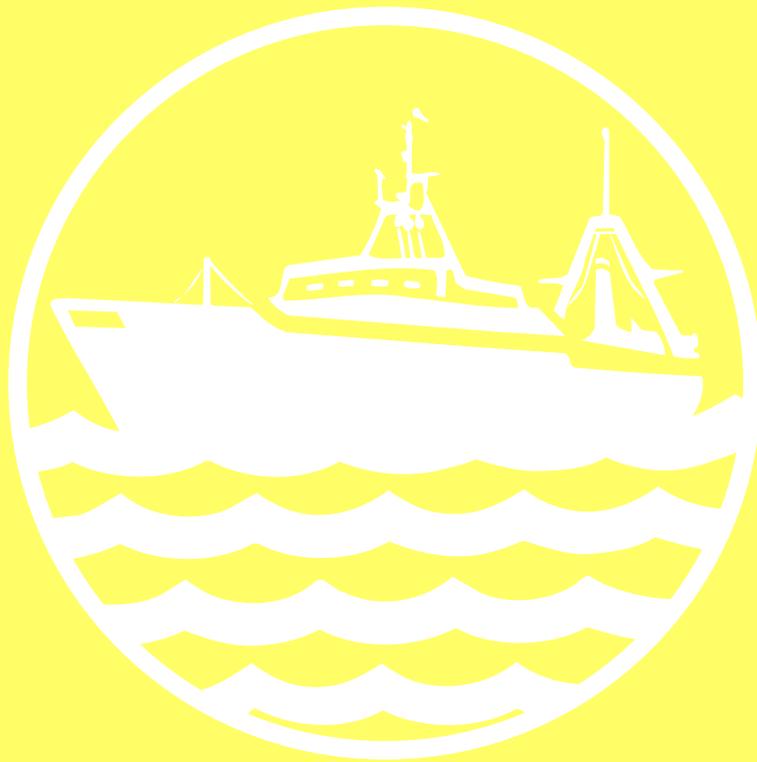


# Journal of Northwest Atlantic Fishery Science



Volume 28

Northwest Atlantic Fisheries Organization  
Dartmouth, Canada  
2000

The presentation of material in this publication does not imply the expression of any opinion on the part of the Secretariat of the Northwest Atlantic Fisheries Organization (NAFO) concerning the legal national or international issues of any Contracting Party of NAFO or any country mentioned in this publication.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior permission of the NAFO Secretariat. Applications for such permission, with a statement of the purpose and extent of the reproduction, should be addressed to the Executive Secretary, Northwest Atlantic Fisheries Organization.

Northwest Atlantic Fisheries Organization  
2 Morris Drive, P. O. Box 638  
Dartmouth, Nova Scotia, Canada B2Y 3Y9  
Tel.: (902) 468-5590 • Fax: (902) 468-5538  
E-mail: [nafo@fox.nstn.ca](mailto:nafo@fox.nstn.ca) • Website: [www.nafo.ca](http://www.nafo.ca)

# Journal of Northwest Atlantic Fishery Science



Volume 28  
Special Issue

A Review of the Cod Fisheries at Greenland, 1910–1995

Svend Aage Horsted

Printed and Distributed by:  
Northwest Atlantic Fisheries Organization  
P. O. Box 638, Dartmouth, Nova Scotia  
Canada B2Y 3Y9

