

B11-O09

SVALBARD ZONE LANDINGS SHOWS FISHERIES MOVING NORTH WHEN WATERS HEAT

Ole Arve Misund (*University Centre in Svalbard, Norway*)

Kristin Heggland (*University Centre in Svalbard, Norway*)

Harald Gjoesaeter (*Institute of Marine Research, Norway*)

Ole Jørgen Loenne (*University Centre in Svalbard, Norway*)

olem@unis.no

Northward expansion of sub - Arctic fish species is expected as Arctic ice retreat and waters heat due to the ongoing climate change.

The Svalbard archipelago in the high Arctic are influenced by cold Arctic water masses from the north east and the warm North East Atlantic current flowing northwards along its western coast. The eastern waters and the fjords are normally frozen during the winter months, while the coastal waters west of the archipelago are open. Norwegian fishers have been harvesting the Svalbard waters for decades, and a detailed catch record exist since 1980.

We analyze the catch records from the Svalbard zone (approximately ICES area IIb). The results clearly indicate a northwards trend in landings of North East Atlantic cod, haddock, ling and halibut. Fisheries of Arctic shrimp have been more variable.

These results are discussed in relation to the possibility for further northward extension of fisheries subject to climate change.