

# MIS LABELLED

Montreal Investigation Results and How to  
Fix Canada's Seafood Fraud Problem



# WHAT IS SEAFOOD FRAUD?

**Seafood fraud is any activity that misrepresents a seafood product being sold. It threatens public health and food safety, weakens the environmental and economic sustainability of fisheries, and cheats consumers and the Canadian fishing industry. It also masks global human rights abuses by creating a market for illegally caught fish.**

A particularly troubling form of seafood fraud is species substitution: swapping cheaper, less desirable or more readily available species for more expensive ones. This can include swapping farmed products for wild caught and black-market fish for legally caught varieties. Mislabelling includes presenting false, incomplete or misleading information about the product.

Canada produces high-quality seafood, roughly 85 per cent of which is exported.<sup>1,2,3</sup> About 80 per cent of the seafood sold in Canada is imported from overseas, often of lower value.<sup>4</sup> Seafood is more prone to mislabelling than any other protein source in the Canadian food market<sup>5</sup> because it is traded globally more than any other food and often follows a long, complex and notoriously opaque path from a fishing vessel to our plate. This creates many opportunities for mislabelling and fraudulent activity along the way.<sup>6,7</sup>

Canadian consumers are routinely given little or no information about the seafood we purchase,<sup>8</sup> despite its popularity and increasing concern about where our food comes from.<sup>9,10</sup> And, with more than 900 different species of seafood available for sale in Canada, it's impossible for consumers to independently and accurately determine what fish we're eating. When menus or labels do provide information, studies have consistently shown that far too often, it is misleading or incorrect.

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## EXECUTIVE SUMMARY

# SEAFOOD FRAUD IS A WIDESPREAD GLOBAL AND CANADIAN PROBLEM

Over the last decade, numerous studies have exposed seafood fraud and mislabelling around the world. A 2016 review by Oceana of more than 200 studies from 55 countries found that one in five of more than 25,000 seafood samples was mislabelled.<sup>11</sup>

**DNA testing conducted by Oceana Canada from 2017 to 2019 has revealed that an alarming 47 per cent of more than 470 seafood samples tested from food retailers and restaurants in six Canadian cities were mislabelled. The most recent round of testing conducted in Montreal in July 2019 showed that a staggering 61 per cent of samples were mislabelled.**

Oceana Canada's national investigation into seafood fraud—the most comprehensive study of its kind conducted in Canada—found farmed fish served up as wild caught; cheaper species substituted for more expensive ones; fish banned in many countries because of health risks masquerading as another species; and exposed rampant

problems with the current traceability and labelling standards for fish in Canada.

Mislabelling can happen on this scale because the global seafood supply chain is obscure and increasingly complex. Once a fish has been caught, it can travel halfway around the world for processing, crossing many national borders before it ends up on our plate.

Canadian labelling standards further complicate this issue: our labelling regulations – despite being amended in 2019 – are outdated and unnecessarily cumbersome. On top of this, Canada has a fragmented regulatory system regarding seafood traceability, with no single agency wholly responsible for addressing it.

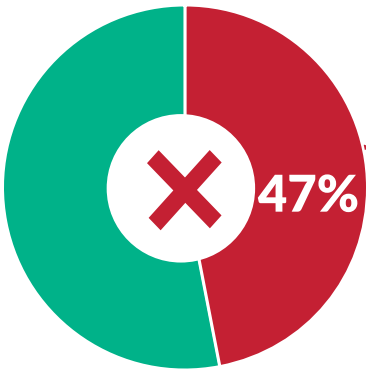
**The federal government has a responsibility to combat this widespread problem. There is a solution: implementing boat-to-plate traceability and comprehensive labelling in Canadian seafood supply chains.**

Boat-to-plate traceability means that key information is paired with fish products from the point of harvest to the point of sale. By tracking fish products this way, we can significantly reduce instances of fraud and mislabelling, better understand where it happens, enhance confidence in our food system and help Canada's seafood industry access global markets – many of which already demand stronger traceability.

Boat-to-plate traceability works. The European Union implemented measures to track fish at every step from capture to consumption and fraud rates have declined significantly.<sup>12</sup> The United States has put boat-to-border traceability in place for some at-risk species groups. It's time for Canada to do more.

Mounting evidence shows seafood fraud is an urgent, widespread issue across the country that needs attention from the federal government. Canadians deserve to know that all seafood sold in Canada is safe, honestly labelled and legally caught.

