

QUARTERLY PROGRESS SUMMARY:

Oct to Dec 2018

SPATNZ

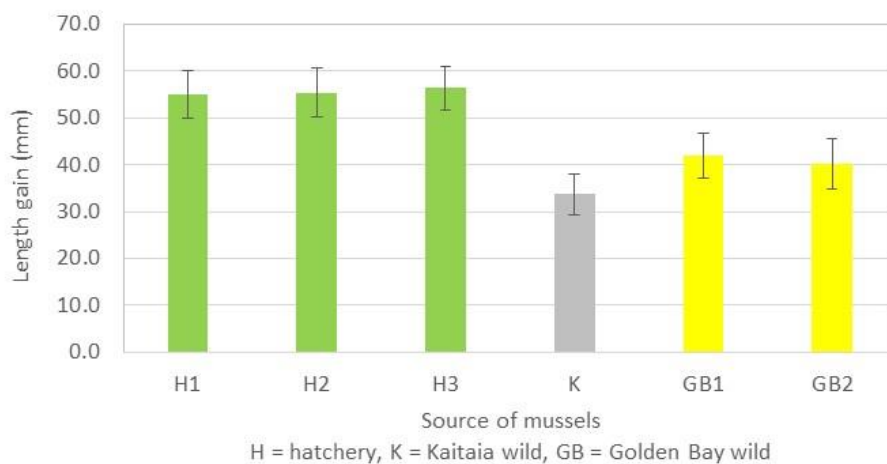


Summary of progress during this quarter

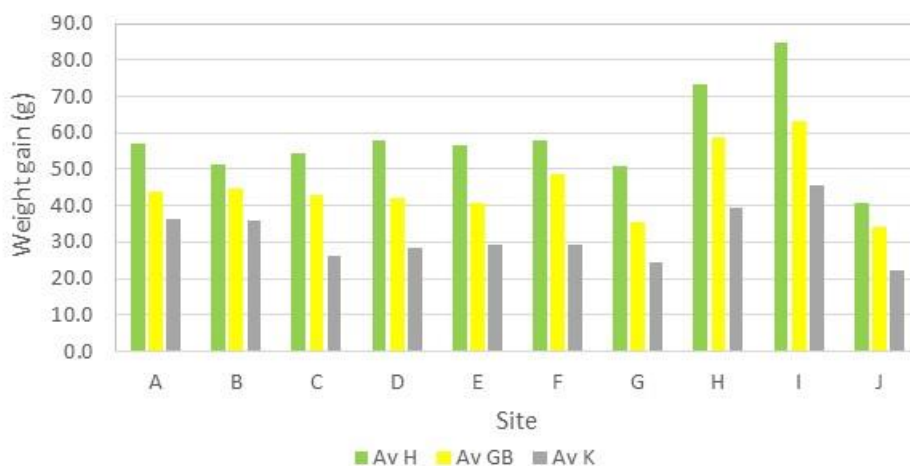
One of our projects compares hatchery bred mussels (“H” in the graphs below) with wild mussels from the two predominant sources of wild spat – Golden Bay (“GB”) and Kaitaia (“K”). Data from 20 months of growth showed similar patterns to earlier data from 8, 11 and 15 months of growth:

- The three hatchery strains gained 67% more length and 86% more weight than Kaitaia wild, and 36% more length and 29% more weight than Golden Bay wild mussels (top graph shows length data).
- The benefit of hatchery over Kaitaia and Golden Bay was evident at all sites, and at least as strong at poor growing sites as at good growing sites (bottom graph).

Length gain (mm) over 20 mo (22 Jan 17 to 19 Sep 18) after being final seeded at ~50 mm.



Weight gain by site for 3 spat sources



Samples were taken from about 2000 mussels and their DNA signatures will be used to optimise the choice of parents for our traditional selective breeding. Harvest assessments of the one hundred or so 2017 families continue. These include monthly measurements of mussel condition (plumpness) to find out which families hold their condition best over time, and at what times of year they fatten.

Key highlights and achievements

- Growth monitoring shows that hatchery mussels grow faster than wild mussels across all growing conditions tested.

Upcoming

- Harvest assessments of 2017 cohort of families continues for the selective breeding programme

Investment

Investment period	Industry contribution	MPI Contribution	Total Investment
During this Quarter	\$0.30 M	\$0.30 M	\$0.60 M
Programme To Date	\$10.2 M	\$10.2 M	\$20.3 M