# "The Friendly Arctic"

-Icelandic reflections

Steingrímur J. Sigfússon

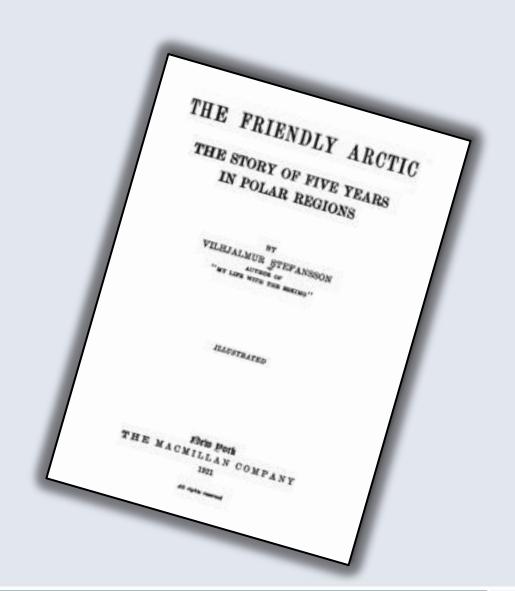
Minister of Industries and Innovation Iceland



# Vilhjalmur Stefansson 1879-1962













#### Polar bear in Iceland again...



Today a polar bear came to Iceland again. in 2008, 2 or 3 came to the northern part of Iceland and now we have a small one in the nnorth eastern part of iceland. most likely it will be shot so that it will not kill any people...

the funny thing is that last time, it was no crisis on iceland and a lot of people wanted to spend a lot of money saving the animals, but now that we are in the middle of a crisis it is not

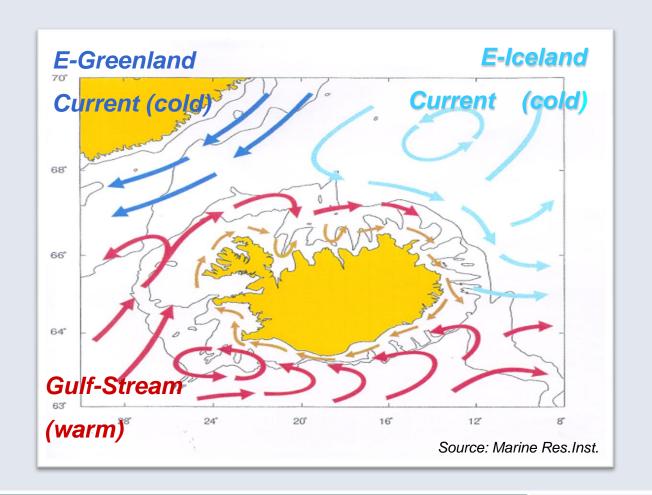






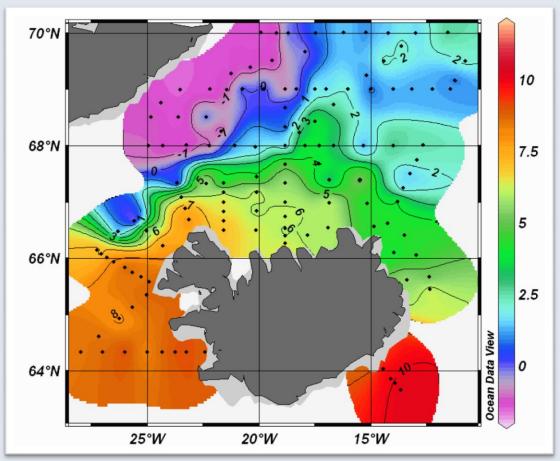


### Ocean currents





# Sea temperature at 50m depth - August 2007



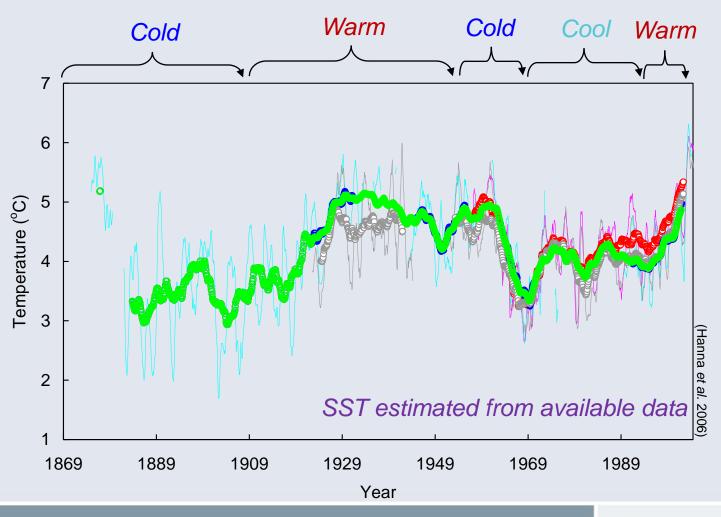
Temperature at the coast of Iceland in summer:
-1-10+ C

