

# **Journal of Northwest Atlantic Fishery Science**



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The Delimitation of Fishing Areas in the  
Northwest Atlantic

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## Foreword

The first volume of the NAFO Journal was published in December 1980, after NAFO came into force in 1979. This volume celebrates the completion of a decade of publications taking on a new outer appearance, replacing the familiar gold and black striped cover of the 1980s. This volume also contains the first of an intended 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 leader in the application of science to fishery management and in the regulation of fisheries. An analysis of these events promises many lessons relevant to the understanding and resolution of present and future fishery research and management issues. This first review concerns a matter central to the scientific advisory and regulatory process — the delimitation of fishery areas for statistical collection purposes.

The idea of a series of invited papers 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. A number of other reviews have recently been solicited for this series, and special issues similar to this one are envisaged in the near future. The Standing Committee on Publications will welcome further proposals for review topics.

December 1990

T. Amaratunga  
Assistant Executive Secretary



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## Dedication

We dedicate this paper  
to the memory of  
Lew Day and Wilfred Templeman  
who contributed immensely  
to the work of ICNAF  
in their different ways.

We personally owe them much.

R. G. Halliday and A. T. Pinhorn





## Lewis R. Day

1915–1990



Lewis R. Day, Executive Secretary of the International Commission for the Northwest Atlantic Fisheries from March, 1963 to its winding up in 1979 and the first Executive Secretary of the Northwest Atlantic Fisheries Organization, died in hospital in Montreal during surgery on 7 May 1990.

The job of Executive Secretary of ICNAF was made for Lew Day, or Lew Day was made for the job; whichever you prefer. During a period of some 16 years, from 1963 to 1979, he served ICNAF and its successor organization, NAFO, with great dedication and distinction.

It was, however, within ICNAF that Lew made his mark. That organization was created in 1949, and was "inherited" by Lew when it had already achieved some maturity and stature in the international fisheries community. He took it, as it were, from late adolescence to full-fledged maturity, through the sixties when the ideals of an internationally managed fishery that could meet everybody's expectations were not yet tarnished, and through the seventies when 200-mile limits and

extended jurisdictions were being developed and implemented.

He fulfilled this role with dedication, with style, with flair, with tact, with charm, and above all with quiet competence. He was everybody's friend and everybody's helper. No problem was too small for his personal attention; no problem too large to be chipped away at so that progress could be made over time. He was the model of an international public servant.

Lew was born on 23 April 1915, in Harrowsmith, a small southern Ontario town. He attended Queens University in Kingston, Ontario, and graduated in Biology in 1939. He was awarded his Masters degree from the University of Western Ontario in 1941. Lew enrolled in a Ph.D. program at the University of Toronto, but interrupted this to serve in the Royal Canadian Army Service Corps from 1942 to 1945, demobilizing with the rank of Lieutenant.

He joined the scientific staff of the Fisheries Research Board of Canada in 1945 as a biologist with the Atlantic Herring Investigation Committee. In 1948, he became scientific assistant to the Director of the Biological Station, St. Andrews, New Brunswick, and in 1954 Assistant Director of the Station, a position he held until his move to Halifax to join ICNAF in 1963. His major duties during the period at St. Andrews were in the area of scientific administration. He nevertheless maintained a healthy scientific productivity and authored or co-authored more than two dozen scientific papers and a series of fisheries fact sheets during the forties and fifties. During his years at ICNAF he maintained his scientific interests, often sat in on meetings of scientific committees, and was always available for advice and comment on scientific and technical matters.

On his retirement in 1979, Lew and Monty moved back to St. Andrews where they both enjoyed a physically active lifestyle in the company of many old friends. While all who knew him will mourn his passing, there is no question that all at the same time would acknowledge his influence, often a deeply personal influence, and his generous and open-spirited contribution in everything he did.

A. W. May  
President and Vice-Chancellor  
Memorial University of Newfoundland  
St. John's, Newfoundland, Canada



## Wilfred Templeman

1908–1990



Dr W. Templeman, an internationally renowned fisheries scientist, died suddenly at St. John's, Newfoundland, Canada on 5 April 1990. Dr Templeman was born at Bonavista, Newfoundland and received his early education in that town. He completed senior matriculation at the Methodist College in St. John's, Newfoundland in 1924, after which he taught in Newfoundland public schools until 1927. He then attended Memorial University College at St. John's in 1927–28 and Dalhousie University from 1928 to 1930, from which he graduated with a B.Sc. degree (with Great Distinction) in 1930. He was subsequently awarded a Fisheries Research Board scholarship and attended the University of Toronto during 1931–33, from which he received a M.A. in 1931 and a Ph.D. in 1933 under Dr A. G. Huntsman. From 1933 to 1936 he was a lecturer in the Department of Biology at McGill University. He joined the staff of Memorial University in 1936 as associate professor and Head, Department of Biology and was made a full professor in 1943. In 1944 he became Director of the Newfoundland Government Laboratory, which became the St. John's Biological Station of the Fisheries Research Board of Canada, when Newfoundland joined Canada in 1949. He continued as Director

