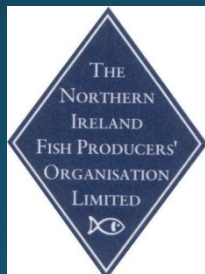


Northern Ireland Gear Trials Project 2017 - 2019

Light technology & gear selectivity trials

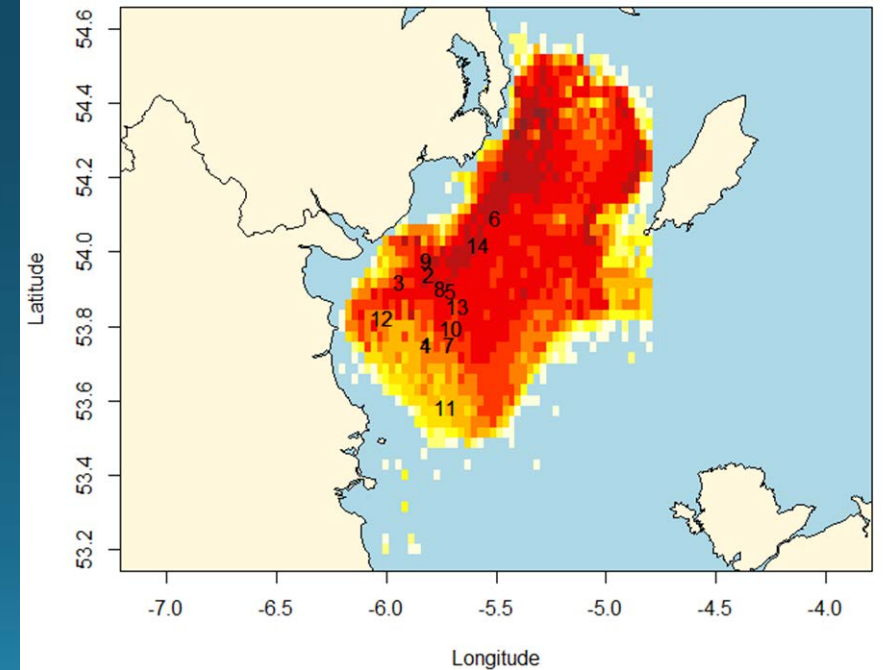


- Lights used and technical information
- Sea trials using light technology in 2017
- Results of light trials
- Non light gear development in 2017
- Upcoming gear trials and future considerations

- Lindgren – Pitman Electrolume
- 2 AA Lithium Batteries
- 500hrs life
- Pressure tested
- Pressure Activated
- Around £50.00/unit

