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FWS ISSUES NEW CIRCULAR ON PROPAGATION OF BAIT FISHES

Raising Bait Fishes, a revised circular on this subject based upon several additional years of pond investigation in the Midwestern States, is ready for public distribution, John L. Farley, Director of the Fish and Wildlife Service, said today.

Raising bait fishes commercially, Mr. Farley explained, has a threefold value--it gives the fisherman better live bait, it aids the State by conserving the natural supply of forage fish, and it gives the dealer a better and more consistent business.

One of the chief difficulties with obtaining bait fishes from natural sources is that usually bait fish are most plentiful at the time demand for live bait is lowest. Another problem is that attempting to keep bait fishes in holding tanks for any extended time is expensive and wasteful because of the high mortality rate among the fish. In addition, the shortage of minnows and other bait fish in public waters is now a reality and regulations on minnow seining are getting more stringent each year.

The publication covers in detail the problems of establishing and operating a bait-fish hatchery, selection of fish for the hatchery and the life history and characteristics of each of 20 of the more important species of bait fishes.

Since a bait-fish hatchery is largely a series or collection of ponds, the circular carries considerable information about both artificial and natural pond development and management. While ideal specifications for the construction of artificial ponds can be set forth, the report says, in actual practice the topography of the area is the controlling feature in any such development. But, in any instance, pond depth is important, varying from 5 to 15 feet depending upon the coldness of the winters and the management plan of the dealer. In Minnesota dealers have found that natural ponds three to five acres in extent and five to eight feet deep have been the most profitable.

Because of the difficulty in carrying fish through the winter many dealers plan their production so that all of the bait fish can be sold during the season. When this is not possible, holding ponds with running water are used and the fish are artificially fed. In some areas it is important that snow be removed from the ice to assure a sufficient supply of oxygen for the fish.

Many dealers arrange to hold over enough fish for the next season's brood stock but others seine new brood stock from the streams or lakes of the neighborhood in the spring before spawning starts.

When stocking a pond with adult fish it is important to have the correct number of brood fish and the proper sex ratio. In Minnesota it has been found most advantageous to stock fathead minnows at the rate of 1,500 to the acre while in Ohio the usual stocking of that fish is 5,000 to the acre. In Louisiana the stocking pattern for the golden shiner is 500 to 1,000 per acre while in Ohio it is 1,800.

The report goes into problems of pond fertilization and artificial feeding, trapping and seining, transplanting and holding-tank losses, and control of weeds, diseases, and parasites. There is also discussion of the natural predators—such aquatic insects as the water tiger or back swimmer, and the larger predators which include birds, snakes, turtles, fish, muskrats and crayfish.

The 20 important bait fishes which are discussed in detail are: white sucker, fathead minnow, creek chub, golden shiner, goldfish, pearl dace, hornyhead chub, river chub, blacknose dace, longnose dace, northern redbelly dace, finescale dace, southern redbelly dace, emerald shiner, common shiner, spotfin shiner, brassy minnow, bluenose minnow, stoneroller, and western mud minnow.

This publication, Circular 35, which is a revision of Circular 12 published in 1948, is a 121-page document with numerous illustrations. Circular 35, Raising Bait Fishes, is for sale by the Superintendent of Documents, United States Government Printing Office, Washington 25, D. C., price 45 cents.

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