Cryptic Sebastes norvegicus species in Greenland waters revealed by microsatellites

Identification of cryptic species can have profound implications in fishery management, conservation and biodiversity contexts. In the North Atlantic, the genus Sebastes is currently represented by four species, although additional cryptic species have been assumed. The connectivity of the gene-pools within the genus in Greenland waters, in particular, remains largely unexplored. Using a panel of 13 microsatellite markers for 720 fish, we explored the species complex of Sebastes norvegicus in Greenland waters. Genetic analyses provided evidence for three cryptic species in samples that were morphologically identified as S. norvegicus. They were termed S. norvegicus-A, S. norvegicus-B, and S. norvegicusGIANTS. A few phenotypic features exist to identify adult S. norvegicus GIANTS, but no characteristics have been identified for the two other cryptic species. The proposed cryptic species should be recognized in the management regime to ensure sustainable exploitation and conservation of Sebastes species in Greenland waters.

General information
State: Published
Organisations: Arctic Section, National Institute of Aquatic Resources, Section for Oceans and Arctic, Institute of Marine Research, University of Washington, Greenland Institute of Natural Resources, UiT The Arctic University of Norway
Authors: Saha, A. (Ekstern), Hauser, L. (Ekstern), Hedeholm, R. (Ekstern), Planque, B. (Ekstern), Fevolden, S. (Ekstern), Boje, J. (Intern), Johansen, T. (Ekstern)
Pages: 2148-2158
Publication date: 2017
Main Research Area: Technical/natural sciences

Publication information
Journal: ICES Journal of Marine Science
Volume: 74
Issue number: 8
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Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 2.63
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): CiteScore 2.18
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Fishery and management of Greenland halibut in East Greenland

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Oceans and Arctic
Authors: Boje, J. (Intern), Gundersen, A. C. (Ekstern)
Publication date: 2017

Host publication information
Title of host publication: Sustainable bio-resources: Management, product development and raw material quality
Publisher: Orkana
ISBN (Print): 978-82-8104-290-2
Main Research Area: Technical/natural sciences
Publication: Research - peer-review • Book chapter – Annual report year: 2017

Geographic extent of introgression in Sebastes mentella and its effect on genetic population structure

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Marine Living Resources, Institute of Marine Research, Greenland Institute of Natural Resources, University of Washington
Authors: Saha, A. (Ekstern), Johansen, T. (Ekstern), Hedeholm, R. (Ekstern), Eg Nielsen, E. (Intern), Westgaard, J. (Ekstern), Hauser, L. (Ekstern), Planque, B. (Ekstern), Cadrin, S. X. (Ekstern), Boje, J. (Intern)
Maturity of Greenland Halibut (Reinhardtius hippoglossoides W.) in East Greenland, Faroe Islands and Hatton Bank area.

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Oceans and Arctic
Authors: Gundersen, A. C. (Ekstern), Larssen, W. M. E. (Ekstern), Tuene, S. (Ekstern), Boje, J. (Intern), Ofstad, L. H. (Ekstern)
Publication date: 2017

Host publication information
Title of host publication: Sustainable bio-resources: Management, product development and raw material quality
Publisher: Orkana
ISBN (Print): 978-82-8104-290-2
Main Research Area: Technical/natural sciences
Publication: Research - peer-review › Book chapter – Annual report year: 2017
Sæler og fisk som naturlige måleplatforme

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Oceans and Arctic
Authors: Boje, J. (Intern)
Pages: 270-276
Publication date: 2017
Main Research Area: Technical/natural sciences

Publication information
Journal: Tidsskriftet Grønland
Issue number: 3
ISSN (Print): 0017-4556
Ratings:
BFI (2018): BFI-level 1
BFI (2017): BFI-level 1
BFI (2016): BFI-level 1
BFI (2015): BFI-level 1
BFI (2014): BFI-level 1
BFI (2013): BFI-level 1
ISI indexed (2013): ISI indexed no
BFI (2012): BFI-level 1
ISI indexed (2012): ISI indexed no
BFI (2011): BFI-level 1
ISI indexed (2011): ISI indexed no
BFI (2010): BFI-level 1
BFI (2009): BFI-level 1
BFI (2008): BFI-level 1
Original language: Danish
Links:
https://issuu.com/greenland/docs/tg-3-2017-gratis-artikel
Publication: Research › Journal article – Annual report year: 2017

Larval drift and settling of Greenland halibut (R. hippoglossoides Walbaum) in Northwest Atlantic with special focus on Greenlandic waters

General information
State: Published
Organisations: National Institute of Aquatic Resources, Arctic Section
Authors: Stenberg, C. (Ekstern), Ribergaard, M. H. (Ekstern), Boje, J. (Intern), Sundby, S. (Ekstern)
Number of pages: 32
Publication date: 2016

Publication information
Publisher: Danish Meteorological Institute
Original language: English
Series: DMI Report
Number: 16-21
ISSN: 1399-1388
Main Research Area: Technical/natural sciences
Electronic versions:
Publishers version
Links:
http://www.dmi.dk/dmi/DMIRep16-21
Publication: Research › Report – Annual report year: 2016
Ocean warming expands habitat of a rich natural resource and benefits a national economy

Geographic redistribution of living natural resources changes access and thereby harvesting opportunities between countries. Internationally shared fish resources can be sensitive to shifts in the marine environment and this may have great impact on the economies of countries and regions that rely most heavily on fisheries to provide employment and food supply. Here we present a climate change-related biotic expansion of a rich natural resource with substantial economic consequences, namely the appearance of northeast Atlantic mackerel (Scomber scombrus) in Greenlandic waters. In recent years, the summer temperature has reached record highs in the Irminger Current, and this development has expanded the available and realized mackerel habitat in time and space. Observations in the Irminger Current in east Greenland in 2011 of this temperature-sensitive epipelagic fish were the first records so far northwest in the Atlantic. This change in migration pattern was followed by a rapid development of a large-scale fishery of substantial importance for the national economy of Greenland (23% of Greenland’s export value of all goods in 2014). A pelagic trawl survey was conducted in mid-summer 2014 and the results showed that the bulk of similar to 1 million Mg (=t) of mackerel in the Irminger Current in southeast Greenland were located in the relatively warm (>8.5 degrees C) surface layer. Mackerel was also observed in southwest Greenland. Finally, 15 CMIP5 Earth System Model projections of future marine climate were used to evaluate the epipelagic environment in Greenland. These projections for moderate and high CO2 emission scenarios (representative concentration pathways [RCP] 4.5 and 8.5) suggest how the available mackerel habitat may expand further in space and time. Overall, our results indicate that, if the stock remains large, productive, and continues its current migration pattern, then climate change has provided Greenland with a new unique opportunity for commercial exploitation. However, positive cases like this should not be cherry-picked and misused as arguments against timely and effective mitigation of climate change.

**General information**

**State:** Published

**Organisations:** Section for Marine Living Resources, National Institute of Aquatic Resources, Section for Marine Ecology and Oceanography, Greenland Institute of Natural Resources, Institute of Marine Research, Marine Research Institute, Greenland Institute of Natural Resources

**Authors:** Jansen, T. (Intern), Post, S. L. (Intern), Kristiansen, T. (Ekstern), Oskarsson, G. J. (Ekstern), Boje, J. (Intern), MacKenzie, B. R. (Intern), Broberg, M. (Ekstern), Siegstad, H. (Ekstern)

**Pages:** 2021-2032

**Publication date:** 2016

**Main Research Area:** Technical/natural sciences

**Publication information**

**Journal:** Ecological Applications

**Volume:** 26

**Issue number:** 7

**ISSN (Print):** 1051-0761

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- BFI (2018): BFI-level 2
- Web of Science (2018): Indexed yes
- BFI (2017): BFI-level 2
- Web of Science (2017): Indexed Yes
- BFI (2016): BFI-level 2
- Scopus rating (2016): CiteScore 4.4 SJR 2.265 SNIP 1.576
- Web of Science (2016): Indexed yes
- BFI (2015): BFI-level 2
- Scopus rating (2015): SJR 2.76 SNIP 1.759 CiteScore 4.63
- Web of Science (2015): Indexed yes
- BFI (2014): BFI-level 2
- Scopus rating (2014): SJR 2.593 SNIP 1.842 CiteScore 4.59
- Web of Science (2014): Indexed yes
- BFI (2013): BFI-level 2
- Scopus rating (2013): SJR 2.676 SNIP 1.863 CiteScore 4.77
- ISI indexed (2013): ISI indexed yes
- Web of Science (2013): Indexed yes
- BFI (2012): BFI-level 2
- Scopus rating (2012): SJR 2.965 SNIP 1.937 CiteScore 4.55
- ISI indexed (2012): ISI indexed yes
- BFI (2011): BFI-level 2
- Scopus rating (2011): SJR 3.286 SNIP 1.975 CiteScore 4.86
- ISI indexed (2011): ISI indexed yes
Variability and connectivity of plaice populations from the Eastern North Sea to the Baltic Sea, part II. Biological evidence of population mixing