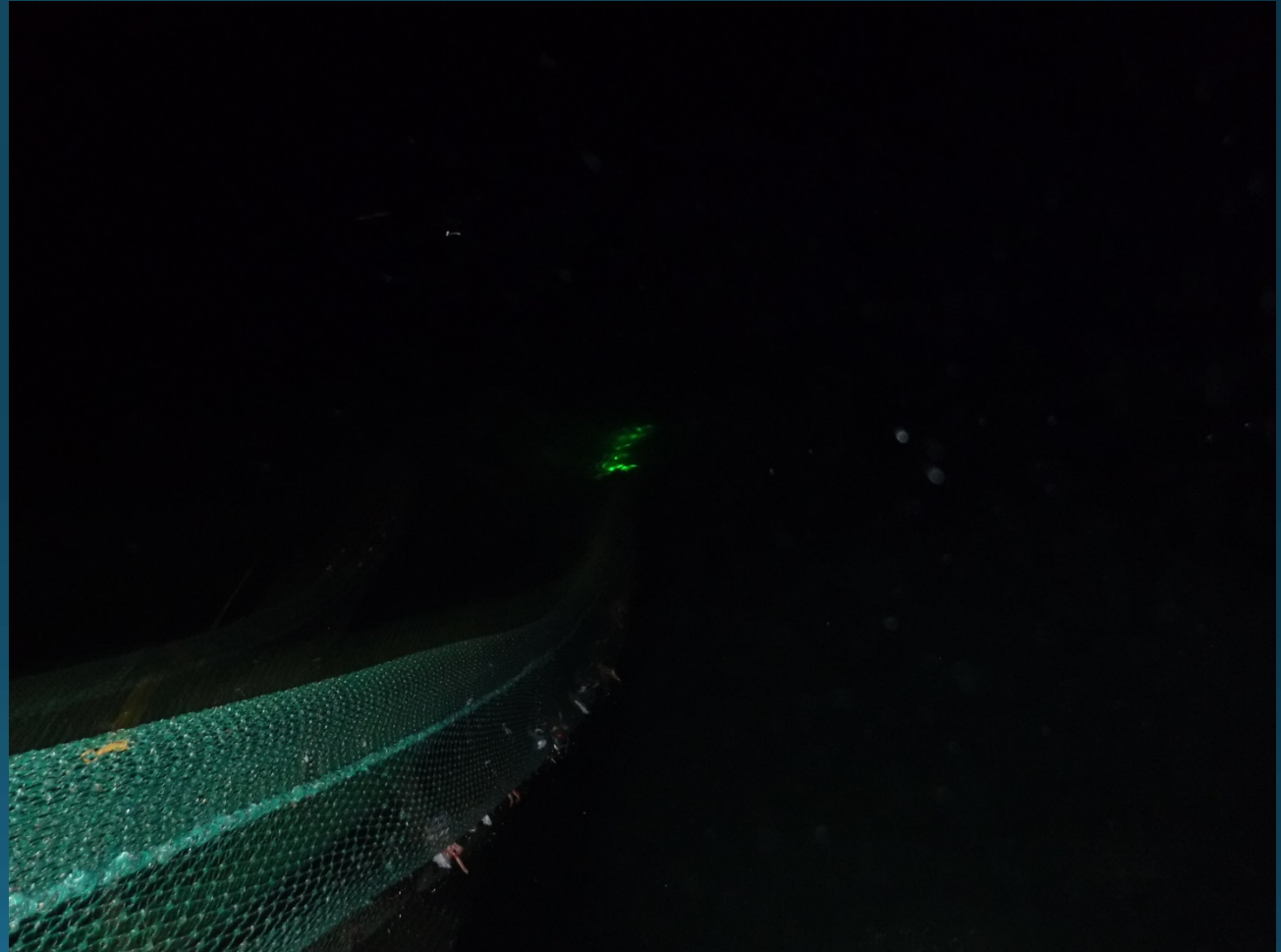


- 5 Day trial at sea – November 2017
- Area VIIa, FU15
- 14 parallel tows of experimental gear against control gear
- Experimental gear fitted with 15 lights on square mesh panel (SMP).
- Control gear fitted with 15 blanked lights
- 3 colours used – white, blue, green
- 2 observers to record data



