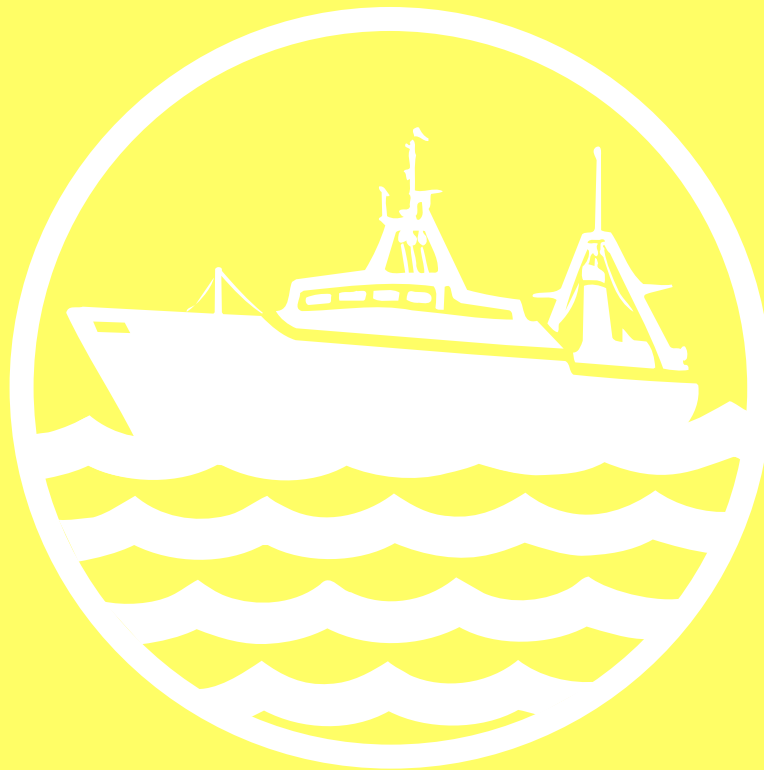


Journal
of
Northwest Atlantic
Fishery Science



Volume 15
December 1993

Northwest Atlantic Fisheries Organization
Dartmouth, Canada

Foreword

The first volume of the NAFO Journal was published in December 1980, after NAFO came into force in 1979. This volume contains the second 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 and encouraged by NAFO, and its predecessor ICNAF, and indeed has been a leader in international organizations in the application of science to fishery management and in the regulation of fisheries. In accordance with its mandate to disseminate information on fisheries research to the scientific community, the Scientific Council of NAFO publishes the *Journal of Northwest Atlantic Fishery Science*, which contains peer-reviewed primary papers and notes on original research, and *NAFO Scientific Council Studies*, which contains review papers of topical interest.

The idea of a series of invited papers was first raised by the Standing Committee on Publications of the Scientific Council in 1985, and has been actively pursued since 1987/88, as one way to enhance the scope of the Journal and to stimulate broader interest in it. The first such invited review paper was published in December 1990 in *J. Northw. Atl. Fish. Sci.*, Vol. 10, as a single volume.

December 1993

T. Amaratunga
Assistant Executive Secretary

Dedication

To:

C. Hope Starks

and

Craig, Stephanie and Jeremy Squires

Acknowledgements

I express my gratitude to M. J. Dunbar and E. H. Grainger then of McGill University for consigning their Arctic collections of decapod crustaceans, including decapod larvae, to me, and for their patience in allowing me to take so long to finish work on the larvae. I take this opportunity to say that I did not take part in collecting the specimens and did not spend any time in the Arctic except prior to my involvement in marine science. Dr Grainger at the Arctic Biological Station, St. Anne de Bellevue, Quebec, provided additional data on the plankton stations for this paper.

I also acknowledge the assistance of Gilbert E. Tucker in measuring some of the identified larvae in the early work on this collection at the Biological Station of the Fisheries Research Board of Canada at St. John's, Newfoundland. Most of the work on these collections, however, was done in my spare time at night in addition to my work at the Station, and recently in my laboratory at home. All drawings were made by me from preserved specimens, most of them many years ago.

I am grateful to Don Parsons of the Science Branch, Department of Fisheries and Oceans, Northwest Atlantic Fisheries Centre, St. John's, Diana Laubitz of the Canada Museum of Nature, Ottawa, and Gerhard Pohle of the Huntsman Marine Science Centre, Atlantic Reference Centre, St. Andrews, for reading the manuscript with helpful suggestions for its improvement.

Contents

Acknowledgements	7
Abstract.....	11
Introduction	13
Materials and Methods	14
Description of larvae of decapod crustaceans.....	14
Stages of the larvae	14
External morphology of the larvae	15
List of Species of Decapod Larvae Taken in Ungava Bay.....	17
Key to Families of Decapod Larvae Present in Ungava Bay	19
Key to Genera and Species of Decapod Larvae Present in Ungava Bay	21
Suborder Eukyphida	25
Hippolytidae.....	25
Pandalidae.....	83
Crangonidae.....	103
Suborder Reptantia	119
Paguridae	119
Majidae	133
Remarks	139
References	141
Tables	145
Index of Scientific Names	155
NOTICES	159
Information for Authors	165
Scientific Publications of NAFO	167

MAP ILLUSTRATING NAFO'S CONVENTION AREA AND 200-MILE FISHING ZONE BOUNDARIES