A multi-disciplinary study was conducted to clarify stock identity and connectivity patterns in the populations of European plaice (Pleuronectes platessa) in the Skagerrak-Kattegat transition area between the Eastern North Sea and the Baltic Sea. Five independent biological studies were carried out in parallel. Genetic markers suggested the existence of different genetic populations in the transition area. Growth backcalculation with otoliths resulted in significant although limited differences in growth rates between North Sea and Skagerrak, indicating weak differentiation or important mixing. Hydrogeographical drift modelling suggested that some North Sea juveniles could settle along the coastline of the Skagerrak and the Kattegat. Tagging data suggested that both juveniles and adult fish from the North Sea perform feeding migrations into Skagerrak in summer/autumn. Finally, survey data suggested that Skagerrak also belongs to the area distribution of North Sea plaice. The outcomes of the individual studies were then combined into an overall synthesis. The existence of some resident components was evidenced, but it was also demonstrated that North Sea plaice migrate for feeding into Skagerrak and might constitute a large share of the catches in this area. The mixing of different populations within a management area has implications for stock assessment and management. Choice must be made to either lump or split the populations, and the feasibility and constraints of both options are discussed. The outcomes of this work have directly influenced the management decisions in 2015.

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Ecosystem based Marine Management, Section for Marine Living Resources, Section for Marine Ecology and Oceanography, BGI-Shenzhen
Authors: Ulrich, C. (Intern), Hansen, J. H. (Intern), Boje, J. (Intern), Christensen, A. (Intern), Hüssy, K. (Intern), Sun, H. (Ekstern), Worsøe Clausen, L. (Intern)
Pages: 13-23
Publication date: 2016
Main Research Area: Technical/natural sciences

Publication information
MSC certification of plaice fisheries in area IIIa: Basic investigations and development of a management plan

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Marine Living Resources, Section for Ecosystem based Marine Management, Section for Monitoring and Data, Section for Marine Ecology and Oceanography
Authors: Hansen, J. H. (Intern), Ulrich, C. (Intern), Boje, J. (Intern), Christensen, A. (Intern), Degel, H. (Intern), Hüsey, K. (Intern), Worsøe Clausen, L. (Intern)
Number of pages: 52
Publication date: 2015

Publication Information
Place of publication: Charlottenlund
Publisher: DTU aqua. National Institute of Aquatic Resources
ISBN (Electronic): 978-87-7481-216-6
Original language: English

Series: DTU Aqua Report
Number: 302-2015
ISSN: 1395-8216
Main Research Area: Technical/natural sciences
Electronic versions:

Oceanic boundary conditions for Jakobshavn Glacier Part I. Variability and renewal of Ilulissat Icefjord waters, 2001-2014

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Marine Ecology and Oceanography, Section for Marine Living Resources, New York University, Greenland Institute of Natural Resources
Authors: Gladish, C. V. (Ekstern), Holland, D. M. (Ekstern), Rosing-Asvid, A. (Ekstern), Behrens, J. (Intern), Boje, J. (Intern)
Pages: 3-32
Publication date: 2015
Main Research Area: Technical/natural sciences

Publication Information
Journal: Journal of Physical Oceanography
Volume: 45
Issue number: 1
ISSN (Print): 0022-3670
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 1
Scopus rating (2016): SJR 2.76 SNIP 1.379 CiteScore 3.22
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 2.646 SNIP 1.413 CiteScore 3.01
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 2.568 SNIP 1.394 CiteScore 2.89
Web of Science (2014): Indexed yes
A cascade of warming impacts brings bluefin tuna to Greenland waters

Rising ocean temperatures are causing marine fish species to shift spatial distributions and ranges, and are altering predator-prey dynamics in food webs. Most documented cases of species shifts so far involve relatively small species at lower trophic levels, and consider individual species in ecological isolation from others. Here, we show that a large highly migratory top predator fish species has entered a high latitude sub-polar area. Bluefin tuna, Thunnus thynnus Linnaeus 1758, were captured in waters east of Greenland (65°N) in August 2012 during exploratory fishing for Atlantic mackerel, Scomber scombrus Linnaeus 1758. The bluefin tuna were captured in a single net-haul in 9-11°C water together with 6 tonnes of mackerel, which is a preferred prey species and itself a new immigrant to the area. Regional temperatures in August 2012 were historically high and contributed to a warming trend since 1985, when temperatures began to rise. The presence of bluefin tuna in this region is likely due to a combination of warm temperatures that are physiologically more tolerable and immigration of an important prey species into the region. We conclude that a cascade of climate change impacts is restructuring the food web in east Greenland waters.

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Marine Ecology and Oceanography, Centre for Ocean Life, Section for Marine Living Resources, Danish Meteorological Institute, Greenland Institute of Natural Resources
Authors: MacKenzie, B. (Intern), Payne, M. (Intern), Boje, J. (Intern), Høyer, J. L. (Ekstern), Siegstad, H. (Ekstern)
Publication date: 2014
Event: Abstract from ESSAS Annual Science Meeting, Copenhagen, Denmark.
Main Research Area: Technical/natural sciences
Publication: Research - peer-review › Journal article – Annual report year: 2014
11 °C water together with 6 tonnes of mackerel, which is a preferred prey species and itself a new immigrant to the area. Regional temperatures in August 2012 were historically high and contributed to a warming trend since 1985, when temperatures began to rise. The presence of bluefin tuna in this region is likely due to a combination of warm temperatures that are physiologically more tolerable and immigration of an important prey species to the region. We conclude that a cascade of climate change impacts is restructuring the food web in east Greenland waters.
Estimates of reproductive potential of Greenland halibut (Reinhardtius hippoglossoides) in East Greenland based on an update of maturity status

When estimating reproductive potential (RP), correct interpretation of the maturity status is essential. It has now become apparent the presence of vitellogenic oocytes within the ovary of Greenland halibut (Reinhardtius hippoglossoides) does not necessarily indicate they will spawn within the next twelve months. This has led to a revision of the interpretation of the maturity scale where fish which contain only a developing cohort (DC) of oocytes are considered immature. Comparisons were made of estimates of L50 of female Greenland halibut in East Greenland using the previous interpretation of maturity status where the leading cohort (LC) and DC oocytes are not differentiated with the new interpretation where they are. Differentiation led to an increase from 63.8 to 80.2cm and from 61.2 to 74.1cm for the northern (between 63°40′N and 67°00′N) and southern area (between 61°45′N and 62°40′N), respectively. Combining the maturity data with abundance data of Greenland halibut in East Greenland, spawning stock biomass (SSB) and total egg production (TEP) was estimated in four quadrants between 1998 and 2012 using both the previous and current interpretation of the maturity scale. Using the new interpretation of the scale led to a decrease in SSB estimates of 28–92% in specific areas and years, with an average of 56%. Estimates of TEP were directly proportional to SSB so this approach did not offer any advantages over SSB as a measure of reproductive potential. Length composition of Greenland halibut caught by Norwegian fishing vessels fishing in East Greenland indicate that 85 and 57% of the females caught by the trawl and longline fleet respectively in the northern area and 46% caught by the longline fleet in the southern area were immature.

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Marine Living Resources
Authors: Kennedy, J. (Ekstern), Hedeholm, R. B. (Ekstern), Gundersen, A. C. (Ekstern), Boje, J. (Intern)
Number of pages: 9
Pages: 73-81
Publication date: 2014
Main Research Area: Technical/natural sciences

Publication information
Journal: Fisheries Research
Volume: 154
ISSN (Print): 0165-7836
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
Macroscopic maturity assessment, Sex ratio, Length at maturity, Maturity ogive

Original language: English

Macroscopic maturity assessment, Sex ratio, Length at maturity, Maturity ogive

DOIs:
10.1016/j.fishres.2014.02.009

Source: FindIt

Source-ID: 266224266

Publication: Research - peer-review » Journal article – Annual report year: 2014
The deep-water flatfish Greenland halibut Reinhardtius hippoglossoides (Walbaum) is common along the West Greenland coast. In the northwestern fjords, Greenland halibut is an important socio-economic resource for the Greenland community, but due to the deep and partly ice-covered environment, very little is known about its behavior and habitat characteristics. We tagged adult Greenland halibut in the waters off Ilulissat with electronic data storage tags that collected information on depth, temperature, and time. Although clear differences between individuals in migration and vertical behavior were present, we discovered a consistent seasonal migration from the relatively shallow-water Disko Bay area into the deep waters of the Ilulissat Icefjord, where the fish resided in the winter months before returning to Disko Bay. Vertical activity was pronounced at both locations, with fish covering vertical distances of up to 100 m within 15 min. During the winter months, the fish experienced temperatures between ca. 0 and 4°C, with most experiencing temperatures of 2 to 3°C. Irrespective of year and quarter of the year, the fish experienced warmer water and a broader range of temperatures when resident in Disko Bay (mean range 2.6°C) than when resident in the ice fjord (mean range 1.4°C). Using the tagged halibut as a 'live tool,' we show that parts of the ice fjord are hundreds of meters deeper than previously thought. We also document the first seawater temperature measurements made beneath the Jakobshavn Isbrae outlet glacier, revealing a positive relationship between depth and temperature for the upper 600 m and a between-year variation in temperatures beneath the ice sheet in 2001, 2002, and 2003.

