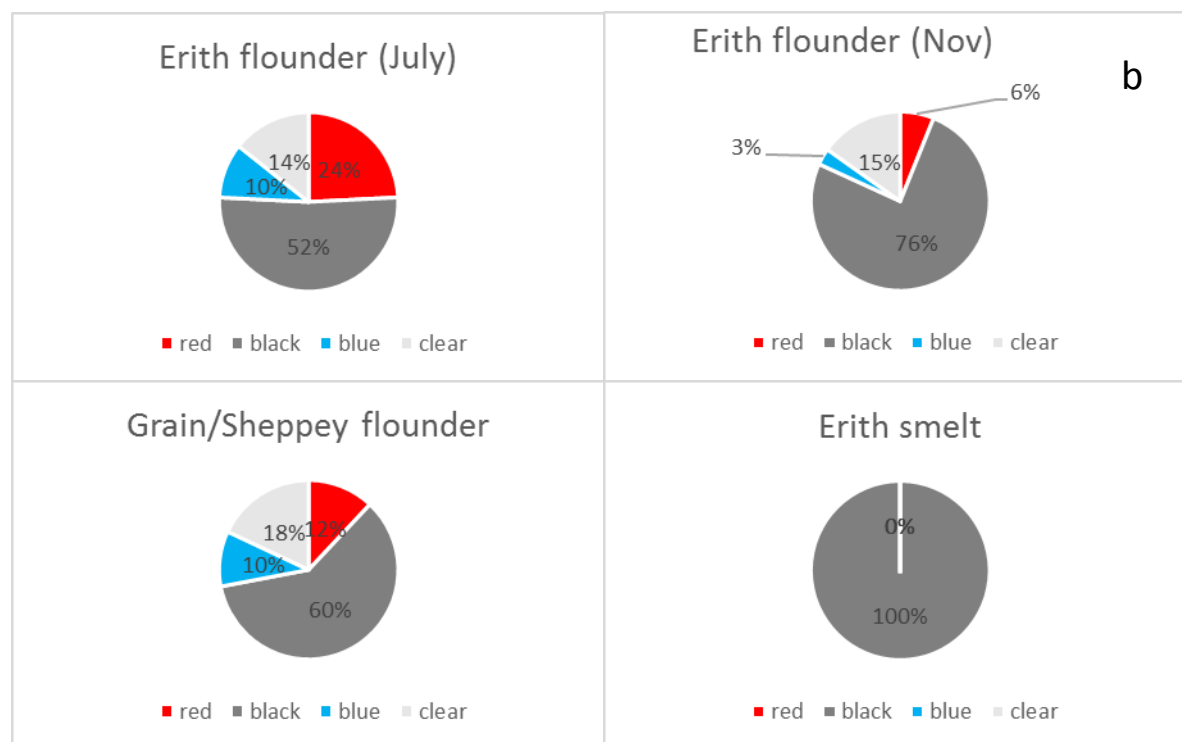
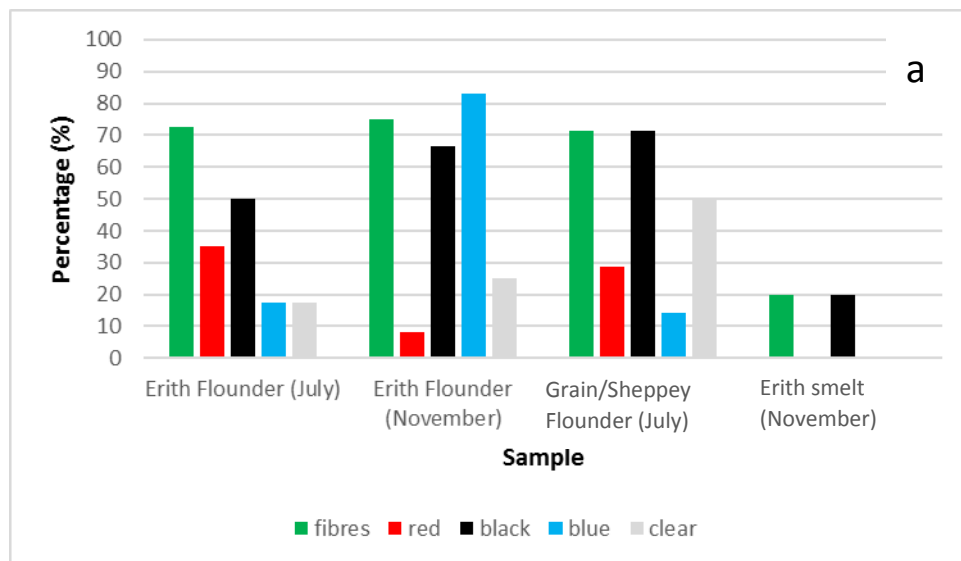
