



Iceland Marine Research Institute

- experiences in sharing vessels with industry,
other organizations and nations

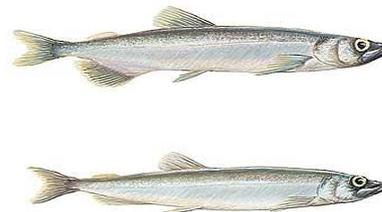
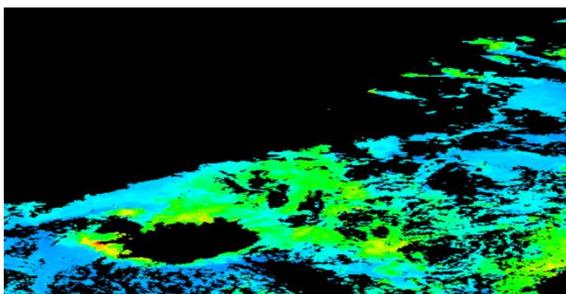
- The Marine Research Institute – a short introduction
- Sharing with the industry
- Sharing with Icelandic Coast Guard
- Sharing between nations



Marine Research Institute

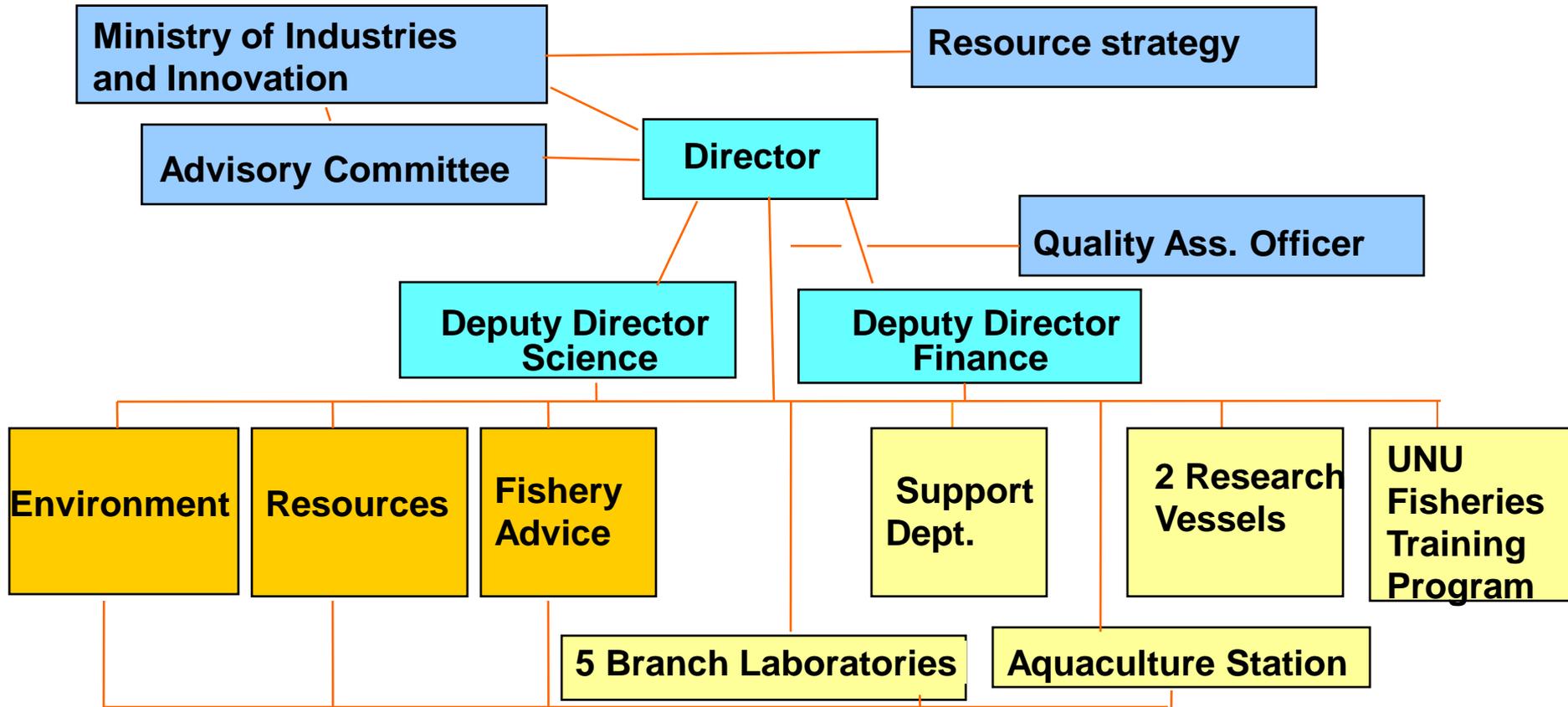
Main research priority:

- Sustainable exploitation of main stocks
- Studies of under-harvested species
- The ecosystem approach to fisheries management
- Research on fishing technology
- Seafloor and habitat mapping
- Mari- and aquaculture
- Climate variations and effects on the ecosystem



