Trident EFP Application

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October 2024 NPFMC – B Reports
3 October 2024

Exempted Fishing Permit (EFP)

- Exemption is requested to regulation 14 (vii) of § 679.2 stating that the pelagic trawl *"Has no more than one fishing line and one footrope for a total of no more than two weighted lines on the bottom of the trawl between the wing tip and the fishing circle*" (Title 50/ Chapter VI/ Part 679/ Subpart A; eCFR :: 50 CFR 679.2 -- Definitions.).

- This exemption will allow for the continued testing of novel footrope design concepts that are anticipated **to minimize seafloor contact by the gear when targeting pollock that are on or near the seafloor, while maintaining catch efficiency.**

- January 1, 2025 – December 31, 2027 (3 calendar years)
- No additional catch allowances (PSC or target)
- No additional impacts expected (should be reduced)
- No changes to fishing locations
- Open to all vessels in the fishery (includes 5 vessels from the pilot project)
- Annual reports provided

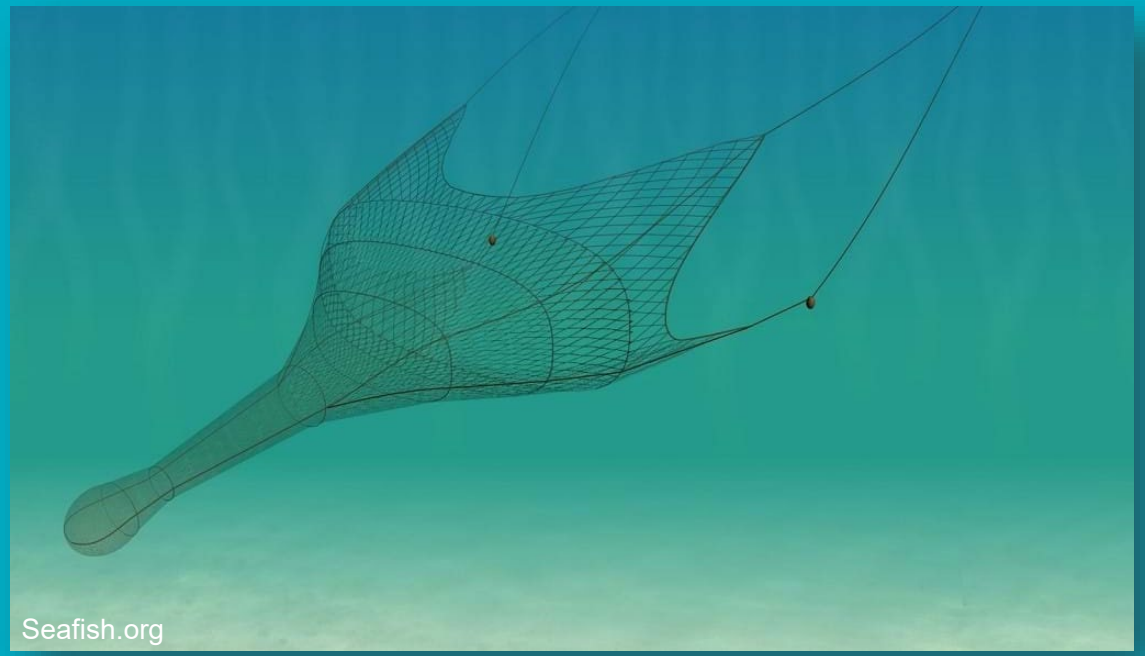
Terms and Background

- Pelagic trawl
- Footrope
- Seafloor (bottom) contact
- Bottom contact sensors

EFP Application

- Pilot project
- EFP
- Next steps

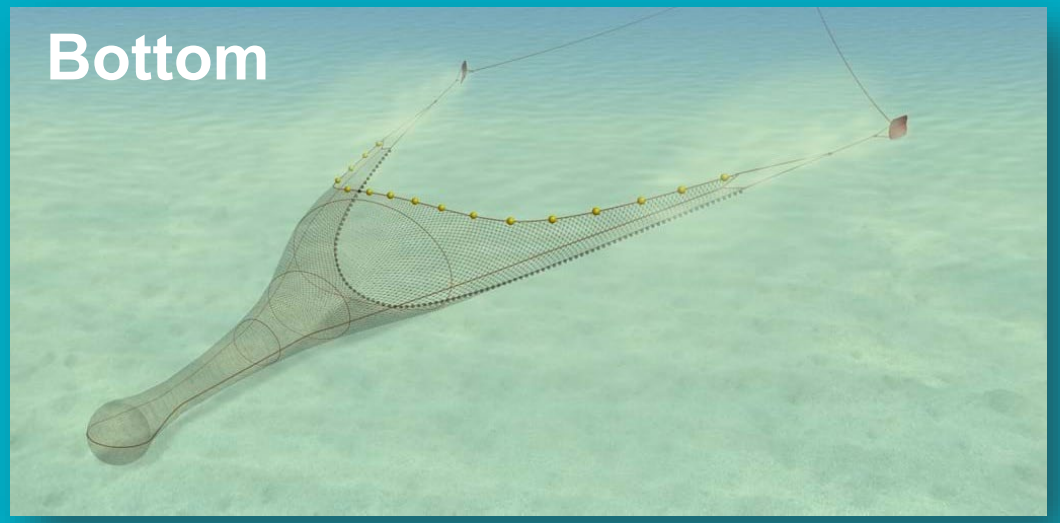
Pollock Fishery Pelagic Trawl

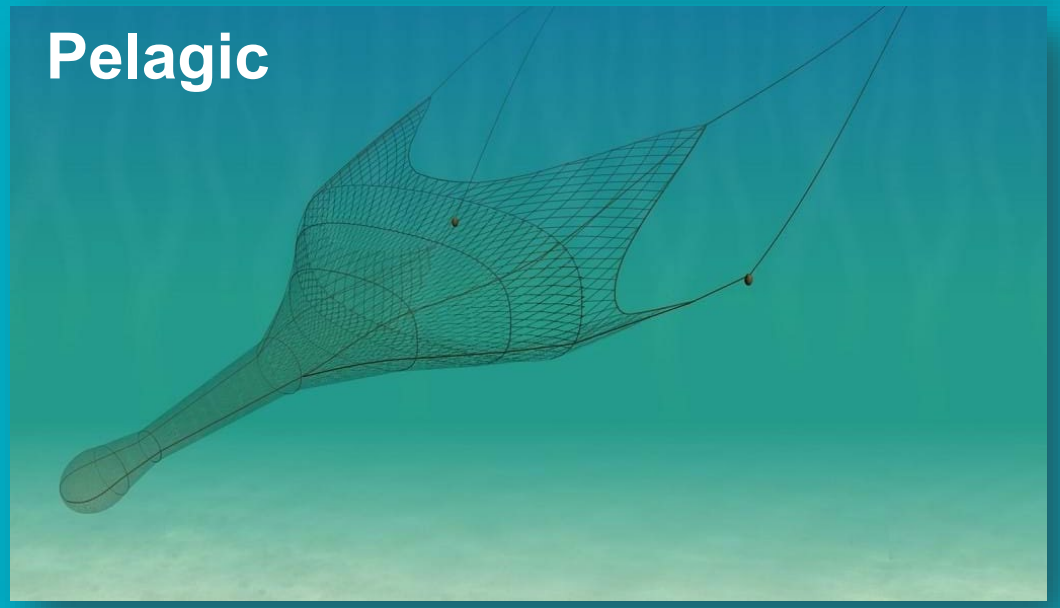


What is a pelagic/ mid-water trawl?

- Net suspended in the water column, using spreading forces and weight to create a large ‘mouth’ opening
- Has the ability to move up and down within the water column to target fish

Pollock Fishery Pelagic Trawl



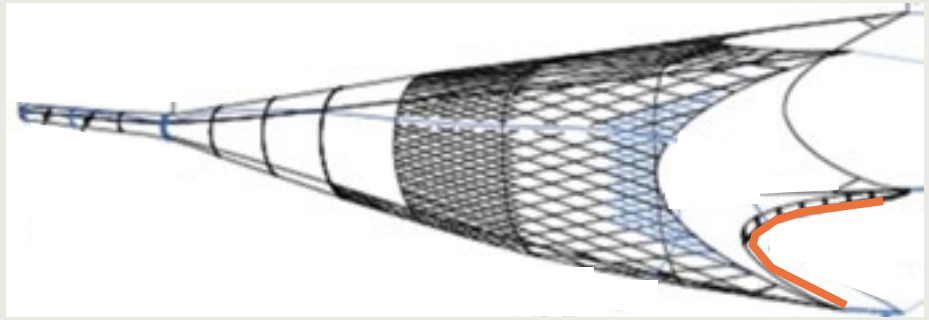


How does it differ from a bottom/ demersal trawl?

