Whitefish in the family Coregonidae are closely related to the salmonid family and are found in cool, clean waters in Northern Europe, Asia, and North America. They resemble salmonids in general appearance, including an adipose fin, but differ from them in their lack of colour, markings or spots, hence the general name whitefish. There are many local names, often for the same species and these include cisco, vendace, powan, freshwater herring, gwyniad and schelly or skelly. There have been many arguments about their taxonomy and classification, especially in Northern Europe; sometimes referred to as ‘the coregonid problem’. Coregonids support sport and commercial fisheries in many countries, but not in Britain, and their populations are often sensitive to over-exploitation and pollution, especially eutrophication. Regular meetings to assess the biology and management of coregonids are therefore to be welcomed. This large volume contains 40 peer-reviewed papers on current topics in coregonid research grouped into five sections.

An introductory section consists of nine papers dealing with genetics and evolution. The first and last of these papers are lengthy and useful reviews dealing with genetic markers and the coregonid problem, and the geography of speciation and adaptive radiation in coregonids. Both reviews are impressive and provide comprehensive coverage of the literature on the genetics and speciation of this family. Between these two reviews are seven shorter papers describing specific examples of genetic variability.

The next section on biology, life history and population dynamics is the longest in the book with fourteen chapters. This is a mixed bunch of shorter papers dealing chiefly with different aspects of population dynamics, but also topics such as the effects of polycyclic aromatic hydrocarbons on gene expression, and the effects of cormorant predation on coregonids. I was impressed by the novel technique of using intra-otolith stable isotope profiles to reconstruct the thermal history of whitefish over the growing season in Lake Annecy. A general review, similar to those in the last section, would have been a welcome addition to this section, but unfortunately is absent.

The third section on invasive species is the shortest in the book with only four papers. These include the harmful effects on whitefish populations of introduced ruffe, Gymnocephalus cernuus (L.), the boom and bust population dynamics of vendace introduced into a subarctic watercourse, and how the co-existence of resident Arctic char, Salvelinus alpinus (L.), and introduced whitefish depends upon the intensive fishing of the latter species.

The fourth section with eight papers deals with coregonid fisheries in Europe. The first paper is a very useful summary of a workshop on re-oligotrophication and whitefish fisheries management. A lower nutrient content has led to slower growth and a poorer condition of whitefish due to the reduced food base, the effect being greater for pelagic, plankton-feeding coregonids than for littoral, benthic-feeding coregonids. The workshop recommended that as natural reproduction is enhanced, stocking should cease. The remaining papers are a mixed bunch covering a
wide range of topics, including the effects of whitefish stocking, thermal marking of otoliths, effects of trawling on whitefish, the allocation of fishing effort, and even the re-discovery of the ‘Edelfisch’, *C. nobilis* Haack, in Lake Lucerne.

The last section with only five papers deals with coregonid fisheries in North America. Once again, it is a mixture of topics, including the history of the short-jaw cisco in Lake Superior, whitefish growth in the upper Laurentian Great Lakes, comparisons of harvest policies for managing lake whitefish, and the long-term impacts of acidification and nutrient additions on a lake whitefish population.

It can be seen from this summary of the contents that a wide range of topics are covered in this book. There are many case-studies for those seeking whitefish examples for their lectures. The reviews are excellent for those not working directly on whitefish, and it is a pity that a few more reviews were not included in the book. However, this volume provides an excellent overview of the current state of work on coregonid fishes. It should be a useful addition to any library concerned with freshwater fish and to those working in allied fields.

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Author Profile

Malcolm Elliott was a research zoologist at the Windermere Laboratory of the Freshwater Biological Association (FBA) (later the Institute of Freshwater Ecology) from 1965 to 2000. Since he retired in 2000, he has been an Honorary Research Fellow of the FBA and continues to publish papers on the quantitative ecology of freshwater fish and invertebrates. He has taught courses in Sweden and Austria, and was an Adjunct Professor of freshwater biology in the Norwegian College of Fishery Science, University of Tromsø, Norway, from 1996 to 2006. He is now an Emeritus Professor in the same University.