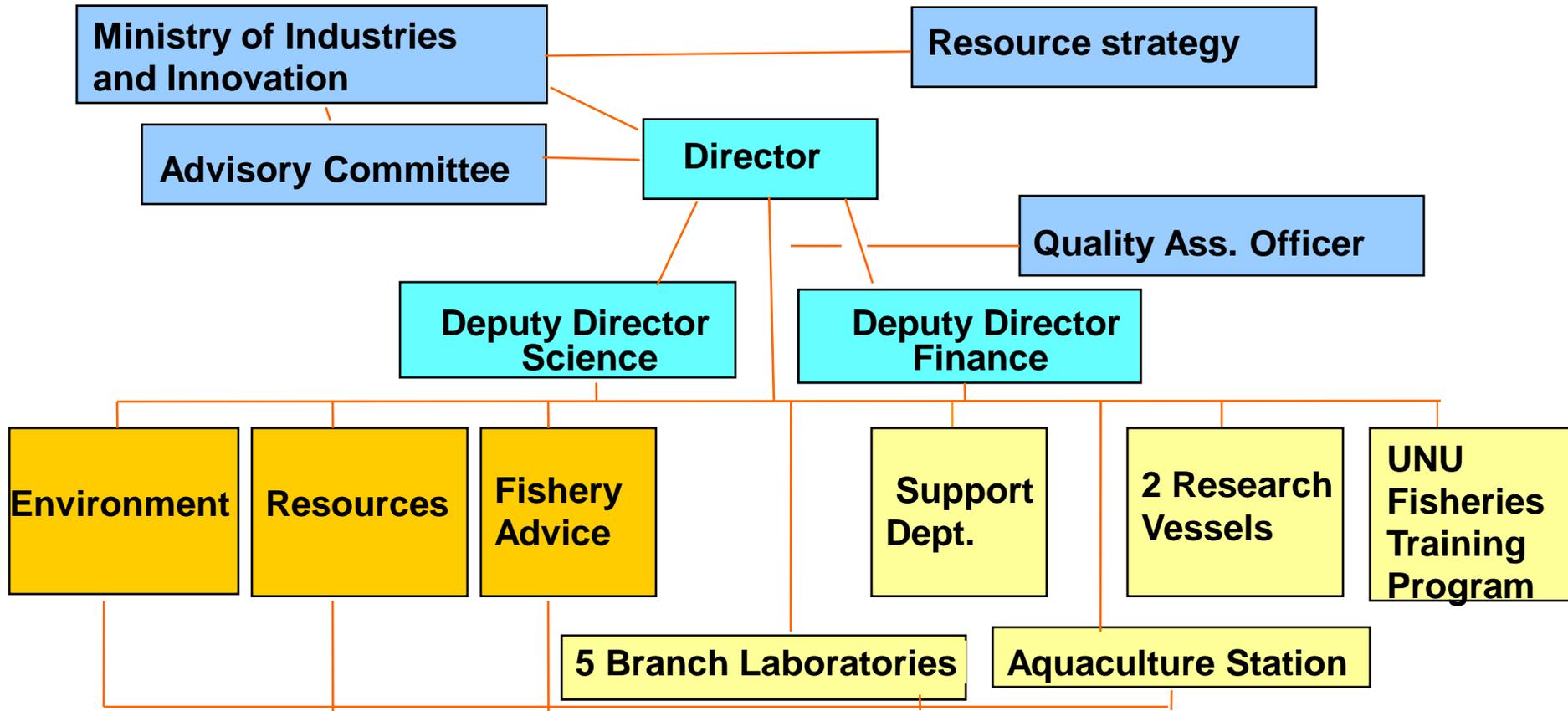


MRI - ORGANISATIONAL CHART





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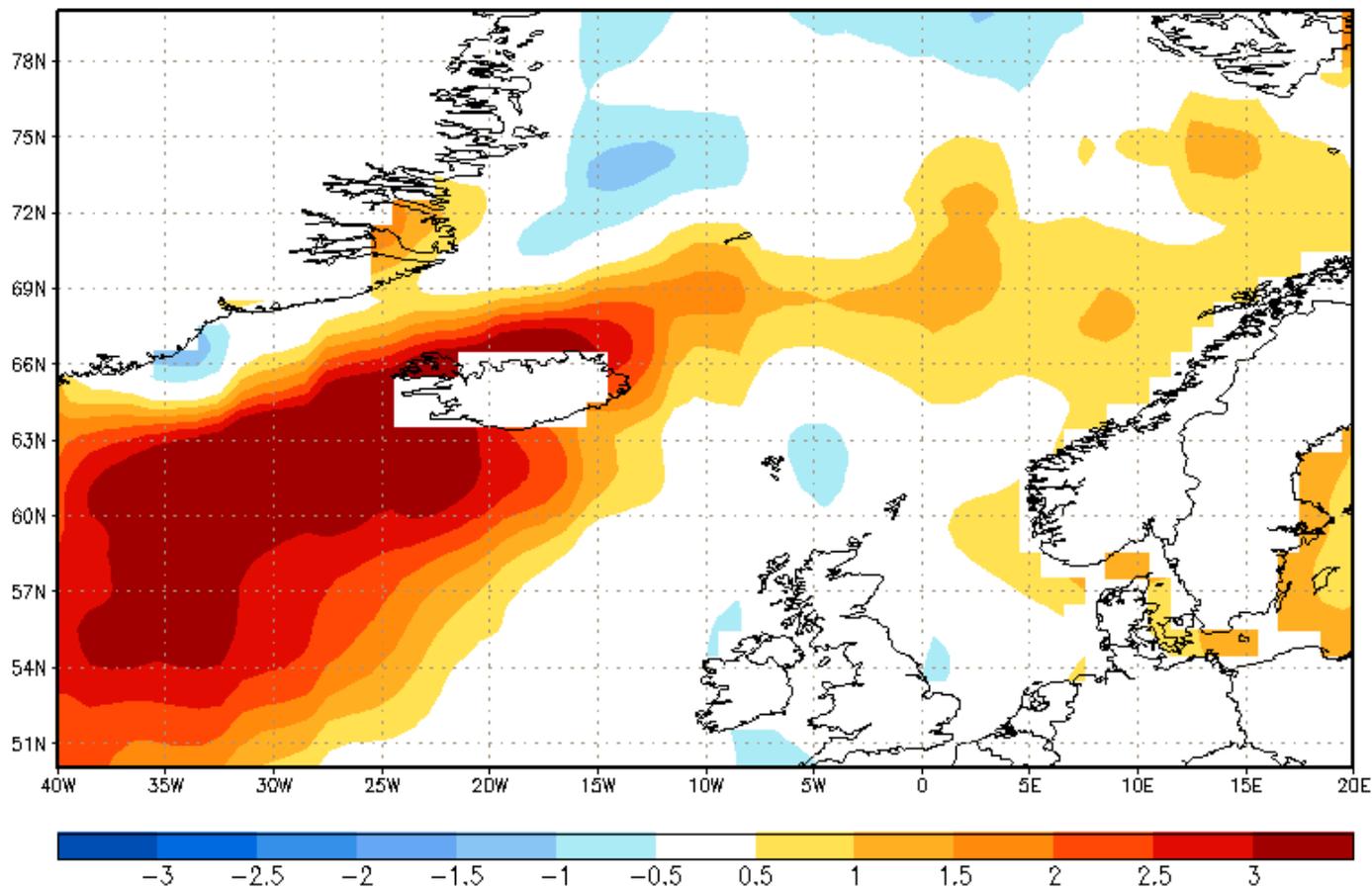
Positions 140
Annual budget 18,0 M Euros
Parl.budget 1/2 plus
Funds/Income <1/2

- Around 140 annually reviewed projects
-70-80% of budget to monitoring fish stocks and advice