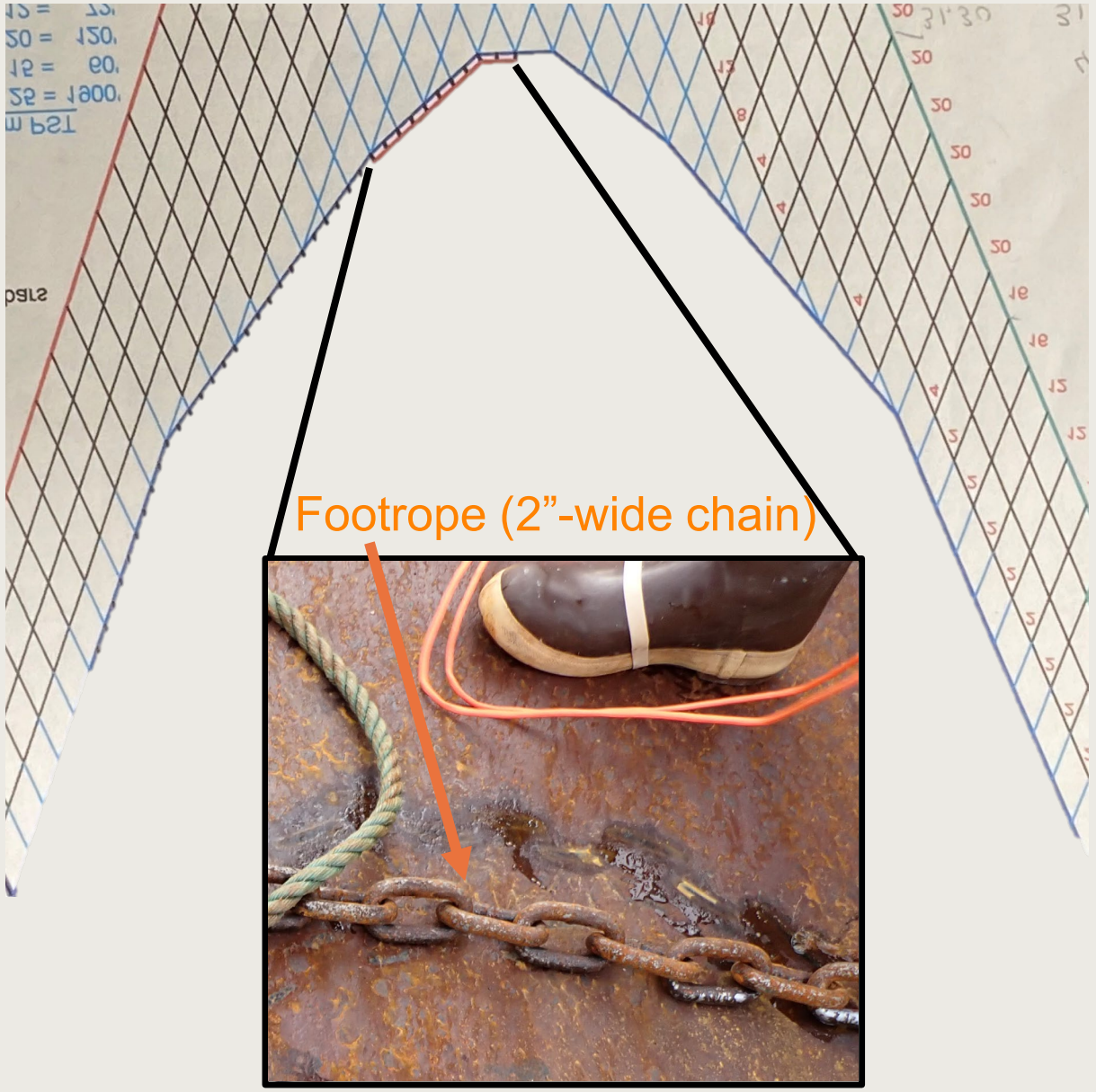
- Bottom trawls can only catch animals that live on the bottom or are typically near the bottom
  - The footrope is designed to be on bottom, with attachments to traverse rocks, etc.

- Pelagic trawls can target fish that are found anywhere in the water column; it is “aimed trawling” using a net sounder
  - The footrope is there to provide weight to help open the net

