

Always a guaranteed mussel

Inventor and entrepreneur Kees Groot developed an alternative to catching young mussels with bottom trawls, with help from IMARES Wageningen UR. Already, one third of the catch is brought in using these Mussel Seed Capture Installations (or MZIs), providing mussel fishers with greater income security.

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Mussel farmers 'sow' newborn mussels, known as mussel spat or seed, in special spots allocated as nurseries in the Wadden Sea and the Eastern Scheldt estuary off the Dutch coast. There the mussels grow to adult, marketable size

in one to three years. 'Traditionally fishers caught their mussel seed using a kind of trawl on natural mussel banks in the Wadden Sea,' explains Pauline Kamermans, a researcher at IMARES, Wageningen UR. 'This method produces

highly variable catches, because the amount of mussel seed varies a lot from year to year.' The trawling also does a lot of damage to the sea bed, say nature conservation organizations. Anticipating stricter regulations which might ban bottom trawl-



seed catch

ing, the sector went looking for alternative fishing methods. Inventor and mussel seed expert Kees Groot was involved in this process in the late 1990s. Because very young mussel larvae still float, Groot decided to develop a floating capture system. IMARES provided expertise and skills in the field of mussel biology, and tested a range of prototype nets and different catch periods.

BRUSHED OFF THE NET

About 10 years later, in 2012, more than 30 percent of the mussel seed was being caught with the alternative to the trawl, says Kamermans. The new Mussel Seed Capture

Installation, or MZI, consists of floating nets 3 metres deep by 100 metres long. ‘The microscopically small mussel larvae attach themselves to the net in the spring,’ explains Groot. ‘There can be 4 million of them on one square metre of net.’ In July the mussel seed fishers harvest the by then much bigger mussels by brushing them off the net with big machines. The shellfish are then taken to the nurseries. A second harvest is often possible, just before the end of the fishing season on 31 October.

The new system is extremely effective. In years that the traditional trawls brought in meagre catches, the MZIs caught plenty of mussel seed. ‘With the MZI fishers now al-

ways have a guaranteed catch,’ says Groot. ‘That gives them more income security.’ The disadvantages of the MZI are the extra work and investment it entails. A net of 100 by 3 metres costs 10,000 euros. Per season it delivers a catch of up to 60,000 euros’ worth of edible mussels.

The sector is opting for this new approach, partly under pressure of protests by nature conservation organizations. The Dutch ministry of Economic Affairs, the mussel sector and nature organizations have agreed that the transition to mussel seed fishing with MZIs should be completed by 2020. ■

www.wageningen.nl/en/mzi



‘Four million little mussels on one square metre of net’

