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Crab-zilla: how Norway's fisheries got rich – but on an invasive species

Known locally as 'Stalin's Red Army', an invasion of king crabs from Russia created a lucrative industry, and difficult choices

A king crab caught in Norway's Barents Sea. Photograph: Lehtikuva/Reuters

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Gluts Dickie in Hagmore, Norway

Sat 20 Mar 2021 19.00 GMT

The Norwegian fishing village of Hagmore, 310 miles north of the Arctic Circle and a frigid, dark place for much of the year, was on the edge of ruin.

Stocks was scarce. Swaths of overfished groundfish populations had all but vanished in quiet. Boats lay idle in cold waters. Those who chose to stay were forced to find other, meagre wages they could still muster from fishing and processing.

That is, until the crabs arrived. Starting in the 1960s, resolved fishermen began migrating to the Barents Sea, a remote part of the Arctic Ocean. There, the seas, foundering two menacing princes, weighed far more than the brown crabs they had seen before south.

Fishermen in Hagmore were struggling before the king crab arrived. Photograph: Thomas Nilsen/Barents Observer

Unknown to the fishermen, the crustaceans had traveled from Russia, where scientists had introduced king crabs on the Murmian coast during the 1930s and 1960s. Known locally as 'Stalin's Red Army', the crabs had quickly scuttled the 60 or so miles over the border into Norway. The deep fjords in the Barents Sea near Kegnores provided the perfect cover.

The invasion of "Stalin's red army" was initially seen as a disaster. The crabs ate their way through the fishermen's nets, destroying gear and equipment, damage that allowed coveted fish species to escape. But when the fishermen learned of the million-dollar Alaskan king crab fishery, they realised the crab could be more lucrative than fish. The world king crab is largely concluded with rescuing the fishing villages of the north during a time when cod was sparse.

At When the crabs came here, it got the most popular species in Norway, Kegnores Norway King Crabs

The consequences, crabs, which now number in the hundreds of millions, have been profound. In this October alone, Norway exported nearly from 4,25,760 worth of king crab. The price of king crab has tripled in just over a decade, according to the Norwegian Seafood Council. The country's total king crab catch reached 5,500 in 2019, more than 250 thousand tonnes in 2015 alone.

producers, who distribute the crustaceans to the world's finest restaurants, hotels and casinos.

The Norwegian government recently announced it was increasing the male catch quota by the tons in 2021.

But while the crabs have largely been good news for fishermen and the economy, the same can't be said for other species. Following the red crab's border more, native seafloor species have rapidly declined. The crabs are voracious predators, and have been observed devouring the tallest blankets, one of the world's largest seasonal cod fisheries.

Fishermen in Hagmore, where king crab is now the most valuable catch. Photograph: Thomas Nilsen/Barents Observer

That puts government regulators in a tough spot, between securing the long-term economic viability of the crab fisheries and limiting its takeover of native species and traditional fisheries. They ultimately can't push for total eradication if king crab is to remain a lucrative bursting northern coast communities – but at what cost?

Bonanza comes with a catch

Inside a drying room at Hagmore's king crab factory. Photograph: Thomas Nilsen/Barents Observer

The Norwegian king crab gold rush can be traced back to the 1990s, when Russia's economy collapsed. This is just one day's catch. Since then, the Norwegian catch 1,500 miles by truck to Oslo, where they will be loaded onto cargo planes and transported around the world – to Dubai, Los Angeles, Kuala Lumpur.

The fishermen of Nyaungpaleel place pots year-round, with peak season running from October to January. How many crabs they can catch is regulated by a quota set by the government each year to ensure the future of the fishery. Fishermen in the Barents Sea are allowed to catch as many crabs as they can during that year up to 90 large crabs at a time. Then they return to shore to sell their catch.