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Marine Living Resources, Section for Marine Ecology and Oceanography, Section for Ecosystem based Marine Management, Danish Pelagic Producers Organisation
Authors: Boje, J. (Intern), Neuenfeldt, S. (Intern), Sparrevohn, C. R. (Ekstern), Eigaard, O. R. (Intern), Behrens, J. (Intern)
Pages: 211-222
Publication date: 2014
Main Research Area: Technical/natural sciences

Publication information
Journal: Marine Ecology Progress Series
Volume: 508
ISSN (Print): 0171-8630
Ratings:
BFI (2018): BFI-level 2
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 2
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 2
Scopus rating (2016): CiteScore 2.4
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 2
Scopus rating (2015): CiteScore 2.56
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 2
Scopus rating (2014): CiteScore 2.75
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 2
Scopus rating (2013): CiteScore 2.79
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 2
Scopus rating (2012): CiteScore 2.9
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 2
Scopus rating (2011): CiteScore 2.85
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 2
Identification of seasonal migration, vertical activity and thermal experience of Greenland halibut Reinhardtius hippoglossoides (Walbaum) in west Greenland waters

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Marine Ecology and Oceanography, Section for Ecosystem based Marine Management, Section for Marine Living Resources
Authors: Behrens, J. W. (Intern), Neuenfeldt, S. (Intern), Sparrevohn, C. R. (Intern), Eigaard, O. R. (Intern), Boje, J. (Intern)
Publication date: 2013
Event: Poster session presented at Society of Experimental Biology, Annual Main Meeting, Valencia, Spain.
Main Research Area: Technical/natural sciences
Publication: Research - peer-review › Journal article – Annual report year: 2014

Variability and connectivity of plaice populations from the Eastern North Sea to the Western Baltic Sea, and implications for assessment and management

An essential prerequisite of sustainable fisheries is the match between biologically relevant processes and management action. Various populations may however co-occur on fishing grounds, although they might not belong to the same stock, leading to poor performance of stock assessment and management. Plaice in Kattegat and Skagerrak have traditionally been considered as one stock unit. Current understanding indicates that several plaice components may exist in the transition area between the North Sea and the Baltic Sea. A comprehensive review of all available biological knowledge on plaice in this area is performed, including published and unpublished literature together with the analyses of commercial and survey data and historical tagging data. The results suggest that plaice in Skagerrak is closely associated with plaice in the North Sea, although local populations are present in the area. Plaice in Kattegat, the Belts Sea and the Sound can be considered a stock unit, as is plaice in the Baltic Sea. The analyses revealed great heterogeneity in the dynamics and productivity of the various local components, and suggested for specific action to maintain biodiversity

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Ecosystem based Marine Management, Section for Marine Living Resources, Lund University, Danish Fishermen’s Producers’ Organization, Wageningen IMARES
Pages: 40-48
Publication date: 2013
Main Research Area: Technical/natural sciences

Publication information
Journal: Journal of Sea Research
Volume: 84
ISSN (Print): 1385-1101
Improving the assessment and management of the plaice stock complex between the North Sea and the Baltic Sea

Plaice in Kattegat and Skagerrak have traditionally been considered as one stock unit. However, the collected information on biology and fishery in areas between the North and Baltic Seas suggest changes are needed in assessment units as well as in management areas. Plaice in Skagerrak (Division 20) is now considered to be closely associated with plaice in the North Sea and is proposed to be included in the North Sea plaice stock assessment, although it is recognized that local populations are present in the area. Therefore, specific management of the Skagerrak plaice is suggested. Plaice in Kattegat (Division 21), the Belts (Division 22), and the Sound (Division 23) is considered a stock unit and is proposed to be assessed as such. However, separate management by area is also suggested to assure the preservation of the local populations. Plaice in the Baltic (Divisions 24–32) is considered a stock unit and is proposed to be assessed and managed as such. Pragmatic options are suggested for empirical harvest control rules accounting for the dynamic of local abundance, using a survey-based biomass indicator. For the future, new scientific analyses should be developed to better inform the origin of the catches, provided that additional resources are allocated to the annual monitoring of different stocks and components. Such information would provide on-going quantitative information on the degree of mixing of the various components, potentially allowing a more accurate assessment, management, and conservation of the status of these

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Management Systems, Section for Public Sector Consultancy, Section for Population Ecology and Genetics
Number of pages: 22
Publication date: 2012
Event: 
Main Research Area: Technical/natural sciences
Links: http://ices.dk/products/CMdocs/CM-2012/N/N0212.pdf
Publication: Research › Paper – Annual report year: 2012

Standardized logbooks from the inshore longline fishery on Greenland halibut in the inshore part of Div. 1A

General information
State: Published
Organisations: Section for Fisheries Advice, National Institute of Aquatic Resources
Authors: Nygaard, R. (Ekstern), Boje, J. (Intern)
Publication date: 2011
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 286863
Publication: Research › Paper – Annual report year: 2011

An assessment of the Greenland halibut stock component in NAFO Division 1A inshore

General information
State: Published
Organisations: Section for Fisheries Advice, National Institute of Aquatic Resources
Authors: Nygaard, R. (Ekstern), Lyberth, B. (Ekstern), Boje, J. (Intern)
Publication date: 2010
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 281240
Publication: Research › Paper – Annual report year: 2010
Comparative evaluation of a mixed-fisheries effort-management system based on the Faroe islands example

Total allowable catch (TAC) management has in many fisheries, especially mixed fisheries, failed to meet conservation objectives. For instance, for the Faroe Plateau mixed demersal fisheries, the TAC system failed to achieve the objective of an average annual fishing mortality of 0.45 for the three gadoid stocks cod (Gadus morhua), haddock (Melanogrammus aeglefinus), and saithe (Pollachius virens). Therefore, in 1996, an effort-regulation system with individual transferable effort quotas was introduced to manage the fisheries. Experience has shown that effort management without additional stock-specific measures may not be appropriate for such fisheries. A management strategy evaluation model was developed to compare an effort-management system based on the Faroese example with a TAC system as currently applied in EU fisheries. Results show that when stocks are considered in isolation, a total allowable effort system does not necessarily perform better than a TAC one. It depends on stock status and dynamics, the level of uncertainty, and the reactivity of the system to changes in scientific advice. When the stocks are considered together in mixed fisheries, effort management seems, however, to be appropriate, and interannual flexibility of the system appears to be the best compromise between short- and long-term objectives, as well as between biological sustainability and economic return.

General information
State: Published
Organisations: Section for Management Systems, National Institute of Aquatic Resources, Section for Public Sector Consultancy
Authors: Baudron, A. (Ekstern), Ulrich, C. (Intern), Nielsen, J. R. (Intern), Boje, J. (Intern)
Pages: 1036-1050
Publication date: 2010
Main Research Area: Technical/natural sciences

Publication information
Journal: ICES Journal of Marine Science
Volume: 67
Issue number: 5
ISSN (Print): 1054-3139
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 2.63
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): CiteScore 2.18
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): CiteScore 2.62
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): CiteScore 2.46
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): CiteScore 2.35
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): CiteScore 2.32
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 1
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 1
Sexual maturity cycle and spawning of Greenland halibut Reinhardtius hippoglossoides in the Davis Strait

Female sexual maturation cycle and the main spawning time of Greenland halibut Reinhardtius hippoglossoides in the Davis Strait were studied through regularly collected samples during 1 year starting in spring 2003. Samples were collected from the southern slope of the Davis Strait Ridge between Canada and Greenland in the depth range 1000-1500 m. Female sexual maturation was described using different approaches: gonado-somatic index, visual macroscopic maturity stage index, histological microscopic maturity index and oocyte diameter measurements. A significant increase in the gonado-somatic index was seen from September onwards until February with a maximum estimated value of 18%. The proportion of mature fish increased from December until March. At the same time, the proportion of females with a low gonado-somatic index also increased from February, indicating that spawning had occurred and females were recovering. Oocyte diameter distribution revealed a leading cohort development during autumn through to December to February. A coupling between sexual maturity and fish condition was seen for females in maturing condition indicating a steady build up of stored energy in the liver from June to November.
Electronic catch recordings for scientific and commercial use
For assessment and management of marine fish resources, representative data of statistically good quality describing the actual catch are lacking for many fisheries. Even for the most studied fisheries in the North Atlantic, the uncertainty regarding what is actually caught has implications for management. Fish stock assessments and sound advice in most cases rely on representative samples of catches. Distant and high sea fisheries often suffer from poor sampling due to sampling personal logistics. Consequently, stock assessment and management of marine fish resources exploited by those fisheries are based on poor or scarce catch data. Presently, sampling at sea is often random in time and place, and not necessarily representative with respect to the fleet metier. Biological sampling in distant waters is a challenge due to
logistics and high costs. The use of electronic scales onboard commercial fishing vessels opens a new approach for data collection. In recent years electronic scales measuring individual fish weights on deck have been connected to GPS in combination with data on depth, fishing gear, logbook information etc. This approach will link detailed data to auxiliary information on the fishery, thereby meeting the challenges of obtaining representative fishery data, that is continuous and complete and will provide sufficient data for fish stock assessments and, hence, subsequent fisheries management of species found in distant waters.
When to count your eggs: Is fecundity in Greenland halibut (Reinhardtius hippoglossoides W.) down-regulated?

