

Sustainability through transparency

By harnessing cutting-edge technology, we're helping to transform the way fishing is monitored and managed

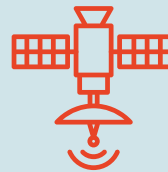
People depend on a healthy, global ocean. It regulates our climate, provides a vital food source for three billion people and supports the livelihoods for hundreds of millions. But unsustainable and unregulated fishing methods take a terrible toll on our ocean, ravaging marine ecosystems, pushing fish stocks to the brink and threatening food security. Action is urgently needed to reverse this decline, and Global Fishing Watch is committed to being part of the solution.

By harnessing cutting-edge technology, our ground-breaking online map tracks the movements of commercial fishing vessels all over the world. Anyone with an internet connection can use it, for free, to track these boats and download data about their past and present activities. This offers unprecedented opportunities to improve the way fishing is managed.

By collaborating with governments, businesses, NGOs and research institutes, we're creating and sharing insights to radically improve transparency and create a sustainable future for our oceans.



To avoid collisions, boats over a certain size are required to publicly broadcast their location using the automatic identification system (AIS).

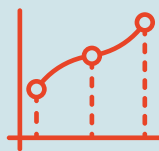


A constellation of satellites and terrestrial receivers collect these transmissions which are delivered to Global Fishing Watch.



Once the data has been processed and tested, we make it available for free at globalfishingwatch.org for anyone to view and interrogate.

Mapping fishing activity: how it works



The Global Fishing Watch platform applies machine learning algorithms to the data – more than 60 million points of information per day – to determine which vessels are fishing boats, the type of fishing gear they're using, and when and where they are fishing based on their movement patterns.



We merge in data from other sources, including government-operated satellite-based vessel monitoring systems (VMS), infrared imaging and radar systems for a more complete picture of global fishing activity.

60,000

Global Fishing Watch shows the activities of about 60,000 commercial fishing vessels (and more every month), that are responsible for a significant proportion of the total global seafood catch. Vessels with AIS account for more than half the fishing effort over 100 nautical miles from shore and as much as 80% of the fishing in the high seas.



The fishing transparency challenge

While many fisheries are strictly regulated, it's hard to monitor what goes on across the vast expanse of ocean – and particularly on the high seas, those areas outside the jurisdiction of any country that cover nearly half the surface of the globe.

As a result, illegal, unregulated and unreported (IUU) fishing is one of the biggest threats to ocean sustainability. By its nature, it's impossible to say just how much IUU fishing takes place, but it's a big problem: the FAO estimates that it accounts for 11–26 million tonnes of fish each year, worth US\$10–23 billion.

Tackling this would make a big contribution to restoring ocean health and making fishing sustainable – and Global Fishing Watch offers an important part of the solution. Our data and analysis can flag up suspicious fishing activity – for example, boats entering marine protected areas, or unlicensed vessels operating in another country's waters. It's also revealing for the first time the extent of fishing: recent analysis has shown that fishing takes place across more than 55% of the ocean surface, making its footprint by area over four times that of agriculture.



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“With the data Global Fishing Watch provides, governments, fishery management organisations, researchers and the fishing industry can work together to rebuild fisheries and protect critical marine habitats.”

Leonardo DiCaprio

The Leonardo DiCaprio Foundation is proud to be a Funding Partner of Global Fishing Watch.



Global Fishing Watch is an independent, international non-profit organisation originally set up through a collaboration between three partners: Oceana, an international organisation dedicated to protecting and restoring the ocean; SkyTruth, experts in using satellite technology to protect the environment; and Google, who provide the tools for processing big data.

Our vision

Healthy, productive and resilient oceans where transparent and effective governance of marine resources supports biodiversity and sustainable development.

Our mission

To advance ocean sustainability and stewardship through increasing transparency. We do this by offering free data and near real-time tracking of global commercial fishing activity, supporting new science and research and boosting the global dialogue on ocean transparency.

Within the next 10 years, we aim to track all large-scale fishing – some 300,000 boats responsible for about three-quarters of the global marine catch – and increase our ability to track small-scale fishing vessels.

What we do

Research and innovation

By making our data and visualisation tools freely available, we're enabling scientific understanding and insights that will lead to change on the water. We're collaborating with internationally-recognised research institutions to further understanding of the complex challenges facing our oceans.

This has generated new insights on, for example, high-seas fishing, shark finning by illegal fishers, the impact of Indonesia's anti-IUU fishing policies and close encounters at sea where one vessel may be transferring its catch to another.

Policy and markets

Our data can inform economic and policy decisions, and we're pursuing partnerships with government and industry to improve transparency, data sharing

and fisheries management. Data from other initiatives like industry-traceability programmes can also help us to tip the balance toward transparency.

Advocacy and education

We're growing a community of people committed to sustainable fisheries and better management in our oceans. We're bringing together governments, businesses, NGOs, media and academia to promote transparency, improve understanding and foster

collaboration – for example in building demand for verifiable, sustainably-sourced seafood, identifying IUU fishing hotspots, and establishing and managing marine protected areas.

Countries commit to make their fishing fleet visible to the world

We're working with governments to publish VMS data through our platform to strengthen monitoring and support enforcement. In 2017, Indonesia became the first nation to make its proprietary VMS tracking data available via Global Fishing Watch, instantly putting 5,000 smaller commercial fishing vessels that don't

use AIS on our map. This brought new insights into vessels that were fishing in Indonesian waters for more than their allotted period or harvesting more than the legal limit. Peru stepped up with a public commitment in June 2017 to share its VMS data, and Costa Rica followed suit in May 2018.

Rapid and lasting gains from solving illegal fishing

A team at University of California, Santa Barbara analysed Global Fishing Watch data to gain a comprehensive view of IUU fishing in Indonesia and the impact of the country's efforts to curb it. The researchers showed that curtailing IUU fishing combined with capping annual harvests at its maximum sustainable level could generate a 14% increase in catch and a 15% increase in profits by 2035 compared with current levels - without short-term losses to the local economy.

The research indicates that Indonesia's marriage of policies and data works – foreign fishing in the country has dropped by more than 90% and total fishing by 25%. Indonesia's tough stance on illegal fishing not only jump-started recovery in its waters but also provides a viable example for other countries plagued by illegal fishing.



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Exposing fishing impacts from world's largest tanker spill in nearly 30 years

On January 6th 2018, the Sanchi, an Iranian tanker carrying more than 100,000 tonnes of toxic oil ran into a cargo vessel. It exploded, killing all crew onboard, and then burned, spewing its cargo for more than a week before sinking in the waters between China, Japan and South Korea. Journalists investigated how the spill spread across one of the world's most productive fishing grounds, using Global Fishing Watch data to see who was fishing in the affected areas. Analysis indicates that there was little change in the level of fishing activity in the affected area following the disaster, raising concerns about contamination.

Explore our data and find out more at globalfishingwatch.org