Sea Surface temperature July 2012

Deviation from 20 year mean

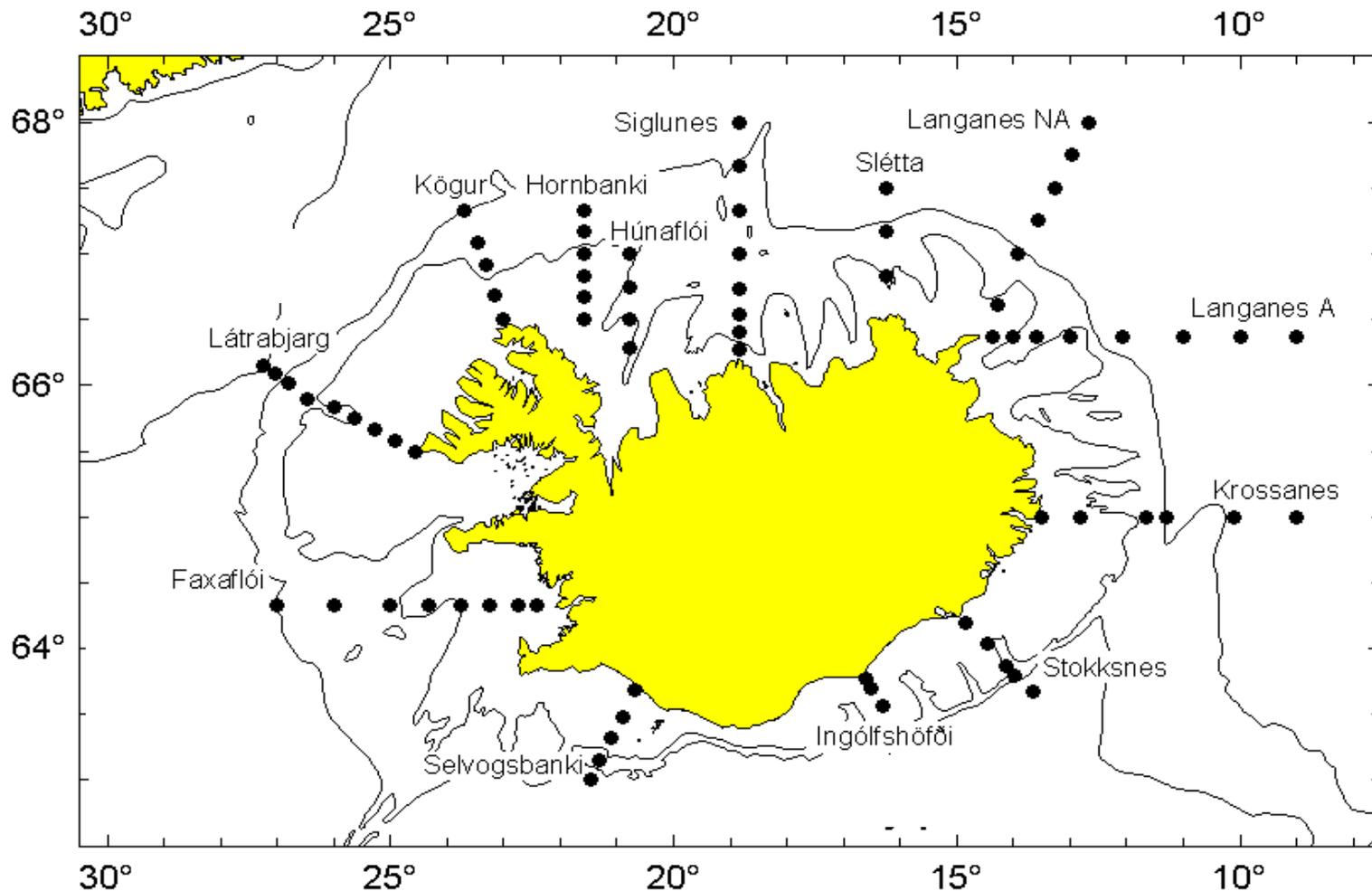


Source: ICES WGNAPES,
Report Ecos. Survey in
NE-Atlantic July-Aug 2012

Source: ICES-WGWIDE 2012



Environmental monitoring



Temperature