General information
State: Published
Organisations: Section for Fisheries Advice, National Institute of Aquatic Resources
Authors: Kennedy, J. (Ekstern), Gundersen, A. (Ekstern), Boje, J. (Intern)
Pages: 260-265
Publication date: 2009
Main Research Area: Technical/natural sciences

Publication information
Journal: Fisheries Research
Volume: 100
Issue number: 3
ISSN (Print): 0165-7836
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 2.21 SJR 1.12 SNIP 1.136
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 1.067 SNIP 1.133 CiteScore 2.01
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 1.105 SNIP 1.312 CiteScore 2.17
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 1.037 SNIP 1.173 CiteScore 1.85
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 0.93 SNIP 1.177 CiteScore 1.78
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 1.154 SNIP 1.135 CiteScore 1.7
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 1.041 SNIP 1.1
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 1
Scopus rating (2009): SJR 0.985 SNIP 1.065
Web of Science (2009): Indexed yes
BFI (2008): BFI-level 2
Scopus rating (2008): SJR 0.938 SNIP 1.142
Web of Science (2008): Indexed yes
Scopus rating (2007): SJR 1.022 SNIP 1.075
Growth analysis and age validation of a deepwater Arctic fish, the Greenland halibut (Reinhardtius hippoglossoides)

The accuracy of age interpretations on a deep-sea, Arctic fish species, the Greenland halibut (Reinhardtius hippoglossoides) was tested using several age validation methods. Consistent annual growth increments were either not formed or not visible in either whole or sectioned otoliths from three fish marked with oxytetracyline and recaptured after 2-4 years at liberty. Bomb radiocarbon assays based on a local reference chronology indicated that both whole and sectioned otoliths underestimated age by 1-15 years, with an average of 6 years. Growth rates estimated using the tag recapture model GROTAG were consistent with growth rates based on the radiocarbon assays and were less than half that of previously reported growth rates. The failure of otolith sections to provide an accurate age is unusual, but may be symptomatic of very slow-growing species with unusually shaped otoliths. Greenland halibut living in the deep-sea, Arctic environment are slower growing and longer lived than previously suspected, suggesting that the age-structured basis for current fisheries management warrants careful examination. Our results highlight the importance of using rigorous tests of ageing accuracy for exploited species and confirm that such age validation methods can be applied successfully in challenging environments such as the deep sea or the Arctic.

General information
State: Published
Organisations: Section for Fisheries Advice, National Institute of Aquatic Resources
Authors: Treble, M. (Ekstern), Campana, S. (Ekstern), Wastle, R. (Ekstern), Jones, C. (Ekstern), Boje, J. (Intern)
Pages: 1047-1059
Publication date: 2008
Main Research Area: Technical/natural sciences

Publication information
Journal: Canadian Journal of Fisheries and Aquatic Sciences
Volume: 65
Issue number: 6
ISSN (Print): 0706-652X
Ratings:
BFI (2018): BFI-level 2
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 2
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 2
Scopus rating (2016): CiteScore 2.56 SJR 1.322 SNIP 1.163
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 2
Do Greenland halibut, R. hippoglossoides, spawn in inshore Disko Bay, West Greenland?

General information
State: Published
Organisations: Section for Shellfish, National Institute of Aquatic Resources, Section for Management Systems, Section for Fisheries Advice
Plaice tagging in Danish waters 1903-1964

General information
State: Published
Organisations: Section for Coastal Ecology, National Institute of Aquatic Resources, Section for Fisheries Advice
Authors: Nielsen, E. (Intern), Boje, J. (Intern), Nicolajsen, H. (Intern)
Number of pages: 8
Publication date: 2007

Publication information
Publisher: [s.n.]
Original language: English
Main Research Area: Technical/natural sciences

Bibliographical note
Working paper to ICES Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK)
Source: orbit
Source-ID: 226808
Publication: Research › Report – Annual report year: 2007

Report on the Faroese Fisheries Regulation - The Faroe Model

General information
State: Published
Organisations: Section for Fisheries Advice, National Institute of Aquatic Resources
Authors: Løkkegaard, J. (Ekstern), Levring Andersen, J. (Ekstern), Boje, J. (Intern), Frost, H. (Ekstern), Hovgård, H. (Intern)
Number of pages: 153
Publication date: 2007

Publication information
Publisher: Institute of Food and Resource Economics, University of Copenhagen
Original language: English
Series: FOI report
Number: 193
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 226497
Publication: Research › Report – Annual report year: 2007

Sexual maturity cycle and spawning of Greenland halibut, R. hippoglossoides Walbum, in the Davis Strait

General information
State: Published
Organisations: Section for Shellfish, National Institute of Aquatic Resources, Section for Management Systems, Section for Fisheries Advice
Authors: Gundersen, A. (Ekstern), Stenberg, C. (Intern), Fossen, I. (Ekstern), Lyberth, B. (Ekstern), Jørgensen, O. A. (Intern), Boje, J. (Intern)
Publication date: 2007
Event: Poster session presented at PICES/ICES/NAFO Symposium on Reproductive and Recruitment Processes in Exploited Marine Fish Stocks, Lisboa, Portugal, Lissabon, Portugal, 1-3 October.
Main Research Area: Technical/natural sciences
An assessment of age determination methods, with age validation of Greenland halibut from the Northwest Atlantic

General information
State: Published
Organisations: Section for Fisheries Advice, National Institute of Aquatic Resources
Authors: Treble, M. (Ekstern), Campana, S. (Ekstern), Wastle, R. (Ekstern), Jones, C. (Ekstern), Boje, J. (Intern)
Pages: 1-22
Publication date: 2005
Conference: Scientific Council Research documents NAFO, 01/01/2005
Main Research Area: Technical/natural sciences

Publication information
Journal: Scientific Council Research documents NAFO
Volume: 05/43
ISSN (Print): 0256-6915
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: English
Source: orbit
Source-ID: 227699
Publication: Research › Conference article – Annual report year: 2005

An assessment of the Greenland halibut stock component in NAFO Division 1A Inshore

General information
State: Published
Organisations: Section for Fisheries Advice, National Institute of Aquatic Resources
Authors: Lyberth, B. (Ekstern), Boje, J. (Intern)
Pages: 1-23
Publication date: 2005
Main Research Area: Technical/natural sciences

Publication information
Journal: Scientific Council Research documents NAFO
Volume: 05/58
ISSN (Print): 0256-6915
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: English
Source: orbit
Source-ID: 226486
Publication: Research › Conference article – Annual report year: 2005

Survey calibration for Greenland halibut in Division 1A Inshore

General information
State: Published
Organisations: Section for Fisheries Advice, National Institute of Aquatic Resources
Authors: Boje, J. (Intern), Lyberth, B. (Ekstern)
Pages: 1-8
Publication date: 2005
Main Research Area: Technical/natural sciences
An assessment of the Greenland halibut stock component in NAFO 1A inshore

General information
State: Published
Organisations: Section for Fisheries Advice, National Institute of Aquatic Resources
Authors: Boje, J. (Intern), Lyberth, B. (Ekstern)
Pages: 1-22
Publication date: 2004
Main Research Area: Technical/natural sciences

Settling and factors affecting 0-group distribution of Greenland halibut, R. hippoglossoides (Walbaum), in west Greenland waters

General information
State: Published
Organisations: Section for Fisheries Advice, National Institute of Aquatic Resources, Section for Shellfish
An Assessment of the Greenland Halibut Stock Component in NAFO Division 1A Inshore

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Coastal Ecology, Section for Public Sector Consultancy
Authors: Stenberg, C. (Intern), Boje, J. (Intern)
Publication date: 2003
Main Research Area: Technical/natural sciences

Publication information
Journal: NAFO Scientific Council Research Documents
Issue number: 03/49
ISSN (Print): 1682-993X
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: English
Source: orbit
Source-ID: 279146
Publication: Research › Conference article – Annual report year: 2003

