FARM FISHPOND PROGRAMS

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Farm fishponds in our Southeastern States are more numerous every day. The baby of ten years ago has grown into a big boy in many ways. Sometimes he is efficient, successful, and thoroughly delightful; but more often it seems, he is a clumsy, stumbling, troublesome exasperation. Any experienced person can be sure that farm fishpond owners and prospective builders still need help at their own pond-sites. They need experienced help: 1) to avoid trouble, 2) to analyze current difficulties, and 3) to correct their troublesome problems.

Frankly I cannot determine from reports and estimates just how many fishponds there are in our eleven states. The Soil Conservation Service reports an actual 92,928 ponds constructed in this 11-state area up to July 1951. In Region 2 we report 70,196 ponds; but only 40,525 can be called fishponds. A few state fisheries divisions would make no estimate of fishponds for me, so I cannot add estimates from this source. The Fish and Wildlife Service reports that they have stocked more than 127 million fish during the past five years — from which I estimate the stocking of perhaps 140,000 acres of water or an equal number of ponds during this 5-year period. For purposes of discussing programs and problems, it will suffice to say that every state has enough farm fishponds now to give plenty of trouble; enough also to prove beyond question that the difficulties can be solved and corrected. Happily, every state has a large number of excellent ponds; even if the percentage of low-producing waters might discourage the pessimist.

The situation has several encouraging factors: The agriculturists and fish culturists in all the Southeast now recognize the farm fishpond as a manageable part of the farm owner's business. The proposition of producing high yields of fish in farm waters is being encouraged in every state, though two of the eleven still seem uncertain about it.

The trend in building and stocking farm fishponds is relatively level — possibly up a little in the current year. The stocking of 29 million fingerlings last year by the Fish and Wildlife Service indicates a recent rate of nearly 30 thousand acres of new pond waters annually in the eleven Southeastern states. Region 2 of the Soil Conservation Service helped 8,635 farmers establish fishponds in fiscal-year 1951, which is only 8 ponds more than we did in 1950.

It is too early to know what help landowners can expect from Dingle-Johnson funds. Ten of the states have fisheries technicians who help with farm pond problems with or without Federal aid. The eleven states have about 40 fisheries men, including SCS and Experiment Stations, who spend part time on farm fishponds; and two who spend all their time at it. The demand for assistance exceeds available manpower: certainly we can expect more technical assistance to become available in the future.

There are six initial problems in getting a fishpond established. The Soil Conservation Service usually provides the needed assistance with the first four: selection of manageable sites, construction design, erosion prevention and flood

control. The fifth problem is to eliminate wild fish so that the sixth — correct stocking — can be done successfully from Federal and state hatcheries. A large number of existing troublesome ponds result from failure to kill the few wild fish before stocking. This is an initial step in fish management which demands the very general use of rotenone.

Four states — Alabama, Kentucky, South Carolina and Georgia — provide significant numbers of fingerling fish for farm ponds, in addition to the stock available from Federal hatcheries. Kentucky has changed their stocking recommendations slightly, using 80 bass per acre instead of 50 bass with 500 bluegill fingerlings per acre (these are unfertilized ponds). Alabama stocks 150 bluegills per acre in fertilized ponds; Tennessee would like to use the same number, but goes along with the other states to stock 1000 per acre as recommended by the Fish and Wildlife Service. The 5000 bluegill, 500 bass limitation adhered to by some hatcheries is resulting in unbalanced lakes above 5 acres in size. The several problems related to correct stocking are still considered quite serious in most of the states.

The remaining problems related to fishponds may be grouped as the management problems: fertilization, weed control, correction of unbalanced fish populations, die-offs, and the problem of fishing the ponds adequately. The state fisheries divisions find these jobs demanded a greater amount of on-site assistance.

With the exception of Kentucky and Virginia, Southeastern fish culturists believe in full fertilization of fishponds. Most of us believe that without fertilization farm pond production is too low to provide the fishing needed — landowners can hardly afford the cost of construction and management unless their yields of fish exceed natural productivity. Of course thousands of ponds are constructed partly or wholly for livestock water; but these ponds are seldom managed in any way for fish (except stocking) unless the management includes fertility enough to support a high poundage of fish for the fisherman.

