title: DFO Multispecies Survey Trip Report subtitle: Newfoundland and Labrador Region author: "Science Branch" output: pdf_document # output: html_document # End of options to set knit: bookdown::render_book site: bookdown::bookdown_site link-citations: true bibliography: bib/refs.bib csl: csl/csas.csl lot: true lof: true

{r load-libraries, cache=FALSE} # # add other packages here: #
library(csasdown) #

TRIP SUMMARY

Vessel: Alfred Needler | Trip number:

Sailed from: | Returned to: Start Date: | End Date: Scientific Staff: (SIC),

Area of Operation: 2J, 2H fishing in depths to a maximum of 1334 m.

Purpose: To determine the distribution and abundance of various groundfish and shellfish species with respect to position, depth and temperature and to collect biological samples.

Fishing Methods: Sets of 15-minute duration towing at 3.0 knots using the Campellen 1800 bottom trawl with a small-mesh liner (12 mm) in the cod-end. SCANMAR acoustic sensors were mounted on the trawl for determination of bottom contact and net configuration during tow.

Time Lost:

categories	time
Mechanical Issues	3
Weather	5
Other	19

A total of 27 hours were lost due to a combination of weather, mecahanical issues and other causes.

NAFO	type	N
2H	successful	18
2H	unsuccessful	2
2J	successful	36
2J	unsuccessful	3

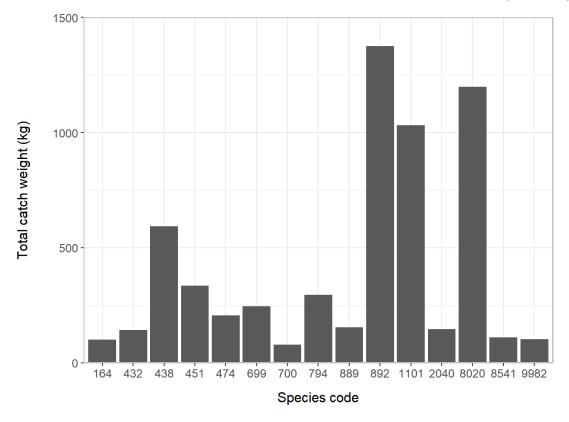
A total of 54 successful sets and 5 unsuccessful sets were completed between depths of 129 m and 1334 m.

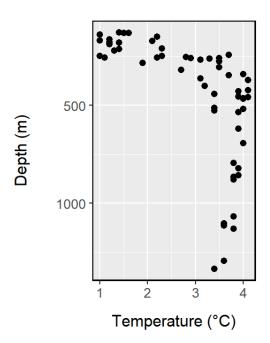
Catch Summary

This trip completed 35 sets in NAFO divisions 2J, 2H. Total catch was 6961kg, with 167 taxa recorded. Fishing occurred from 129m to 1334m.

167 taxa were represented in the catch, with a total catch weight of $6961.37 \rm{kg}$. GREENLAND HALIBUT and SHRIMP NATA. were the most prevalent species, accounting for 19.8% and 17.2% of the total catch by weight, respectively. Figure @ref{catchsummary} summarizes the most commonly caught taxa from this trip.

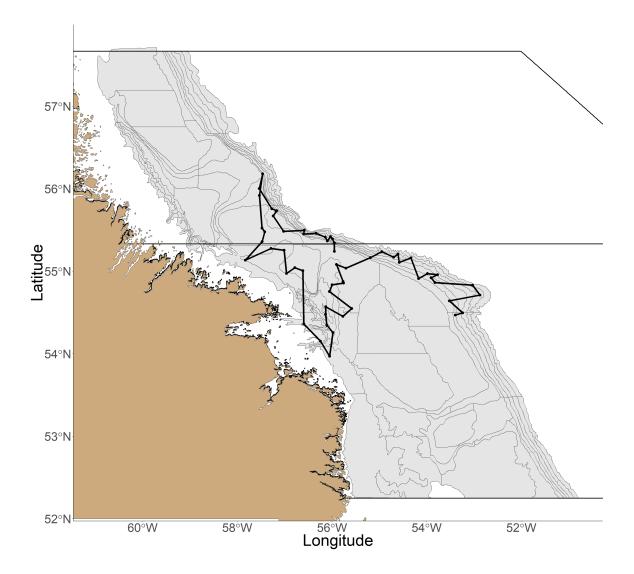
Summarized near bottom temperature from a net mounted CTD is shown in Figure @ref{temp.plot}.





This report has been prepared by (SIC).

SURVEY TRACK



A plot of the survey track is presented in Figure @??fig:makeamap).