Salinity
Nutrients
Productivity
phyto- and
zooplankton

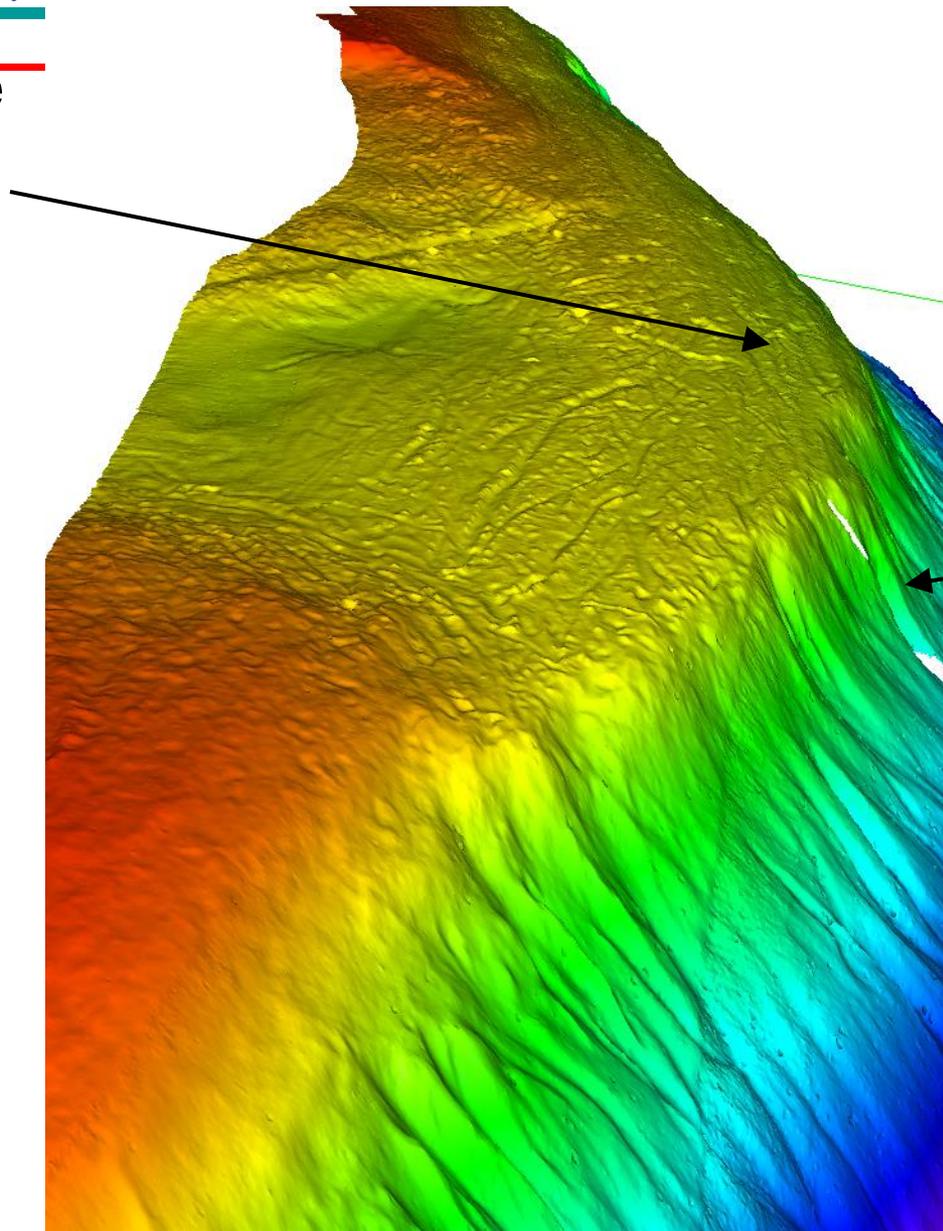
80 to 100
fixed stations

3-4 times/year
12-14 days
each survey



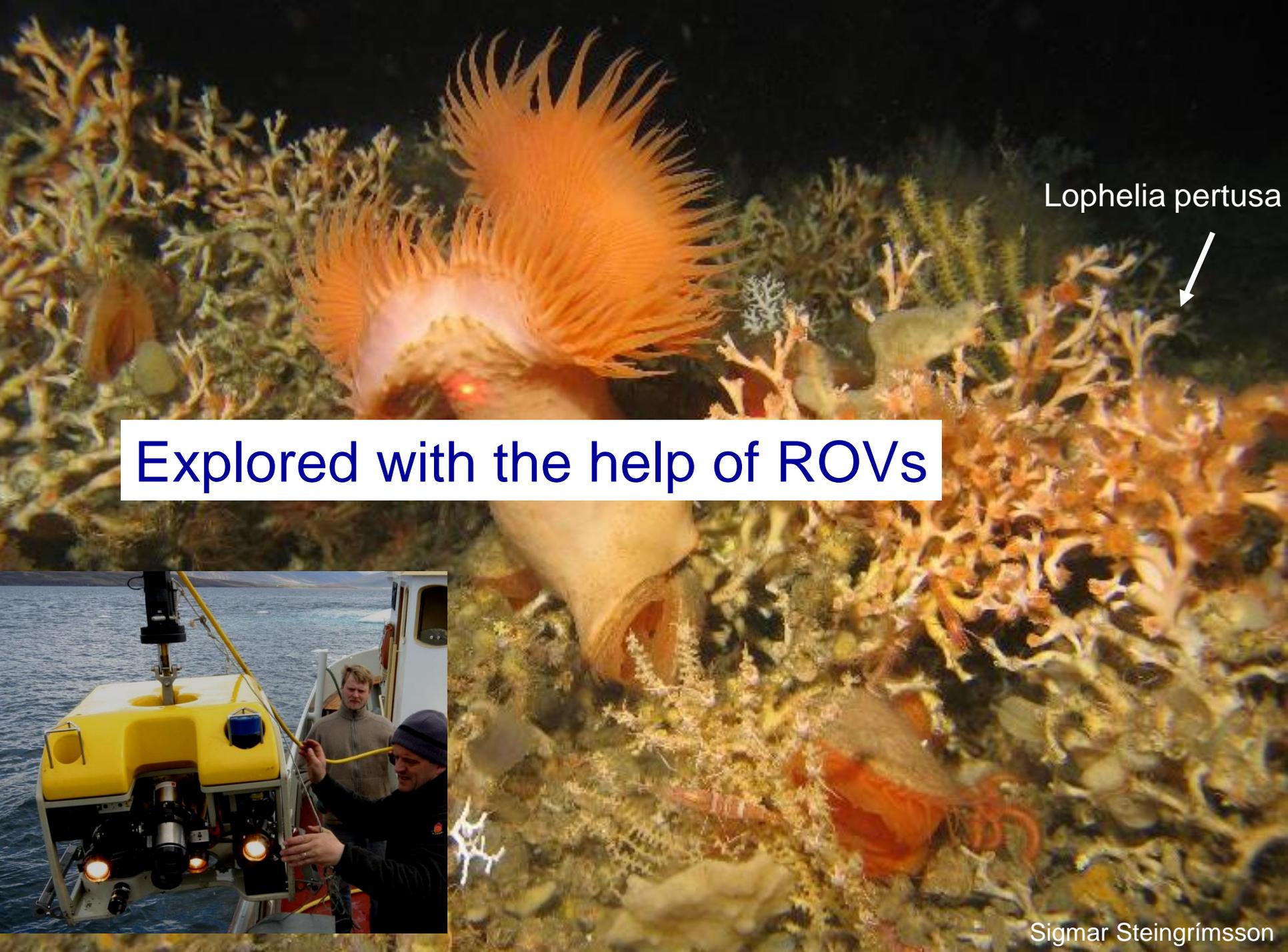
Mapping cold water coral reefs with multi beam

