Initial Questions the County Agent Can Ask the Prospective Fish Culturist

Gef Flimlin, New Jersey Sea Grant Marine Advisory Service

This publication will help extension personnel, who have little or no experience with aquaculture operations, respond to requests for assistance. Completed questionnaires, documenting areas of interest, will be sent to the state Aquaculture Specialist (or other knowledgeable agent*) to determine the most appropriate action for the prospective fish farmer. Agents should retain a copy of the completed questionnaires for their records, and to help direct program development.

*Identified by the the director of extension in each state and listed in the quarterly newsletter, Northeastern Aquaculture, published by the Northeastern Regional Aquaculture Center.
Questionnaire

Personal Information

Date: ________________________________

Name: ________________________________

Address: ________________________________

City: ____________________________ County: ____________________________

State: ____________________________ ZIP: ____________________________

Phone: Home ( ) Business ( )

1. What do you want to grow? ____________________________________________ [ ] not sure

2. Are you currently employed? (Y, N)
   In what occupation? ____________________________________________

3. Are you planning to do aquaculture [ ] full or [ ] part time?

4. Is your interest in aquaculture intended for
   [ ] business? [ ] hobby? [ ] other? ____________________________

5. What brought about your interest in aquaculture?
   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________

6. Have you ever raised fish? (Y, N)
   Comment: ____________________________________________

Note: Extension Agents could now stop the survey if just a general inquisitiveness about aquaculture is expressed. In this case a basic packet of aquaculture information that includes fact sheets, bulletins, pamphlets, or listings of books and periodicals could be sent to the caller. These materials should be available from the USDA designated Principal Extension Contact for aquaculture in each state.

I. Physical Parameters

Where do you plan to culture your fish? (check one or more)

[ ] Ponds
   (go to "A" if existing, "B" if ponds must be constructed)

[ ] Raceways or Flow-through systems (go to "C")

[ ] Closed systems: [ ] indoors [ ] outdoors (go to "D")

[ ] Other:
   (go to "II", "III", or "IV" as appropriate)

[ ] Undecided (send basic information and file for call back)

A. For existing ponds:

1. How old is the pond? ____________________________

2. Is the pond [ ] natural or [ ] constructed?

3. What shape and how large is the pond?
   [ ] Round [ ] Oblong [ ] Square
   [ ] Rectangular [ ] Irregular
   Surface acres or dimensions: ____________________________
   Maximum depth _________ Average depth _________

4. Is the pond drainable? (Y, N)
   If so, what type of drainage structure does it have?
   (e.g., gate valves, flash board risers, other)

   ____________________________________________
   ____________________________________________
   ____________________________________________

5. Are there any tree stumps in the pond? (Y, N)

6. Are there any deep holes in the pond? (Y, N)

7. Do you plan to use [ ] cages or [ ] small net pens?

8. Does the pond freeze during the winter? (Y, N)
   How deep? ____________________________

9. What is the present use of the pond? (irrigation, recreation, etc.) ____________________________

10. Does the pond have an outflow? (Y, N)
    Into what? ____________________________

11. Is there any known or suspected runoff into the pond from agricultural fertilizers or pesticides, septic leakage, roads, livestock feedlots, garbage dumps, etc.? (Y, N)
    If yes, indicate what ____________________________
12. Has the pond ever purposely been treated with fertilizers, chemicals, or lime? (Y, N) 
   Which and when? 

13. Does the pond lose much water through evaporation during the summer? (Y, N) 
   How much does the water level drop? 

14. What aquatic species are in the pond now? 

15. Is the area subject to flooding? (Y, N) 

16. Is electricity available at the pond? (Y, N) 
   Voltage and phase? 

   (go to II, Water Analysis) 

B. For ponds to be constructed: 
1. Do you own the land? (Y, N) 
2. How much land is available? 
3. Topography - flat, sloped, wooded, etc. 

