
This monograph consists of a review of studies of Arctic grayling in Alaska (1952-1982) and a seemingly exhaustive bibliography (to 1985) of the Holarctic genus Thymallus (grayling). The primary intent of the monograph is to assemble and review the large number of published papers and relatively inaccessible research reports on grayling, therefore providing the first bibliographical update on the genus in approximately 20 years.

Armstrong's review and synthesis of data available on Arctic grayling in Alaska primarily is directed towards fisheries management and includes sections on sport harvest, stocking, life history, migrations, age and growth, feeding ecology, and population estimation. A strength of this contribution is the inclusion in the synthesis of numerous documents, like Federal Aid annual reports, that are not easily obtained elsewhere. This review concludes with a clear statement that identifies major gaps in knowledge of Arctic grayling biology and speculates on how this information void may severely hamper future management attempts. Our major criticism of the review stems from the exclusive use and discussion of literature pertinent to the management of grayling. Clearly, the synthesis would have benefited by an attempt to draw parallels and distinctions among Arctic grayling and other salmonid species.

The major component of this monograph is a 92-page worldwide bibliographic listing of 1314 references on the grayling genus Thymallus. Researchers will find this index most helpful, as the introduction clearly describes how to use the various indexed sections of the bibliography. Even the abstracting services and key words used for the computer searches are provided, so that researchers could conceivably conduct a similar search of the post-1985 articles not included in the monograph. Although the bibliography is compiled alphabetically by author, key word indices that categorize articles by taxonomy, geography and subject matter are given. These indices greatly facilitate the ease and speed with which the bibliography can be searched for specific information; however, many of the larger categories would have benefited by the use of subheadings. Each bibliographic listing includes basic reference information (e.g., title, author, date, etc.), as well as an indication of whether an English translation or summary of the article is available. The review is aimed at researchers specifically interested in the management of Arctic grayling, while the bibliography is designed as a general reference aid for anyone working on the genus Thymallus. Although the audience for this review and bibliography is limited, researchers requiring information on grayling will likely find the monograph an invaluable, and inexpensive, method for accessing this widespread reference material.

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