

A vessel that 'hand-picks' its catch from the seabed

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This vessel is the first of its kind. It can gather shellfish from the seabed without damaging the ecosystem. Credit: Ava Ocean

The Arctic Pearl is setting course for the Barents Sea in search of the shellfish delicacy known as the Iceland scallop. It is the first and only vessel of its kind, crammed with new technology that may herald the start of a new era in bottom fishing.

On Tuesday this week, the CEO of the Norwegian science institute

SINTEF, Alexandra Bech Gjørsv had the honor of naming the Arctic Pearl at the Fiskerstrand shipyard outside Ålesund. This former seismic [vessel](#) is now converted into a [fishing boat](#) and is to date the only one of its kind.

The Arctic Pearl is the first vessel in more than 30 years to be given the go-ahead to harvest Iceland scallop from the rich habitats found in Norwegian waters. The [seabed harvesting](#) technology installed on board is entirely new and cannot be compared with any other kinds of bottom fishing gear currently in use.

It can best be described as a "shellfish picker" that employs a selective water pump system to delicately gather up seafood species without touching the seabed. The selected shellfish are lifted into a harvesting basket that is suspended above the seabed. Here, any by-catch and smaller shellfish are removed before the basket is raised to the surface.

The world's first sensitive bottom fishing vessel?

The nature of this very special technology, developed by Ava Ocean and SINTEF, has enabled the Norwegian authorities to grant a five-year test catch quota for the species Iceland scallop. Ava Ocean wants to use this period to demonstrate to the world that it is possible to exploit even more of the many [food resources](#) found on the seabed without damaging vulnerable marine ecosystems.

There is currently no real alternative to traditional bottom scraping, which is the most widely used method of harvesting benthic shellfish species. But bottom scraping is a very destructive method and is prohibited not only in Norway, but in many other countries.

Working with the Marine Research Institute

The Arctic Pearl is not only embarking on the new harvesting of a shellfish delicacy with which only very few of us are familiar. It will also be joining forces with the Norwegian Marine Research Institute to carry out the precise and laborious task of documenting the impact of the "shellfish picker" on seabed fauna and habitats.

"The aim here is to demonstrate that we have a harvesting system that not only effectively picks selected shellfish species from the seabed, but which does so without damaging the ecosystem on which the [shellfish](#) depend or negatively affecting population recruitment," says Øystein Tvedt, who is CEO at Ava Ocean. "Only then will it be possible to develop a long-term fishery that is sustainable from both an environmental and economic perspective," he says.

Provided by SINTEF

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