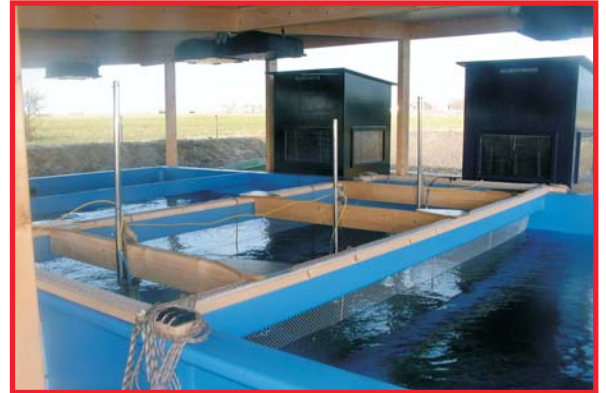


# Effects of sound and vibrations on cockles



Study period: September 2005  
Location: SEAMARCO, The Netherlands

In the Netherlands, common cockles (bivalve molluscs or clams) are fished commercially by excavation with high pressure water jets. During this process sand is injected between the gills and this not only damages or kills the clams which are harvested, but also those in the vicinity of the harvesting machine. Therefore the industry is presently developing a less harmful harvesting method. One method is to use sound or vibrations to close the cockles before the harvesting machine approaches them. In this pilot study we investigated whether sound projected in the water column and vibrations in the substrate can be used to induce the cockles to close.



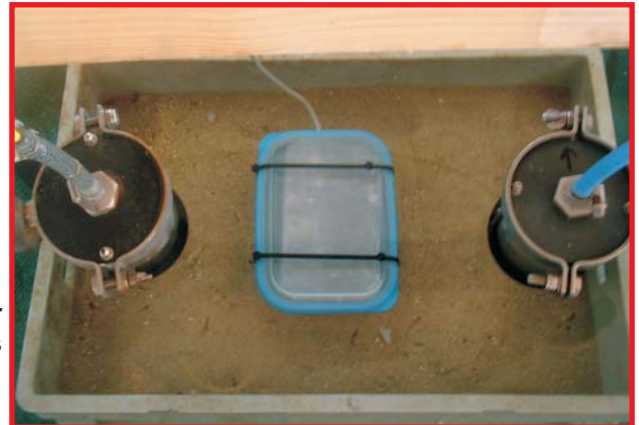
Tank with study area



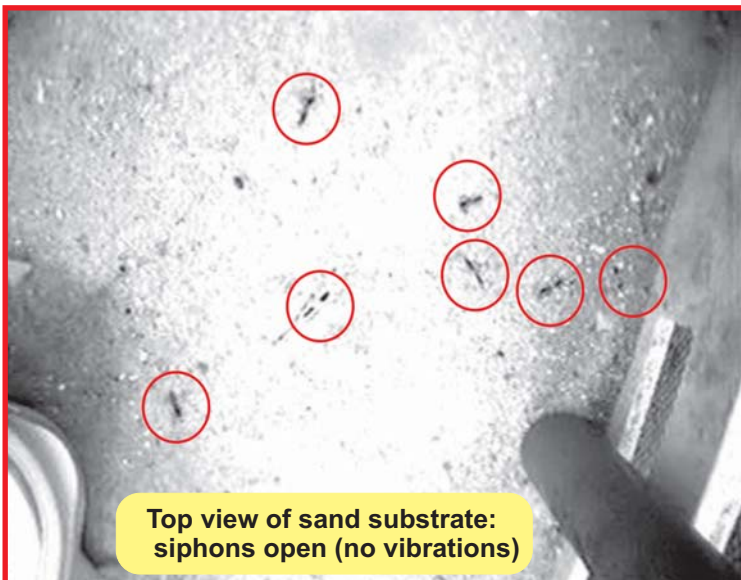
Cockles on sand subjected to sound



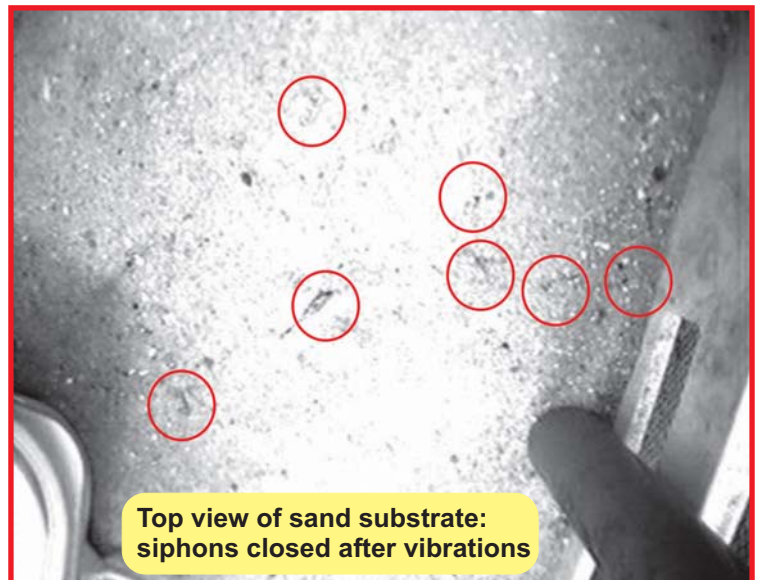
Images on monitor screens of cockles on sand



Cockles in sand with vibrator box on sand



Top view of sand substrate: siphons open (no vibrations)



Top view of sand substrate: siphons closed after vibrations

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