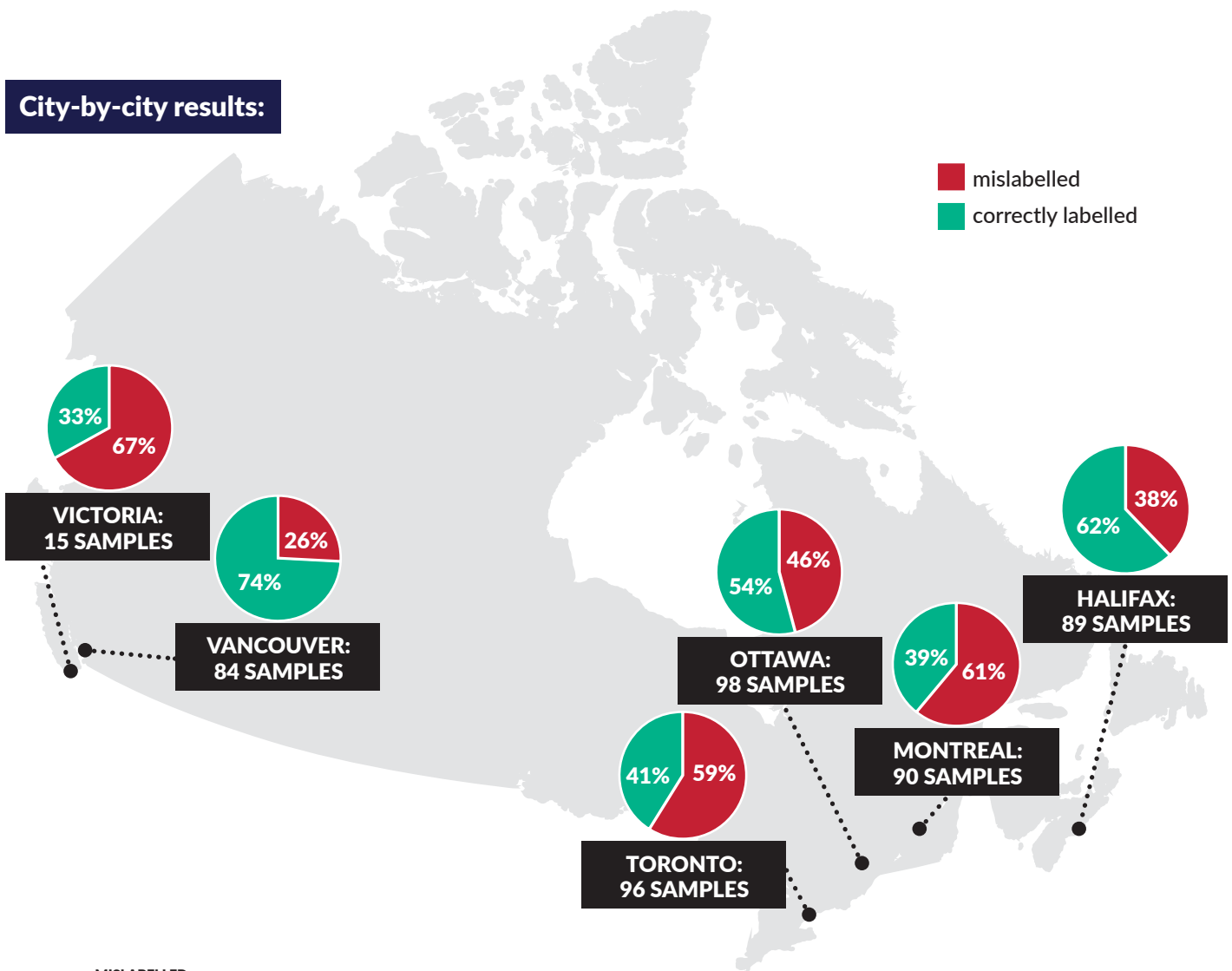
# NATIONWIDE TESTING



## ALMOST HALF OF ALL SAMPLES MISLABELLED

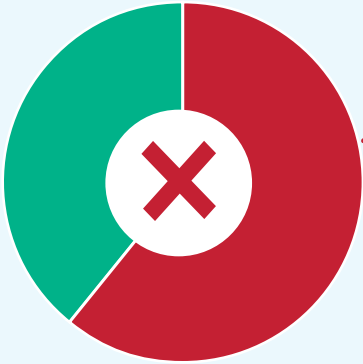
Oceana Canada tested 472 seafood samples in six Canadian cities between 2017 and 2019. The results reveal that seafood fraud and mislabelling are rampant: 47 per cent of the samples purchased in grocery stores and restaurants were mislabelled.

