SB 210

<TARGET><BILL>SB 210</BILL><SUBJECT>SB 210</SUBJECT><COMM>SSTA30</COMM></TARGET>

SENATE COMMITTEE REPORT
First Committee of Referral

DATE: 2/19/18

FURTHER: Judiciary

DATE TURNED IN TO OFFICE: 3/28/18

State Affairs Committee considered SENATE BILL NO. 210

SB 210-FOOD LABELING ON MENUS

"An Act relating to the misrepresentation of seafood and seafood ingredients by retail food establishments."

and recommends:

[ ] be **replaced** with **CS** _____ (_____) *[ ] Same Title [ ] New Title*

[ ] adopt **previous CS** _____ (_____) *[ ] Same Title [ ] New Title*

[ ] attached amendment(s)

[ ] adopt _____ Letter of Intent

[ ] further referral to _____ Committee

Dept Abbr.	
ADM	LWF
CED	LAW
COR	LEG
EED	MVA
DEC	DNR
DFG	DPS
GOV	REV
DHS	DOT
AJS	UA

NEW FISCAL NOTE(S)				
Dept.	Fiscal	Indet.	Zero	FN #
DEC			✓	1

PREVIOUS FISCAL NOTE(S)				
Dept.	Fiscal	Indet.	Zero	FN #

[ ] **APPROPRIATION - no fiscal note**

SIGNATURES AND RECOMMENDATIONS:	PRINTED LAST NAME	DO PASS	DO NOT PASS	NO REC	AMEND
	Wilson	✓			
	Giessel	✓			
	GAN	✓			
	Coghill			✓	
CHAIR:	MEYER	✓			

ALASKA STATE LEGISLATURE

Session

State Capitol, Rm. 7
Juneau, AK 99801
(907) 465-2435
Fax: (907) 465-6615

Interim

1500 W. Benson Blvd, Rm. 228
Anchorage, AK 99501
(907) 269-0120
Fax: (907) 269-0122

Senator.Bill.Wielechowski@akleg.gov

Resources Committee

Joint Armed Services Committee

Judiciary Committee

SENATOR BILL WIELECHOWSKI

Sponsor Statement
Senate Bill 210

An Act relating to the misrepresentation of seafood and seafood ingredients by retail food establishments

Senate Bill 210 would prohibit Alaska restaurants from misrepresenting the identity and origin of seafood on their menus. Restaurants misidentifying seafood products will be subject to a fine of $500 for each violation. SB 210 also permits restaurant employees to report complaints anonymously and without being subject to retaliation from their employer.

It is particularly easy to deceive consumers about seafood at restaurants because of the many species of fish and other seafood available for substitution and due to diners' limited familiarity with them. Investigations across the nation into restaurants misrepresenting seafood on their menus demonstrate that the problem is rampant. For example a 2015 national study by Oceana, a non-profit organization supporting ocean abundance and biodiversity, indicated that 43% of salmon samples tested were mislabeled. That study also shows that restaurant diners received mislabeled seafood products 38% of the time—five times the rate of mislabeling in grocery stores.

The risk of misleading restaurant customers about seafood menu items is too great for Alaska. Passing this bill will protect consumers and safeguard our world-class seafood industry. Misrepresenting Alaska seafood—providing an inferior product—diminishes the reputation of our seafood among consumers. Restaurant customers expecting quality Alaskan seafood but receiving a lower-value substitute experience disappointment and may not choose Alaskan seafood in the future. Misrepresentation of Alaskan seafood also directly hurts our renowned seafood industry. A restaurant advertising premium Alaskan seafood but willfully substituting a lower-quality product enjoys the benefit of the Alaska label without the cost investment and undermines our state's industry by lessening demands on our seafood market. Alaska's fisheries bring tens of thousands of jobs to the state and have a significant economic impact throughout coastal Alaska, rural Alaska, and urban Alaska. We should afford protections to this industry against the possibility of menu misrepresentation.

A majority of Alaska's seafood restaurants are outstanding providers of our exceptional seafood. This legislation will simply provide further assurances that all restaurants in the state are honestly representing the identity and origin of their seafood.

ALASKA STATE LEGISLATURE

Session

State Capitol, Rm. 7
Juneau, AK 99801
(907) 465-2435
Fax: (907) 465-6615

Interim

716 W. 4th Ave, Ste. 409
Anchorage, AK 99501
(907) 269-0120
Fax: (907) 269-0122

Senator.Bill.Wielechowski@akleg.gov

Resources Committee

State Affairs Committee

Joint Armed Services Committee

Judiciary Committee

SENATOR BILL WIELECHOWSKI

Sectional Analysis
Senate Bill 210

An Act relating to the misrepresentation of seafood and seafood ingredients by retail food establishments

Section 1. This section adds new provisions to the Alaska Food, Drug, and Cosmetic Act (AS 17.20). Alaska Statute 17.20.042 would prohibit a restaurant from mislabeling a seafood product or ingredient on its menu. Under this section, a restaurant employee may report violations to the Alaska Department of Environmental Conservation anonymously and free from the employer's retaliation. It also provides that a restaurant may remedy a violation through a verbal warning about a seafood item's substitution or provide a refund to a customer before a violation is reported. This section further establishes a $500 fine for each violation, not to exceed $50,000 for all violations. Finally, in this section, the terms "menu" and "seafood" relevant to the bill are defined.