Corals are being found on ridges formed by ancient icebergs



Corals on the continental slope

Specific, costly, time consuming



Lophelia pertusa



Explored with the help of ROVs

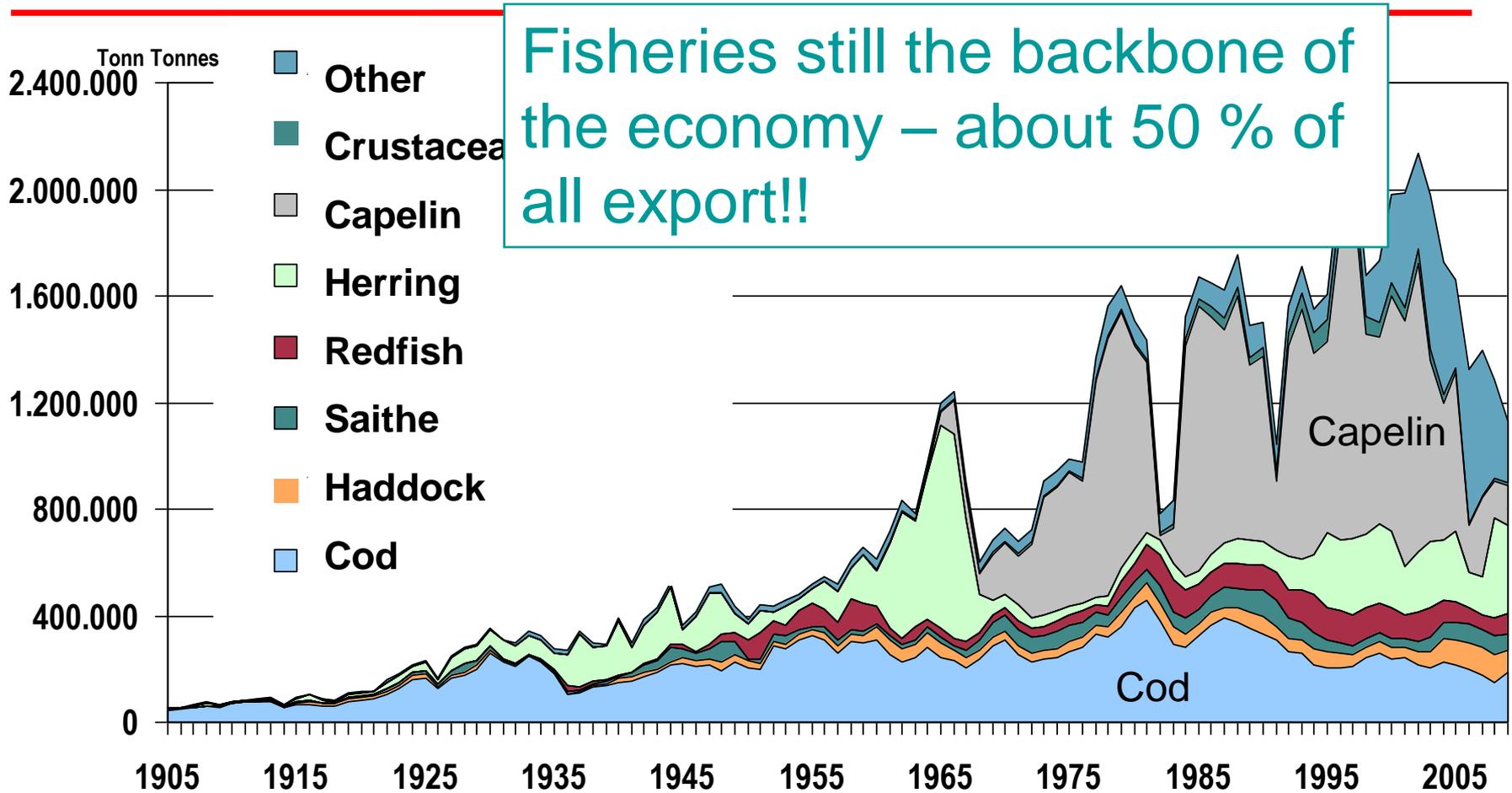


Sigmar Steingrímsson



Iceland: a century of intense harvest

** 1905-1944 afli við Ísland, 1945-2009 afli af öllum miðum



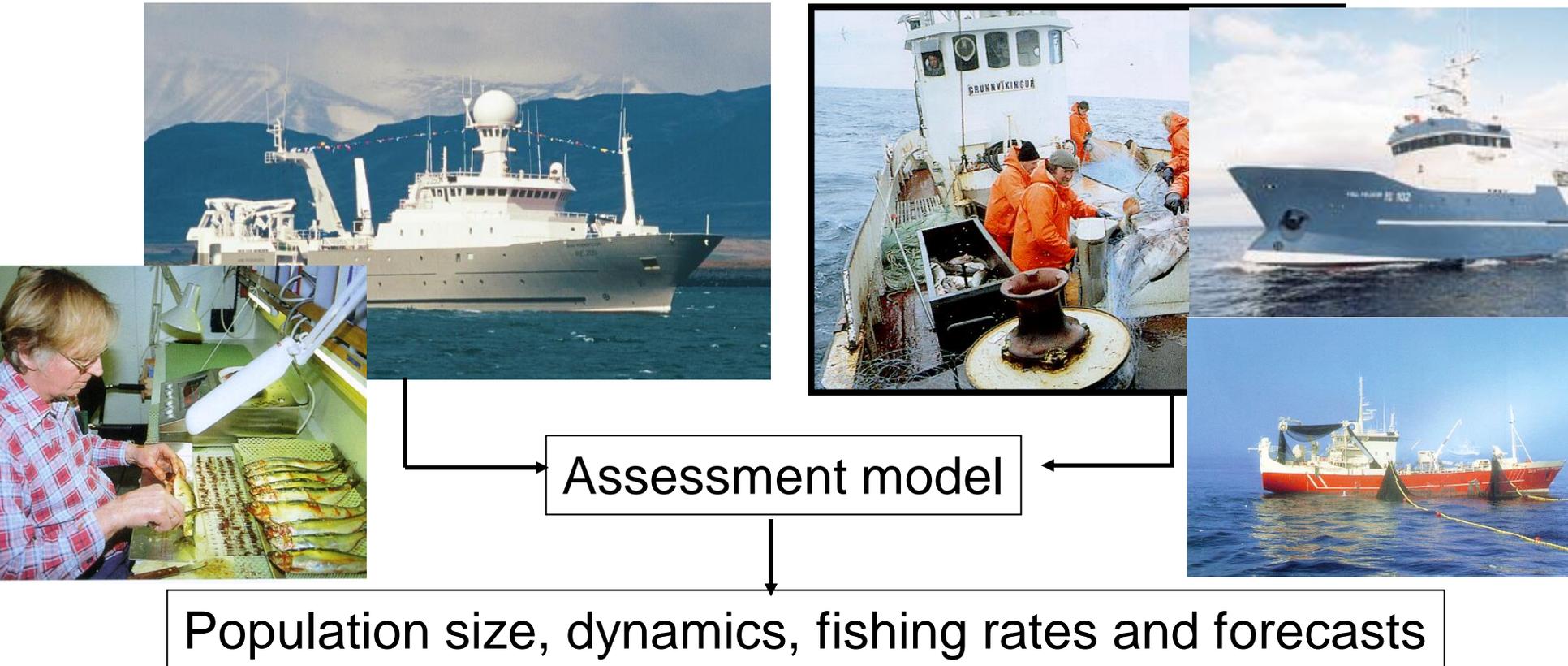
1905-1944 afli við Ísland, 1945-2009 afli af öllum miðum



Sharing with the industry

Fish Stock Assessment and Annual Advice

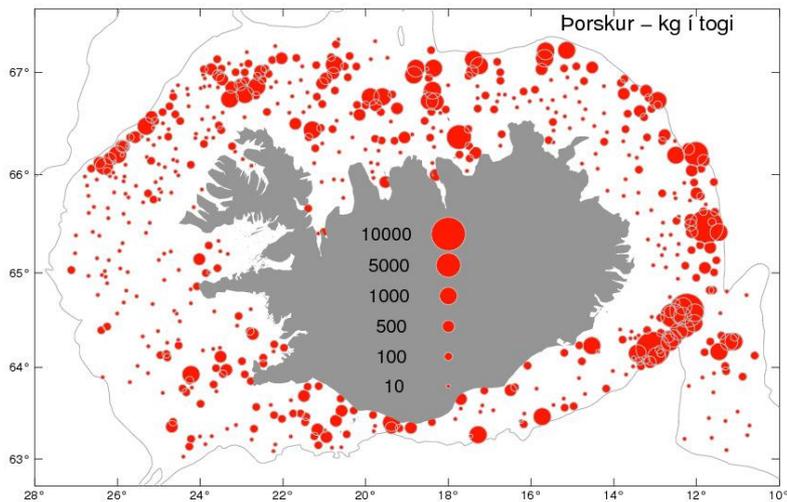