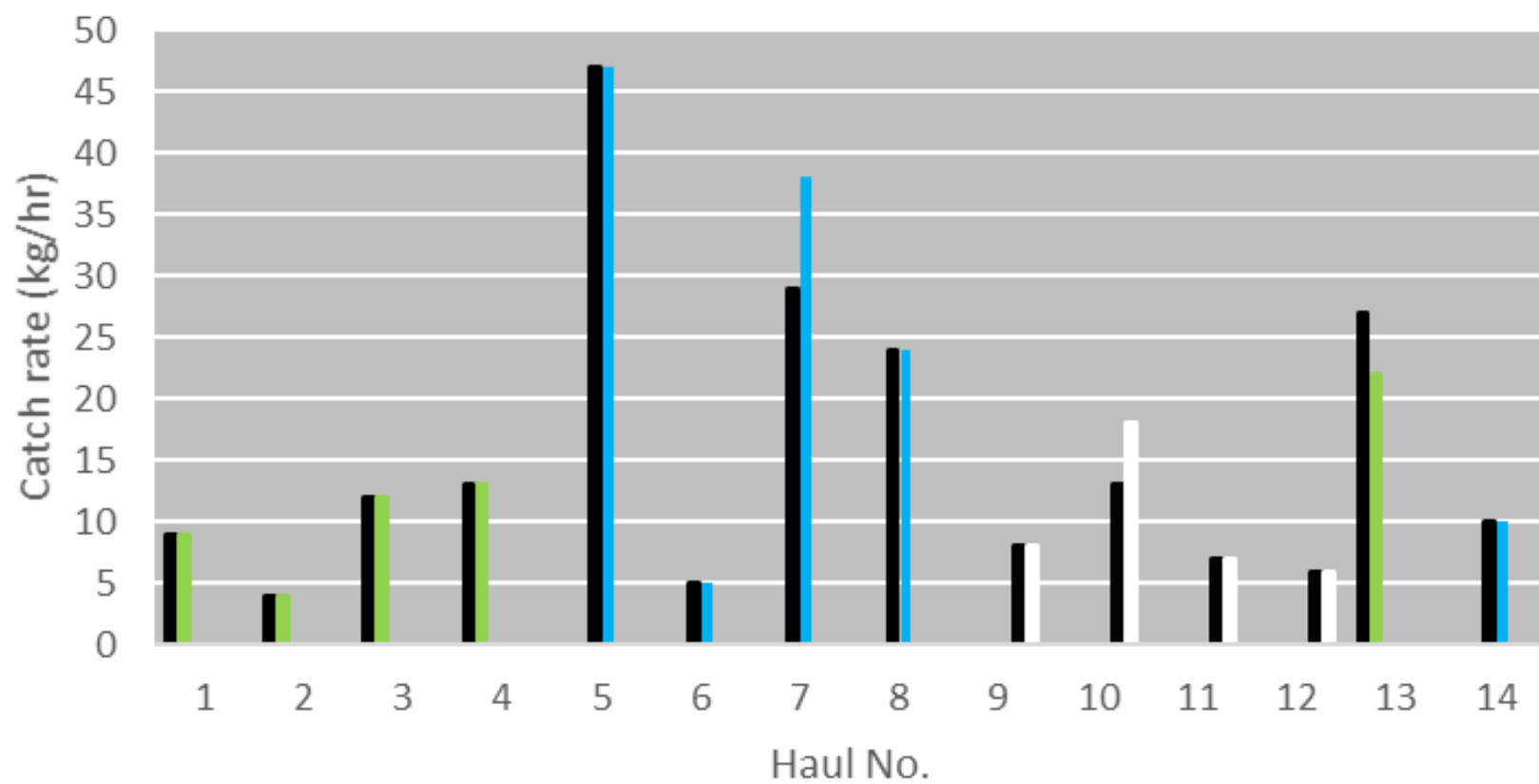


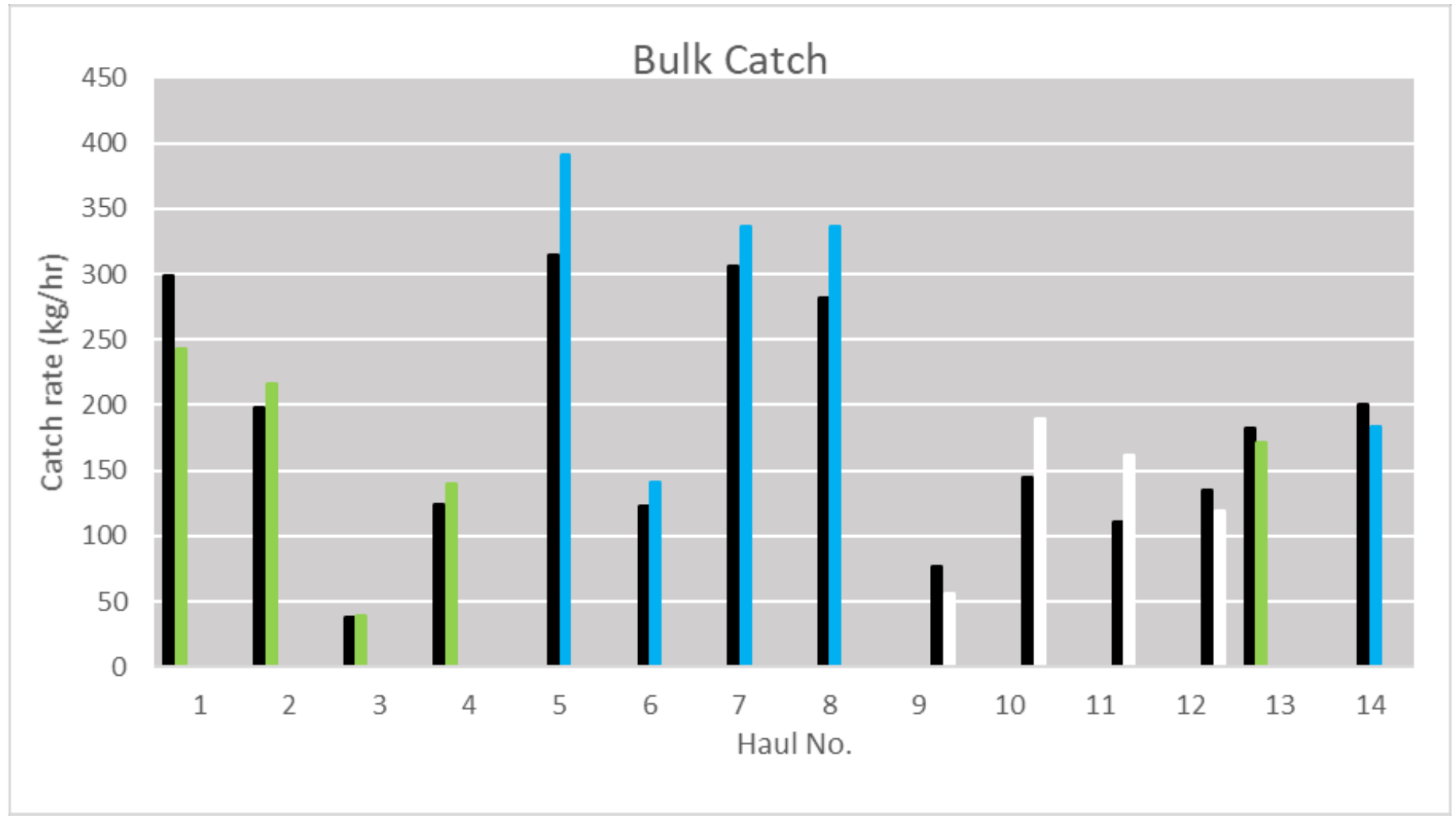
