Maryland Sea Grant Extension Program

FINFISH AQUACULTURE WORKBOOK SERIES



Fish Culture in Maryland Weighing the Pros and Cons

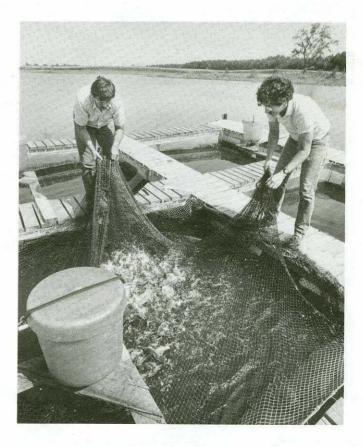
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INTRODUCTION

One of the newer forms of agriculture in Maryland is the rearing of fish in farm ponds, better known as fish farming or fish culture. Increasingly, fish culture is attracting the attention of farmers because of the decline in production and prices from traditional farming enterprises, the decline of the Chesapeake Bay seafood industry, and the growing nationwide consumption of seafood. Between 1984 and 1986, for example, seafood consumption increased more than 11 percent while still only reaching 20 percent of the potential market.

If approached efficiently, fish farming can be very profitable. Of course it requires capital investment, labor and some specialized equipment and is not without certain risks and demands. For instance, one of the biggest problems farmers face in culturing fish is underestimating the daily attention that a live fish crop requires. As with any new farming enterprise that increases diversification, the pros and cons of fish culture must be assessed carefully before commiting time and money.

The following checklists should help in such an assessment. They were developed by Drs. John Jensen and Jerry Crews of the Alabama Cooperative Extension Service for prospective catfish farmers, and are equally applicable for Maryland fish farmers, who will face similiar situations. While these checklists do not cover every issue faced in culturing fish, they do give some insight into the factors you should consider in determining whether a fish culture enterprise is feasible for your particular situation. While the greatest likelihood of success will be realized by answering



"yes" to most of the questions, answering "no" does not automatically mean failure. A preponderance of negative answers should probably lead you to take a second look at alternative uses for your resources.

ECONOMIC FACTORS

MANAGEMENT

- Do you already have suitable ponds or a site suitable for a pond?
- Do you have most of the machinery and equipment needed?
- Do you have the necessary financial resources?
- Is the fish profit potential higher than that of other possible investments?
- Will the expected profit be adequate compensation for your labor, management and risk?
- Will investment and operating capital interest rates permit reasonable profit?
- Is fish culture the best alternative for the land you intend to use?
- Can you afford to forego income until you sell your first crop?
- Are you able to absorb occasional losses?
- Are you willing to devote the daily time and effort required?

MARKETING

- Do you know of an established market for your fish?
- Is there a market for your fish at the time you intend to sell them?
- Do you have a suitable arrangement for harvesting your fish?
- Can you be flexible and harvest fish during the off season?
- Do you have an alternative marketing strategy to fall back on?

RISKS

Do you have the knowledge and resources needed to contend with:

- Poor water quality?
- Off-flavor?
- Pesticide contamination?
- Poachers and vandals?
- Personal stress resulting from risk management?

PHYSICAL FACTORS

- Does the topography of the land lend itself to pond construction?
- Will the soil hold water?
- Is there enough water to fill the pond and replace loss?
- Is the water of proper quality for fish production?
- Is the pond area protected from flooding?
- Are the drains in existing ponds large enough to allow rapid drainage?
- Can wild fish be prevented from entering the pond?
- Is there year-round access to the pond for harvesting and feeding?
- Is there a smooth, stump-free area in the pond to allow efficient harvesting?
- Is your residence close enough to the pond to allow for frequent observations and necessary adjustments?

PRODUCTION FACTORS

- Are good quality feeds readily available for reasonable prices?
- Do you have a source of supply for the drugs and chemicals needed?
- Are fingerlings available from local dealers?
- Can you raise your own fingerlings?
- Can you make or purchase aeration equipment?
- Is dependable labor available?
- Are dependable diagnostic services available?
- Do you have equipment for storing feed?
- Are you aware of the government agencies and trade associations that can provide you with educational and technical services?
- Are you aware of the necessary permits required for raising fish in Maryland?

SUMMARY

Fish culture can be highly profitable, but as with any farming enterprise there are risks attendant to every benefit. Positive answers to most of the questions from the checklists is suggestive of a manageable risk level, although there is no guarantee of success. Generally required for successful fish culturing are suitable land and water, sufficient money, a ready market and the time and skills needed to manage the operation. If you lack any of these elements, or answered negatively to many of the questions from the checklists, you may want to consider other uses for your resources.

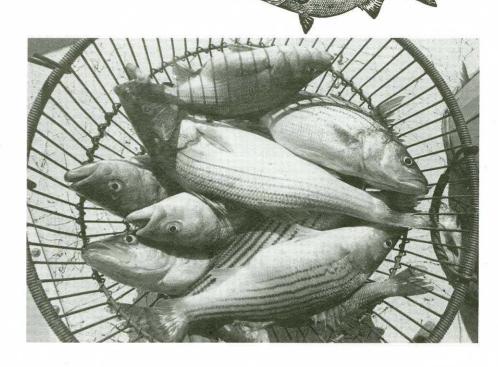
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