### City-by-city results:





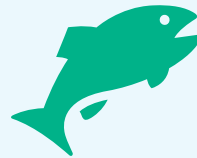
# NEW: MONTREAL INVESTIGATION RESULTS



## 61% OF MONTREAL SAMPLES MISLABELLED

In July 2019, Oceana Canada tested 90 seafood samples from 50 grocery stores and restaurants in Montreal, Canada's second largest city, and found that a shocking 61 per cent were a substituted species or didn't meet the labelling requirements set out by the Canadian Food Inspection Agency (CFIA).

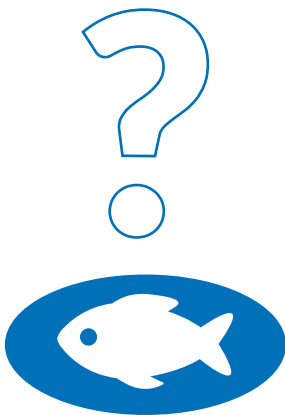
Oceana Canada's team visited a range of locations, including some of Montreal's busiest grocery stores and most popular seafood restaurants, obtaining samples from:



**18** GROCERY STORES  
(29 samples)



**33** RESTAURANTS  
(61 samples)



The samples were independently analyzed by TRU-ID, a commercial lab in Guelph, Ontario. The lab uses DNA barcoding, a genetic technique pioneered at the University of Guelph, to determine the species' identity.<sup>13</sup>

The species name was then compared to the corresponding market name(s) on CFIA's *Fish List* for that species. The *Fish List* includes the acceptable names for labelling all seafood imported into Canada or produced by a CFIA-registered establishment. If the sample's market name was on the list, it was considered correctly labelled. This is the same methodology used by CFIA in its own studies of seafood mislabelling and by previous studies across Canada.

## MONTREAL INVESTIGATION

SIXTY-ONE PER CENT OF THE SAMPLES COLLECTED – 55 OUT OF 90 – WERE MISLABELLED IN SOME WAY.



**23.3%** were mislabelled according to Canadian labelling standards (the English or French common name on the label didn't correspond with the acceptable market name for that species on CFIA's *Fish List*) (21 samples).



**34.4%** were a different species entirely (31 samples).



**3.3%** were species that are not authorized for sale in Canada (three samples).

### Mislabelling was found in:



**74%** of restaurant samples (45 out of 61).



**10 out of 10** of both yellowtail and snapper samples were mislabelled.



**34%** of grocery store samples (10 out of 29).



**Only two** of the species tested – sole and halibut – had no instances of substitution or mislabelling.

SPECIES	NUMBER OF SAMPLES	MISLABELLED SAMPLES	PERCENTAGE MISLABELLED
Yellowtail	10	10	100%
Snapper	10	10	100%
Dover sole	3	3	100%
Butterfish	2	2	100%
Walleye	1	1	100%
Pickerel	1	1	100%
Striped bass	1	1	100%
Lithrini	1	1	100%
Tuna	16	15	94%
Sea bass	8	5	63%
Northern shrimp	2	1	50%
Salmon	6	3	50%
Cod	17	2	12%
Halibut	10	0	0%
Sole	2	0	0%

# RESULTS UNCOVER SERIOUS IMPLICATIONS FOR OUR HEALTH, OUR OCEANS AND OUR WALLETS



## OUR HEALTH

When one fish species is substituted for another, or incorrect information is provided, consumers are put at risk of exposure to parasites, allergens, contaminants, aquaculture drugs and pesticides used in industrial farming operations, or natural toxins found in certain species.

Sixteen per cent of the mislabelled Montreal samples were substituted species that could have negative health consequences.