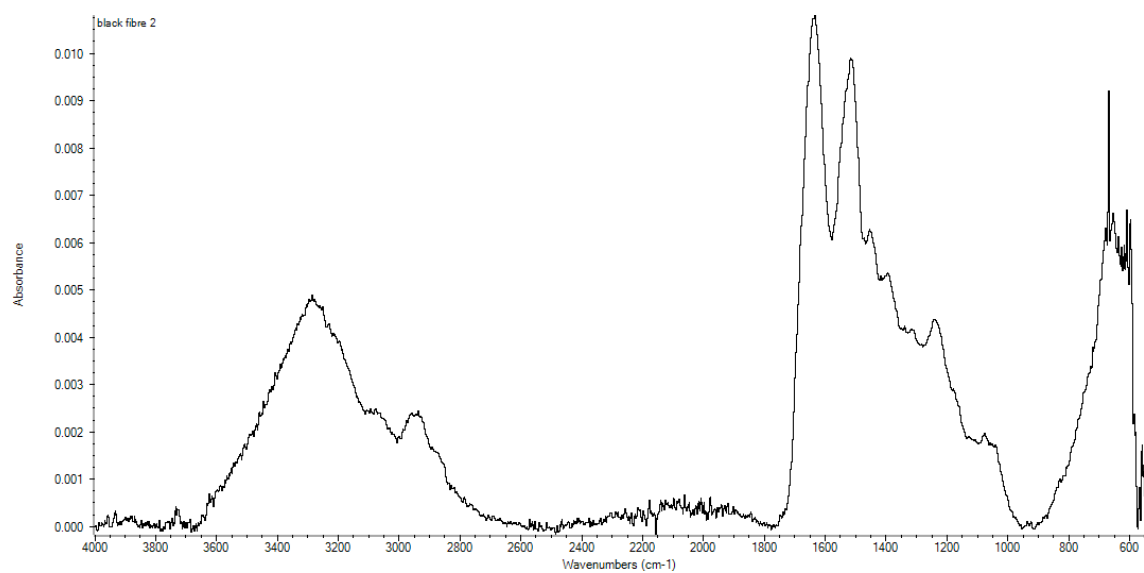