Lights attached to SMP



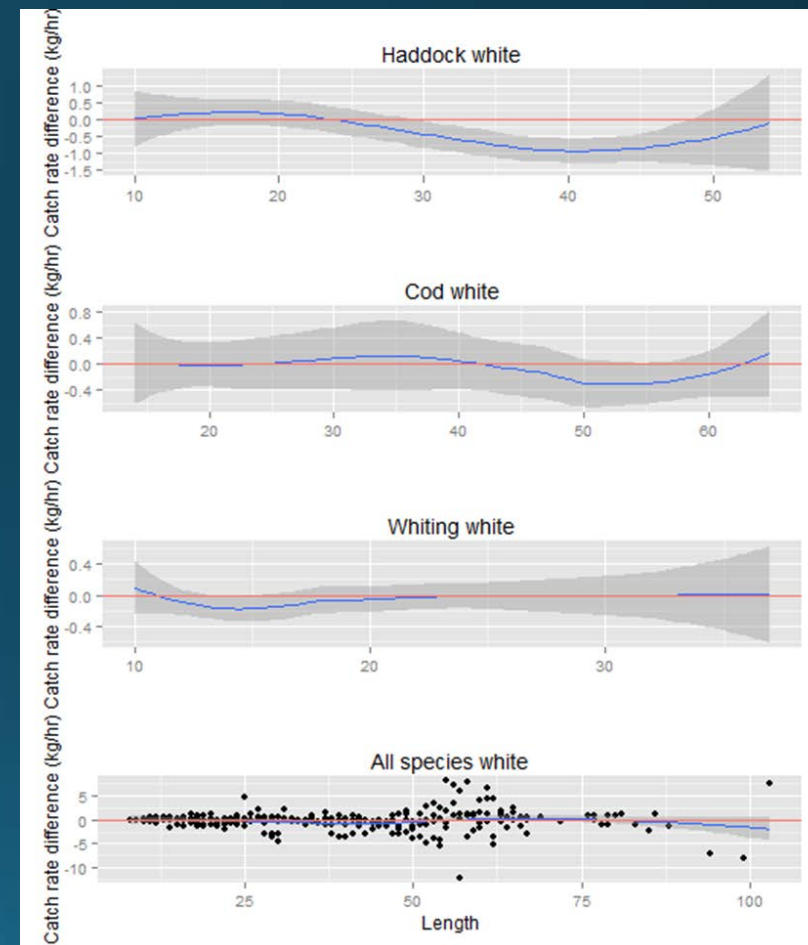
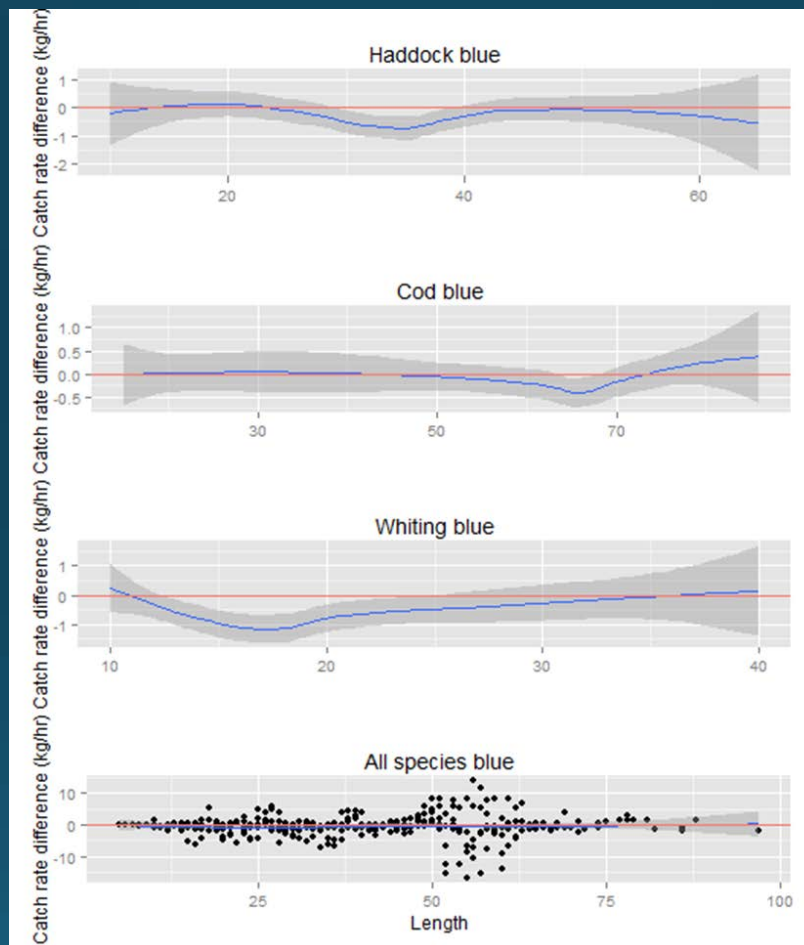
