

Precision Seafood Harvesting

Quarter 4 2011/12 (April - June 2012)

Precision Seafood Harvesting (PSH) is a PGP programme that seeks to develop a new wildfish harvesting technology that will result in more precise catches, allowing fish to be landed fresher, in better condition, and of higher value.

The shareholders of PSH are Aotearoa Fisheries, Sanford, and the Sealord Group.

The programme has just completed its first quarter and is progressing as planned. The technical effort is divided into improving harvesting technology, handling and storage and rearing. Validating any improvements and providing suitable benchmarks for ongoing operations are incorporated into the programme.

At-sea testing of the Mark 5 prototypes of the new Modular Harvesting System (MHS) are being conducted. The design is being tested for reduced fish fatigue, and the size, frequency and shape that permits relevant fish to escape the modules. Video is being used to evaluate the effects of the design changes on water flow and velocity during the harvesting process. The size, shape and number of fish able to escape affect the water flow and the design parameters are being optimised during the testing process. To date the current prototype design delivers fish in a condition much better than those caught in traditional mesh trawl. The initial evaluation has been with snapper and it is intended to review and operationally test designs suitable for other types of fish building on the knowledge obtained for snapper.

A new handling system that uses hydraulic lift to shift fish onto the trawl deck is working well. It provides a platform for easy control of handling and sorting on-board and greatly reduces the damage to fish. The system is made workable due to the unique water holding characteristic of the new harvest system.