The authors assumed that the populations are all "rainbows," but on page 47 they mention the faint yellow coloring of the golden trout. In their 1947 classification, Rio Grande cutthroat in the Mexican golden trout, "These are beautiful fish and their dominant feature, when alive, is the bright orange cutthroat color below the jaw and on the belly."

It is well known that cutthroat often have the orange coloration all over the body, sometimes referred to as the "strong orange of the lower fins" (page 57) and the rosy color which they quote from Fleisch's field notes. The yellowish coloration of the golden trout is not entirely the same as this rosy color which they describe as "baddly faded," page 59; the Golden Collection "closely resembles the Rainbow," page 57, whereas "these specimens have faded to dull brown...the rainbow stripe has completely disappeared," page 56.

A few contradictions are curious. On page 54 they state, "The amberjaw is the same species as the golden trout, the yellow cutthroat" coloring patterns are identical. But if this is true, then page 64 that, "The possession of a faint, yellowish 'cutthroat' mark by the Rincon and Casas Grandes rainbow...could reflect that hybridization...the Rincon Grande cutthroat..."

On page 59 the authors conclude that Stilwell was misinformed concerning the planting of hatchery rainbow fish in the Rio Grande. It seems that the authors say, "If it is true, as Stilwell (1948, p. 135) states, that English immigrants introduced rainbow fish into the Rio Grande, then it is clear that the Rio Grande and Casas Grandes populations could represent hybrids not only between the Rio Grande cutthroat, but between the Gila trout or some other form of rainbow..."

The "coefficient of difference" used by the authors in a "cookbook" method devised to replace standard statistical procedures. According to this method the value of what the authors call "mec," which is the product of their number of individuals in each group, is 30 in which even the extreme ranges of the counts do not overlap and yet they cannot decide whether or not the two populations overlap.

The authors prefer to ignore the present nomenclature and the evidence of the Mexican Classification of species naming species.

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This is a revised and greatly enlarged outgrowth of the author's earlier work, Methods of Estimating Fish Stock Quantities. (1947). The new book has been expanded and improved with the aid of an additional article, and the elements so elaborated are comprehensively reviewed. Compiled by one of the world's leaders in the field of population statistics, the book is a comprehensive and practical guide for the scientist and student of fisheries.

It is a comprehensive bibliography and useful index supplement the text.

Seemingly glossed over throughout the book is the number of factors which determine the outcome of various types of fishing gear as sampling devices. In this connection one must acknowledge the importance of "effective fishing intensity" and cited by Beverton and Holt in their Dynamics of Exploited Fish Populations. These factors have been shown through experiments to be related to the size of the fish population and to the size of the fishery. The authors conclude that a true probability of capture can be derived for bottom-dwelling species taken by trawls. For drift nets, the authors stress the importance of the form the species are captured. Population statistics based on catch and effort data from fisheries reported are not taken into account from bias of unknown degree.

In addition to presenting a concise summary of available techniques for studying fish populations, this book also alludes to many areas of fisheries research. The methods described in this book will prove indispensable to many practicing biologists.

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To say that this is a monumental work and is destined to become classic in its field may sound sanguine, but in my opinion is a statement of fact. No treatise, on this subject, of comparable scale related previously or is likely to be forthcoming for some years. I was privileged to hear parts of the formulation ably presented by the senior author on a recent field visit to the University of Maine Biological Laboratory at Beaufort, North Carolina, in the summer of 1951. The complete volume reflects the authors' thoroughness and versatility in investigation of phenomena that were evident during the course. It represents the fruits of 6 years' work on the part of the authors, both internationally distinguished methodologists and biometricians. The analyses are directed primarily toward demersal fish and fisheries of the North Sea, but the methods employed can be of application in other fisheries and to other groups of animals as well.

The reader will find the arrangement of the material both orderly and logical, Part I introduces the concepts of factors contributing to the increase or decrease of fish populations. This is followed by the presentation of mathematical models which take into account the four major influences on population size: recruitment, growth, natural mortality, and fishing mortality. The models are then converted to the process, which is essentially an analysis of the strengths of the treatment, also may contain one of its weaknesses. Men responsible for fisheries administration are often not highly trained,