## Market Opportunities & Strategies for Oregon's Freshwater Aquaculture by Dr. Ed Schmisseur, Agribusiness Management Consultant

Market opportunities and strategies for Oregon's freshwater aquaculture industry were identified in a recent study funded by a USDA Rural Business Enterprise Grant with matching funds provided by the Oregon Aquaculture Association. These findings are highlighted in this presentation.

## **Market Opportunities**

Market opportunities are readily available for Oregon's freshwater aquaculture producer. But like most opportunities, risk and returns must be carefully considered and business goals need to be inline. In this study, no attempt was made to determine the profitability or risk associated with any of these opportunities as detailed production cost information is required to provide useful risk and returns assessments.

Aquaria Fish: Ornamental or aquaria fish are in high demand and demand is growing. Koi, some brightly colored goldfish, and rare tropical fish are a few of the most highly demanded species and they command high prices-- well over \$25 per fish. Propagators seeking to enter this market should be aware of market risks as entry is difficult, competition is intense, specialized fish brokers are embedded in the producer-to-retailer market chain, and growing equipment for some of the species have a high capital investment. Finally, nationwide chains like Petco have recently entered the aquaria retail market driving down wholesale prices and driving out the small but ubiquitous, independently owned retailers.

Oregon's warm water fish propagators might consider some level of aquaria production to increase income. Risk exposure of this venture could be reduced but not eliminated if growers could introduce aquaria fish as a poly-culture in their existing pond production systems. This should lower cost of production and make their grower prices more competitive. Also, potential aquaria propagators might choose to phase in expansion of aquaria production as new management experience is gained. Propagators should seek to wholesale directly to local independently owned "pet store" retailers. "Pet store" retailers located along the highly populated I-5 corridor and those closest to their production facilities should be the first market contacts.

**Aquaria Fish Food:** A direct by-product of aquaria fish production is fish feed. Fish that do not meet standards of the ornamental retail market can become the feed for fish meeting market standards. Additional processing and packaging of fish feed, however, is required. Producers considering the production of aquaria fish should carefully evaluate the economics of fish feed production as additional profits might be generated.

**Garden Pond Fish:** A large but unknown number of metropolitan, urban, and rural garden ponds exist in Oregon or for that matter most other states. No doubt, the number

of ponds and the average volume of water in these ponds increase annually. These trends will probably continue for many decades. Many garden ponds are stocked with fish. Goldfish and Koi are currently popular stocked species. But, other species with vastly different attributes might be better stocking choices.

Oregon's freshwater propagators have the opportunity to promote and market for garden pond stocking many of the species they routinely produce. Trout, bass, bluegill, catfish and possibly other species could thrive in a garden pond culture. As an alternative to Koi and goldfish, these species could be priced quite competitively and marketed as being more hardy, natural, and "native". Entering this market, however, will be challenging. It will be difficult to identify possible market buyers and determine market demand. Local independently owned "pet store" retailers should be used to enter this possibly lucrative market.

Live Fish Markets: The live haul food fish market is relatively new in Oregon. Oregon's only known live fish markets, located in Portland, are in need of live fish and a supplier of live fish is wanted. Wanted species include trout, catfish, tilapia, and stripped bass. Marketing live fish could also present opportunities to market fresh fish. Although, initially sales would be small, it is expected demand would significantly increase when store customers experience a steady supply of their favorite live fish.

Risks to selling live fish to Portland markets are minimal. The market is in close proximity to Western Oregon propagators and the stores have the capability to handle and display live fish.

**Fresh Fish Markets:** The fresh food fish market has a high payoff potential, but it also has a high capital investment. And, in the Pacific Northwest, salmon and other seafood have a relatively high and well-established market demand and shelf space assignment. Established competition and the predominance of large chain groceries relying on large volume wholesale fish brokers for product are another major barrier to market entry.

The easiest way to enter the fresh food fish market is through independent groceries and independent, specialty fish stores. These niche markets generally have more flexibility in making purchase decisions. Independent specialty fish markets, however are relatively little in number and are their numbers are dwindling. Often, initial entry into these stores can be on a trial basis. This greatly reduces risk for both fish producer/processor and the retailer. And, market expansion can be slower paced which can lower everybody's financial risks.