Fecundity of Greenland halibut (Reinhardtius hippoglossoides) in East Greenland waters 1997-2000

General information
State: Published
Organisations: Section for Fisheries Advice, National Institute of Aquatic Resources
Authors: Gundersen, A. (Ekstern), Emblem, W. (Ekstern), Hellevik, A. (Ekstern), Rønneberg, J. (Ekstern), Boje, J. (Intern), Gundersen, A. (ed.) (Ekstern)
Publication date: 2002

Publication information
Publisher: Nordic Council of Ministers
Original language: English
Series: TemaNord
Number: 2002:519
ISSN: 0908-6692
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 225581
Publication: Research › Report – Annual report year: 2002

Greenland halibut biology and population dynamics - State of the art and identification of research needs. Based on a Nordic Workshop

General information
State: Published
Organisations: Section for Fisheries Advice, National Institute of Aquatic Resources, Section for Management Systems, Section for Shellfish
Intermingling and seasonal migrations of Greenland halibut (Reinhardtius hippoglossoides) populations determined from tagging studies

A total of 7244 Greenland halibut (Reinhardtius hippoglossoides' Walbaum) were tagged in Greenland waters between 1986 and 1998 to increase information on stock delineations, to clarify migration routes, and to describe the seasonal movements of cord populations. At present 517 recaptured Greenland halibut have been recorded. For Greenland halibut released in Davis Strait, Baffin Bay, and the fjords of south-western and eastern Greenland, a substantial portion of recovered fish demonstrated migratory behavior, up to 2500 km, primarily to Denmark Strait between Greenland and Iceland. The recaptured fish provided evidence of intermingling between the population in Denmark Strait and the populations in Davis Strait and the southwest Greenland fjords. These observations support those of other studies that indicate that Greenland halibut inhabiting Davis Strait and the fjords of southwestern and eastern Greenland originate in the spawning grounds west of Iceland. The high mobility of offshore Greenland halibut within Baffin Bay and Davis Strait suggests that Greenland halibut migrate extensively between feeding and spawning areas. Greenland halibut in the fjords of northwestern Greenland appear to be resident in behavior and do not intermingle with offshore or more southerly inshore populations. A seasonal pattern in the recovery of these fish indicates that Greenland halibut aggregate in the inner part of cords during the second half of the year (when inshore waters are not covered with ice)
Maturation and occurrence of atresia in oocytes of Greenland halibut (Reinhardtius hippoglossoides W.) in the waters of East Greenland, Faroe Islands and Hatton Bank

General information
State: Published
Organisations: Section for Fisheries Advice, National Institute of Aquatic Resources
Authors: Tuene, S. (Ekstern), Gundersen, A. (Ekstern), Emblem, W. (Ekstern), Fossen, I. (Ekstern), Boje, J. (Intern), Steingrund, P. (Ekstern), Ofstad, L. (Ekstern), Gundersen, A. (ed.) (Ekstern)
Publication date: 2002

Publication information
Publisher: Nordic Council of Ministers
Original language: English

Series: TemaNord
Number: 2002:519
ISSN: 0908-6692
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 224967
Publication: Research - peer-review › Journal article – Annual report year: 2002

Variability in fecundity and total egg production for West-Nordic Greenland halibut

General information
State: Published
Organisations: Section for Fisheries Advice, National Institute of Aquatic Resources, Section for Management Systems, Section for Shellfish
Authors: Gundersen, A. (Ekstern), Boje, J. (Intern), Jørgensen, O. A. (Intern), Hjørleifsson, E. (Ekstern), Stenberg, C. (Intern), Fossen, I. (Ekstern), Ofstad, L. (Ekstern), Rätz, H. (Ekstern), Gundersen, A. (ed.) (Ekstern)
Publication date: 2002
An assessment of the Greenland halibut stock component in NAFO Division 1A inshore

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Coastal Ecology, Section for Public Sector Consultancy
Authors: Stenberg, C. (Intern), Boje, J. (Intern)
Pages: 37
Publication date: 2001
Main Research Area: Technical/natural sciences

Publication information
Journal: NAFO Scientific Council Research Documents
Issue number: 01/68
ISSN (Print): 1682-993X
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: English
Source: orbit
Source-ID: 279144
Publication: Research › Conference article – Annual report year: 2001

Catch rates and hook and bait selectivity in longline fishery for Greenland halibut (Reinhardtius hippoglossoides, Walbaum) at East Greenland

A joint Norwegian–Greenland longline survey was conducted at East Greenland in August 1997, using different hook and bait types. Most Norwegian longliners use hooks of the type EZ 12/0. This hook was compared to three versions of a new circle 14/0 hook. A total catch of 2899 Greenland halibut from 45,760 hooks baited with squid were used in the hook selectivity analyses. In average, CPUE was 281kg/1000 hook for the EZ hook. CPUE for the circular hook was 36% higher making an overall significant difference in CPUE between the EZ hook and the circle hooks. On 6630 hooks squid and grenadier were used alternately. The CPUE of Greenland halibut was 25% higher for grenadier bait. The grenadier bait resulted in a reduction in bycatch compared to the squid bait (1.1 and 20.7% by numbers, respectively). Catches by EZ 12/0 hook and one of the circle 14/0 hooks were compared in order to examine size selectivity. Using the SELECT approach, expected proportions were fitted to the observed proportions for five different models of selectivity. All models resulted in almost identical fits. The absence of non-selective data requires the choice of selectivity curve to be based on knowledge about the capture process. Since the selectivity curves cannot be determined unambiguously in this study, none of the estimated curves are preferred for the other.

General information
State: Published
Organisations: Møre Research, ConStat, The North Sea Centre, Greenland Institute of Natural Resources
Authors: Woll, A. K. (Ekstern), Boje, J. (Intern), Holst, R. (Ekstern), Gundersen, A. C. (Ekstern)
Pages: 237-246
Publication date: 2001
Main Research Area: Technical/natural sciences

Publication information
Journal: Fisheries Research
Volume: 51
Issue number: 2-3
ISSN (Print): 0165-7836
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 2.21 SJR 1.12 SNIP 1.136
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 1.067 SNIP 1.133 CiteScore 2.01
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 1.105 SNIP 1.312 CiteScore 2.17
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 1.037 SNIP 1.173 CiteScore 1.85
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 0.93 SNIP 1.177 CiteScore 1.78
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 1.154 SNIP 1.135 CiteScore 1.7
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 1.041 SNIP 1.1
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 1
Scopus rating (2009): SJR 0.985 SNIP 1.065
Web of Science (2009): Indexed yes
BFI (2008): BFI-level 2
Scopus rating (2008): SJR 0.938 SNIP 1.142
Web of Science (2008): Indexed yes
Scopus rating (2007): SJR 1.022 SNIP 1.075
Web of Science (2007): Indexed yes
Scopus rating (2006): SJR 1.025 SNIP 1.274
Web of Science (2006): Indexed yes
Scopus rating (2005): SJR 0.906 SNIP 1.134
Web of Science (2005): Indexed yes
Scopus rating (2004): SJR 0.944 SNIP 1.023
Web of Science (2004): Indexed yes
Scopus rating (2003): SJR 1.076 SNIP 1.314
Web of Science (2003): Indexed yes
Scopus rating (2002): SJR 1.299 SNIP 1.22
Web of Science (2002): Indexed yes
Scopus rating (2001): SJR 0.934 SNIP 0.891
Web of Science (2001): Indexed yes
Scopus rating (2000): SJR 0.611 SNIP 0.836
Web of Science (2000): Indexed yes
Scopus rating (1999): SJR 0.546 SNIP 0.865

Original language: English
Source: orbit
Source-ID: 281261
Fecundity of Greenland halibut (Reinhardtius hippoglossoides Walbaum) in East Greenland waters

Fecundity is described for Greenland halibut, based on ovaries collected in July 1997 in ICES Division XIVb in East Greenland waters. The mean potential fecundity was estimated to be 113700 (range 32500–277100). Fecundity was significantly determined by total length. Fecundity–length and fecundity–weight (round and gutted) relationships were estimated. Vitellogenic oocytes appearing dark in the microscope with a diameter ranging from 900 to 1650μm were counted and used in the fecundity estimates. This stage was easily distinguished from an early vitellogenic stage, with a diameter ranging from 490 to 1050μm (mean 730μm). The latter appeared transparent with a small brownish nucleus.