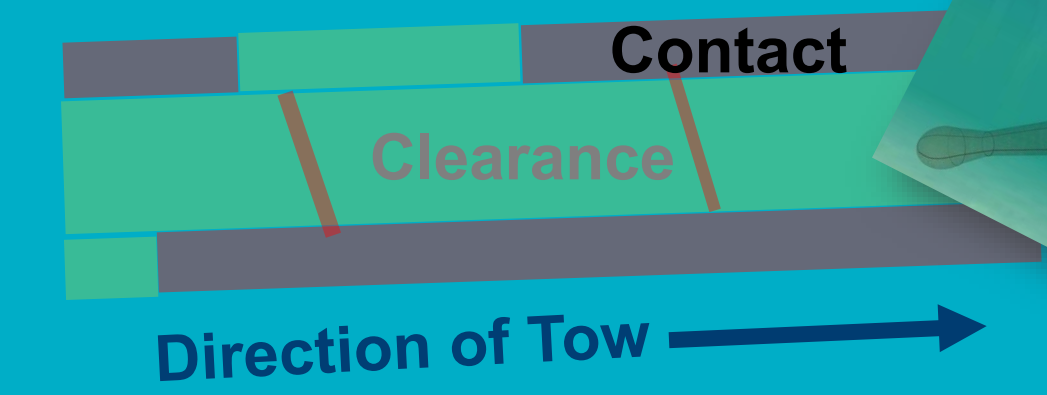
Pelagic Trawl Footrope

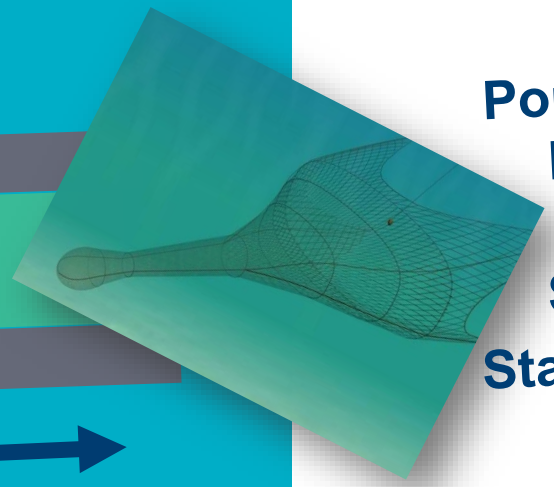


Footrope

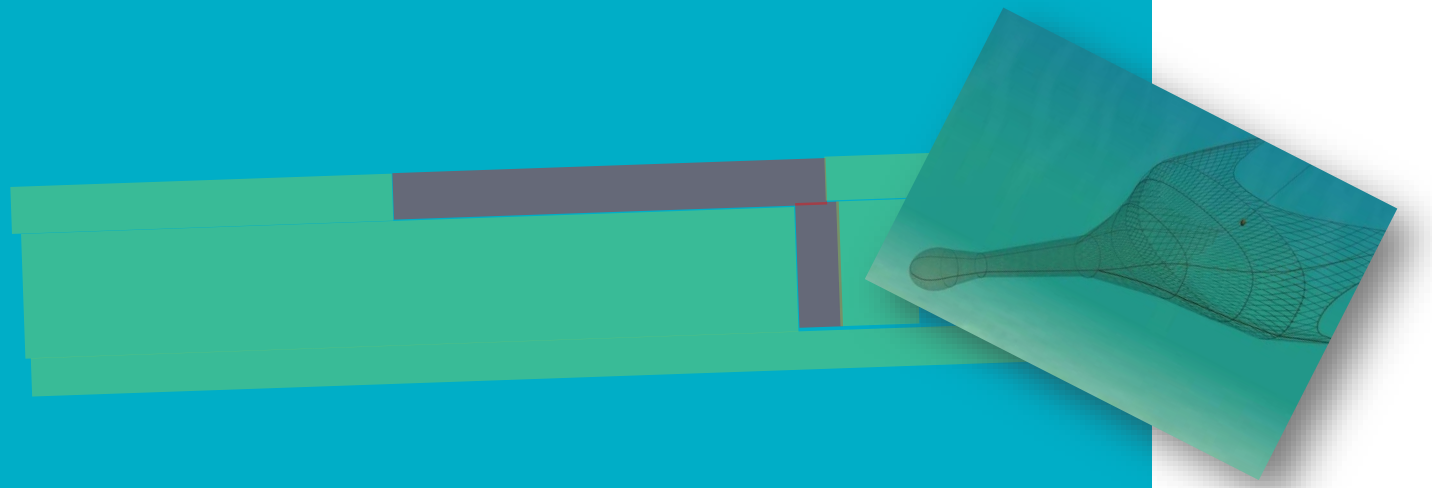


Footrope - Seafloor Contact