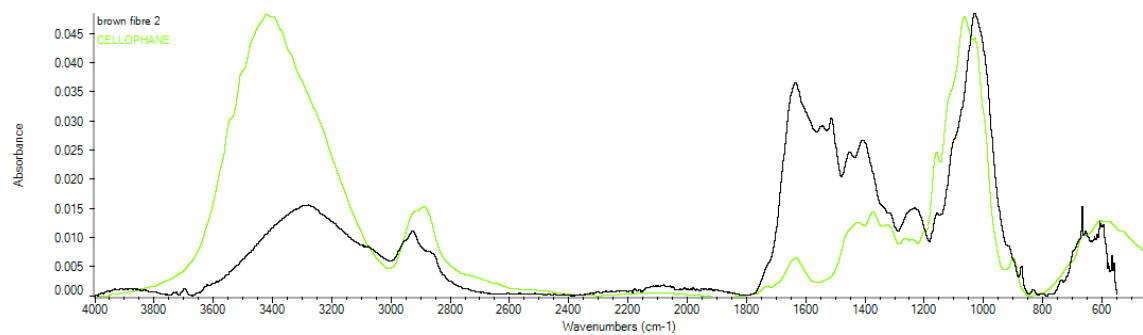
**Fig. 1.** The sampling sites used during the present study; E = Erith, S = Isle of Grain/Sheppey.



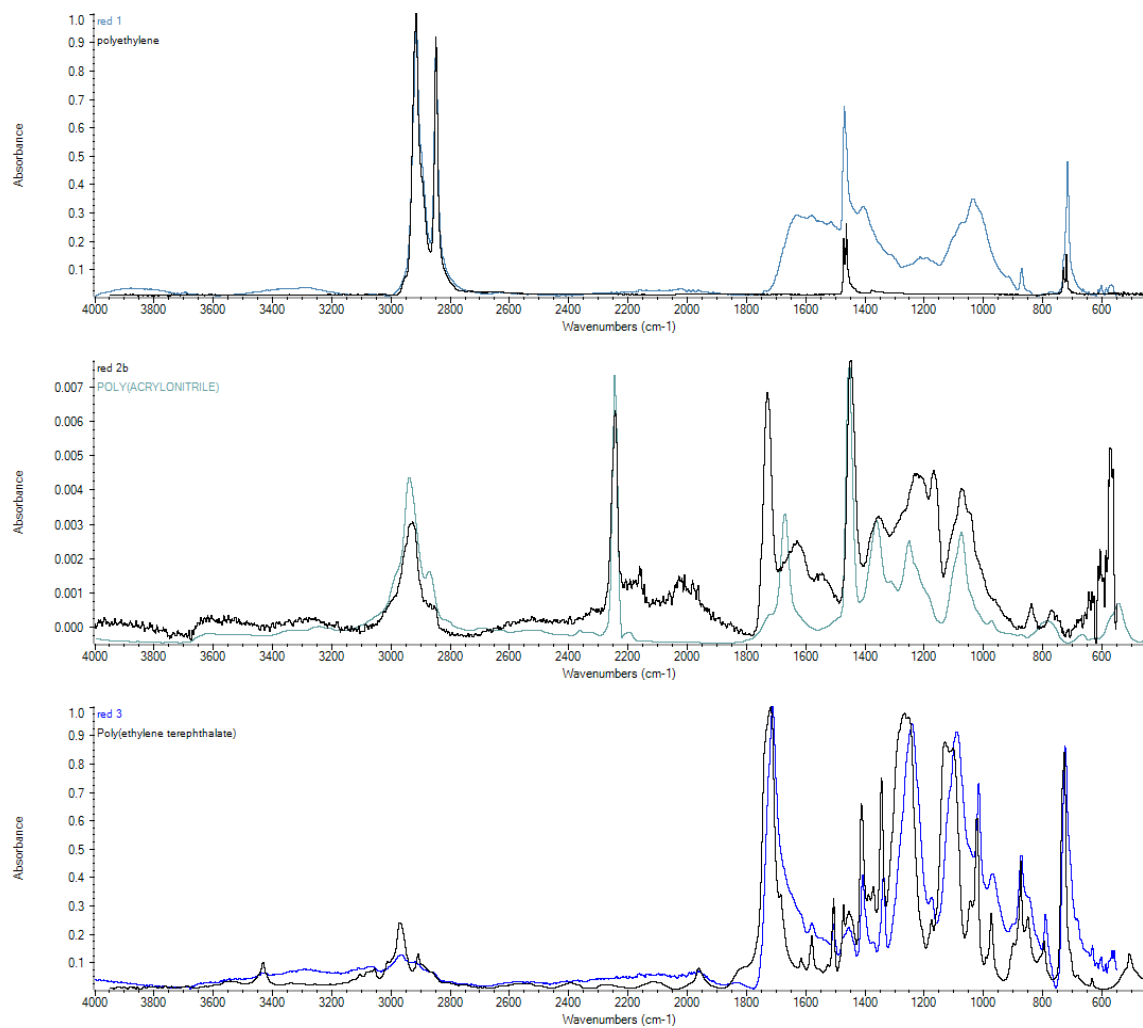
**Fig.2.** (a) *Percentage of fish* - The first bar (green) represents the percentage of the sampled fish that had one or more plastic fibres in each sample. The subsequent bars (red, black, blue, clear) show the percentage of the sampled digestive tracts at each site which contained the different colour fibres. Some fish ingested several different coloured fibres and thus the sums of the bars does not equate to 100%. (b) *Percentage of fibres* – the percentage of fibres that were red, black, blue and clear in each sample.