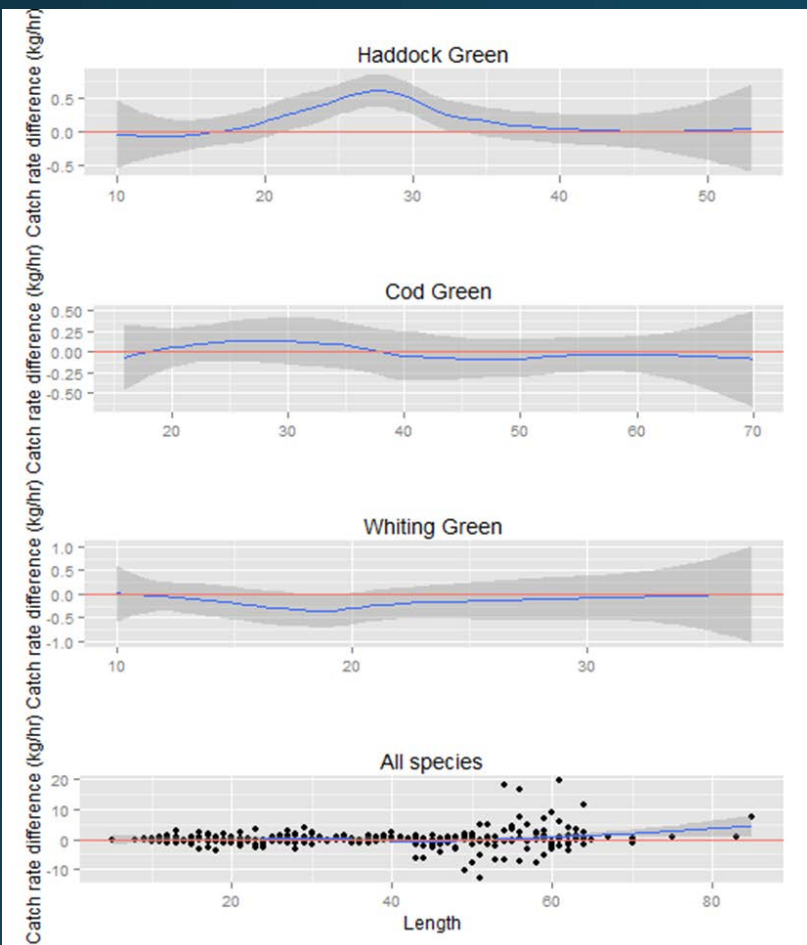
Green lights visible from stern of boat