### BUTTERFISH OR ALBACORE TUNA REPLACED WITH ► ESCOLAR

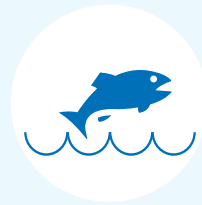
Escolar can cause acute gastrointestinal symptoms such as diarrhea, vomiting and nausea. Japan, South Korea and Italy have all banned the sale of escolar because of its health risks.<sup>14</sup> In addition, Health Canada advises pregnant and breastfeeding women to reduce their consumption of escolar.<sup>15</sup>

### YELLOWTAIL REPLACED WITH ► JAPANESE AMBERJACK

Japanese amberjack can contain a natural toxin known as ciguatera, which can cause long-term debilitating neurological symptoms.

### WILD PACIFIC SALMON REPLACED WITH ► FARMED ATLANTIC SALMON

According to CFIA, farmed salmon may contain drug residues, antibiotics and contaminants that pose health hazards.



## OUR OCEANS

Seafood fraud provides a pathway for illegally caught fish to enter the market. In addition, when a cheaper, more abundant fish is mislabelled as a more expensive, less abundant one, it can give consumers a perception that the population is healthier than it actually is. This undermines efforts to stop overfishing, manage fisheries responsibly and protect areas and animals in need of conservation.

For example, the International Union for the Conservation of Nature (IUCN) has listed red snapper as a vulnerable species. The Montreal investigation found 10 examples of “red snapper”

listed on menus, making it easy to believe the species is healthy. When those samples were tested, none of them turned out to be actual red snapper.

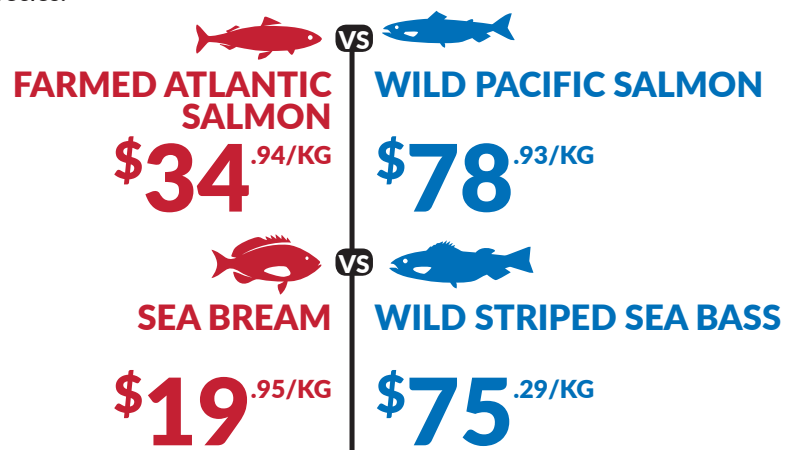


## OUR WALLETS

Seafood fraud cheats consumers who are not getting what they pay for. Deliberate seafood fraud is often driven by economic gain. Cheap or more readily available species are mislabelled so they can be sold as expensive, desirable or supply-limited ones. Not only do consumers get cheated out of what they paid for, but responsible seafood businesses face unfair market competition.

### Did you get what you paid for?

Here are a few of the examples found in Montreal of cheaper species being sold as more expensive fish, highlighting the cost difference for each species.\*



\*As featured on [seafoodonline.ca](http://seafoodonline.ca) in September 2019.

# CANADA IS FALLING BEHIND ON LABELLING AND TRACEABILITY
















Modern seafood supply chains have more steps and greater opportunity for fraud than most other commodities. They need modern traceability systems to ensure that products are safe, legally caught and honestly labelled.

A 2016 global review of seafood fraud investigations found mislabelling at every stage of the supply chain.<sup>16</sup>

Substitutions or mislabelling can take place on the boat, during processing, at the retail level or any time seafood changes hands.

## Canada is falling behind:

We need a traceability system equipped for 21<sup>st</sup> century supply chains.

TRACEABILITY REQUIREMENT BEST PRACTICE	EUROPEAN UNION A modern approach that's working	UNITED STATES A step in the right direction	CANADA A traceability laggard
Key information follows seafood products through the supply chain from boat to plate		13 types of imported seafood can be traced from boat to border	
Catch documentation is required for all domestic and imported seafood		Domestic seafood:  Traced species:  Other imported seafood: 	
Robust information is required on labels: scientific species name, wild-caught or farmed, area and method of catch			
Information must be entered electronically		Catch documentation for traced species:  Other species:  Traceability: 	



# BEST PRACTICES: THE EUROPEAN UNION

The EU, the world's largest importer of seafood, is leading the way with some of the most stringent traceability and labelling requirements of any region. The EU also requires that catch documentation – which identifies the origin of the fish and proves it was legally caught – must accompany seafood products.