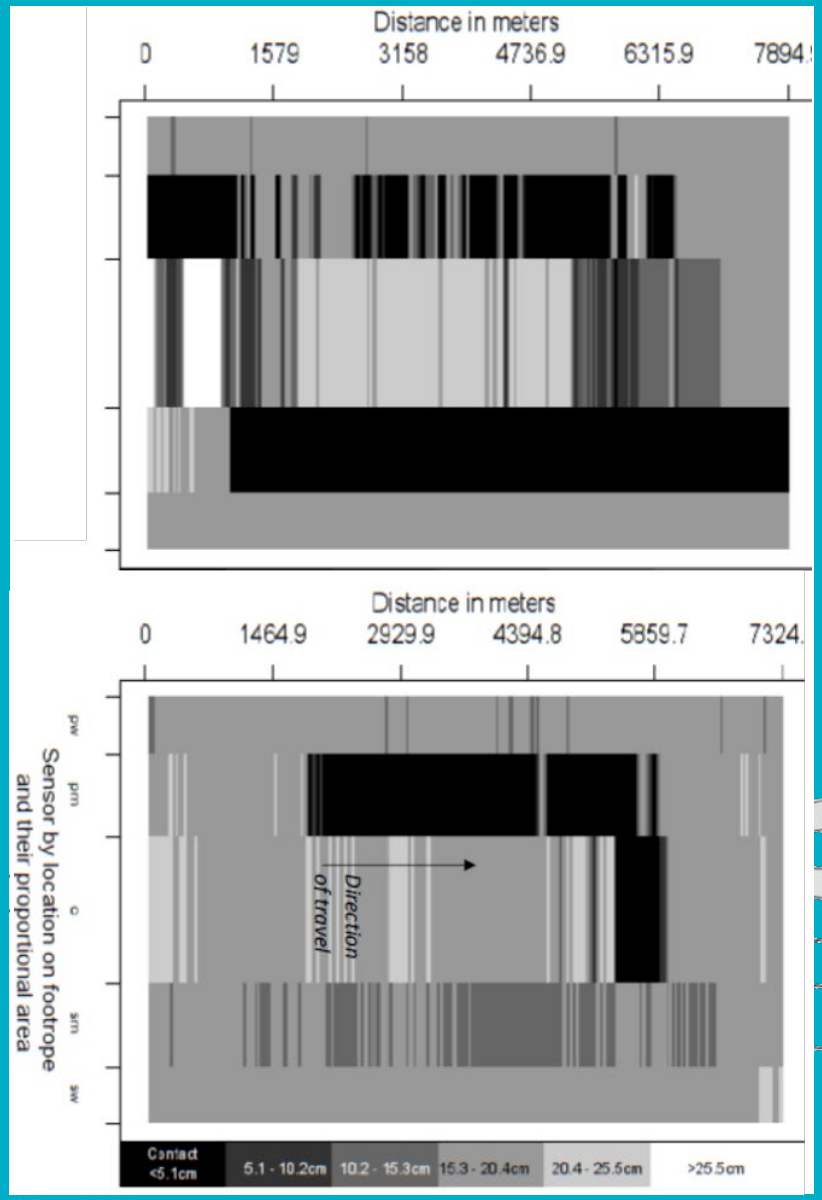




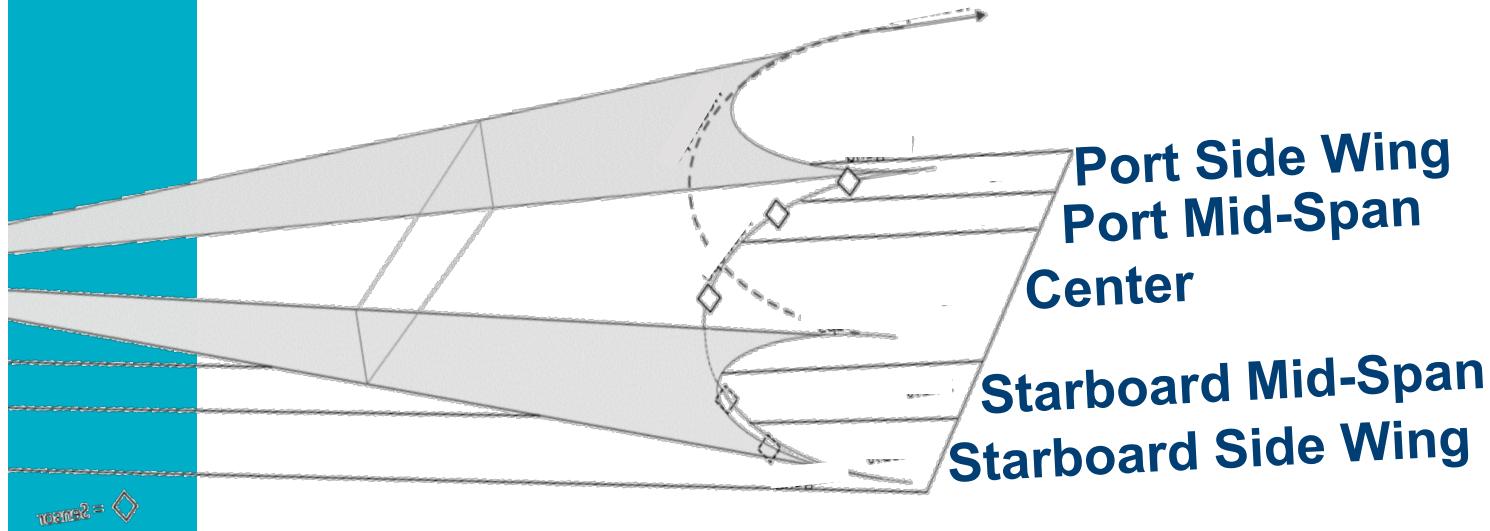
Port Side Wing
Port Mid-Span
Center
Starboard Mid-Span
Starboard Side Wing