Another entry approach to the fresh, food fish market is creating a product that has additional and preferred attributes such as organically produced, sustainable, and has food safety-quality assurance guarantees. Any one of these preferred attributes could increase demand and improve the ability of growers to capture market access, shelf space and possibly, but not necessarily, command a higher retail price.

## **Market Strategies**

Market opportunities and market demand can often be stimulated by a variety of producer actions. In this section, some strategies to help make freshwater aquaculture sales are identified.

Acquire Preferred Attributes for Freshwater Aquaculture Production: In today's "new" market place, traditional values of price, taste, and freshness are now coupled with stewardship, community, health, honesty, integrity, authenticity, and traceability. Even in fresh fish markets consumers want and can be provided with recognizable attributes at competitive prices. Attributes alone, however, will not sell a product nor does it ensure a premium price, but attributes can help make sales!

Several organizations provide services that certify preferred attributes are actually associated with production. They include Oregon Tilth Certified Organic Program, Food Alliance Farm and Ranch Certification Program, and very soon the World Wildlife Fund.

Although Oregon Tilth does not yet have a certification program for aquaculture, they are interested in offering this certification. Currently aquaculture is not under the scope of the National Organic Program; therefore fish cannot be certified organic. The National Organic Standards Board, however, has proposed a rule that would allow organic aquaculture. Currently that is no definitive timeline on when this rule will be adopted.

The Food Alliance Farm and Ranch Certification Program certify sustainable agriculture production. It operates the most comprehensive third-party certification in North America.

Currently, the World Wildlife Fund is working with mollusk producers and buyers to discuss standards for the certification of mollusk aquaculture products. They are also developing dialogue groups to develop standards for salmon, shrimp, catfish, and tilapia. And a new dialogue is about to be started with trout producers.

**Develop a Food Safety/Quality Assurance Program for Freshwater Aquaculture Production:** Consumers expect a clean and safe supply of food. Yet, each year in the United States contaminated food causes 75 million illnesses, 325,000 hospitalizations and 5,000 deaths. Food safety should be our number one priority.

Although food safety issues negatively impact the aquaculture production industry, they provide the Oregon freshwater aquaculture propagators an opportunity to create higher standards for food safety and, as a result, produce superior quality products for the consumer. The opportunity and challenge await all Oregon aquaculture propagators, particularly those producing fresh market food fish.

Quality assurance programs have been successfully developed by several national commodity organizations. They are market driven programs. Quality assurance requires

that individual producers address consumer needs and validate best management practices assuring food safety, animal welfare, and environmental quality. And, most importantly, they must produce a measurable difference to the final user of the product.

A major part of a quality assurance program addresses feed ingredients. The US broiler grow-out industry identifies specifications about microbiological quality of feed ingredients. They test and sample ingredients for pesticides and other chemical residues. In addition they have testing programs for finished feed pharmaceuticals residues, and chemicals.

Secure Product Branding: Branding systems have many diverse goals but the same expectations that consumption of branded products will significantly increase. Branding is simply a commodity generic marketing campaign revolving around the development of a brand that depicts exceptional quality and encourages increased consumer purchases. Brands create a point of differentiation for retailers and consumer during the competitive period when purchase decisions are made. California has a branding program called "Buy California". New Seasons Markets has the "Home Grown Program" that uses a special store logo making locally grown products easily identifiable and marketed. Oregon's program is called "Brand Oregon".

Branding systems are for products that go "head-to-head" in competition with close substitutes in the market pace. Branding can add value to the product, but the product must have consumer benefits that are worth the purchase price.

## **Summary**

In summary, Oregon's freshwater aquaculture propagators have several market opportunities to consider. Opportunities to consider include aquaria fish and aquaria fish food, garden pond fish, live fish markets, and fresh fish markets. But, like most opportunities, risk and returns and business goals need to be carefully considered. As the world demand for food, especially the demand for fish, increases and commercial fish landings continue their decline, Oregon freshwater aquaculture propagators should find even more market opportunities available to them.

Besides market opportunities, freshwater aquaculture producers can stimulate even more market sales by additional producer actions. Producers can acquire preferred attributes for their products, develop a food safety/quality assurance program, and use product branding. Much work always remains to be done in the marketing of your aquaculture production.