Key information, including the scientific species name, catch area and date, harvest method and fishing gear, vessel information and other key data travels with the seafood product along the entire supply chain. As part of its traceability program, the EU also requires seafood sold in grocery stores to carry labels that show the consumer where and how it was caught, as well as the common and scientific names of the species.

**In the EU, rates of mislabelling and fraud dropped from 23 per cent to seven per cent when traceability and labelling systems were put in place.<sup>17</sup>**

Since these regulations were implemented, the rate of mislabelling in the EU has decreased markedly. Analysis by Oceana revealed a drop from approximately 23 per cent before 2011 down to seven per cent after 2014.<sup>18</sup> A similar conclusion was reached by a separate 2015 study – the largest ever multi-species, transnational study of fish labelling in Europe – which found approximately five per cent of mislabelling at the retail level under the new requirements.<sup>19</sup>

**Canadian industries that sell their products in the EU are already in compliance with these requirements, yet fishers from other countries who sell their products in Canada are required to provide almost no information to Canadian consumers.**

Closer to home, the U.S. has taken an important first step by implementing boat-to-border traceability and catch documentation requirements for some of its seafood imports at the beginning of 2018.



# WHAT'S IN A LABEL?

Compared with seafood labels in the EU, Canadians get almost no traceability information about the seafood they purchase. In Canada, the only information required is the country where the seafood product was last processed if it was imported – rather than where it originally came from – and the generic marketplace (or common) name.

Unlike other food animals, where only a handful of species are commercially farmed, hundreds of marine species are available in grocery stores and restaurants in Canada. Common names like “snapper,” “sole” and “tuna” are used for dozens, or even hundreds, of different species.<sup>20</sup>

## Seafood labels in Canada<sup>21</sup>

### 1 MACKEREL

\$7.80

Net Wt/Ct: 0.250 k

Business name and address: xxx

### 2 Product of United States

Best before: 9/12/20

Keep Refrigerated



### TRACEABILITY REQUIREMENTS

- 1 Common name
- 2 Country of where the last substantial transformation occurred

A 2019 Oceana Canada-commissioned Abacus Data poll showed that 75 per cent of Canadians are concerned about seafood fraud and 81 per cent think seafood products sold in Canada should require the same information as our trading partners.<sup>22</sup>

## Seafood labels in the EU<sup>23</sup>

### 1 MACKEREL (*Scomber scombrus*)

€5.40

### 2 Trawls

Net quantity: 250g

Business name and address: xxx

### 3 Ireland XX-YYY-ZZ EC

Caught in Celtic Sea North

Use by 9/12/20

Keep at 0 to 2°C



### TRACEABILITY REQUIREMENTS

- 1 Commercial designation (or common name) and scientific name
- 2 Fishing gear category
- 3 Identification mark
- 4 Production method
- 5 Catch area





## Preventing Illegal, Unreported and Unregulated Fishing

A recent report estimated that 25–30 per cent of wild-caught seafood imported into the U.S. comes from illegal, unreported and unregulated (IUU) fishing and has a value of \$1.3–\$2 billion USD.<sup>24</sup> Experts suggest that the percentage of IUU seafood in Canada is likely the same or higher, given the similarities between U.S. and Canadian imports, the significant amount of seafood imported from the U.S. into Canada and Canada's weaker legislation.<sup>25</sup>

IUU fishing can be associated with other crimes at sea, including human rights abuses. Working environments on these vessels or facilities can be extremely unsafe and child labour is common.<sup>26</sup> On top of this, there is extensive evidence of the organized and systemic use of modern slavery by vessels engaged in illegal fishing.<sup>27,28,29</sup> Undocumented migrants are being kidnapped, sold and tricked onto fishing vessels to work as forced labourers

or indentured slaves. Escaped slaves have told of egregious human rights violations, including physical abuse, torture and even murder.

Canada has a responsibility to address IUU fishing. In June 2018, at the G7 Summit hosted in Charlevoix, Quebec,<sup>30</sup> leaders of all G7 countries committed to taking action to fight IUU fishing, including the implementation of unique vessel identifiers. In 2019, Canada ratified the *Port State Measures Agreement to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing*, an international agreement intended to combat IUU fishing. The agreement grants officials more authority in fighting seafood fraud in Canadian ports. Without a robust traceability system in place, however, it's impossible to ensure that products of IUU fishing aren't entering our country through other means disguised as legally fished commodities.