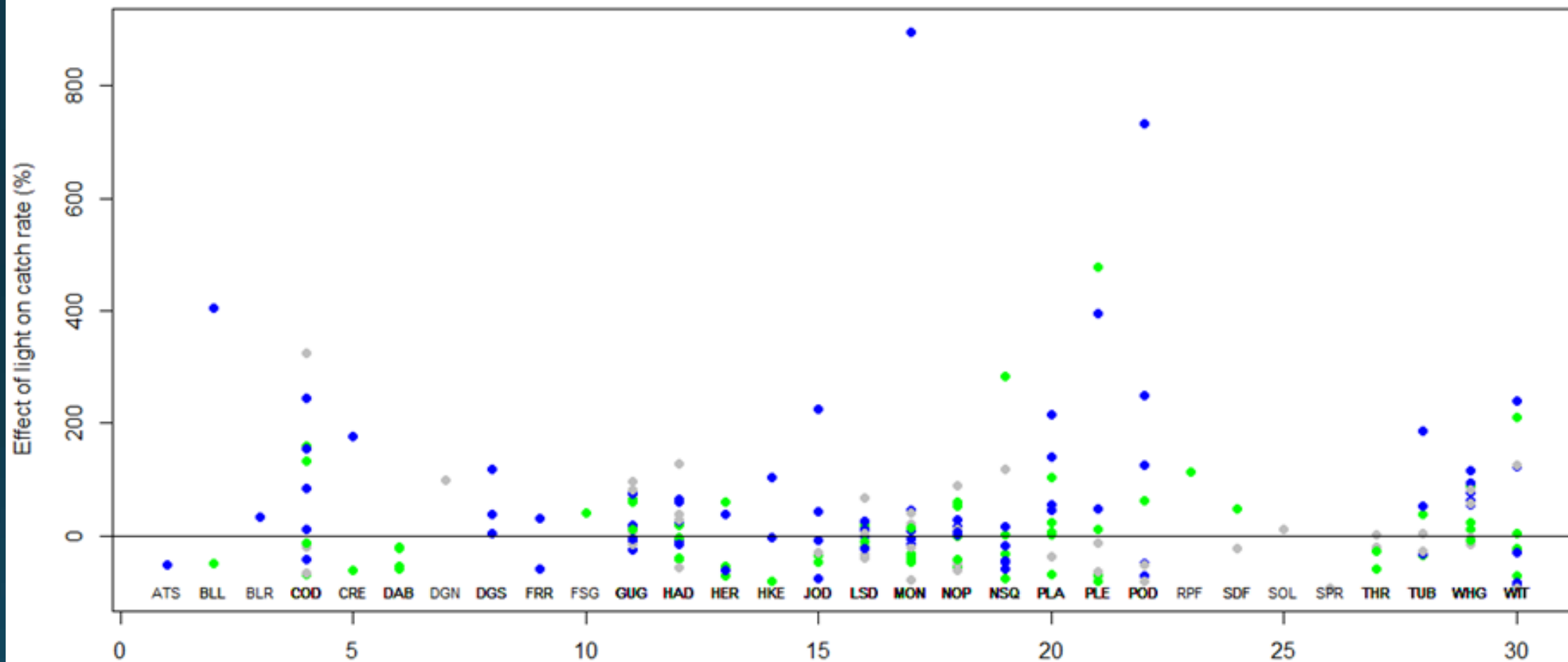
Nephrops Catch





Catch rate difference

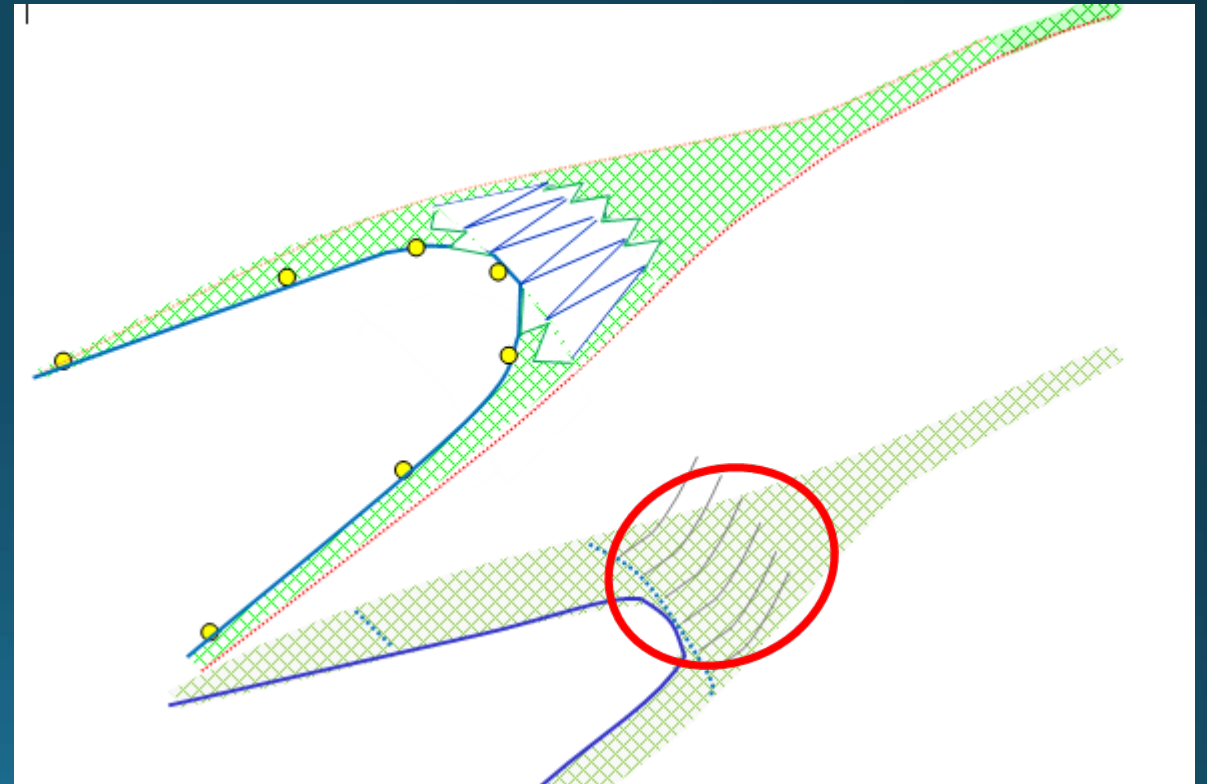
