There are calculators to compute one's carbon footprint, and even methods of summing up a water footprint. But when it comes to calculating different countries' impacts on the world's oceans, those figures are typically as murky as the briny deep itself. Until now, that is.

Researchers at British Columbia's Fisheries Centre in conjunction with National Geographic magazine set out to establish nations' SeafoodPrints, figures that illustrate how big of an impact each country has on the ocean. After reviewing data sets and crunching the numbers, scientists named the seas' three top offenders: China, Japan, and the United States.

These three countries boast pretty high population numbers, and the amount of fish each nation hauled in definitely played a part in the equation. But especially in the United States, per capita seafood consumption really isn't all that high, especially when compared to a nation like Japan, where fish serves as a dietary staple. In order to understand why America ranked as one of the worst three offenders, you have to look at the types of fish U.S. diners chow down on.
Americans tend to select large, predatory species of fish like Atlantic salmon, bluefin tuna, and Chilean sea bass. Because these fish play a much larger role in oceanic food chains than smaller species like sardines, consuming predators results in a much larger SeafoodPrint. "A pound of tuna represents roughly a hundred times the footprint of a pound of sardines," Daniel Pauly, the study's lead researcher, told National Geographic. As the Washington Post reports, one 1,000-pound tuna can eat about 15,000 small fish in a year, which means that eating one pound of tuna is the equivalent of eating, say, 100 pounds of a smaller species like tilapia.

Not only do diners' penchants for predators take a toll on the seas, they impact folks' health, too. Most oceanic species contain mercury, a heavy metal. This metal bioaccumulates up the food chain, meaning that the bigger the fish, the more mercury it's likely to contain. A bluefin tuna, for example, holds a hefty load of mercury, while a sardine's heavy metal count is pretty low. Consuming mercury is concerning for all diners, but it's especially worrisome for young children whose bodies are still developing and pregnant women. Eating too much mercury can cause numbness, fatigue, brain damage and developmental problems, birth defects, and even death.

Fishermen across the globe haul in 170 billion pounds of fish and shellfish every year, according to National Geographic. Seafood buffets may runneth over, but the world's oceans are literally running out of fish. One way we consumers can help get seas back on track is by taking unscrupulous seafood purveyors to task for their irresponsibility. Whole Foods, for example, continues to sell threatened and endangered species of fish like red snapper and Chilean sea bass. Sign our petition asking the store to live up to the environmental stewardship philosophies it touts and immediately stop selling all threatened species of fish.

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