

Tim D. Smith: *Scaling Fisheries: The Science of Measuring the Effects of Fishing, 1855–1955*.

Julia Lajus

Researcher and Project Coordinator, Centre for Environmental and Technological History, European University at St. Petersburg, and Senior Researcher, Institute for the History of Science and Technology, Russian Academy of Sciences

The reason why this comparatively recent book is recommended as a “fisheries classics” is that it bridges the substantial gap in our knowledge on interactions between fisheries as economic activity and fishery science as an intellectual endeavour to assist fisheries by understanding the uncertain behaviour of their objects.

The book by Tim Smith, fisheries scientist from the Northeast Fisheries Science Centre in Woods Hole (USA), is devoted to the history of one of the key problems of fisheries – the fluctuation in catches. Very precise demonstrations using carefully chosen examples of ‘how catches vary?’ and ‘why they vary?’ form the very informative and concise first chapter of the book, which could be widely used in teaching of environmental historians, historians of science, and fisheries scientists.

Fishermen have long known that fisheries appear and disappear over time, but this was mostly their problem and of little interest to other people. With economic modernization and the development of large-scale fisheries in the second half of the nineteenth century this problem became important to entrepreneurs and politicians as well. Hence, the fisherman’s problem also became a scientific problem, which was necessary to solve to overcome the economic and social consequences of the ‘bad’ years.

As the author puts it, fishery science ‘has almost always been pursued in the context of very strong economic and political interests’ (p. 5), and it is virtually impossible to discuss the development of its concepts without taking into account the influence of these interests. Putting forward this thesis as the basis of the whole work, the author describes in detail the context in which scientists worked and its influence on the selection of appropriate problems and the means of their solution.

In the vivid historical account the author addresses both the history of ideas and the history of persons and organizations. The book is constructed chronologically. Inside each part the development of plot move from the origin of problem through the various variants of its statement and elaboration of solutions through discussions and conflicts, not to the final decision – that is always absent – but to the natural arising of new problems. Consequently, the evolution of fisheries science is portrayed through cycles of comprehension and the creation of new problems.

Smith demonstrates the most intent interest to the question of methods. He always brings methods developing in the fishery science into correlation with the methods of other fields of science, showing their interrelated simultaneous development. The necessity not only to explain the variation of catches, but first and foremost to predict them, led to elaboration of increasingly exact and sophisticated methods, based on mathematic expression and formal modelling. The book brightly illustrates how these approaches, so universal today, were invented and shows both the illusive hopes that they evoked and the cautious scepticism and even criticism that impeded their development.

The author states in the introduction that he has attempted to write about people and events rather than the specifics of fish and fisheries. Undoubtedly, he succeeded in both. The broad geographical inclusion is also very important. The interchange of attention from one country to another, constant emphasis of the common character of problems arising, the interest to the international connections of ideas, people and institutions, paint an impressive picture of the development of fishery science in its interrelations with fisheries in a world scale.

Fisheries historians tend to view science as a 'black box', from which ideas and policy recommendations emerge in a neutral or benign fashion. What Smith shows fisheries historians, typically working from economic or social history perspectives, is that this black box is itself highly contested, and that the assumption of scientific neutrality is not only unsustainable, but must be actively engaged as a causal factor underlying the evolution of any fisheries system. Read alongside David Cushing's *The Provident Sea*, for example, historians will gain a significantly greater insight into how the process of scientific enquiry acts as a driving factor underlying the changes within particular fisheries.

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