



THESIS ANNOUNCEMENT

Mississippi-Alabama Sea Grant Consortium
 P.O. Box 7000 • Ocean Springs, MS 39566-7000
 PHONE: (601)875-9341 • FAX: (601) 875-0528

The following abstract is for your information. The Mississippi-Alabama Sea Grant Consortium does not sell or distribute graduate theses. Copies of Ph.D. dissertations are available from University Microfilms International, 1490 Eisenhower Place, Ann Arbor, MI 48106. Also available from University Microfilms International are copies of master's theses from the following Consortium member institutions: Mississippi State University, The University of Mississippi, The University of Alabama at Birmingham, and the University of South Alabama. For information on the availability of copies of Ph.D. dissertations and master's theses on loan, contact your library's Interlibrary Loan Office.

Title: Development and Evaluation of a Spray-Dried Artificial Diet for Larval Culture of Freshwater Prawn (*Macrobachium rosenbergii*), Hybrid Striped Bass (*Morone saxatilis* x *M. chrysops*) and Striped Bass (*M. saxatilis*)

Author: Cortney Lynn Ohs **Degree:** Master of Science

Date: August 1995 **Publication Number:** MASGP-92-028

Department: Wildlife and Fisheries, Mississippi State University

Larvae of the freshwater prawn, *Macrobrachium rosenbergii*, the striped bass, *Morone saxatilis*, and the hybrid striped bass, *M. saxatilis* x *M. chrysops* were fed either spray-dried artificial diets or live *Artemia* nauplii alone or in different combinations. Spray-dried diets were neutrally buoyant and stable in water as shown by low rates of leaching. Significantly higher survival and growth of larvae was achieved with the feeding of live *Artemia* nauplii. Treatments in which larvae were fed artificial diets exclusively from the onset of exogenous feeding had the lowest survival and growth rates. Mortality rates decreased as the duration of feeding live *Artemia* nauplii before weaning to artificial diets increased. Guts of larvae were observed to be full after feeding indicating satisfactory consumption. The poor performance associated with artificial diets may be the result of incomplete digestion caused by rapid gut evacuation or lack of appropriate qualitative and quantitative enzyme activity.

MASGC Project Number: R/MT-22-PD

Program Year: 1992

NOAA Grant Number: NA16RGO155