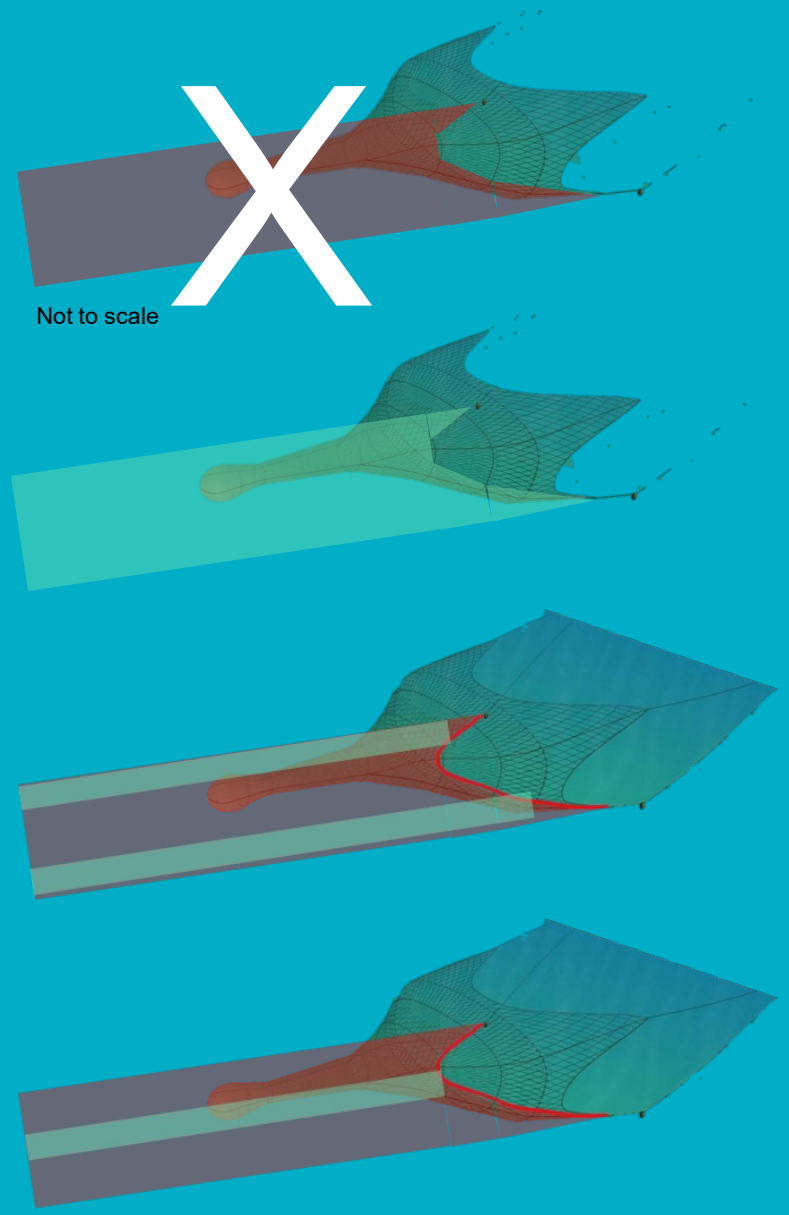
Footrope - Seafloor Contact



King 2019



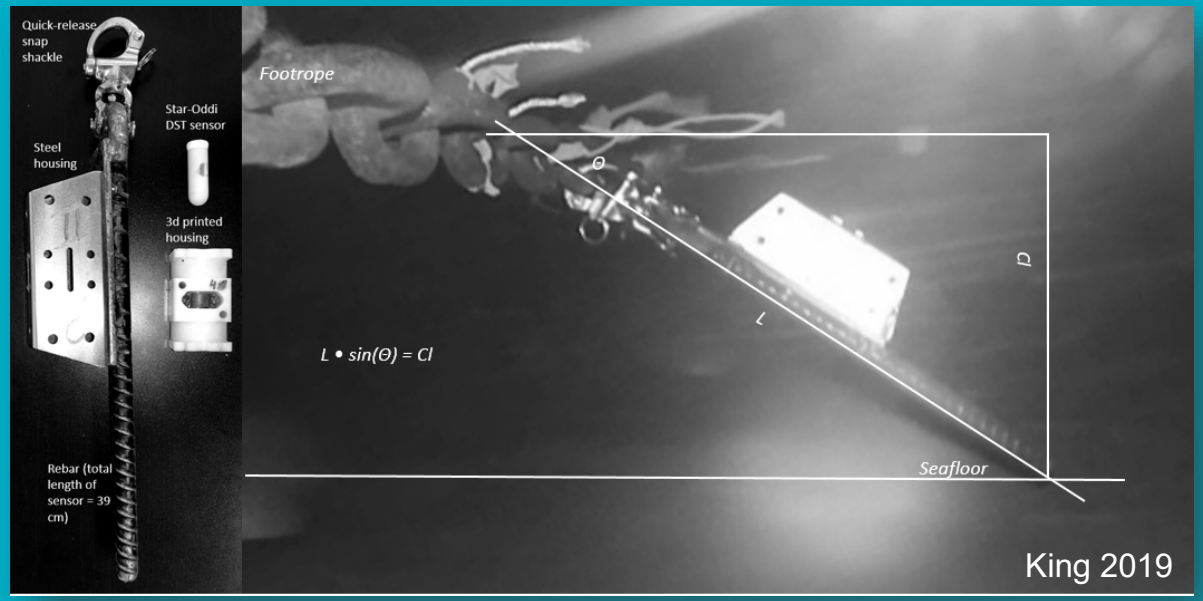
Footrope - Seafloor Contact



Variable Contact

- Contact is highly variable over the extent of the footrope and duration of the tow (King 2019)
- Fishing depends on where the pollock are found within the water column; pollock are found near the seafloor, but not always

