

Mussel Farming



Benchmarks can serve as guidance for business planning by prospective shellfish and seaweed producers as well as for lenders in the evaluation of loan applications.

PRODUCERS CAN USE BENCHMARKS FOR:

- Comparing the performance of their farm to that of similar farms and thus find areas for improvement;
- Assessing risk management strategies;
- Expanding their businesses.

LENDERS CAN USE BENCHMARKS FOR:

- Better understanding mussel businesses
- Comparing loan applications to standard industry performance

So far limited information is available on mussel benchmarks since mussel farming is still in its growth phase in Maine.

If mussel production continues to expand in Maine, benchmarking values across mussel farms over time would be expected to begin to converge and exhibit somewhat greater uniformity. Current findings are based on 4 farms of varying sizes.

While gross margins for raft-culture mussel farming on average were positive, **WHEN NON-CASH COSTS OF DEPRECIATION WERE INCLUDED, THE NET MARGINS THAT REFLECT LONG-TERM PROFITABILITY WERE NEGATIVE, ON AVERAGE**

BREAKEVEN PRICE OVER TOTAL COSTS DECREASES AS PRODUCTION INCREASES, indicating economies of scale

THE MOST PROFITABLE MUSSEL FARM had the greatest volume of production per foot of line and the greatest labor efficiency

Profitability decreased **AS WORKING CAPITAL DECREASED**

ONLY IN MORE RECENT DECADES HAS MUSSEL FARMING BECOME ECONOMICALLY VIABLE across North America and in Maine

Mussel production in the U.S. accounts for only 4% of all U.S. shellfish farms (2019), **BUT IN MAINE, 24% OF SHELLFISH FARMERS PRODUCE MUSSELS, 6 TIMES THE NATIONAL RATE**

RECOMMENDATIONS FOR USE OF BENCHMARKS

- **Monitor labor efficiency** (e.g. sales revenue per hour of labor). If sales revenue per hour of labor is less than hourly wage rates, the farm is losing money with every hour of wages paid.
- **Track production efficiency** (e.g. pounds harvested per linear foot of line).

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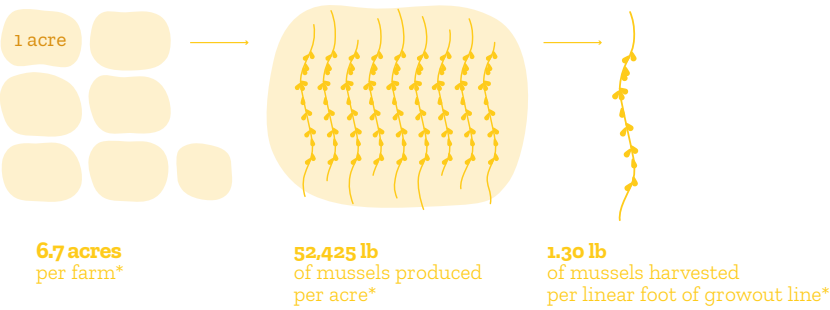
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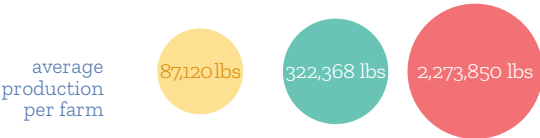
PRODUCTION

Compared with mussel production in Spain and the Netherlands, Maine's production is still in its infancy with potential to grow.

*median values

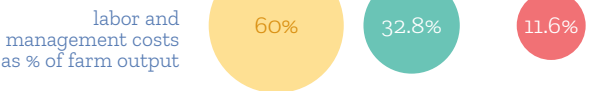
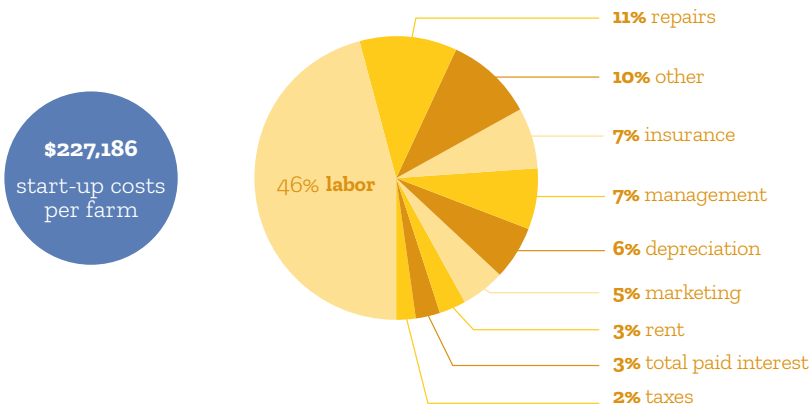


On average, Maine mussel farms are notably smaller than those in Spain (raft culture) and the Netherlands (bottom culture)



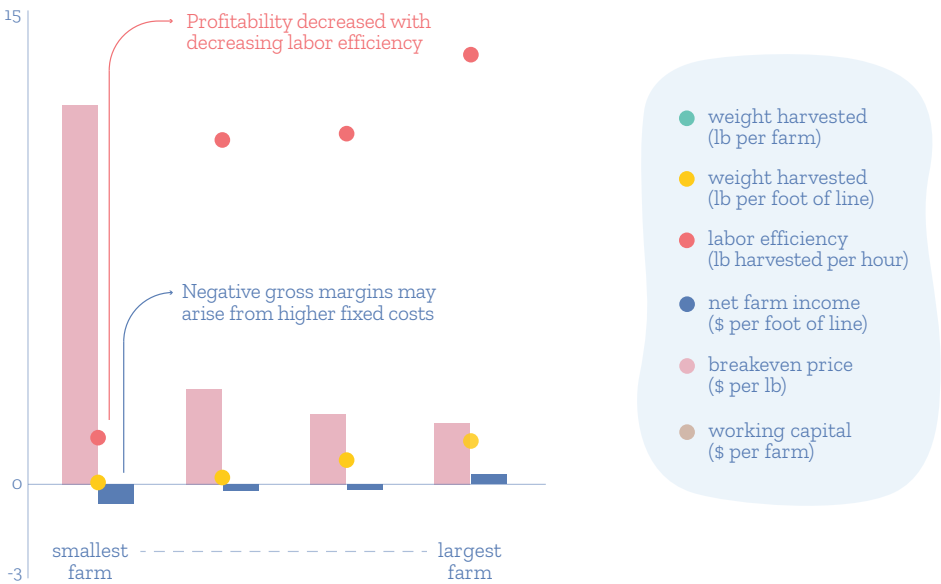
COSTS

Since labor comprises the greatest cost during mussel production optimizing its efficiency is key.



PROFITABILITY

Economies of scale in mussel production may explain, at least in part, the lack of long-term profitability of mussel production.



CASH FLOW

Working capital declines as net farm income declines and with smaller scale of production.

