

Turning the Tide

Ending overfishing in north-western Europe

The Pew Charitable Trusts

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This overview summarizes the report *Turning the Tide* which documents the role and development of fisheries in Europe's north-west waters and the opportunities created by the EU's reformed Common Fisheries Policy to restore fish stocks there.

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Overview

The seas of north-western Europe—the North, Irish, and Celtic seas, and the waters west of Scotland and Ireland—boast a rich and diverse mix of environments and wildlife that have shaped the cultures along their shores. For millennia, the natural bounty of these waters has spurred development of coastal communities and enabled the expansion of fisheries in pursuit of food and profit.

In recent decades, however, the scale of that expansion has increased dramatically. Calls by scientists and environmentalists to reduce fishing pressure have been ignored too often by politicians who put short-term economic and political gains ahead of long-term sustainability. As a consequence, many fish stocks collapsed throughout the region, leaving fishing communities devastated. In response, the European Union (EU) recently agreed to a reform of its fisheries management, the Common Fisheries Policy (CFP), that should prove a successful first step in restoring and maintaining the health of fisheries and fish stocks, and of the communities and marine ecosystems that depend on them.

This report takes an in-depth look at the seas in north-western Europe, their characteristics, their histories and the roles that their fisheries have played in the booms and busts of communities at the water's edge. An understanding of these distinct regions—and the critical part played by their fish stocks—emphasizes the importance of effective implementation of the reformed CFP, which requires an end to overfishing throughout Europe where possible by 2015 and at the latest by 2020. Now is the time to start making sure the policy goals move from rhetoric to reality.

A region rich in marine wildlife and history

The North Sea coast is home to upward of 60 million people—13 per cent of the EU's population.¹ That includes densely populated areas, such as the Netherlands, where on average roughly 500 people live in every square kilometre, as well as largely rural places such as the Shetland archipelago off Scotland, where only 16 of some 100 islands are inhabited.²

Further west, the coastline of the Irish Sea features one of the most industrialized parts of the region—England's Merseyside, which includes Liverpool—and a stretch of coast with nearly one quarter of the estuaries of the entire United Kingdom. Both the North and Irish Seas are relatively shallow and to a large extent encircled by land, their waves encountering borders as varied as the fjords of Norway, the tidal inlets of the Wadden Sea, and the extraordinary basalt formation known as Giant's Causeway in north-east Ireland.

In contrast, the deeper Celtic Sea has relatively little coastline; it washes against the southern coast of Ireland and touches the tips of Cornwall, Wales and Brittany, but is otherwise limited in extent by the lines drawn in ocean maps. The waters to the west of Scotland and Ireland cover the largest area in this region and encompass the most variety of all, from the sparsely populated Western Isles to the Firth of Clyde (the site of herring fisheries as early as the fifteenth century), west to cold depths that shelter deep-water corals and fish that can live for 100 years or more.

Amid the contrasts, one constant remains: The waters and coastal zones of north-western Europe have long enjoyed—and despite urbanization, industrialization and overfishing, in many cases continue to enjoy—thriving concentrations of marine life. The Celtic Sea supports about 300,000 breeding pairs of 15 seabird species.³ The Monach Isles in the Outer Hebrides host the second-largest breeding population of grey seals in the world.⁴ Massive deep-sea coral reefs on the Porcupine Bank, 320 km west of Ireland, include living thickets that stand up to four times the height of many similar cold-water corals.⁵ The Wadden Sea in the North Sea's south-east corner is the site of the largest unbroken system of intertidal sand and mud flats in the world, and its salt marshes host around 2,300 species of flora and fauna.⁶

North-West European Waters



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These diverse marine ecosystems have long played critical roles in the culture and economy of north-western Europe. Shell and skeletal cod remains in north-east Ireland suggest the existence of marine fisheries in the Irish Sea dating back some 9,000 years.⁷ Around 1000 CE, Basque fishers began venturing as far north as Norway, Iceland and the Faroe Islands, catching cod and preserving it with salt.⁸ By the seventeenth and eighteenth centuries, the Dutch herring fishery absorbed more capital and employed as many people as the country's merchant fleet, the richest in Europe at that time.⁹



Cod has remained an iconic species in the region for centuries.

A history of overfishing

So great was the region's bounty that in 1813, Henry Schultes, a British political commentator, wrote that "the seas which surround us afford an inexhaustible mine of wealth".¹⁰ Almost 100 years later, writer Walter Wood rejoiced that, "despite the vast growth of the fishing industry, the total quantities of fish rise annually".¹¹ Yet by the time of that second proclamation, the first warning signals were already being sounded. In 1900, for example, Walter Garstang of Britain's Marine Biological Association noted of the North Sea that years of excessive fishing had led to steadily diminishing returns for the work required.¹²

Two wars then slowed the expansion of the region's fishing industry and the toll of overfishing, but that interruption would prove only temporary. Today, declines vary from sea to sea: North Sea fisheries, for example, have been and continue to be fished by many states, with one succeeding another as the dominant actor; in the Irish Sea, Irish and British vessels bring in the great bulk of landings. The open-ocean fisheries to the west of Scotland and Ireland pose a challenge, unique in the region, because EU fisheries must seek agreements on quotas in international waters with counterparts from Iceland, Norway, the Faroe Islands, Greenland and Russia. But the broader narrative—of rapid increases in fish landings followed by sharp declines as fish stocks collapse under the pressure of intensive fishing—has played out time and again.