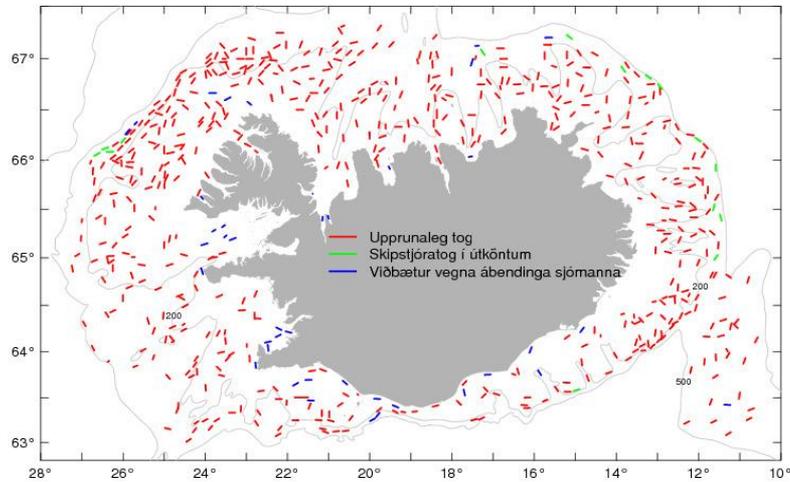
Measured = 1,7 million fish –
Aged = 120 thous. fish





Marine Research Institute

Groundfish survey: 600 fixed stations to assess distribution and biomass of main species





Sharing with the industry

- Stock assessment is the biggest project every year
- Need to cover all fishing grounds around Iceland
- Need both trawlers and smaller boats
- Very important for the industry – positive
- Sharing of knowledge – fishermen and scientists



Sharing with the industry

how do we do it?