Footrope - Seafloor Contact

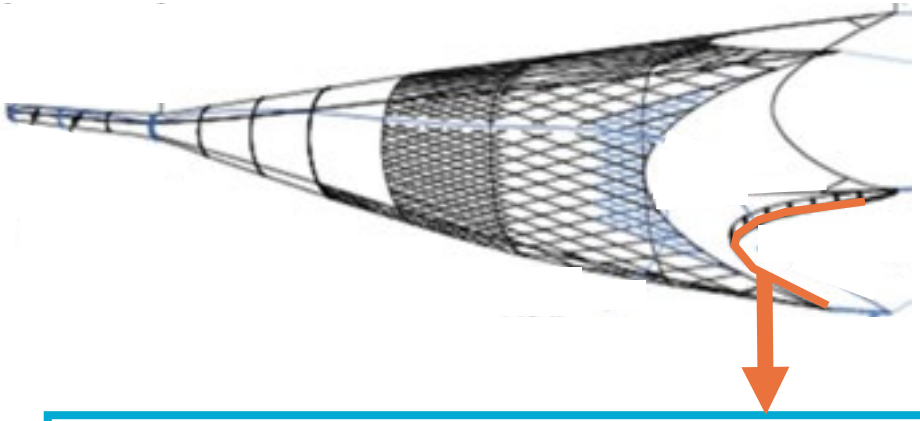


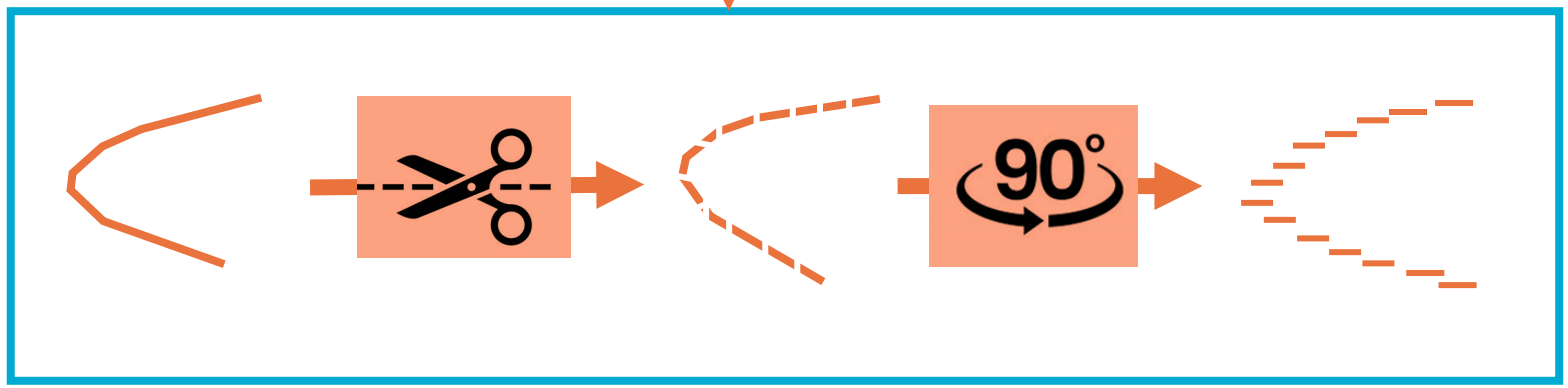
Challenges in Measuring Seafloor Contact for a Pelagic Trawl

- Limited real-time technology
- Variability in contact (by location and over the duration of tow)
- Contact data can be unreliable (errors in data, binding of the sensor attachment, etc.)
- Captains do not know when on bottom with certainty
- Data processing is time intensive
- Estimating variable clearance height is challenging

Pilot Project (2023-2024)

- Tested (with approval from NOAA Fisheries) a modified footrope that alters the length and orientation of the existing footrope components, but maintains the same weight needed to ensure opening of the gear