4. Is the proposed pond site considered wetland? (Y, N) 
5. Is site subject to flooding or in a flood plain? (Y, N) 
6. What is the soil type? 
7. Have pesticides been used in the area? (Y, N) 
   Which ones? 
8. Is electricity available at the site? (Y, N) 
   Voltage and phase? 
9. Are there roads or all weather access to the area? (Y, N) 
10. Where will the effluent go when the pond is drained? 

   (go to II, Water Analysis) 

C. For flow-through raceways: 
1. Is water flow constant year round? (Y, N) 
2. Where would effluent go? 
3. What is the yearly water temperature range? 
4. Do you have an appropriate disposal plan for the uneaten food and fecal material? (Y, N) 

   (go to II, Water Analysis) 

D. For closed systems: 
1. Is it your own design? (Y, N) 
   If yes, have you tried it on a small scale? (Y, N) 
2. Is it a purchased system? (Y, N) 
   If yes, have you seen other systems from this supplier in operation? (Y, N) 
   Have you seen operating costs, production figures, sales records, or maintenance information for it? (Y, N) 
3. Have you estimated your potential utility costs? (Y, N) 
4. Do you have an appropriate disposal plan for the system waste material? (Y, N) 
   (go to II, Water Analysis) 

II. Water Analysis 

1. What is the water source? 
   □ Well  How deep? 
   □ Stream or river 
   □ Spring 
   □ Water table 
   □ City water 
   □ Run off 
2. What is the volume of flowing water available in gallons per minute? 

3. Do you know these water chemistry parameters for your source? (Y, N) 
   If yes, indicate the values and any known fluctuations? 
   □ Hardness: 
   □ Alkalinity: 
   □ pH: 
   □ Dissolved oxygen: 
   □ Temperature range: 
   □ Iron or mineral content: 
   □ Turbidity or clarity analysis: 
   □ Color (eg. green, light brown, dark brown, etc.): 
   □ Salinity: 

   (go to II, Water Analysis)
III. Fish Biology

1. What fish are you proposing to grow?

2. Why are you choosing this fish to culture?

3. Are you knowledgeable about its biology, nutrition, physical, and physiological requirements? (Y, N)

4. In the culture operation will you:
   - [ ] Condition and spawn broodstock
   - [ ] Incubate and hatch eggs
   - [ ] Rear fry
   - [ ] Rear fingerlings

5. Have you researched its marketability? (Y, N)

IV. Business Concerns

1. Have you done a business plan? (Y, N)

2. Do you have a marketing plan? (Y, N)

3. Do you have financing? (Y, N)
   - Enough to cover you for three years or through several crop failures? (Y, N)

4. Any relevant previous experience in aquaculture, farming, or marketing seafood? (Y, N)

5. Have you had any aquaculture training or education? (Y, N)
   - Describe:

6. Do you anticipate any problems with neighbors? (Y, N)

7. Has this project been discussed with the town zoning office? (Y, N)
   - What was the response?

8. Have you contacted the state agency(ies) responsible for aquaculture permits? (Y, N)

9. Do you have access to fingerlings, feed, and appropriate aquaculture supplies? (Y, N)

10. Is there a knowledgeable labor force available in the area? (Y, N)
    - Will this be a family operation? (Y, N)

11. Have you discussed this venture with (name of: contact):
   - [ ] State Fisheries Agency
   - [ ] State Department of Health
   - [ ] State Department of Agriculture
   - [ ] Local Soil Conservation District
   - [ ] University Fisheries Staff

12. List other contacts made:

County Agent Action and/or comments (advice given, publications sent, referrals):

List any specific questions from the caller:

This completed form should be sent to:

Acknowledgments

This publication was supported by the Northeastern Regional Aquaculture Center through grant number 89-38500-4356 from the Cooperative States Research Service, U.S. Department of Agriculture. The preparation of the publication was also funded in part by NOAA Office of Sea Grant, U.S. Department of Commerce under grant number NA89AA-D-SG057 (Project No. A/S-1).

Any opinions, findings, conclusions or recommendations expressed in this publication are those of the author and do not necessarily reflect the views of the U.S. Department of Agriculture.