Perch and Sunfish, the Other White Meat

P.B. Jarvis

Oday there is a fast growing movement in this country towards eating healthier. People are concerned about their weight, their cholesterol and what residual chemicals or preservatives are in the foods they eat. One need only pick up a can, jar or box and read the label to find that a list of ingredients and nutritional data is on virtually everything edible we purchase (and some that are not so edible).

From an animal protein standpoint, perhaps the most healthful meat is fish, the other white meat.

Currently the Northern Aquaculture Center is engaged in research involving Bluegill sunfish and Bluegill/Green sunfish hybrid. This research will produce a number of useful sets of data including feed conversion ratios and growth rates. The ultimate goal of the research is to compare the growth of the bluegill and hybrid sunfish to determine which, if either, species out-performs the other in an intensive aquaculture system. This research has been deemed important due to the market potential of this fish. Heretofore, commercial culture of sunfish has occurred only on a limited basis and only in outdoor ponds. This study is being conducted in six of the Center's 5,000-gallon recirculating systems. These systems are designed to use less water than conventional fish farms, using only 10% water replacement each day. Besides the collection of culture data, this project may prove that sunfish are a valuable alternative crop. The wholesale price of sunfish fillets is \$6.95 per pound. This study will also provide data, which will be useful in determining the profitability of intensive sunfish farming. Preliminary data suggests that the bluegills out-perform the hybrids slightly in growth rate, however, visual assessment suggests that the hybrids grow more uniformly. It also "appears" that a market weight of one third to one-half pound may be achievable in less than 12 months under optimum conditions.

The yellow perch is also a very popular pan fish. The perch is so popular that over fishing in the past 20 years has reduced the number of commercially available perch to a mere fraction of the current 30 million pound-per-year demand. This demand, coupled with the high wholesale price being paid for fillets (up to \$9.00 per pound) and the commercial potential for farm-raised perch, has encouraged the NAC to engage in research of perch culture. Currently the NAC is working to evaluate two diets for perch – one which will use soybean meal and the other field pea meal as a source of protein. The study is designed to evaluate the use of these vegetable-source proteins to replace more expensive fishmeal. Fishmeal is the usual source of protein in carnivorous fish diets. It is hoped that the data collected will prove useful in promoting soybean and field peas as a protein source for carnivorous fish species. Both of the main diets will be subdivided into 3 diets each containing predetermined percentages of either soybean or field pea meal. Each sub diet will be fed to three tanks of fish, which will equal 18 observations. Three controls will receive a diet without vegetable-based protein as its major protein constituent. The study will start with 3-inch perch fingerlings and continue for six months at which time the data will be analyzed. Analysis will include feed conversion ratios, growth rates and percentage of weight gain.