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# A Review Paper on Limnology in Fresh Water Fishes

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**Abstract:** Limnology, often known as the study of fisheries biology, has been an increasingly important component of research into freshwater fisheries over the course of the last several decades. This pattern has been steadily becoming more obvious over the course of the last several years. It was formerly believed that humans and fish were equally important to the health of the environment. However, as the 20th century progressed and the foundational research traditions of limnology became more established, this viewpoint started to change. It should not come as much of a surprise that the field of limnology has reduced its emphasis to encompass just the study of lakes, rivers, and other bodies of water that are comparable. This significantly led to the gap in understanding that developed between the two different study fields. In recent years, there has been a modification made to the methodology that is used when analysing fisheries found in freshwater. As a result of this, they have been forced to reconsider the objectives of the research as well as the technique, and they have thrown doubt on the traditional role that limnology has played in the area of fisheries science. The necessity of seeing fisheries as dynamic socio-ecological systems has resulted in the expansion of current fisheries research to include a wide variety of subfields of academic inquiry. The relevance of having knowledge about fishing was directly responsible for this expansion. It is necessary to have a holistic perspective in order to have a complete understanding of fisheries since they include both social and ecological processes. The only way to achieve this level of comprehension is to combine the information gained through scientific and social-science research. However, although it was formerly the key enabling science in fisheries research, it is currently simply one of many significant scientific areas. In the past, it was the primary science in fisheries research. This trend might be attributed to the emergence of more sophisticated methods in scientific research. Limnology has been around for a long time for a reason, and one of those reasons might be the insight it gives into the complex web of interactions that exist between people and fish. Because of this, it has endured for such a considerable amount of time. Documenting the inherent dynamics of social-ecological fishing systems is one of the ways that this technique will contribute to limnology. Limnology is an important area of research because of its capacity to capture the dynamics that are intrinsic to social-ecological fishing systems. As a result of this, it offers some potential benefits in one form or another. Limnology is a field that is ideally adapted to capture the dynamics that may be found in social-ecological fisheries systems; thus, it is possible that it might be beneficial in this particular situation. It is necessary for significant paradigm shifts to take place in both limnology and freshwater fisheries research before academic limnologists and freshwater fisheries researchers can begin to collaborate more closely.

Keywords: Angling, Limnology, History, Fisheries, Social-Ecological, System, Fresh Water System

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