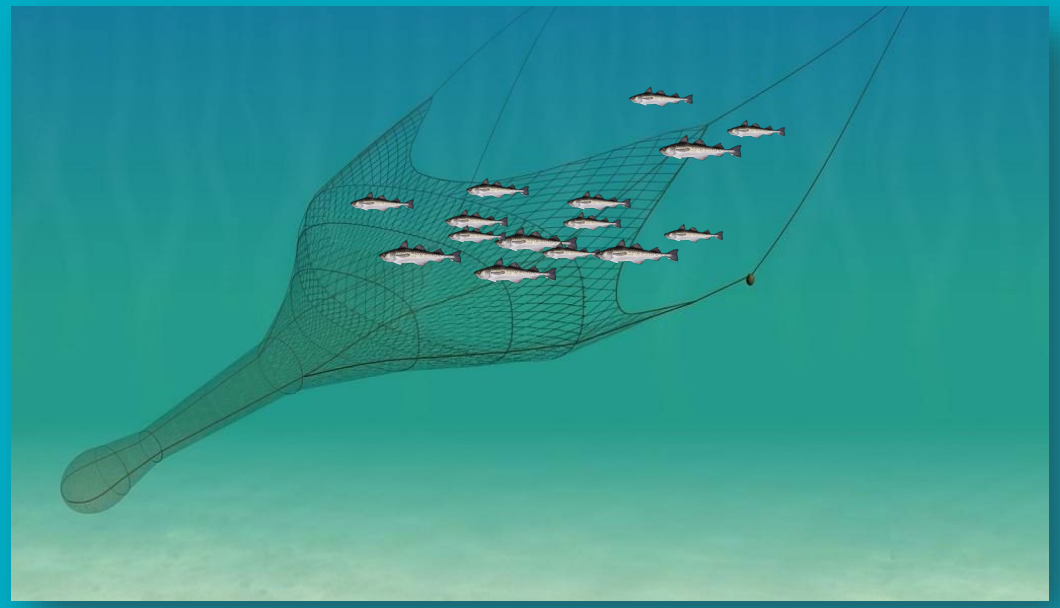


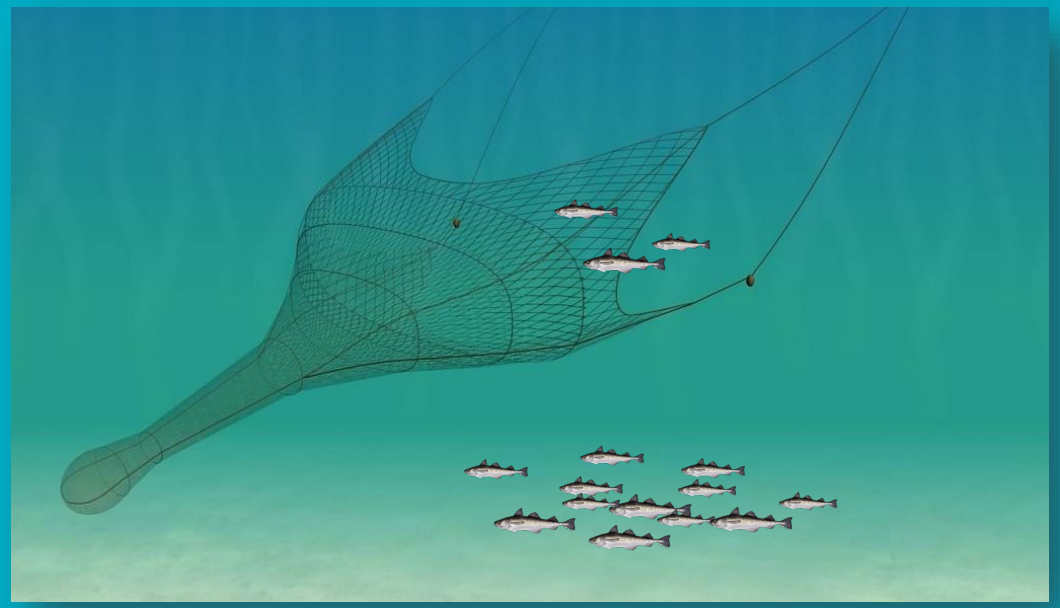


Pilot Project (2023-2024)

- Aimed to reduce contact when fished near the seafloor
- Tested on 4 Catcher Vessels (variety of net types) and a Catcher Processor
- Monitored for:
  - Changes to operations, safety, and catch composition
  - Angle of contact with the chains and clearance of fishing lines
  - Gear performance and catch efficiency

Fishing Efficiently Means Less Impact





Fishing Off-Bottom (when the fish are there) **is Not an Effective Solution to Minimizing Impacts**

- Non-targeted fishing means increasing the number of tows to get the same amount of quota.

- This results in:
  - Increased time the gear is in the water (potential bottom contact, fuel use, etc.)

  - Increased opportunities to encounter bycatch animals/ Prohibited Species Catch (PSC)

  - Increased time on the water and therefore more opportunities for safety issues for the crew

Pilot Project (2023-2024)

- Preliminary results are promising; show there is merit to further iterative research to improve and test the design; more study is needed

- Has more than two weighted lines (outside of regulation) - EFP required to continue

Next Steps

- Continue analysis of data collected from the pilot project
- Peer-review of footrope design and testing methods through short communications article
- If EFP approved:
  - Integrate research with ongoing APU work
  - Expand list of participating vessels
  - Explore NPRB proposal additional research opportunities