

Preface

Since the first edition of this book was published in 1984 there have been several developments and changes in the field of freshwater fisheries management. This second edition reflects these political and technical developments.

With the formation of the National Rivers Authority (NRA) in 1989 (see page 13 and Appendix 3) conservation in all its forms was given a higher profile. Routines and procedures were set up to ensure that the work of the NRA functions (flood defence, pollution control, fisheries, recreation, conservation, navigation and catchment management) at least protected the environment if it could not enhance it. Fisheries management has therefore become much more conservation minded.

All the most common problems are covered, and in those instances where space considerations preclude a full and detailed treatment it is hoped that the updated reading list and appendices will lead the reader quickly to further sources of more detailed or more specialized information.

Part 1 of the book describes the resource over which the fisheries manager holds responsibility. It subdivides naturally into a description of the physical environment inhabited by fish, followed by various aspects of fish biology and fish populations. More information is given on the developments in electric fishing and sonar equipment and their use in surveying fish populations.

Part 2 describes the principal techniques available to the manager for the management and improvement of that resource, be it by direct action such as the draining or desilting of a lake, or by indirect action such as the application of statutory or local regulations. The popularity of building pond fisheries is reflected with more information on the creation and management of stillwater fisheries.

Part 3 examines the commercial exploitation of the resource, with examples of the needs, methods and potential of angling, commercial fishing and fish farming including an expanded Section on the aquaculture of cyprinids.

The 13 appendices are aimed primarily at students of fisheries management in the United Kingdom and Ireland, but again their content will be found to have much wider application and relevance. Descriptions are given of the main organizations responsible for administration of fisheries, and for providing grants to fisheries developments. Information is given on careers in freshwater

fisheries and on major employers in the field; and a summary is given of UK legislation relevant to fisheries management. A checklist is presented of the *dos* and *don'ts* for the fisheries manager wanting to create and manage a pond fishery. Finally a description is given of conservation and recreation needs.

Publisher's note

In this reprint of the second edition, all references to the National Rivers Authority (NRA) should be taken as being references to the Environment Agency.

The Environment Agency for England and Wales was created by the Environment Act 1995 and took up its statutory duties on 1 April 1996. The Agency combines the functions previously carried out by the National Rivers Authority and Her Majesty's Inspectorate of Pollution (HMIP). It also includes the waste regulatory functions of 83 local authorities and units from the Department of the Environment, Transport and the Regions (DETR) dealing with aspects of waste and contaminated land.

The authors

All the contributors are or were employed with the STWA and/or the NRA. They have between them a wealth of experience in all aspects of fisheries management. They have written and published many scientific papers. Most of them are called on at regular intervals, by outside organizations, to give lectures or talks on some aspect of fisheries or conservation management.

Robin Templeton agreed to revise and update the first edition of this book. He was in the water industry from 1965 and spent some time in Hampshire and Yorkshire prior to his final appointment as Area Fisheries Manager in the Trent Area of the NRA, a post he occupied until his untimely death in late 1992. He graduated with a Zoology degree in 1961 and later gained an MSc. He was a Fellow of the Institute of Fisheries Management (FIFM) and was interested in all aspects of fisheries management.

Dr Peter Bottomley was involved in fisheries and pollution work with the STWA and its predecessors during the period 1952–86. He obtained his degree and doctorate prior to 1952. He is a FIFM. Since his retirement in 1986 he has been acting as a part-time consultant in water quality and fisheries.

Dr Bruno Broughton is a zoology graduate who gained his doctorate in the late 1970s. For 11 years he was employed as fisheries scientist and a fisheries officer with the STWA. Since 1988 he has established his own successful fisheries management consultancy business, providing detailed, independent advice on fisheries matters to angling clubs, land owners, local authorities, non-governmental organizations and industry.

Alan Churchward has been in the water industry since 1972. After graduating he obtained an MSc in 1969. He is now Area Fisheries Manager in the Severn area of the NRA. He has a particular interest in the commercial fisheries of the River Severn.

Martin Cooper graduated with a biology degree in 1969. After several years working on trout farms in Scotland and Denmark he joined the water industry

as a pollution officer in the Thames area. He joined the STWA in 1973 and is now Area Fisheries Manager in the Trent area of the NRA.

Keith Easton has a biology degree and an MPhil. He has been with the STWA since 1975 as a fish biologist. He is now a fisheries scientist with the NRA based in the Trent area. He is an FIFM and has interests in improvement techniques for stillwater and flowing water fisheries.

John Gregory graduated with a degree in the biological sciences in 1970. After a 5-year period as a marine fisheries officer in the Solomon Islands he joined the Anglian Water Authority in 1975 as a fisheries biologist. He is now an area manager for fisheries, conservation, recreation and navigation with the Welsh Region NRA. He is an FIFM.

Alan Henshaw graduated with a degree in fisheries science. He joined the water industry in 1984. After a period as a warden on a put-and-take-trout fishery he became the fish rearing officer at the Severn-Trent Region of the NRA's Calverton fish farm.

Valerie Holt has been involved in water recreation and conservation for some 20 years. She is an FIFM and is now with the NRA as a conservation and recreation officer. Her particular interests are pond creation, the use of herbicides and general river habitat improvements.

Ron Millichamp joined the water industry, after leaving the Services, in 1953 as a head bailiff in Northumberland. Ron then had various other posts as head bailiff and rivers inspector before becoming a fisheries officer with the Usk River Authority in 1965. Between 1974 and 1982 he worked with the Welsh Water Authority as a fisheries, recreation and conservation officer. He retired in 1982 to start his own consultancy specializing in fishery law and enforcement. He is an FIFM.

Martin Moore has worked in the Thames Region of the NRA since 1975. He has reared many species of British freshwater fish during 10 years involvement with the development and running of two Thames fish farms. One of his many fishery interests has been the development of crayfish farming in the UK.

Dr Rick North obtained his doctorate after graduating with a Zoology degree in 1971. He is a fisheries scientist in the Severn Area of the NRA. His principal interest is in the biology of salmonids.

Dr Alan Starkie has been with the STWA and NRA since 1975. He graduated with a biology degree and later obtained his doctorate. He is a fisheries

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