QUARTERLY PROGRESS SUMMARY:
Apr to Jun 2017

SPATNZ

Summary of progress during this quarter

Autumn and winter months have been the most challenging time of year to rear mussel larvae. We saw the same pattern this year but managed to achieve 6 to 7 times more ready-to-settle larvae in Apr-Jun 2017 than in the same quarter of 2015 and 2016. This improvement rounds off an excellent 12 months of progress in hatchery performance.

The mussel spat are transferred from the hatchery to spat farms at just 1 mm long, so still very vulnerable. In the hatchery we can filter their water, control their temperature, and give them plenty of good food. We lose that control after transfer to farms, and so the survival of spat can be variable depending on a myriad of factors. Our research over the next couple of years will include extensive work on this stage as it has such a big bearing on the productivity of the hatchery.

This quarter SPATnz staff conducted a month-long shellfish hatchery module with Year 2 and 3 aquaculture students from the Nelson-Marlborough Institute of Technology. The students learn the theory of hatchery work and rear a batch of shellfish larvae from eggs through the larval stages to spat, as well as growing the microalgae that the mussel larvae feed on.

In April we publicized the milestone of first mussel crop from the new hatchery reaching harvest size. The story was very well received attracting extensive coverage through television, radio, print and on-line media.

Key highlights and achievements

- We made improvements in the success of larval rearing during what is traditionally the most challenging quarter of the year.
- The 2017 breeding cohort was successfully intermediate seeded with sufficient numbers still present from 98 of the 100 families in the cohort.
- Shellfish hatchery training with NMIT aquaculture students completed.
- Widespread media coverage of SPATnz when first hatchery crop reached harvest size

Upcoming

- Continue to scale up processes toward targets.
- Increase research on optimising survival of mussels after transfer to spat farms.
- Begin attempts to find DNA markers associated with traits of interest.

Investment

Investment period	Industry contribution	MPI Contribution	Total Investment
During this Quarter	$0.38 M	$0.38 M	$0.75 M
Programme To Date	$8.58 M	$8.58 M	$17.15 M