General information
State: Published
Organisations: Section for Public Sector Consultancy, National Institute of Aquatic Resources, Møre Research
Authors: Gundersen, A. C. (Ekstern), Rønneberg, J. E. (Ekstern), Boje, J. (Intern)
Pages: 229-236
Publication date: 2001
Main Research Area: Technical/natural sciences

Publication information
Journal: Fisheries Research
Volume: 51
Issue number: 2-3
ISSN (Print): 0165-7836
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 2.21 SJR 1.12 SNIP 1.136
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 1.067 SNIP 1.133 CiteScore 2.01
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 1.105 SNIP 1.312 CiteScore 2.17
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 1.037 SNIP 1.173 CiteScore 1.85
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 0.93 SNIP 1.177 CiteScore 1.78
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 1.154 SNIP 1.135 CiteScore 1.7
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 1.041 SNIP 1.1
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 1
Scopus rating (2009): SJR 0.985 SNIP 1.065
Web of Science (2009): Indexed yes
BFI (2008): BFI-level 2
Scopus rating (2008): SJR 0.938 SNIP 1.142
Variability in fecundity and total egg production for West Nordic Greenland halibut (Reinhardtius hippossoides)

General information
State: Published
Organisations: Unknown
Authors: Gundersen, A. (Ekstern), Boje, J. (Intern), Hjørleifsson, O. (Ekstern), Stenberg, C. (Intern), Fossen, I. (Ekstern), Ofstad, L. (Ekstern), Rätz, H. (Ekstern)
Publication date: 2001
Main Research Area: Technical/natural sciences

Publication information
Journal: NAFO Scientific Council Research Documents
Issue number: 01/157
ISSN (Print): 1682-993X
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: English
Source: orbit
Source-ID: 281258
Publication: Research - peer-review » Journal article – Annual report year: 2001

An assessment of the Greenland halibut stock component in NAFO Division 1A inshore

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Coastal Ecology, Section for Public Sector Consultancy
Authors: Stenberg, C. (Intern), Boje, J. (Intern)
Publication date: 2000
Main Research Area: Technical/natural sciences

Publication information
Journal: NAFO Scientific Council Research Documents
Issue number: 00/47
ISSN (Print): 1682-993X
Ratings:
A review using longlining to survey fish populations with special emphasis on an inshore longline survey for Greenland halibut (Reinhardtius hippoglossoides) in West Greenland, NAFO Division 1A

General information
State: Published
Organisations: Greenland Institute of Natural Resources
Authors: Stenberg, C. (Intern), Boje, J. (Intern), Kingsley, M. (Ekstern)
Publication date: 2000
Main Research Area: Technical/natural sciences

Publication information
Journal: NAFO Scientific Council Research Documents
Issue number: 00/29
ISSN (Print): 1682-993X
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: English
Source: orbit
Source-ID: 279141
Publication: Research › Conference article – Annual report year: 2000

An assessment of the inshore Greenland halibut stock component in NAFO Division 1A inshore

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Coastal Ecology, Section for Public Sector Consultancy
Authors: Stenberg, C. (Intern), Boje, J. (Intern)
Pages: 24
Publication date: 1999
Main Research Area: Technical/natural sciences

Publication information
Journal: NAFO Scientific Council Research Documents
Issue number: 99/48
ISSN (Print): 1682-993X
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: English
Source: orbit
Source-ID: 279148
Publication: Research › Conference article – Annual report year: 1999

The suitability of vertebral counts in stock delineation studies of Greenland halibut, Reinhardtius hippoglossoides (Walbaum), in West Greenland

Vertebral counts of Greenland halibut collected from West Greenland in 1995 were compared to samples from the same areas for the period 1987–1989. The 1995 samples, obtained in Davis Strait, Baffin Bay, and two North-west Greenland fjords, showed no significant differences in mean vertebral numbers. Previous studies in 1987–1989, however, showed significant differences in mean vertebral counts between some of the same areas. Inter-annual variation in vertebral numbers is therefore suggested to be greater than the variation between sample areas. Despite the protracted egg and larval stage of Greenland halibut, the currents along the West Coast of Greenland are unlikely to transport juveniles in any significant amount from the Davis Strait spawning grounds to the North-west Greenland fjords. The origin of the
northernmost populations therefore remains unknown. As single cohorts in the material seem to affect the total average counts per area significantly it is suggested that a change in the distribution of Greenland halibut might have occurred during the period studied. The results also emphasize the importance of relying on data based on more than one year and question the suitability of vertebral counts in stock delineation studies of Greenland halibut.
An assessment of the inshore Greenland halibut stock component in NAFO Division 1A

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Coastal Ecology, Section for Public Sector Consultancy
Authors: Stenberg, C. (Intern), Boje, J. (Intern)
Pages: 15
Publication date: 1997
Main Research Area: Technical/natural sciences

Publication information
Journal: NAFO Scientific Council Research Documents
Issue number: 97/78
ISSN (Print): 1682-993X
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: English
Source: orbit
Source-ID: 279157
Publication: Research - Conference article – Annual report year: 1997

Heilminth parasites as biological tags in population studies of Greenland halibut (Reinhardtius hippoglossoides(Walbaum)), in the north-west Atlantic

As part of a stock identification study, the parasite fauna of 608 Greenland halibut, Reinhardtius hippoglossoides(Walbaum) from six areas in the north-west Atlantic was examined. New records of parasite species for the Greenland area have been added by this study. No significant differences in prevalence were found between sexes or age groups of Greenland halibut. Three digeneans (Brachyphallus crenatus, Steganoderma formosum, and Stenakron vetustum) and three nematodes (Anisakis simplex, Ascarophis sp., and Contracaecum sp.) showed irregularities in spatial infestation pattern and were therefore chosen as biological tags. Non-parametric discriminant analyses of the prevalence of these parasites indicated strong similarities between components off Labrador, Davis Strait, and in the fjords of Umanak at West Greenland. Greenland halibut in south-west Greenland fjords appeared to be isolated, as does the component in the Denmark Strait. This general pattern adds further support to previous investigations on stock structure of Greenland halibut in the North-west Atlantic.

General information
State: Published
Organisations: University of Copenhagen, National Environmental Research Institute, Greenland Institute of Natural Resources
Authors: Boje, J. (Intern), Riget, F. (Ekstern), Køie, M. (Ekstern)
Pages: 886-895
Publication date: 1997
Main Research Area: Technical/natural sciences

Publication information
Journal: ICES Journal of Marine Science
Volume: 54
Issue number: 5
ISSN (Print): 1054-3139
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Selectivity of gillnets in the Greenland halibut fishery at Greenland

General information
State: Published
Organisations: Section for Fisheries Advice, National Institute of Aquatic Resources
Authors: Boje, J. (Intern), Hovgård, H. (Intern)
Publication date: 1995
Main Research Area: Technical/natural sciences

Publication information
Journal: ICES CM 1995/
Volume: B:17
An analysis of meristic characters and genetic differentiation in Greenland halibut (Reinhardtius hippoglossoides Walb.) in the Northwest Atlantic

A stock identification study of Greenland halibut (Reinhardtius hippoglossoides) in the Northwest Atlantic was carried out based on samples from off eastern Newfoundland [Canada], Davis Strait, three West Greenland fjords and Denmark Strait. Meristic characters and frequencies of electrophoretically detectable alleles of protein loci were analyzed. Mean number of vertebrae showed significant heterogeneity among areas, while fin-ray numbers showed no difference. Offshore areas were very alike in terms of mean numbers of vertebrae, while those from the inshore areas of West Greenland differed both among themselves and from those of the offshore areas. The genetic variation between samples was small. In all samples the phenotypic distribution of four polymorphic loci was in accordance with the expectation from the Hardy-Weinberg proportions. Pair comparisons of the allelic distributions between samples showed that more than one breeding stock must exist. Although the Denmark Strait stock could not be separated from the stock in the area between West Greenland and Canada, results support the conclusion that at least two spawning stocks exist in the Northwest Atlantic. Results are consistent with the prevailing theory that Greenland halibut form a single, interbreeding stock in the offshore area between Canada and West Greenland, but also agree with other evidence that Greenland halibut in West Greenland fjords are partially isolated from the offshore stock.