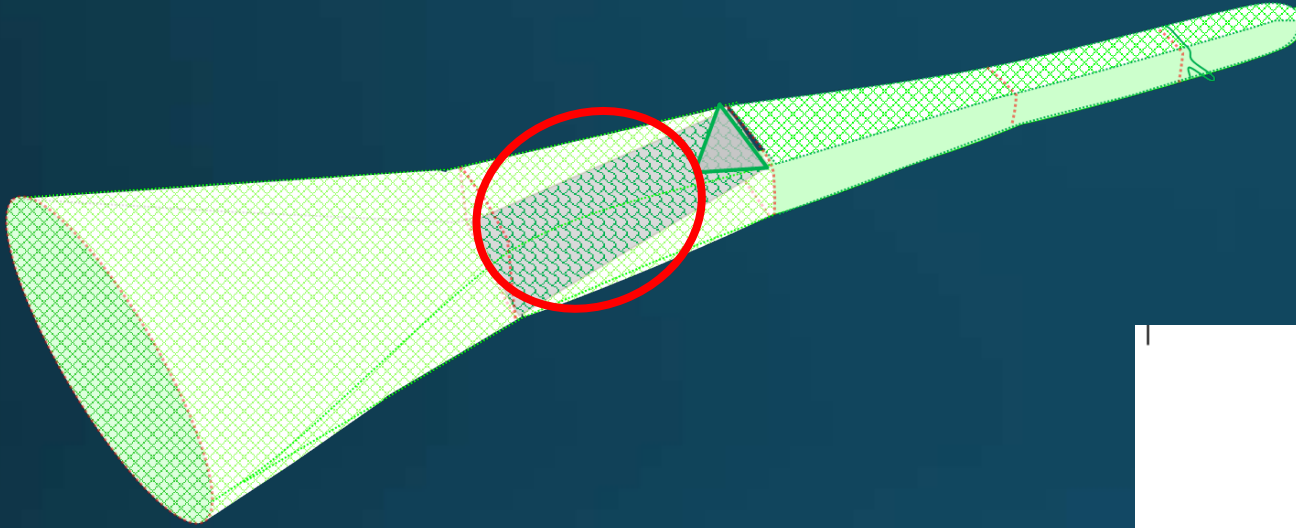




Summary of the light data collected so far...