The examples, and their socio-economic and ecological consequences, make for disheartening reading:

- In the North Sea, the first herring stock collapse took place in 1955; more herring stocks began collapsing in the late 1960s, and in 1977 the North Sea herring fishery had to be suspended for four years.¹³ Catches of cod in these waters peaked at over 300,000 tons in the early 1970s, declined in the 1980s and 1990s, and then plunged until, by 2003, the International Council for the Exploration of the Sea (ICES), the intergovernmental organization focused on marine and fisheries science, called for a closure of the cod fishery. Although the fishery is now conducted under the aegis of a management plan, the stock remains overfished and its biomass is critically low.
- In the Irish Sea, once-extensive fisheries for herring are now a tiny fraction of their former size, so much so that the majority of the catch is taken by just three trawlers. ICES has recommended zero catch of cod since 2004, while it was only in 2012 that EU fisheries ministers set what is known as the total allowable catch (TAC) in the coastal waters of western Scotland at zero.
- In the Celtic Sea, the level of fishing has changed the relative abundances of species of different sizes, fundamentally transforming the composition of the sea's ecosystem.¹⁴ For example, these waters have experienced significant declines in large fish species, such as cod and angler fish, and increases in smaller size species such as blue whiting, megrim and whiting.
- West of Scotland and Ireland, the blue whiting fishery was the largest in the north-east Atlantic in 2003; by 2011, it had collapsed to such an extent that scientists recommended zero catch that year.¹⁵ An Irish fishery for orange roughy, supported by subsidies, began in 2000, peaked in 2002 and had ended by 2009.

Overfishing and the early Common Fisheries Policy

Since 1983, the Common Fisheries Policy has been used to manage fishing by EU members and fisheries in EU waters. The CFP cannot be held responsible for management failures that predate its launch, but it has not yet proven effective in restoring fish stocks to sustainable levels. Indeed, certain aspects of the policy have contributed to mismanagement of fish stocks in the region. For example:

- Scientific advice was not always available to help pre-empt rapid exploitation of fisheries, and even when it was, it often was not used to guide management decisions. The final word on setting catch limits under the CFP falls to the EU Council of Ministers, which frequently weights short-term political considerations over long-term ecological or economic ones.
- Fisheries managers remain dependent on information from fishing vessels, information that is not always available or reliable. ICES, for example, has estimated that "unallocated removals"—unreported catch and unauthorized landings known as "black" landings—have at times accounted for as much as 40 per cent of North Sea cod catches.¹⁶
- Even when restrictive measures are put in place to allow for rebuilding of stocks, the fishing industry and its supporters often work to overturn them, denying the measures time to take full effect. For example, a reduction in fishing for Celtic Sea cod after 2005, combined with an extraordinarily large number of young fish entering the population in 2010, led to a rapid increase in the stock's size. Catch limits were almost immediately increased, the stock declined again, and an opportunity for recovery was lost.
- An overarching problem, though, has been that neither the original CFP nor the policies that preceded it were intended to regulate fisheries from the perspective of sustainability or ecosystem protection.

Fishing at or below maximum yield maximizes average yield in the long term.

Officials adopted the first set of European Economic Community (EEC) regulations on fisheries in 1970. These rules grew out of a belief that the ocean was largely inexhaustible and a conviction that fisheries management was about maximizing catches and profits. The drafters focused primarily on structural and market measures to increase productivity and growth.

After the CFP was launched in 1983, capacity in the fishing fleets continued to increase to meet these objectives—and fish stocks continued to decline. Even as the fisheries policy underwent a series of reforms intended to place greater emphasis on sustainability, many of the more ambitious measures that might have allowed fish stocks to recover were thwarted by an emphasis on short-term political and economic considerations. As a consequence, by 2007, 94 per cent of assessed EU stocks were classified as overfished.¹⁷

Fisheries policy reform: A way forward

In 2008, the European Commission published a “Mid-Term Review of the Common Fisheries Policy” that rebuked the policy, its structure and its implementation, setting in motion a process that has resulted in a substantially reformed CFP that entered into force in January 2014. The policy now includes, among other mandates, a clear time frame for ending overfishing and an obligation to land unwanted catch. If correctly implemented, these measures could fundamentally transform commercial fisheries in the region, allow overfished stocks to recover, and return the seas of north-west Europe to a state where they are once again full of life.

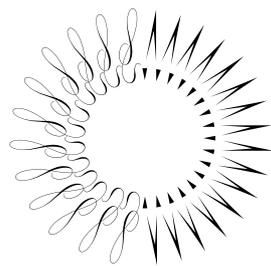
Correct implementation, however, is the key. Though they have agreed to phase out overfishing by 2015 where possible and by 2020 at the latest, ministers actually increased the degree of overfishing in 2012 and 2013. Going forward, some EU member states are likely to seek delays in, or exceptions to, implementation of the new standards, or request quota adjustments that would result in yet more overfishing.

Years of combined effort by the European Commission, Parliament and Council—with widespread pressure from civil society—resulted in the reformed CFP. The policy can succeed only if those charged with implementing the reforms maintain their focus, and the public keeps pushing decision makers to ensure the law works in practice as intended. That would allow the recovery of fish stocks and lead to stable, sustainable fisheries in a region that supports abundant marine life and thriving communities.

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