- Leasing vessels through open tenders
- Paying with cash and with catches
- Last two years paying with fish quotas

- Difficulties obtaining good vessels
- Fishing vessels are in operation all year
- Little time for research – even for lease



Use of vessels in days

2014/2013/2012

- RVs Arni Fridriksson 120/176/177
- RVs Bjarni Saemundsson 72 /145/158
- Other vessels 380/356/340



Sharing with Icelandic Coast Guard





Sharing with Icelandic Coast Guard

- Public organisations
- Using the same pier
- Personal contacts
- A lot of days at harbour



Sharing with Icelandic Coast Guard

- Public organisations
 - Using the same dock
 - Personal contacts
 - A lot of days at harbour
-
- But specialization in crew and vessels not fit for sharing





Sharing between nations

- In the middle of ...



- makes sharing vessels challenging



Sharing between nations

- Need for cooperation because of mutual stocks
- Herring
- Capelin
- Red fish
- Mackerel
- Whales
- ...
- and because of hydro and climate research



Sharing between nations an example

- Mackerel survey in Greenland waters on RVs Arni Fridriksson
- 12 days each year 2014 and 2015
- Combined with mackerel survey in Icelandic waters
- Total 36 days survey – one exchange of crew



Sharing between nations

Research Vessels – similar vessels (fishery, hydro etc.) are in use at the same time because of the nature of the researches. And because of weather conditions in the North Atlantic.

Is sharing vessels for longer periods (weeks) therefore more or less impossible?

Or can long time planning and cooperation make better use of underdeployed vessels?



Iceland Marine Research Institute

How to you keep control on the captain?





Iceland Marine Research Institute

How to you keep control on the captain?

KEEP AN EYE ON HIM





Iceland Marine Research Institute

How do you keep control on the captain?

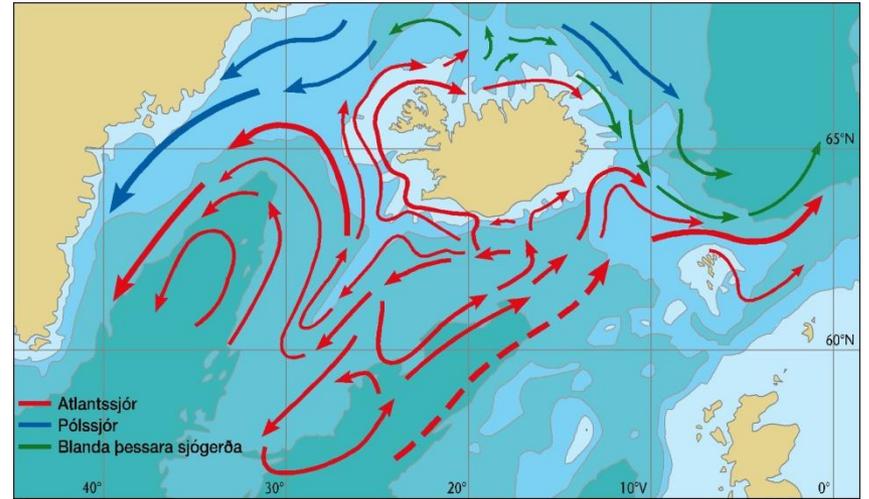
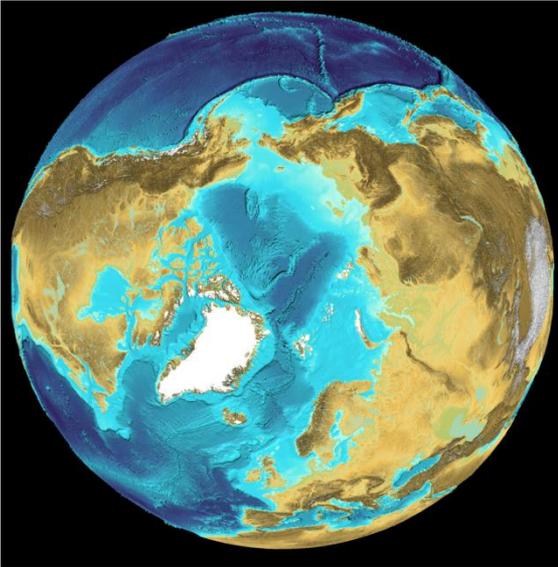
KEEP AN EYE ON HIM



My office



Marine Research Institute



Thank you

