Background

A quantity of rock shrimp was harvested as a by-catch during an experimental survey project for northern pink shrimp. This shrimp species is typically larger than the northern pink shrimp, achieving counts of less than 40 per pound. This species is typically found in near-shore waters, therefore any subsequent fishery can developed by inshore vessels under 45 feet in length.

Torngat Fish producers Co-operative Society Ltd. (Torngat) was interested in looking into the potential of this such a fishery. A vessel fitted with a beam trawl was contracted to harvest rock shrimp with landings being processed at the Makkovik plant.

Methodology

Marketing of shrimp and shrimp products requires an understanding of the requirements of the markets being targeted and the raw material being processed. The involvement of a processor with experience in shrimp market was important to the success of this project. Torngat provided the processing facilities and marketing expertise required.

The Center for Aquaculture and Seafood Development (C-ASD) provided expertise to assist in harvesting and onboard handling of the raw material, onshore processing of the landed product and ongoing support for the marketing efforts of the company.
Through a literature search, information about *argis dentana* (life cycle, habitat, harvesting and processing information) was sourced prior to departing to Makkovik. This was to ensure onboard handling practices resulted in top quality product being landed. The C-ASD technologist also assisted in processing the product at the Makkovik operation, and training workers on site.

Toqngat Fisheries Co-Operative Ltd had a marketing consultant present during the final harvesting and processing runs. The samples produced during the initial production runs were test marketed by Toqngat.

### Results

The landings of rock shrimp during this project was approximately 600 lbs, which was lower than the anticipated. The use of beam trawl to harvest this product may not be the ideal fishing method. Tows were short in duration, as compared to fishing efforts by fishers for *pandalis borealis* and catch rates were below 60 lbs per tow.

The low catch rates lead to ideal post harvesting handling conditions. The product harvested was immediately chilled and then placed in the hold.

At the processing facility, samples of the product were taken at landing. The product was a maximum of 2 days old, and had less than 1% damaged/broken shrimp and a count of 70-90 per lb.

Processing of the product included, washing, grading, and separation of by-catch. Overall, 70% of the product landed was *Argis dentana*, the remainder was made of other shrimp species. The rock shrimp were further graded into large (under 40 count/lb), medium (60-70 count/lb) and small (greater than 120/lb). Half of the large rock shrimp were further processed into head off product. The head off product was packaged into 5 lb cello packs and plate frozen.

### Conclusions

The work completed on this project shows that the product has potential in the marketplace. Prior to further market analysis, research is required in determining an effective method of harvesting the species, *Argis dentana*. This research should focus on alternative pot fishing methods.