Hundreds of ponds get out-of-balance because submerged weeds grow heavily from the bottom. Some of the die-offs result directly from the decomposition of those weeds. Fishing becomes useless. We may say, therefore, that the most important management factor is adequate fertility — to accomplish the major objective of good fishing.

There is a growing trend to produce farm pond fishing for those who pay for the privilege by day or season. No state discourages this trend, three definitely recommend it, while the others are as yet almost uninterested in its possibilities. The Soil Conservation Service advocates this as one way to increase farm income, provide greater agricultural service to fishermen, encourage more water conservation, and to accomplish effective control of submerged water weeds. We are committed to the proposition of high yields and steady returns from each acre of soil and water under conservation practice.

The problems of weed eradication are vexing. Every weed can be killed with some kind of poison; but a program of chemical control is expensive, it is an annually recurring task, and at best it grows no added pounds of fish. Every fish culturist in the Southeast knows now, by experience or publication, chemical recommendations for weed control. There is still some uncertainty — a variety of suggestions — relative to which control to recommend, including manual controls such as pulling, cutting and draining the pond, in addition to chemical applications. These problems will always be troublesome; but we will handle them fairly well.

Nevertheless, we all agree that our best bet is to avoid weeds as much as we can by full fertilization, deepening the shore line, and removal of edge plants as they appear.

Advancements in the use of rotenone have increased the abilities of fisheries technicians in pond management. The four common uses are: 1) to eliminate wild fish before stocking; 2) to sample fish populations to determine the size and species of fish present in any pond waters; 3) to reduce the populations by partial poisoning around the edges of impounded waters; and 4) to kill the whole population before restocking. This tool will be used more universally. We need not discuss, now, the detailed techniques of its use.

A flush of dead fish on a pond is always cause for concern. Actually, the total number of ponds affected is fortunately small; but every case will be heard from. The eleven states say that unlawful use of rotenone is a very rare problem — much less than we feared might occur. Accidental poisoning, occurring from control operations against insects on cotton and other crops, is rare in most areas. I think we can depend on the producers of insecticides and our fisheries research men solving this problem rather quickly.

The die-offs which occur from weather and chemical quirks will try the patience of pond owners and technicans alike; but these, too, can be avoided and reduced in part by standard methods of management. In other words, die-offs will not seriously hamper fishpond development.

The problem of under-fishing has two main parts. In our educational process, we find ourselves in that stage which exasperates the technician; because the great majority of fishermen have not yet made the same mental about-face that we have undergone in very recent years. I can assure you that our fishermen and pond owners are accepting more rapidly the idea of heavier fishing. The change of attitude is very rapid — I think we might say universal — wherever our modern fishpond program has been demonstrating itself for a period of 6 or 8 years.

On the other hand, heavier fishing will not correct the unbalanced ponds — though many people, at first thought, grasp for this hope. Also, we must remember that most small, unfertilized ponds support a poundage too small to encourage frequent and heavy fishing. Finally, unbalanced populations in a half-fertilized pond, or one where wild-fish competition prevents good size, will never beckon the pond owner to fish heavily.

The most encouraging thing in the farm fishpond program today is our attitude. Pond owners, agricultural leaders, fish culturists, and fishermen are steadily accepting the thought that we can produce more fishing in the Southeast — better fishing by management than natural waters provide. Most soil conservation districts include that concept in their ever-increasing activities. At least seven of our eleven state fisheries divisions are working in some organized way with the district pond-owners.

The trend in the farm fishpond program is one of steady progress — encouraging in every detail — despite the shortage of funds and experienced fish culturists, and in spite of the tremendous tasks we see ahead as we look up from our job today. I am not unmindful of the numerous difficulties and mismanaged ponds. Our experience, nevertheless, is convincing proof that farm fishponds are being managed better each year — the Farm Fishpond Program is rising to success.