General information
State: Published
Organisations: Greenland Fisheries Research Institute, National Institute of Animal Sciences
Authors: Riget, F. (Ekstern), Boje, J. (Intern), Simonsen, V. (Ekstern)
Pages: 7-14
Publication date: 1992
Main Research Area: Technical/natural sciences

Publication information
Journal: Journal of Northwest Atlantic Fishery Science
Volume: 12
ISSN (Print): 0250-6408
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
BFI (2016): BFI-level 1
Scopus rating (2016): SJR 0.317 SNIP 0.442 CiteScore 0.83
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 0.831 SNIP 1.67 CiteScore 1.33
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 0.448 SNIP 0.634 CiteScore 0.91
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 0.246 SNIP 0.566 CiteScore 0.75
ISI indexed (2013): ISI indexed no
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 0.199 SNIP 0.423 CiteScore 0.33
ISI indexed (2012): ISI indexed no
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 0.646 SNIP 0.816 CiteScore 2.24
ISI indexed (2011): ISI indexed no
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 0.81 SNIP 0.747
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 1
Fishery and some biological aspects of Greenland halibut (Reinhardtius hippoglossoides) in West Greenland waters

A review of available information is presented of recent investigations on the fishery and biology of Greenland halibut (Reinhardtius hippoglossoides) in West Greenland waters. Biological aspects are discussed mainly in relation to the recruitment to West Greenland area and the connection between the stocks in the West Greenland fjords and the stock complex in the Davis Strait. Larval drift is discussed relating the distribution of pelagic larvae and young demersal stages to the ocean current patterns in the area. Although the main drift pattern seems to be from the assumed spawning area in the Davis Strait to the West Greenland area, it also seems likely that larvae drift from the East Greenland/Iceland area to the southern part of West Greenland. Length frequencies at different places in the West Greenland area seem to indicate that as they grow they migrate deeper, both to the fjords and the continental slope in the Davis Strait. Recaptures from tagging experiments in the inshore area have all been near the tagging site, except for two examples of long distance migrations. A spawning migration from the fjords to the Davis Strait area have not been confirmed by tagging experiments. The recapture rates are shown to be independent of the length of fish. The sex ratios in the fjords at the West Greenland show the proportion of females as generally being the higher and that it is very similar to observed sex ratio on the continental slope of the Davis Strait. Observations on maturity show that a small proportion of the females and a larger proportion of the males in the West Greenland fjords are found in maturity stages just before or at spawning, suggesting that spawning, to some extent, takes place in the fjords. It is therefore proposed that Greenland halibut in the West Greenland fjords are mainly stationary and do not participate in the spawning in the deeper areas of the Davis Strait south of 67°N.

General information
State: Published
Organisations: Greenland Fisheries Research Institute
Authors: Riget, F. (Ekstern), Boje, J. (Intern)
Pages: 41-52
Publication date: 1989
Main Research Area: Technical/natural sciences

Publication information
Journal: Northwest Atlantic Fisheries Organization Scientific Council Studies
Issue number: 13
ISSN (Print): 0250-6432
Ratings:
Web of Science (2018): Indexed yes
Scopus rating (2016): SJR 0.166 SNIP 0.125 CiteScore 0.2
Scopus rating (2015): SJR 0.106 SNIP 0 CiteScore 0
Distribution and abundance of young Greenland halibut Reinhardtius hippoglossoides in west Greenland waters

Distribution and abundance of young Greenland halibut (Reinhardtius hippoglossoides) at West Greenland are described on the basis of stratified-random bottom-trawl surveys in 1982-84 and research trawling for shrimp during 1968-87. Greenland halibut abundance was low in the offshore areas (south of 67°N) covered by the bottom-trawl surveys and shrimp-trawl operations, but the catch rates tended to increase from south to north. The greatest abundance was found in the offshore north of Store Hellefiske Bank and in Disko Bay (north of 68°N). However, high abundance of young Greenland halibut was found in shrimp-trawl catches in some coastal areas, especially near Holsteinsborg and south of Godthaab, both of which are quite distant from the main areas of distribution in the north. Length distribution by yearly quarter in the Godthaab area indicated the first appearance of 0-group Greenland halibut in the fourth quarter. While young Greenland halibut in the northern areas may originate from the assumed spawning area in Davis Strait, those in the southern coastal waters of West Greenland are postulated to originate from the Iceland-Greenland area, being transported to southern West Greenland by the East Greenland Current.

General information
State: Published
Organisations: Greenland Fisheries Research Institute
Authors: Riget, F. (Ekstern), Boje, J. (Intern)
Pages: 7-12
Publication date: 1988
Main Research Area: Technical/natural sciences

Publication information
Journal: Northwest Atlantic Fisheries Organization Scientific Council Studies
Issue number: 12
ISSN (Print): 0250-6432
Ratings:
Web of Science (2018): Indexed yes
Scopus rating (2016): SJR 0.166 SNIP 0.125 CiteScore 0.2
Scopus rating (2015): SJR 0.106 SNIP 0 CiteScore 0
Scopus rating (2014): SJR 0.108 SNIP 0 CiteScore 0
Scopus rating (2013): SJR 0.241 SNIP 0.759 CiteScore 1
Projects:

Changes in marine resources in Skagerrak and Kattegat 1946-2012 – Catch and revenue in the post war fishery and transformation of the fleet (DIGIFISH) (39103)

The project has compiled catch and economic data from fisheries in Skagerrak and Kattegat since 1946. The aim of the project was to establish a common database for future utilization in the research of development of fisheries and socio-economics in the specific area.

Research institutes from Sweden (Swedish University of Agricultural Sciences), Norway (Oxford Research) and Denmark (DTU Aqua) participated in the project. Data has been extracted from various national statistical databases and logbooks/landing slips from the fishery. The output from the project is a database with landings and economic values of fish landed in Skagerrak and Kattegat, comprising all commercial species and thereby valuable for historic studies of the species and their utilization.

There is a pressure from consumers on the fishing industry to legitimate sustainability in the fisheries, which normally requires assessments and advice consistent with international criteria on sustainability. A prerequisite for such an approach is complete catch data back in time. Therefore, the present project provides important data to base assessments on and to perspective recent fisheries with historic data.

Economic data in the database will enable socio-economic analyses of the different fisheries, including changes on structure of society and fishery.

This project was coordinated by DTU Aqua.

The project was funded by the AG Fisk (Working Group for Fisheries), Nordic Council of Ministers.

National Institute of Aquatic Resources
Arctic Section
Swedish University of Agricultural Sciences

Oxford Research
Period: 01/01/2013 → 31/12/2013
Number of participants: 1
Research areas: Marine Living Resources & Marine Populations and Ecosystem Dynamics & Fisheries Management
A management plan is an important requirement for MSC certification of specific fisheries. However, prior to this project, reliable stock assessments, which are necessary for a management plan for plaice (*Pleuronectes platessa*) in area IIIa (Kattegat/Skagerrak), had not been available. These problems most likely originated from insufficient knowledge about the geographical distribution of populations as well as the interactions between populations in Kattegat/Skagerrak and neighboring areas. Through a mapping of the distribution and dynamics of populations, this project aimed at providing the missing data that would ultimately allow for the development of a management plan for the plaice fishery in area IIIa. The work included information from genetics, tagging, otolith-based growth estimation, oceanographic modeling, and analyses of survey and fisheries data.

Results from the project showed evidence of both local population components in the Kattegat/Skagerrak as well as substantial mixing between North Sea populations and these local components, and consequences of lumping or splitting the populations for stock assessment and management were discussed.

The outcomes of the work directly influenced the policy decisions since 2015. Decision was finally made to proceed with the lumping option, thus allowing a quantitative analytical assessment and management advice for the area. However, because of the differences in size between the two populations, there is a risk of depletion of the local Skagerrak population if the fisheries on it increase as a consequence of the increase in the North Sea stock. In terms of management, some mechanisms already exist for reducing the fishing pressure in the Skagerrak if deemed necessary, as plaice in the North Sea and in the Skagerrak are managed by two different Total Allowable Catches (TACs). It has therefore been suggested that routine monitoring of the survey and fisheries patterns would allow detecting any departures from the current situation, i.e., a decoupling of trends in the different areas and the different seasons that could indicate a reduced productivity of the local stock.

In the longer term, the current progresses on the biological knowledge of the stock in Skagerrak should be sustained. Additional genetic allocation of individual fish to the different populations should be performed to obtain a better quantification of the mixing in different areas and seasons, and the survey coverage should be improved in the Skagerrak.

The project was funded by the Danish Ministry of Food, Agriculture and Fisheries and the European Fisheries Fund (EFF).
suffered from a number of uncertainties and issues which could not be solved through a standard benchmark process. DTU Aqua was thus involved in order to clarify the biological knowledge base for this stock and contributed to suggestions for a more tailored approach to the assessment and management of plaice in Skagerrak.

The project resulted in significant changes in the perception of plaice population dynamics in the Skagerrak-Kattegat. An ICES workshop was convened in 2012 (WKPESTO) on the basis of the project, and a new basis for scientific advice was agreed. The scientific and advice outcomes of the project have been disseminated in a scientific publication by Ulrich et al. (2013), DOI: 10.1016/j.seares.2013.04.007

The research underlying this project was continued in project 39025 in 2013-2014.

The project was coordinated by Danish Fishermen's Producers' Organisation, Denmark.

The project was funded by the Danish Ministry of Food, Agriculture and the Fisheries and the European Fisheries Fund (EFF).

National Institute of Aquatic Resources
Section for Ecosystem based Marine Management

Danish Fishermen's Producers' Organization
Period: 01/01/2010 → 01/02/2013
Number of participants: 2
Research areas: Fisheries Management & Ecosystem based Marine Management
Project participant:
Boje, Jesper (Intern)
Project Manager, academic:
Ulrich, Clara (Intern)

Monitoring and modelling vertical movements of Greenland halibut in Disko Bay (38795)
The project measured and parameterized Greenland halibut behaviour in terms of vertical movement patterns by means of data storage tags. The tags were released (and recaptured) prior to the project period under another project, so that data was available at start of the project.