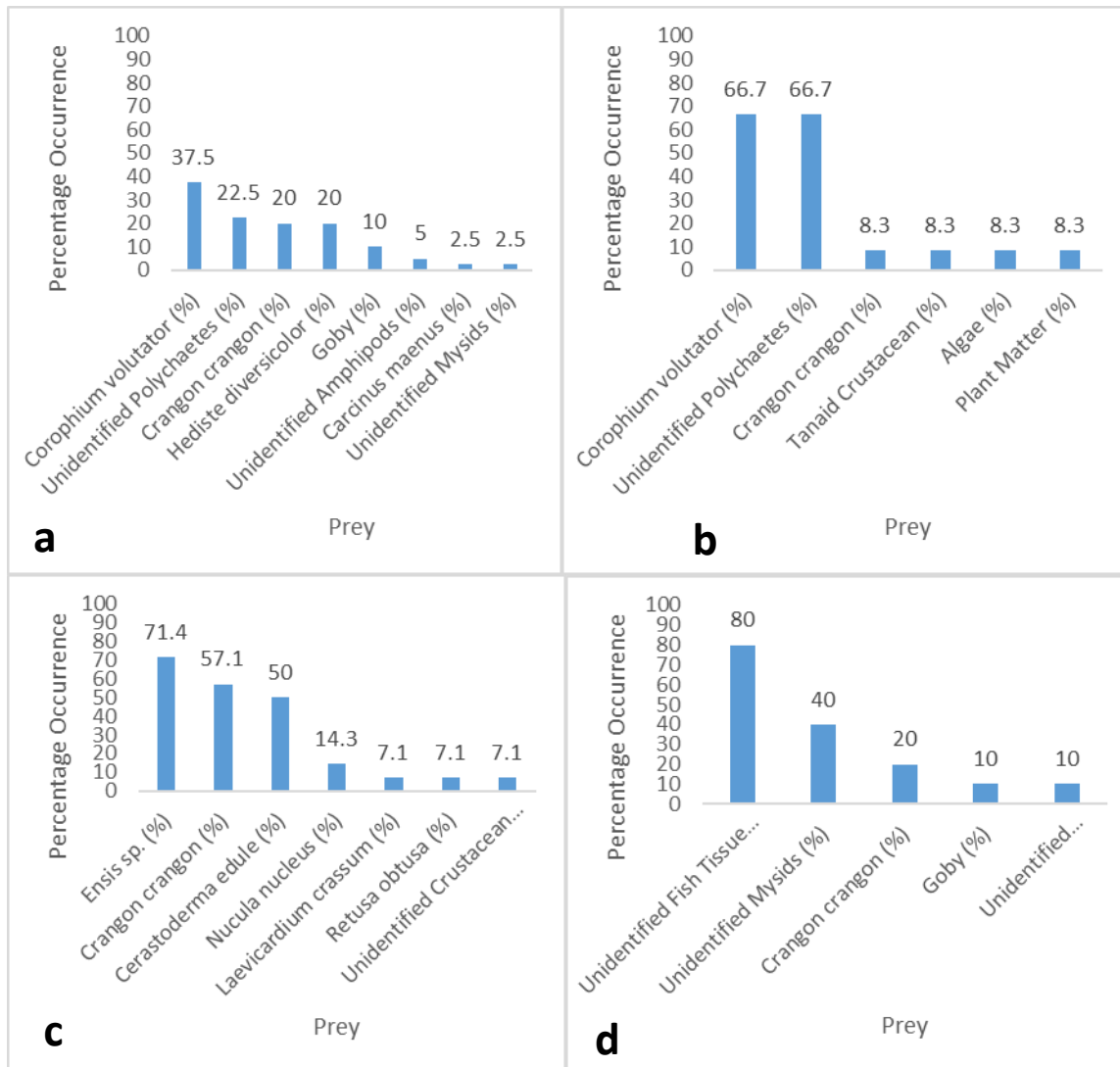
**Fig. 3.** Absorbance spectrum from collated sample of black fibres generated through FT-IR. All black samples, bar two, produced identical spectra. The carbonyl-region peaks identify the fibres as a polyamide (secondary amide).



**Fig. 4.** FT-IR absorbance spectra for brown fibres compared to cellulose, which has a similar structure. Brown fibres are thus disregarded as organic because they are likely to be plant debris.



**Fig. 5.** FT-IR absorption spectra for a collective of red fibres. (a) has sharp C-H bond peaks that stretch and vibrate resembling polyethylene (polythene), (b) is poly(acrylonitrile), with a clear carbon-nitrogen triple bond just above  $2200\text{cm}^{-1}$ , a peak which are present in library spectra, (c) is polyester with its ester linkage expressed through a carbonyl peak above  $1700\text{cm}^{-1}$ .



**Fig. 6.** European flounder: (a) diet from Erith caught in July, (b) Diet from Erith caught in November, (c) diet from Isle of Grain/Sheppey. European smelt (d) diet from Erith.