

Marine Stewardship Council GLOBAL IMPACTS REPORT UPDATE

June 2019

OUR COLLECTIVE IMPACT

For over 20 years fisheries, scientists, consumers and industry have been part of a collective effort to make sure our oceans are fished sustainably.

^{Over} 15%	of marine wild catch engaged with the MSC program (certified or in assessment)
Almost 900	conditions of certification met by fisheries since 2000, moving from acceptable to global best practice
^{Over} 1,600	improvements delivered to strengthen or monitor fishery sustainability
92%	of certified fisheries have been required to make at least one improvement
More than 36,000	products are sold with the blue MSC label
More than 38,000	sites around the world selling certified sustainable seafood

Global Impacts Report Update

FISHERIES IMPROVING

The Marine Stewardship Council's (MSC) global impact reporting examines the progress and improvements of MSC certified fisheries around the world.

Our 2019 analysis focuses on the improvements MSC certified fisheries have made to reduce environmental impacts.

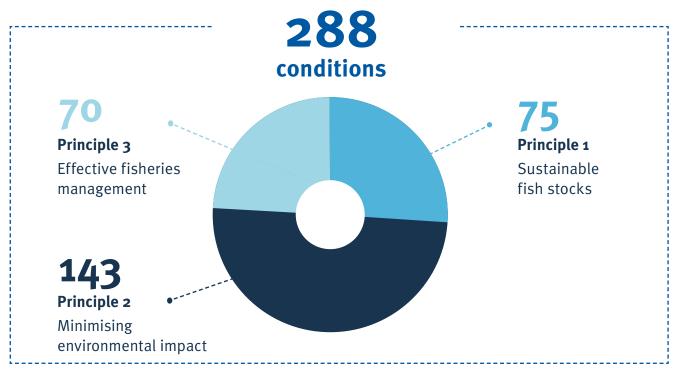
Why do MSC certified fisheries need improving?

While fisheries must be performing at a high level to be MSC certified, there is often room for improvement. In fact, 92% of certified fisheries have made at least one improvement. These improvements are required for fisheries to maintain certification. These improvement requirements form what we call conditions. Each condition may impact multiple species and generate many improvements.

A completed condition means a fishery's score meets best practice as measured by the three Principles of the MSC Fisheries Standard.

How many conditions have fisheries completed?

Between 2016 and 2018, MSC certified fisheries completed 288 conditions.



Minimising environmental impact

143 conditions relate to Principle 2 of the Fisheries Standard: minimising environmental impact.

We have recorded these conditions in four main categories:



What actions did fisheries take to minimise environmental impact?

MSC certified fisheries funded or participated in;



MSC certified fisheries funded or participated in 65 new scientific research projects.

MSC certified fisheries have taken 24 technical actions, including gear modifications for reducing bycatch and the creation of new marine protected areas.

54 assessments of fishery impact were completed, including the mapping of fisheries' pathways.

What are the benefits of fisheries' improvements?

An improvement is the result of an action taken by a fishery to close a condition. Sometimes, one action produces multiple improvements. For example, closing an area to fishing could impact several species.

The MSC's Strategic Research team has analysed fisheries' improvements since 2016 to test the benefits. They found:



GLOBAL IMPACTS: CASE STUDIES FROM AROUND THE WORLD

The MSC certification program recognises, rewards and incentivises sustainable fishing around the globe. This map highlights four case studies from fisheries that have made positive improvements.





How the island nation of Fiji is leading the way in reducing accidental catch in longline tuna fisheries. See page 7.



The Oregon and Washington pink shrimp fishery off the west coast of the USA is working to protect a lesser-known fish. See page 8.



A Chilean squat lobster fishery has been working with researchers to map its fishing grounds and better understand its impacts on deep sea habitats and ecosystems. See page 9.



North East Arctic cod and haddock thrive in the Barents Sea due to good management and international collaboration. See page 10.

TUNA FISHERY WORKS TO REDUCE BYCATCH



How the island nation of Fiji is leading the way in reducing accidental catch in longline tuna fisheries.

In Fiji, tuna fishing provides an important source of income for many people. Here, tuna is caught using longlines, which can accidentally catch unwanted species (bycatch). <u>The Fiji albacore and yellowfin tuna fishery is leading</u> the way in reducing bycatch in longline fisheries.

Sustainability and sharks

When the fishery prepared for its first MSC assessment in 2011, it had a problem with shark bycatch. The fishery immediately started work to reduce its impact on various species of sharks.

Parts of fishing lines called 'traces' are commonly made of wire to prevent fish biting through the line. Unfortunately, sharks are more likely to get accidently caught when fishers use these traces. To tackle the problem, the fishery switched to monofilament traces, which sharks can bite through to escape.

The fishery also committed to improve the information on bycatch by requiring vessels to complete log sheets of all interactions with sharks. Vessels now fish in deeper waters, where they are less likely to encounter some shark species.

Independent observation

The presence of independent observers on fishing vessels is an important part in good fisheries management. Observers record catch and bycatch.