December, 2000



## Foreword

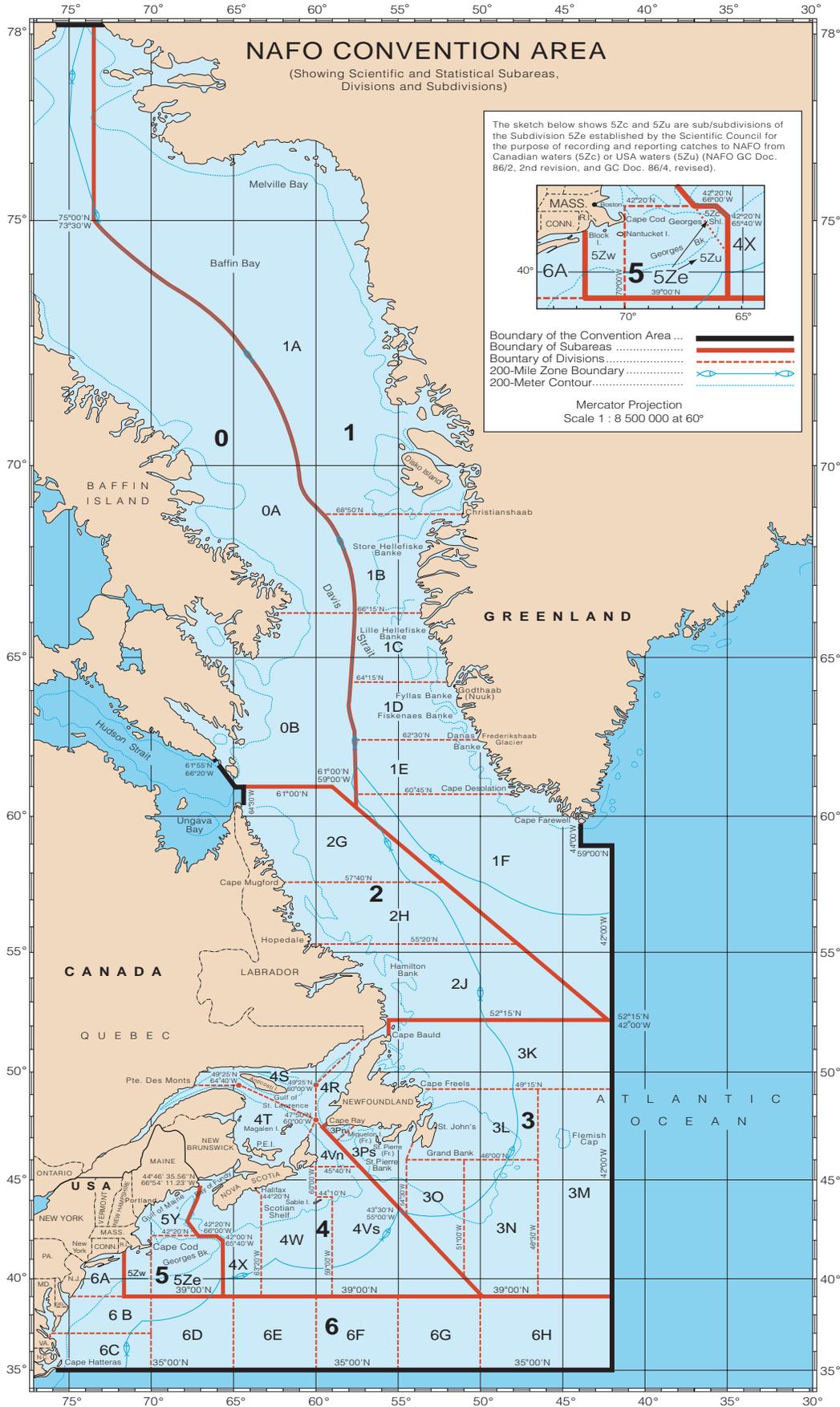
The first volume of the NAFO Journal was published in December 1980, after NAFO came into force in 1979 replacing its predecessor, the International Commission for the Northwest Atlantic Fisheries (ICNAF). This volume celebrates the completion of two decades of publications and contains another of the series of invited review papers concerning Northwest Atlantic fisheries, fishery research and management.

The Northwest Atlantic fisheries have a rich history, and a great deal of research has been sponsored or encouraged by NAFO and its predecessor, ICNAF. Indeed, ICNAF was, in the years immediately prior to extension of coastal state jurisdictions, an international pioneer in the application of science to fishery management and in the regulation of fisheries. An analysis of those historic events provide many lessons relevant to the understanding and resolution of present and future fishery research and management issues.

The idea of a series of invited papers for publication in the NAFO Journal was first raised by the Standing Committee on Publications of the NAFO Scientific Council in 1985 as one way to enhance the scope of the Journal and to stimulate broader interest in it. The first such invited paper was published at the completion of the first decade of the NAFO Journal in December 1990. Invited issues have considered topics such as delimitation of fishery areas and establishment and development of regulatory systems for the North Atlantic Fisheries. The present paper being published at the end of the second decade of the NAFO Journal, documents the development of the cod fisheries around Greenland since official statistics were first recorded in 1910. The review which includes the development of fisheries regulations to the present day, is very much the kind of broad review paper that the Standing Committee had hoped to attract. This paper should be of use to scientists, to historians and to fishery administrators alike. The author, who devoted considerable effort compiling this valuable information during his retirement time, is congratulated with sincere thanks for the work.