Great variability in temperature range

Source: Marine Res.Institute

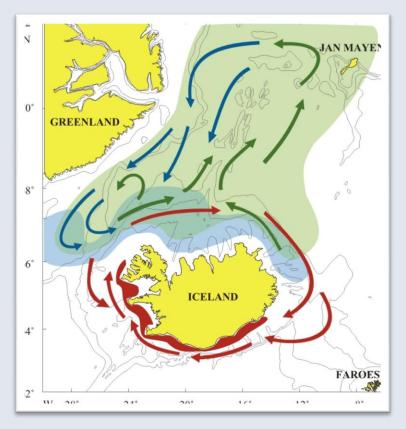


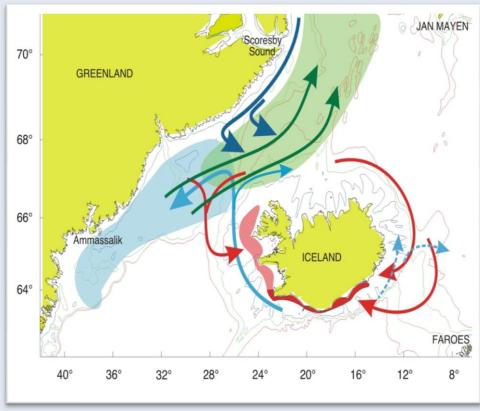
# Sea Surface Temperature (SST) north of Iceland Warming up in recent years similar to mid 20th century