Previous measurements using Data Storage tags on halibut tagged in Disko Bay have shown that the halibut undertake distinct vertical migrations of several hundred meters at a time during a few hours.

The findings in the project from analyses of the previous tagging’s gave important biological information on the seasonal migration patterns for Greenland halibut in the West Greenland Fjords; icefjords are mainly preferred as wintering habitat for the fish while the outer parts of the fjord systems are summer habitats. Further, the study showed that halibut are fast vertical swimmers most likely when chasing pelagic prey fishes.

The project was coordinated by DTU Aqua.

The project was funded by the Commission for Scientific Investigations in Greenland (KVUG).

National Institute of Aquatic Resources
Arctic Section

Greenland Institute of Natural Resources
Period: 01/01/2010 → 31/12/2013
Number of participants: 3
Research areas: Marine Populations and Ecosystem Dynamics & Fish Biology
Project participant:
Neuenfeldt, Stefan (Intern)
Behrens, Jane (Intern)
Boje, Jesper (Intern)

Cooperative agreement between Greenland Institute of Natural Resources and DTU Aqua (38085)
DTU Aqua supports the Greenland Institute of Natural Resources (GINR) within general fisheries biology, assessment, survey planning and evaluation and education and support of young scientists.
The scientists are also engaged in formulation of advice to the Greenland Government in several ICES Expert Groups such as North Western Working Group (NWWG) and Working Group for Widely Distributed Stocks (WG WIDE), North East Atlantic Fisheries Commission (NEAFC) and North West Atlantic Fisheries Organization (NAFO). ICES and NAFO are further the platforms where important assessment issues such as stock ID, assessment methods and survey techniques are discussed and applied in the advisory service.

Further scientists acts as appointed experts at the Self-Governments bilateral fisheries meetings and coastal state meetings.

During the years DTU has recruited eight scientists from GINR while one scientist has been recruited from DTU Aqua to GINR.

The project is coordinated by DTU Aqua.

The project is funded by the Greenland Institute of Natural Resources.

National Institute of Aquatic Resources
Section for Oceans and Arctic
Greenland Institute of Natural Resources
Period: 01/01/2001 → …
Number of participants: 3
Research areas: Fisheries Management & Marine Living Resources
Project participant:
Boje, Jesper (Intern)
Wieland, Kai (Intern)
Project Manager, academic:
Jørgensen, Ole A. (Intern)

Activities:

ICES - Baltic Fisheries Assessment Working Group - WGBFAS (External organisation)
Period: 2015
Jesper Boje (Participant)
National Institute of Aquatic Resources
Arctic Section
Degree of recognition: International

Related external organisation
ICES - Baltic Fisheries Assessment Working Group - WGBFAS
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - Benchmark Workshop on Plaice - WKPLE (External organisation)
Period: 2015
Jesper Boje (Chairman)
National Institute of Aquatic Resources
Arctic Section
Degree of recognition: International

Related external organisation
ICES - Benchmark Workshop on Plaice - WKPLE
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - Baltic Fisheries Assessment Working Group - WGBFAS (External organisation)
Period: 2014
Jesper Boje (Participant)
National Institute of Aquatic Resources
Arctic Section
Degree of recognition: International

Related external organisation
ICES - Baltic Fisheries Assessment Working Group - WGBFAS
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - North Western Working Group - NWWG (External organisation)
Period: 2014
Jesper Boje (Participant)
National Institute of Aquatic Resources
Arctic Section
Degree of recognition: International

Related external organisation
ICES - North Western Working Group - NWWG
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - Workshop to consider reference points for all stocks - WKMSYREF (External organisation)
Period: 2014
Jesper Boje (Participant)
National Institute of Aquatic Resources
Arctic Section
Degree of recognition: International

Related external organisation
ICES - Workshop to consider reference points for all stocks - WKMSYREF
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - Advice Drafting Group on Icelandic Capelin - ADGICAP (External organisation)
Period: 2013 → …
Jesper Boje (Participant)
National Institute of Aquatic Resources
Section for Marine Living Resources
Degree of recognition: International

Related external organisation
ICES - Advice Drafting Group on Icelandic Capelin - ADGICAP
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - Advice drafting group on Vulnerable Marine Habitats Committee - ADGVME (External organisation)
Period: 2013 → …
Jesper Boje (Participant)
National Institute of Aquatic Resources
Section for Marine Living Resources
Degree of recognition: International

Related external organisation
ICES - Advice drafting group on Vulnerable Marine Habitats Committee - ADGVME
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar
ICES – Advisory Committee - ACOM (External organisation)
Period: 2013 → …
Jesper Boje (Participant)
National Institute of Aquatic Resources
Section for Marine Living Resources
Degree of recognition: International
Related external organisation
ICES – Advisory Committee - ACOM
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - Arctic and North-Western Advice Drafting Group Committee - ADGANW (External organisation)
Period: 2013 → …
Jesper Boje (Participant)
National Institute of Aquatic Resources
Section for Marine Living Resources
Degree of recognition: International
Related external organisation
ICES - Arctic and North-Western Advice Drafting Group Committee - ADGANW
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - Baltic Fisheries Assessment Working Group - WGBFAS (External organisation)
Period: 2013 → …
Jesper Boje (Participant)
National Institute of Aquatic Resources
Section for Marine Living Resources
Degree of recognition: International
Related external organisation
ICES - Baltic Fisheries Assessment Working Group - WGBFAS
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - Benchmark Workshop on Greenland Halibut Stocks - WKBUT (External organisation)
Period: 2013 → …
Jesper Boje (Chairman)
National Institute of Aquatic Resources
Section for Marine Living Resources
Degree of recognition: International
Related external organisation
ICES - Benchmark Workshop on Greenland Halibut Stocks - WKBUT
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - North Western Working Group - NWWG (External organisation)
Period: 2013 → …
Jesper Boje (Participant)
National Institute of Aquatic Resources
Section for Marine Living Resources
Degree of recognition: International

Related external organisation

ICES - North Western Working Group - NWWG
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - Advisory Committee - ACOM (External organisation)
Period: 2012 → …
Jesper Boje (Participant)
National Institute of Aquatic Resources
Section for Public Sector Consultancy
Degree of recognition: International

Related external organisation

ICES - Advisory Committee - ACOM
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - Baltic Fisheries Assessment Working Group - WGBFAS (External organisation)
Period: 2012 → …
Jesper Boje (Participant)
National Institute of Aquatic Resources
Section for Public Sector Consultancy
Degree of recognition: International

Related external organisation

ICES - Baltic Fisheries Assessment Working Group - WGBFAS
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - Benchmark Workshop on Redfish - WKRED (External organisation)
Period: 2012 → …
Jesper Boje (Participant)
National Institute of Aquatic Resources
Section for Public Sector Consultancy
Degree of recognition: International

Related external organisation

ICES - Benchmark Workshop on Redfish - WKRED
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - Development of Assessments based on LIFE history traits and exploitation characteristics - WKLIFE (External organisation)
Period: 2012 → …
Jesper Boje (Participant)
National Institute of Aquatic Resources
Section for Public Sector Consultancy
Degree of recognition: International

Related external organisation

ICES - Development of Assessments based on LIFE history traits and exploitation characteristics - WKLIFE
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar
ICES - North Western Working Group - NWWG (External organisation)
Period: 2012 → …
Jesper Boje (Participant)
National Institute of Aquatic Resources
Section for Public Sector Consultancy
Degree of recognition: International

Related external organisation
ICES - North Western Working Group - NWWG
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - Second Workshop on Redfish and Oceanographic Conditions - WKREDOCE2 (External organisation)
Period: 2012 → …
Jesper Boje (Participant)
National Institute of Aquatic Resources
Section for Public Sector Consultancy
Degree of recognition: International

Related external organisation
ICES - Second Workshop on Redfish and Oceanographic Conditions - WKREDOCE2
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - The Second Ad Hoc Group on Criteria for Reopening Fisheries Advice - AGCREFA2 (External organisation)
Period: 2012 → …
Jesper Boje (Participant)
National Institute of Aquatic Resources
Section for Public Sector Consultancy
Degree of recognition: International

Related external organisation
ICES - The Second Ad Hoc Group on Criteria for Reopening Fisheries Advice - AGCREFA2
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak - WGNSSK (External organisation)
Period: 2012 → …
Jesper Boje (Participant)
National Institute of Aquatic Resources
Section for Public Sector Consultancy
Degree of recognition: International

Related external organisation
ICES - Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak - WGNSSK
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ICES - Workshop on the Evaluation of Plaice Stocks - WKPESTO (External organisation)
Period: 2012 → …
Jesper Boje (Participant)
National Institute of Aquatic Resources
Section for Public Sector Consultancy
Degree of recognition: International

Related external organisation

ICES - Workshop on the Evaluation of Plaice Stocks - WKPESTO
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar