

A Fish Production Problem Probably Related to Free Market Competition

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Opinion

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In this short note, I highlight a discrepancy which in my opinion exists between fingerling production and the fattening phase: a problem probably related to free market competition.

I am most familiar with fish production in Mediterranean countries, where sea-bass and sea-bream are farmed, but the fact to which I refer also applies to salmonids and northern countries.

Market logic aims at high production at the lowest cost in the shortest possible time. This applies to fry production and fattening. These two sectors are often separate and totally independent, each in competition with rival companies and endeavouring to make a profit, even at the expense of quality. But as we all know, the two sectors are closely linked: the success of fattening depends on the quality of the fry, while the demand for fingerlings and the survival of commercial hatcheries themselves depend on the marketing success of the stock bred.

In industrial production, the growth of fry is forced in order to obtain large numbers in a short time, in any period. This means that the fish are more susceptible to disease due to liver stress from an early age. Stock is therefore more vulnerable, subject to viral and bacterial attack. Medication is more often necessary, and the hatchery suffers high mortality, health costs, and ultimately sells an inferior product. Even in the case of

good production outcomes, however, the fingerlings are of poor quality and the fish farms inherit the problems.

The stress of forced growth does not allow the organisms to build up their immunity, or to develop the natural slowdown of seasonal growth. It alters their biological clock and defence functions. All this has inevitable repercussions in the fattening phase, where although the life of these stocks is relatively short, diseases are increasingly a problem. Moreover, once they reach market size, the fish are not "healthy" by comparison with wild fish: they have a pale enlarged liver and the flesh has poor consistency and deteriorates more rapidly.

Without going into the details of this production method, aspects such as timing, density, production rhythms and feed, I wish to say that producing a healthier, more "natural" product, without reducing earnings or losing competitiveness, is certainly possible.

Research is tackling the problem by selecting organisms that are genetically more resistant to the stressful conditions in which they are raised. This research is fine, but besides the need for more coordination between the hatcheries and fattening farms, I think the real challenge is to work to produce a healthy, good quality fish product, as compatible as possible with the natural physiological needs of the species, in the interests of the fish themselves and the humans who consume them.