## Capelin - migration and distribution





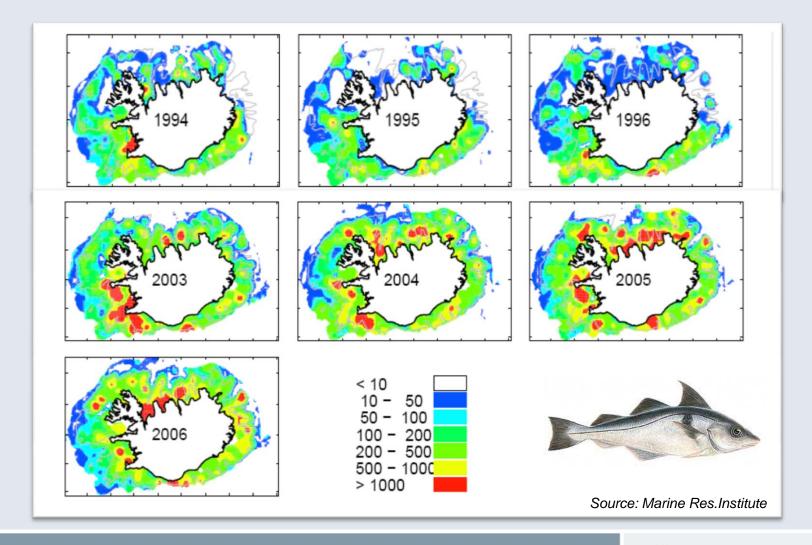
After Hjálmar Vilhjálmsson

Before 2000

After 2000

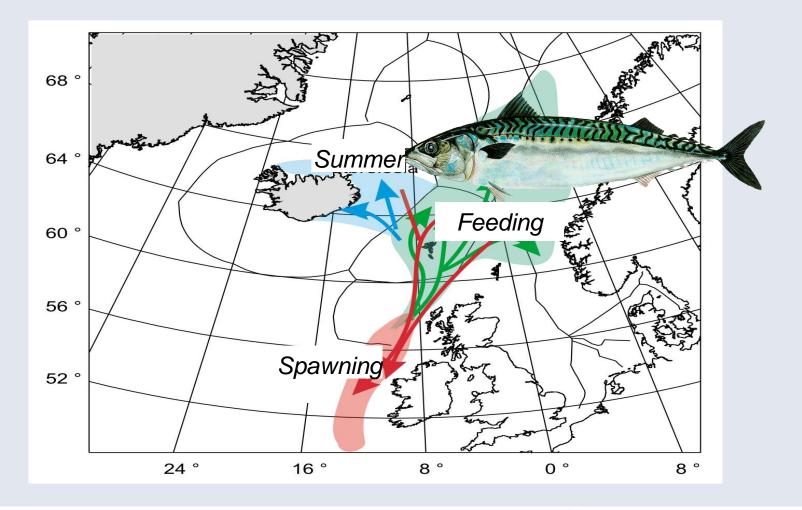


#### Haddock: Changed distribution due to ocean climate variability



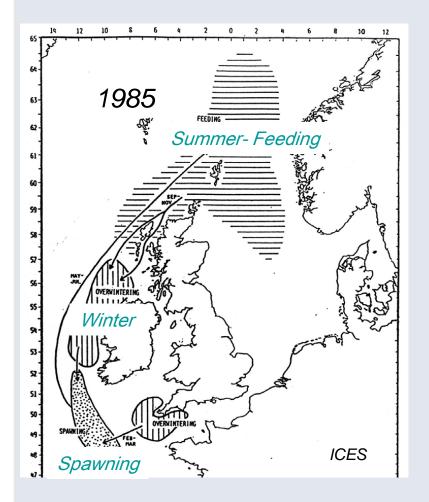


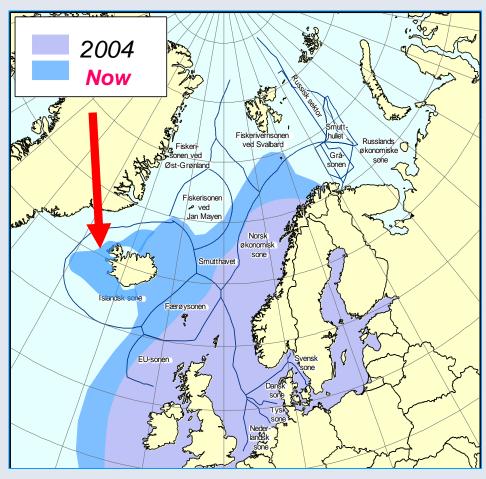
# Mackerel – northernmore distribution during the last decade





## Mackerel distribution in earlier years and NOW



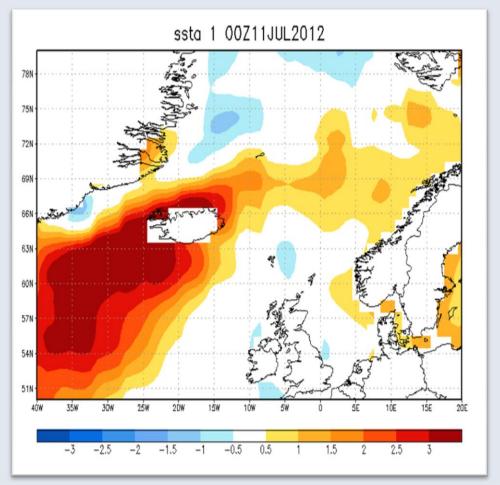


ICES. 1990. Second report of the EEC - norwegian joint scientific group on migration and area distribution of mackerel (western stock). ICES CM 1990 / H:5.



# Sea Surface temperature July 2012

#### **Deviation from 20 year mean**

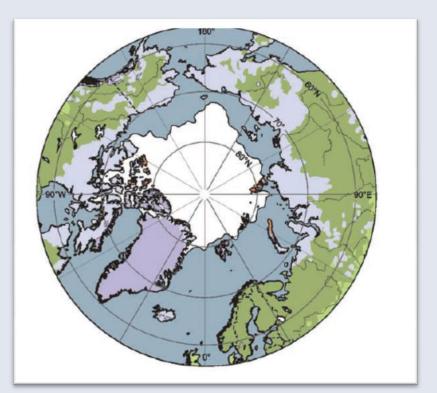


Source: ICES WGNAPES, Report Ecos. Survey in NE-Atlantic July-Aug 2012

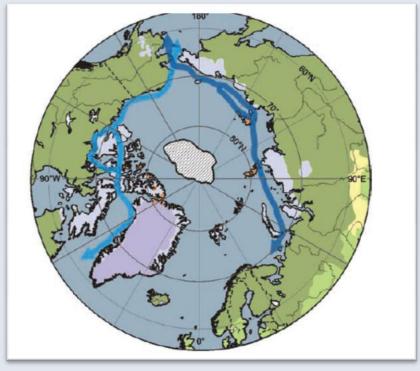


# Predicted ice coverage and sailing routes now and in the year 2080

Now



2080



Ice in summer

ACIA Report, 2007





