

May 2017—AQUACULTURE PERSPECTIVES

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Can “old” be new again?

by Bill Mancini

There is a saying, “Everything in its time.” This applies to most things, including aquaculture.

The pace of development of aquaculture technology is extraordinary these days. Aquaculture techniques and technology are developing faster than I’ve seen at any time in my career.

Much of this progress is a function of improved demand and economics, or more precisely, profitability.

The interesting part about that is the new attention paid to some old and familiar concepts. A good example is the renewed interest in the aquaculture of Atlantic cod.

While wild populations of Atlantic cod have been only a wisp of their former glory for many decades, this lack of supply has spurred us to consider this fish for aquaculture, and not just recently.

European and Scandinavian aquaculturists have eyed Atlantic cod as an aquaculture candidate for a long time. Atlantic cod, however, are relatively difficult to culture technically because of some fairly strict environmental and nutritional requirements.

Additionally, and probably the most important drawback, the economics back then were shaky at best, given the lack of refinement and high cost of the production systems.

It appears that aquaculture is no different than other economic segments that rely heavily on technology. Over time, the price of the technology tends to fall as manufacturing improvements and scale and size of the overall market increase production efficiency, and draw in more competition (i.e., more manufacturers). Equipment prices fall and production efficiency at the farm increases—a recipe for potential success.

Concepts such as indoor shrimp production, open-ocean and land-based salmon production, integrated production of fish and plants, designer fish, and many others have been around a long time. But now appears to be the opportunity that many

growers/investors have been waiting for. A nexus of technology, scale, market demand, and pricing have created—rather than a “perfect storm,” I’ll call it a path toward a “perfect calm.”

Now, certainly, I admit everything is relative. We have not yet achieved perfection by any stretch of the imagination. But most assuredly, a momentum is building that is undeniable.

Wild fisheries are no longer viewed as infinite in their ability to supply us with high-quality protein. Those days are long gone. As more people populate the planet, our world seems much smaller and limited than it used to be.

So, I’ll ask the rhetorical question: Where will our food come from?

Those of us old enough to remember the film “20,000 Leagues Under the Sea,” will recall the scene where Captain Nemo of the Nautilus (James Mason) invites his unexpected guests (Sailor Kirk Douglas et al.) to a meal of products from the ocean, including those cultured by the crew.

Sixty-three years ago when the film was made, that concept was almost unheard of—bordering on science fiction. In 1870 when Jules Verne conjured up the story, it was science fiction, by most standards.

In a real-life prediction of the future during the 1960’s, aquatic explorer and visionary Jacques Cousteau said the sea will be farmed and provide people with a bounty.

Our genius and inventiveness has led us to the present day and the real opportunity to secure our nutritional futures with aquaculture—on land and in lakes and oceans.

My optimism is tempered by my age and experience. All kinds of challenges such as climate change, our penchant for war, overpopulation (to name a few) stand in our way of success as a species.

But the pace of progress in aquaculture is quickening as talent, necessity, and dollars take hold. What was once old is new again, in brilliant and innovative ways. No doubt, the pace of change in our industry will continue to accelerate.

The path is clear, and we have reached the critical mass to take us into the future.

Bill Mancini is president of Fisheries Technology Associates, Inc., a Fort Collins, Colorado-based aquaculture, aquaponics, and fisheries consulting firm. He may be reached at 970-225-0150 or <mancini@ftai.com>.