Section 2. This section provides definitions of "prepared food product" and "retail food establishment" under AS 17.20.075.

Section 3. Under this section, definitions under AS 17.20.049(b)(3) and (b)(4) are repealed and reestablished under Section 2, AS 17.20.075.

SENATE BILL NO. 210

IN THE LEGISLATURE OF THE STATE OF ALASKA

THIRTIETH LEGISLATURE - SECOND SESSION

BY SENATOR WIELECHOWSKI

Introduced: 2/18/19
Referred: State Affairs, Judiciary

civil penalty for seafood mislabeling

A BILL

FOR AN ACT ENTITLED

"An Act relating to the misrepresentation of seafood and seafood ingredients by retail food establishments."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

*** Section 1.** AS 17.20 is amended by adding a new section to read:

Sec. 17.20.042. Misrepresentation of seafood on menu. (a) A retail food establishment may not misrepresent on a menu the identity or origin of a seafood or seafood ingredient in a prepared food product.

written

(b) An employee of a retail food establishment may report a violation of (a) of this section to the department anonymously.

(c) A retail food establishment may not directly or indirectly dismiss, demote, suspend, lay off, refuse to promote, or otherwise retaliate against an employee who reports a violation of (a) of this section.

whistle blower provision

(d) A retail food establishment does not violate (a) of this section if the retail food establishment

loophole

* anonymous reporting

or in writing? loophole

(1) verbally warns a customer before the customer places an order that the retail food establishment will substitute another seafood or seafood ingredient for the seafood or seafood ingredient identified on the menu; or loophole

(2) offers, before the misrepresentation is reported to the department, a full refund of the price of the seafood or the prepared food product that contains seafood ingredients to the customer who paid for the seafood or prepared food product.

(e) Notwithstanding AS 17.20.305, a retail food establishment that violates (a) or (c) of this section is guilty of a violation and is punishable as provided in AS 12.55 by a fine of $500 for each violation, but not to exceed a total of $50,000 for all violations.

penalty guilty of violation

(f) In this section, Definitions

(1) "menu" includes a list of food that is given to customers or posted in the retail food establishment;

(2) "seafood" means salmon, halibut, herring, flounder, crab, clam, cod, shrimp, pollock, other finfish and shellfish, and byproducts of salmon, halibut, herring, flounder, crab, clam, cod, shrimp, pollock, and other finfish and shellfish.

* **Sec. 2.** AS 17.20.075 is amended by adding new paragraphs to read:

(3) "prepared food product" means a food product that has been prepared by the retail food establishment selling the food product or by another person at the direction of the retail food establishment;

(4) "retail food establishment" means a business that sells prepared food products to the general public for consumption on or off the premises, and includes a business that is, or contains on its premises, a restaurant, delicatessen, salad bar, or bakery; "retail food establishment" does not include an establishment that is provided by

(A) an employer primarily for the employees of the employer;