Since gaining MSC certification in 2012, the fishery has substantially increased its levels of observer coverage. In 2017, observers participated in 62% of trips by the fishery's MSC certified vessels. The fishery is also using electronic monitoring systems and has installed onboard cameras on 50 vessels.

The Fiji Maritime Academy has introduced a training module on bycatch mitigation as part of the Deckhand Fishing and Offshore Skipper Programme. In April 2019, the first students graduated and are now gaining practical at-sea work experience on-board fishing vessels.

With good management and a commitment to sustainability, Fiji's fisheries can continue to catch tuna and reduce their impact on other marine life.

PINK SHRIMP FISHERY USES LED LIGHTS ON NETS



MSC certified fisheries' practices help conserve more than large marine animals. The Oregon and Washington pink shrimp fishery off the west coast of the USA is working to protect a lesser-known fish.

The pink shrimp fishery's area of operation is also home to a tiny silver fish called eulachon. Their name comes from the local Chinookan languages. Eulachon are also known as candlefish because they used to be dried and used as candles. Like salmon, eulachon migrate from the sea up rivers to spawn.

Eulachon at risk

Climate change, habitat loss and the impacts of fisheries may all have contributed to declining numbers of eulachon. The species is now classified as threatened under the USA Endangered Species Act.

In 2013, state fishery managers began to research ways to reduce the amount of eulachon caught. This came in response to a condition of MSC recertification.

LED lights reduce eulachon bycatch

Researchers found that by placing LED lighting on the foot ropes of the nets that reduced unwanted catch of eulachon by 80-90%. By 2018, 100% of vessels adopted this method. As a result of the success, the use of LED lights has spread to shrimp fisheries across California, Oregon and Washington.

The addition of the LED lights helped not only eulachon: researchers found slender sole bycatch was reduced by 69%, dark-blotched rockfish decreased by 82% and other rockfish by 56%. No one knows how the lights reduce the catch. It could be that the light illuminates an escape path or that it encourages the fish to move downwards, or it might act as a warning to avoid the oncoming trawl.

SQUAT LOBSTER FISHERY GENERATES NEW SCIENCE



Many MSC certified fisheries are required to improve their scientific understanding of the areas they fish. A Chilean lobster fishery has been working with researchers to map its fishing grounds.

The Chilean squat lobster demersal trawl fishery operates in the Pacific, off the south-central coast of Chile. As a data-limited fishery, it was assessed using the MSC's Risk-Based Framework.

The fishery uses demersal trawls to catch the red and yellow (carrot) squat lobster, which lives between 100m and 350m below the surface.

Assessing the impacts of the fishery on sea floor habitats

In 2017, the fishery worked with researchers to map its fishing grounds. They compared this map to local seabed maps to assess if the fishery was a risk to vulnerable habitats such as seamounts.

Seamounts are underwater mountains that rise up from the bottom of the ocean. These mountains offer a rocky surface for corals to attach themselves and create habitats for fish and crustaceans. Deep ocean currents are forced over and around the seamounts. This movement creates a concentration of food that supports the diverse ecosystem.

The seabed assessment revealed the fishery's activity did not threaten the biodiverse habitats. The research also improved the fishers' and government understanding of local sea floor habitats.

Recognising and reporting endangered, threatened and protected species

To raise awareness of important species they might encounter, the fishery produced photo guides for identifying any coral, sponges, sharks, rays and seabirds that might be caught. These posters are now found on every vessel so fishers and crew can accurately report any bycatch. Knowing which species the fishery encounters is crucial in helping understand the impacts on the habitats where it fishes.

COLLABORATION HELPS SECURE BARENTS SEA COD STOCKS

Global Impacts Report Update



Off the coasts of Norway and Russia, the Barents Sea is one of the most productive and economically important fishing regions in the world.

The North East Arctic cod and haddock that live here are thriving. The biomass of the cod stock is at a historic high, estimated to be in the region of 2 million tonnes, but this was not always the case. During the 1980-90s the stock was less than half a million tonnes and there were concerns for its future. Thanks to favourable environmental conditions and good management, many fisheries in the region have been MSC certified for the past decade.

A collaborative approach

Before MSC certification a fishery improvement project (FIP) was set up by the Sustainable Fisheries Partnership. The FIP helped the fisheries tackle illegal, unregulated and unreported (IUU) fishing, by working with seafood buyers, governments and other stakeholders.

International collaboration is also key for the sustainability of these fisheries and management is overseen by the joint Norwegian-Russian Fisheries Commission.

Sustainability and science

Since 2010 over 85% of Russian cod and haddock fisheries have become MSC certified. These certified fisheries continue to work in partnership with government scientists and NGOs to reduce the impact of their fishing gear on seabed habitats.

Through collecting data on bycatch, fisheries are helping identify areas that could benefit from voluntary closures. The fisheries are also engaged with the Polar Research Institute of Marine Fisheries and Oceanography, who are developing fishing gear that minimises impact with the seabed.

Cod in a changing climate

The recent increase in cod biomass is not only down to good management, climate effects have also played a part. Increases in temperature have been beneficial for North East Arctic cod and have increased adult cod numbers.