until 1972. During this time he was also visiting research professor at Memorial University from 1957 to 1972 and after his retirement as Director of the St. John's Biological Station in 1972, he was J. L. Paton Professor of Marine Biology and Fisheries at Memorial University during 1972–82. After this, he continued his research career as a researcher at the Northwest Atlantic Fisheries Centre, St. John's, until his death.

During his career in fisheries, which spanned over half a century, Dr Templeman was a researcher, a scientific leader and an educator. As a researcher, he published over 250 scientific papers which covered a wide variety of topics from vitamin A in liver oils to climatic trends, from sea-fleas to birds and from seals to shellfish and fish. His early work on lobsters in the 1930's led to changes in lobster regulations and had a considerable influence on later lobster research. His later research included different species of rare fishes, dogfish, skates, capelin, salmon and groundfish but it is for his research on groundfish that Dr Templeman is best known. Much of his early groundfish research concentrated on the provision of advice to fishermen on locations and movements of major commercial species and the most appropriate fishing technologies. Following this exploratory phase, his research shifted to aspects of fish in relation to their environment and an understanding of stock definition and relationships. With increased exploitation and overexploitation by the international fishery during the 1960's, his research in population dynamics (age, growth, recruitment) was intensified to better understand how natural factors and exploitation by man were affecting stock size and abundance. Much of this research culminated in the publication of a bulletin in 1966 entitled, "Marine Resources of Newfoundland". The body of knowledge accumulated by Dr Templeman and researchers under his direction was invaluable in providing scientific advice in the very early days of regulation of groundfish by total allowable catches.

As a scientific leader, Dr Templeman made major contributions both nationally and internationally. On the national scene, he was highly regarded in the fishing industry and among national fisheries managers and for years the fishing industry looked to Dr Templeman as a key spokesperson representing industry problems to government. As Director of the Biological Station for 28 years, he oversaw the transfer of fisheries research responsibilities from Britain's oldest colony to Canada's youngest province in 1949 and subsequently was responsible for the conduct of research, the results of which even to this day constitute much of the knowledge base of our understanding of marine resources in

the waters around Newfoundland. During this period, a considerable part of his time was spent in attempting to guide Memorial University's policies and interests closer to the sea and to better tailor the system to provide scientists well trained for fisheries research. On the international scene, Dr Templeman was one of the founding fathers of the International Commission for the Northwest Atlantic Fisheries (ICNAF), being one of Newfoundland's representatives at the founding convention in 1949 and he played a leading role in that organization as one of Canada's senior scientists. He chaired the Standing Committee on Research and Statistics in 1964-67 and later the Scientific Advisors to Panel 2. In addition to these he chaired numerous smaller committees and working groups of ICNAF and participated in many meetings and symposia around the world, always contributing papers where possible.

As an educator he developed graduate level courses at the Memorial University campus in St. John's and sought out promising new researchers with scholarship awards, student employment and other programs. There is little doubt that Dr Templeman had a tremendous impact on the development of the present generation of Newfoundland scientists at the Northwest Atlantic Fisheries Centre in St. John's.

In recognition of his many contributions in these fields, Dr Templeman was awarded the Order of the

British Empire (OBE) in 1948, was named a Fellow of the Royal Society of Canada (FRSC) in 1950 and received the Canadian government's Public Service Merit Award in 1972 for performance at an unusually high level over an extended period of time. In 1976 an Honorary D.Sc. was conferred on him by Memorial University of Newfoundland and in 1982 a modern Canadian government 50-metre research trawler was named in his honour.

Dr Templeman was one of the world's most outstanding marine biologists and fisheries research scientists. He was also one of the last real naturalists who sought to study and understand all the different facets of nature. Few people give as much to their chosen field of interest and maintain as much interest and enthusiasm for their work as he did. The world has lost a great scientist, leader and educator in the death of Dr Templeman and those of us who were fortunate enough to have come under his influence have lost a source of inspiration which will be sorely missed in today's rapidly changing world of science.

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