

Factors Influencing in vitro Production of Estradiol by Isolated Oocytes in White Sturgeon, *Acipenser transmontanus*.

By

Deug-woo Han  
B.S. ( Kon-kuk University, Seoul ) 1994

THESIS

Submitted in partial satisfaction of the requirements for the degree of

MASTER OF SCIENCE

in

Animal Science

in the

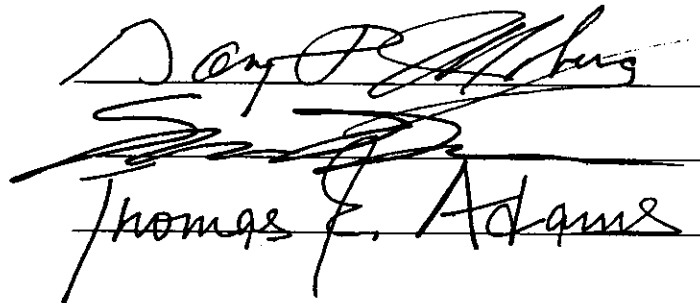
OFFICE OF GRADUATE STUDIES

of the

UNIVERSITY OF CALIFORNIA

DAVIS

Approved :



Committee in Charge

Gary P. Moberg  
Sergei I. Doroshov  
Thomas E. Adams

1998

-i-

## TABLE OF CONTENTS

ACKNOWLEDGEMENTS -----	ii
INTRODUCTION -----	1
REVIEW OF RELATED LITERATURE -----	4
MATERIALS AND METHODS -----	8
RESULTS -----	14
DISCUSSION -----	17
REFERENCES -----	24

## ACKNOWLEDGEMENTS

I gratefully acknowledge my committee members, Dr. Gary P. Moberg, Dr. Sergei I. Doroshov, and Dr. Thomas E. Adams for their guidance, encouragement, and criticism during this study.

Author is grateful to Paul Lutes ( Aquaculture and Fishery Program, U.C. Davis ) and Bill Bentley for the management of fish, Ken Beer ( The Fishery Inc. ) for generous donation of fish for the experiment, Joel Van Enennaam for his help in the selection of fish for this experiment and advice on histology, Jung-ho Son and Janelle Belanger for helping with the experiments, Javier Linares-Casenave for the analysis of vitellogenin, and Dr. Thomas Famula for statistical advice.

I give thanks to my friends, Kevin Laugero, Josephine Nocillado, and Molly Webb for their kind help and discussion.

I would like to acknowledge the National Sea Grant College Program, National Oceanic and Atmospheric Organization, U. S. Department of Commerce, for funding this project under NOAA Grant NA66RG0477, Project R/A-98, and under California Sea Grant College System and California State Resource Agency.