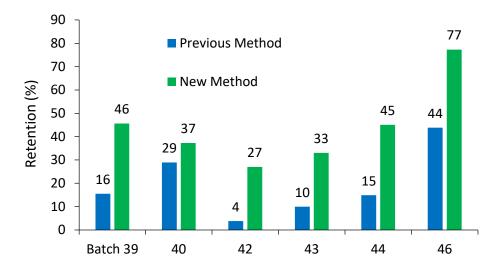
QUARTERLY PROGRESS SUMMARY: Jul to Oct 2019 SPATN7



Summary of progress during this quarter

With the hatchery performing to design, our research in the last year of the Programme focussed on minimizing the losses of spat following transfer to marine farms. We consolidated research findings into a new method and compared results with our previous method over several batches. The new method gave consistently higher spat retention, and averaged 44% over 6 batches (see graph), which exceeds our target of 37% retention by Programme end. Inconsistent spat retention was the last step in the process that we needed to improve. So with these results we are confident of reaching our production target for the current hatchery.



Proportion of spat deployed to sea that were recovered at ~15 mm. The New Method gave consistently good retention while the Previous Method remained inconsistent.

Previously we reported experimental findings showing the growth advantage of hatchery mussels compared with wild-caught mussels. This has now been reinforced by analysis of data from ~1500 commercial harvests. Compared to Kaitaia wild-caught mussels, the hatchery mussels decreased the average growout time from 29.6 to 18.2 mo, increased the crop yield per metre by 59%, and reduced the amount of unwanted marine waste by 42%. Golden Bay wild-caught mussels gave intermediate performance for each measure.

Key highlights and achievements

New spat production protocols have markedly improved spat retention.

This overcomes the last major hurdle in the spat production process so we are confident of reaching our production targets for the existing hatchery.

Hatchery mussels can double the productivity of a Marlborough mussel farm compared to wild spat.

Upcoming

- The SPATnz PGP Programme ended on 31 October 2019, so SPATnz is now operating as a commercial hatchery.
- Programme Final Report will be released in February 2020.
- MPI will commission an independent Programme Evaluation in 2020.
- SPATnz will report annually through until 2026 on Programme benefits.
- SPATnz is now considering options for hatchery expansion over the next few years.

Investment

Investment	Industry	MPI	Total
period	contribution	Contribution	Investment
During this Quarter	\$0.54 M	\$0.54 M	\$1.09 M
Programme To Date	\$11.27 M	\$11.27 M	\$22.55 M