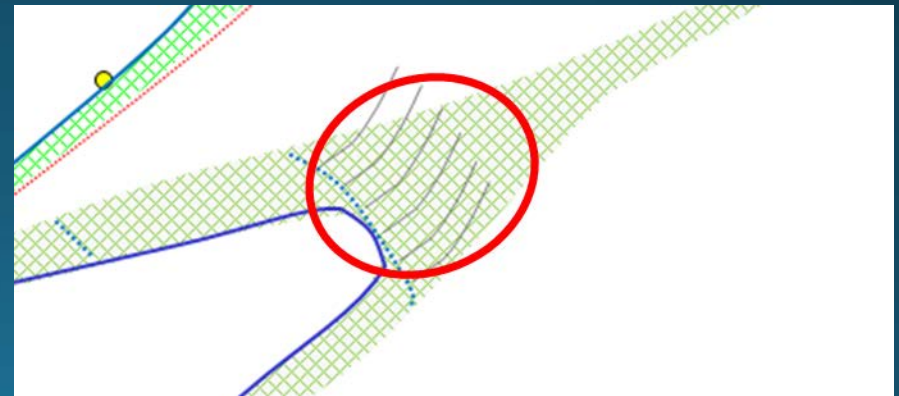
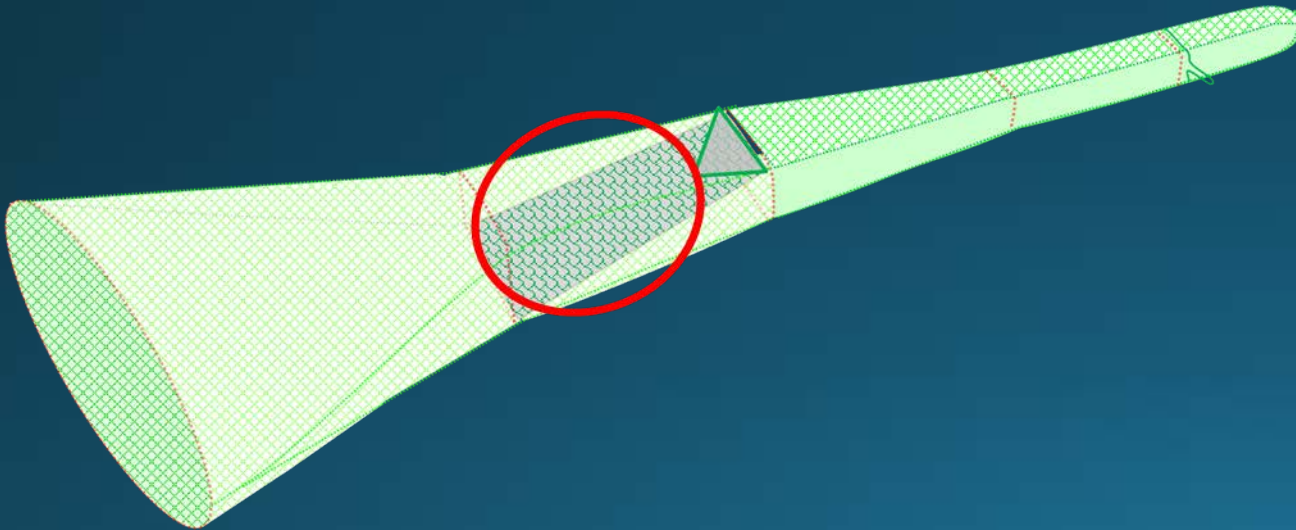
- Lights placed on gear may produce a behavioural effect in fish caught in the trawl
- Overall, trawls fitted with lights of all three colours trialled appeared to retain more fish
- This was most noticeable for whiting and in particular, small whiting
- The lights produced a deterring effect when fish encountered the SMP
- A location on the gear other than the SMP should be tried

2 non – light selective devices trialled
during August 2017



Next trials taking place by end of March 2018

- Lights fitted to inclined net grid/ leader lines
- Results reviewed by SG and future direction decided



Thank you for listening

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