# THE CANADIAN GOVERNMENT MUST COMMIT TO ADDRESSING SEAFOOD FRAUD

Canada lags behind other countries: no single agency or government department is responsible for combatting seafood fraud and no legislation or set of regulations oversees traceability at each step in the supply chain. This has created legal and regulatory gaps at the fishing, processing and retail stages.

The federal agencies that share responsibility for the integrity of seafood supply chains have not identified a common goal, established joint strategies or agreed on roles and responsibilities. Collaboration between these key agencies and departments is therefore crucial to reducing seafood fraud in Canada.

**If Canada's traceability requirements continue to lag behind those of our major trading partners, our food safety reputation is at risk and Canadian businesses could lose access to important markets. Canada needs a comprehensive system that is in line with the standards of our major trading partners, safeguards consumers and protects our oceans and fisheries.**

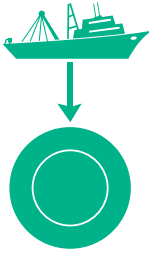
CFIA has already highlighted food fraud as a serious problem in Canada and seafood fraud as a particularly problematic area. Seafood is a high-risk commodity due to the complexity of supply chains and the number of species that are commercially fished around the world.

CFIA had the opportunity to improve seafood traceability in the *Safe Food for Canadians Regulations*, which came into force in January of 2019, and to improve labelling through the Food Labelling Modernization initiative, which is concluding in 2019. Despite Oceana Canada's recommendations and CFIA's own research, which found a 15 per cent rate of mislabelling before seafood products even reached the processing stage,<sup>31</sup> the new regulations fail to address seafood fraud and mislabelling.

Seafood fraud is a complex problem with a feasible solution: the Canadian government must commit to implementing nationwide boat-to-plate traceability to ensure that all seafood sold in Canada is safe, honestly labelled and legally caught.

# SOLUTIONS

## TRACE ALL SEAFOOD FROM BOAT TO PLATE



The federal government must commit to putting a traceability system in place that requires key information to follow all seafood products throughout the supply chain, from the boat or farm to the point of final sale, whether that's a restaurant, grocery store or fish market. This information should include the who, what, where, when and how of fishing, processing and distribution.

## INTRODUCE TRACEABILITY VERIFICATION MEASURES



CFIA must introduce DNA testing for species authentication into its inspection program. It should incorporate inspection, verification and enforcement measures at levels high enough to deter fraud.

## REQUIRE CATCH DOCUMENTATION



Fisheries and Oceans Canada (DFO) and CFIA must work together to require catch documentation for all domestic and imported seafood, in line with what is currently required by the EU and recommended by the United Nations' Food and Agricultural Organization,<sup>32</sup> which Canada agreed to support at the G7 Summit in 2018.<sup>33</sup>

## IMPROVE CONSUMER INFORMATION



CFIA's labelling standards must be brought in line with those used in the EU and include essential information such as the scientific species name, whether the fish was wild caught or farmed, where it came from (geographic origin) and the type of fishing gear used.





# IT'S TIME TO STOP SEAFOOD FRAUD

**Seafood fraud hurts our health, our oceans and our wallets.** Canadians deserve to know that all seafood sold in Canada is safe, honestly labelled and legally caught.

Canada's fragmented regulatory system for seafood means that implementing boat-to-plate traceability will take leadership: the agency best placed to tackle this problem head on is CFIA.

Add your name to our petition urging CFIA to take the lead on implementing full boat-to-plate traceability and help #StopSeafoodFraud.

[Go to oceana.ca/StopSeafoodFraud](https://oceana.ca/StopSeafoodFraud)

Sign up as a Wavemaker today, and follow us on Facebook, Twitter and Instagram.



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# We can save the oceans and feed the world.

Oceana Canada was established as an independent charity in 2015 and is part of the largest international advocacy group dedicated solely to ocean conservation. Oceana Canada has successfully campaigned to end the shark fin trade, make rebuilding depleted fish populations the law, improve the way fisheries are managed and protect marine habitat. We work with civil society, academics, fishers, Indigenous Peoples and the federal government to return Canada's formerly vibrant oceans to health and abundance. By restoring Canada's oceans, we can strengthen our communities, reap greater economic and nutritional benefits and protect our future.

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