December, 2000

Tissa Amaratunga  
Technical Editor  
Northwest Atlantic Fisheries Organization  
Dartmouth, Nova Scotia  
Canada



# Contents

Abstract .....	1
I. Introduction .....	3
II. Materials and Methods .....	11
III. Fleets and Activity of Nations in Cod Fisheries at Greenland .....	15
IV. The Catches .....	25
V. Fisheries Regulations and Management .....	105
VI. Summary .....	107
VII. Acknowledgements .....	109
References and Special References .....	110
<b>Notices</b> .....	<b>113</b>
<b>Scientific Publications of NAFO</b> .....	<b>119</b>

# Abstract

# A Review of the Cod Fisheries at Greenland, 1910–1995

Svend Aage Horsted<sup>1</sup>

Greenland Institute of Natural Resources  
P. O. Box 570, DK 3900 Nuuk, Greenland

## Abstract

For Greenland and the fisheries around Greenland, one of the most pronounced and extremely important fluctuations in abundance of marine resources was shown by cod in Greenland waters during the 20<sup>th</sup> century. The present paper reviews the cod fisheries during this century for which official statistics exist since 1910. From 1925, data were collected and published by the International Council for the Exploration of the Sea (ICES) and, from 1950, by the regional fisheries organizations International Commission for the Northwest Atlantic Fisheries (ICNAF) for 1950–79, and Northwest Atlantic Fisheries Organization (NAFO) for years since 1979.

The official published catch statistics are given in terms of nominal catches, i.e. landed weight, for instance gutted, heads-on fish converted to corresponding weight of round, fresh fish. The conversion factors themselves set by each country participating in the fisheries varied somewhat among countries. A critical review of the conversion factors is given as well as of other factors, and in quite a number of cases, amendments to the officially published statistics are presented.

The total cod fishery in Greenland waters is reviewed by various identified components:

1. The local Greenland fishery, until the mid-1960s a coastal and inshore small-boat fishery by hand- and long-lines and pound nets. From the mid-1960s large liners fished offshore and since 1968 large trawlers have fished offshore.
2. A Faroese land-based fishery by small boats operating mainly offshore but close to shore and mainly by hand lines.
3. An offshore fishery by liners, dory vessels (from Portugal) and trawlers. The Faroese operated liners and trawlers besides the land-based small boats mentioned above (2).

The fisheries are reviewed country by country, including a review of fleets and effort, and of tendencies in temporal and spatial distribution of the fishery.

---

<sup>1</sup> Retired. Work finalized at The National Environmental Research Institute, Department of Arctic Environment, Tagensvej 135, 4<sup>th</sup> floor, DK-2200 Copenhagen N, Denmark

The fisheries regulations are reviewed. The offshore area open to non-Greenlandic fleets was outside 3 naut. miles until 1963, then 12 naut. miles until 1977 when the 200 naut. mile Exclusive Economic Zone was introduced. TACs and catch quotas were introduced in 1974.

Total catch of cod at West Greenland peaked by about 460 000 tons in 1962. After 1968, catches decreased rapidly, and since 1973 it has been below 100 000 tons. The exploitation for cod at East Greenland began when modern trawlers, mainly from Germany, started fishing there in the mid-1960s. The catch at East Greenland until 1995 has generally been much below that at West Greenland for the period reviewed.

Over the total period (1910–95) 16 different nations have participated in the cod fisheries at Greenland landing a total of about 10 million tons. The coastal state Greenland has taken about 15% of that total, while the biggest share has been taken by Portugal (2.09 million tons or 21% of total).

Adverse environmental factors, for instance relatively low temperature of upper water layers since about 1968 seem to be the main reason for the recent drastic decline of the stock size. Low larval productions at Greenland and relatively low transport of larvae from Iceland to Greenland waters have resulted in a period with lower recruitment than earlier in the century. It seems like the good period of the 20<sup>th</sup> century has come to an end, with no signs of an immediate and long lasting rebuilding of a Greenland cod stock to the levels seen in the mid part of the century.

*Key words:* cod, distribution, environment, fishing fleets and gears, Greenland, statistics, management