Practical Manual for Semi-intensive Commercial Production of Marine Shrimp

Aquaculture

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with support from
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Texas A&M University Sea Grant College Program
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Foreword

The world’s population has moved into an age where it must rely increasingly on farm-raised products and less on wild populations for food. People are moving away from being hunters and gatherers and more toward being farmers and cultivists. Shrimp farming, the production of marine shrimp in impoundments or ponds, has developed rapidly in recent years. More than 40 countries around the world now raise shrimp in ponds. For the tenth year in a row, the world’s shrimp farmers produced a record crop in 1990, a total of 633,000 metric tons of whole shrimp, up 12 percent from the previous year. One million hectares of ponds yielded an average of more than 630 kilograms per hectare. Shrimp farmers now produce 25 percent of the shrimp placed on world markets and fishermen supply 75 percent of a total market of 2.6 million metric tons. Shrimp farmers produced only 2 percent of the world’s needs in 1980. If production continues to expand at the current rate, farm-raised shrimp will capture 50 percent of the total market by the year 2000.

To a large extent, development is driven by market demand. Shrimp farming, however, is constrained in many countries and inefficient use of existing resources is widespread in many of the countries now culturing shrimp.

This book represents a significant step toward defining the basic principles and most important steps in the pond culture of marine shrimp. Variations of these techniques and principles described may be used at different locations with different species for both semi-intensive and, to some extent, intensive culture systems.

There is a great deal of printed matter concerning shrimp mariculture, but there is very little written material from a commercial standpoint. This manual describes the methods used by a private company on a commercial scale to raise penaeid shrimp successfully in earthen ponds from the fry or postlarval stages to market size.

The Texas A&M University Sea Grant College Program welcomes the opportunity to publish this manual and hopes to extend the distribution of this information to the global aquaculture community. Hopefully, it will be useful to shrimp farmers and researchers worldwide. Perhaps this manual will stimulate others to share more from a commercial standpoint in the development of culture systems that will result in more efficient use of our earth’s resources.

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