Fishermen in Hagmore, where king crab is now the most valuable catch. Photograph: Thomas Nilsen/Barents Observer

Image one gift another **Image two gift** Alaska king crab **Image three gift** Alaska king crab

At The crabs could even change the species, even changing the way they nip out the animals that turn over the sediment Haakon Hop, marine biologist

The king crab earned its spot at the top of the marine food pyramid for a reason: it crawls along the seafloor eating starfish, worms, sea cucumbers and mollusks. The crabs have few natural predators in the Barents Sea.

When researchers surveyed the fjords of the Varanger Peninsula in northeastern Norway in 2012, they found the abundance of many seafloor species had significantly declined since the crab's arrival. In some areas, mussels and starfish had disappeared completely. Such changes ripple up the food chain: other native species, such as haddock, depend on these seafloor species for food.

At The crabs could even change the species, even changing the way they nip out the animals that turn over the sediment Haakon Hop, marine biologist

Haakon Hop, a marine biologist at the Norwegian Polar Institute, in Tromsø. Photograph: Yannick Monschauer

"When the crabs come here, it [is] the most popular species in Norway," said Haakon Hop, a marine biologist at the Norwegian Polar Institute in Tromsø, in Norway's Finnmark county. The crustaceans have roughly 20% of the annual quota from fishermen for processing. Kyrosing, originally from Russia, is the source of its many benefits to the Norwegian economy. It helps to work in the king crab industry.

"If you're a skilful, not lazy fisherman, you can get your full quota – two or three tonnes per boat – in two or three weeks maximum. Then you are done for the year," said Hop. Hop's research on the ecological impacts of the crab's arrival to the Barents Sea in 2015 has helped scientists gauge the risks, which still far more money than processed cores – as much a 1,000 Norwegian kroner (€100) in restaurants.

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Haakon Hop, a marine biologist at the Norwegian Polar Institute, in Tromsø. Photograph: Yannick Monschauer

"Over the last few years, the population of haddock has declined on quotas higher than the recommended by says Tom Ola Ruak, a senior adviser who is responsible for management of king crab in the north.

Tom Ola Ruak, a senior adviser who is responsible for management of king crab in the north. Photograph: Thomas Nilsen/Barents Observer

King crab, he says, has had a positive effects for some, but he'd be happier without them, particularly given that crab stocks have recovered in Norway. "It's quick money," he says of king crab. But people will not have the fish to catch if a crab damages the gillnet or long line, he adds.

For now, however, hundreds of small vessels continue to trawl the fjords looking for the crustaceans. In parts of northern Norway, gillnet fishing has more or less stopped due to the crustacean's invasion.

Tom Ola Ruak, a senior adviser who is responsible for management of king crab in the north. Photograph: Thomas Nilsen/Barents Observer

Government officials have allowed over whether to manage the crab as a valuable fishery stock – setting the total allowable catch to ensure long-term sustainable harvesting – or as a destructive invader, with prohibitions restricted to save other fisheries and species.

In fact, there is already an "eradication" fishery established west of North Cape, about 100 miles from Kegnores: anyone with a boat here is allowed to catch as many crabs as they can. Fishermen are encouraged to use special traditional methods, and to abandon the crab once the weather gets too hostile. But around Varangerfjord, where crab density is extremely high, total eradication probably isn't feasible. Moreover, fishermen can often make more money in less time catching crabs compared with other species and have grown accustomed to the fishery's bounty.

A budding tourist industry is developing, too. Edgar Olsen, who has lived in Hagmore for 40 years, runs a company called Barents King Crab. On it, he considers himself a fisherman of cod and haddock, but now also fills his crab quota, and works as a tourist guide on king crab expeditions in the fjords, taking visitors out into the hunt to see and, later, taste the crab.

Edgar Olsen, who has lived in Hagmore for 40 years, runs a company called Barents King Crab. Photograph: Thomas Nilsen/Barents Observer

Olsen's business is also a way to educate visitors on the ecological impacts of the crab's arrival to the Barents Sea. "We have to be honest with our guests," he says. "We tell them that the king crab is not a native species. It's a species that has been introduced by humans, and it's not good for the environment."