



A story of fish production as it applies to Montana  
by Vernon E Craig

A THESIS Submitted to the Graduate Faculty in partial fulfillment of the requirements for the degree  
of Master of Science in Fish and Wildlife Management at Montana State College  
Montana State University  
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**Abstract:**

This paper presents in a simplified manner some of the more important aspects of fish production and management as they exist in Montana. The topics of water temperature, pollution, reproduction, etc. are discussed separately, but all are directed toward one common goal of production.

Illustrations were prepared to supplement the text.

Cartoons and headings have been added to create interest and to stress important points. Depictive drawings have been prepared to provide visual aids for the identification of common plants, food organisms, and fish.

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VERNON E. CRAIG

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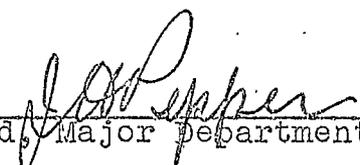
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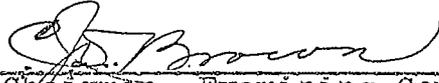
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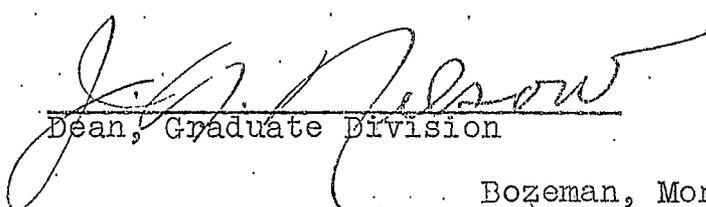
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Approved:

  
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Bozeman, Montana  
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## Abstract

This paper presents in a simplified manner some of the more important aspects of fish production and management as they exist in Montana. The topics of water temperature, pollution, reproduction, etc. are discussed separately, but all are directed toward one common goal of production.

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## Introduction

Most of the literature dealing with fisheries management is so technical that it is little understood by anyone without extensive biological training. Non-technical literature dealing with fish management and productivity is found in conservation bulletins, sports magazines, and newspaper articles. Much of the information available, however, emphasizes recreational rather than management aspects of fish production. Publications that do deal with management usually apply to local problems and fail to present a complete picture of fish production. For example, an explanation of the fish planting needs in a state having high fishing pressure would not necessarily apply in states where there is little pressure.

Persons who are not familiar with the problems of fisheries management are less apt to support good management practices. Without public support, a fisheries program has no chance of success.

An attempt is made in this paper to present the layman with a simple and easily understood discussion of the more important aspects of fish productivity as they apply to management in Montana. The material presented should be of value to such groups as sportsmen, 4-H clubs, schools, boy scouts, etc.

Important factors which affect the production of fish are discussed under individual headings. These are, however,

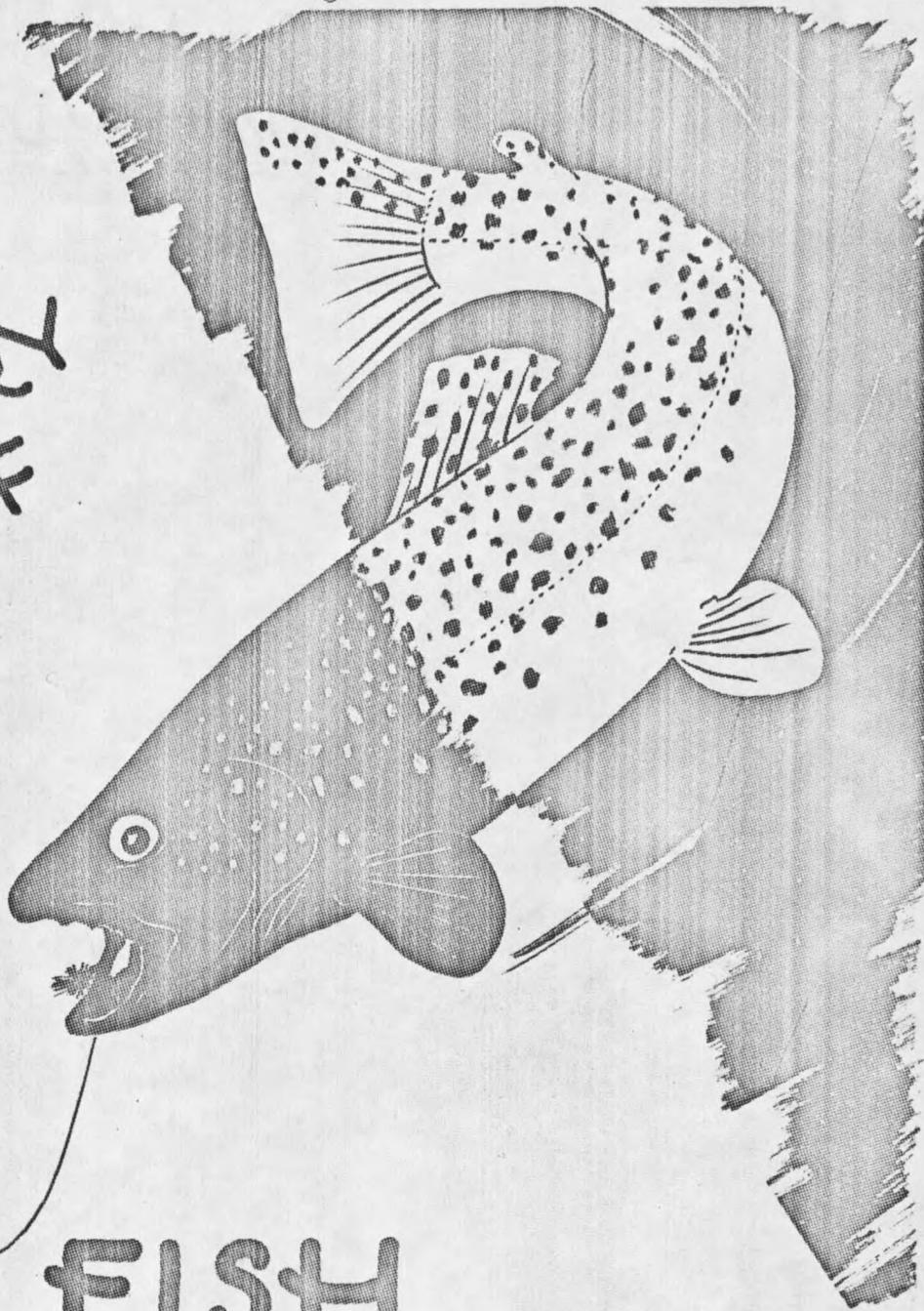
arranged in such a manner as to present the story of fish production and management.

Illustrations have been prepared which should not only make the text more readable, but drive home important points. These fall roughly into two categories: humorous, and depictive. The abundance of cartoons in our magazines, advertising, and movies bears witness to the popularity and value of humor in illustration. Cartoons stimulate the imagination of young and old alike, and often lead the reader through accompanying text. Those cartoons that tell stories within themselves are very effective in selling ideas. In this presentation, continuity between text and illustrations is maintained by placing the cartoons near the text which concerns them. Simplified but depictive drawings of the plants and animals involved in fisheries management supplement descriptive material to facilitate their identification.

#### Acknowledgements

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A  
STORY  
OF



FISH  
PRODUCTION

# PROBLEMS

OF



# FISHERY PRODUCTION





































































































































































