acarina	0	0	0	0	0	0
Collembola	0	0.01273	0	0.01273	0	0
Diptera larvae	0.40744	0	0	0	0.38197	0.24192
TOTAL B	50.34389	20.33364	38.9484	41.86412	80.25229	70.77939