(B) a school primarily for the students and employees of the school; or

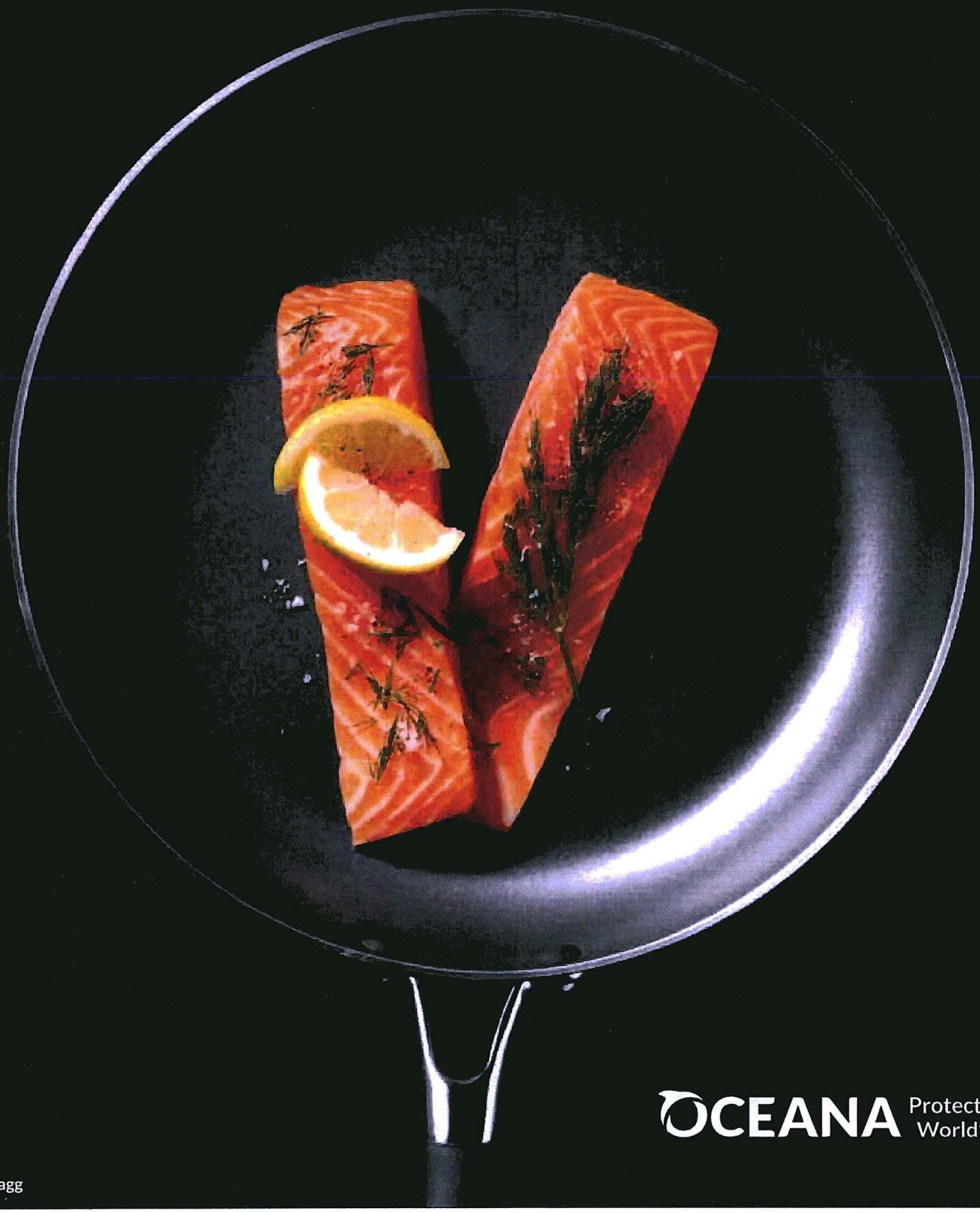
(C) a correctional facility primarily for persons held under official detention.

* **Sec. 3.** AS 17.20.049(b)(3) and AS 17.20.049(b)(4) are repealed.

– but won't we still need them in AS17.20.049

United Fishermen of Alaska
DEC; Dept. Environmental Conservation

Oceana Reveals Mislabeling of America's Favorite Fish: Salmon



OCEANA Protecting the World's Oceans

Americans love *salmon.*

It's our favorite fish, surpassing tuna in per capita consumption in 2013. And yet, it's easy to dig into some grilled salmon or a lox-covered bagel without thinking too much about the path that fish took to reach the dinner (or breakfast) plate. It turns out, depending on when and where it is bought, there's a good chance that the fish on our plate is not the fish we expected.

Much of the salmon Americans eat travels much farther than one might guess. Though fishermen catch enough salmon to satisfy over 80 percent of our domestic demand, on average, 70 percent of that catch is exported instead of staying in the U.S. Some domestic wild-caught salmon likely makes its way back, but only after entering an opaque global seafood market. During this journey, information about the fish can get lost: which species it is, whether it was farmed or wild, and how and where it was caught. Failing to track this key information throughout the supply chain contributes to high rates of seafood fraud.

During the winter of 2013-2014, when wild salmon were out-of-season, Oceana collected 82 salmon samples from restaurants and grocery stories and found that 43 percent were mislabeled. Most of the mislabeling consisted of farmed Atlantic salmon being sold as wild-caught. This mislabeling differed greatly from Oceana's nationwide survey in 2013, which found low rates (7 percent of 384 samples) of mislabeled salmon. The difference between these two studies may be because the earlier study collected its samples at the peak of the 2012 commercial salmon fishing season, when wild salmon was plentiful in the market.

U.S. wild salmon fisheries are among the best managed in the world and yield high-quality, valuable products. Yet we export most of our fresh wild salmon and import mostly farmed salmon, which may be associated with negative environmental impacts due to inefficient feeding practices, fish waste, misuse of antibiotics and pesticides, and diseases that can spread to wild populations. In other words, we send away some of the best salmon in the world, and we import lower-value products of questionable origin. Imported salmon is far more likely to be associated with ecologically harmful practices, economic fraud and even illegal fishing.

Seafood fraud can have serious ecological and economic consequences. Environmentally conscious consumers can be deceived when opting for more ecologically friendly choices like wild-caught U.S. salmon. When a less valuable product like farmed Atlantic salmon is sold as the more valuable Chinook, consumers aren't getting what they think they are paying for. At the same time, responsible fishermen who sell wild Chinook salmon are competing with fraudulent products, usually farmed salmon, and receiving less cash than they should be for their hard-won catch.

Key Findings

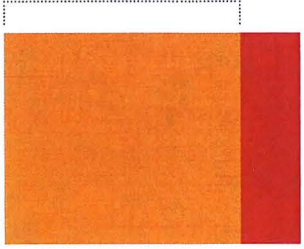
Oceana found that *43 percent* of the salmon samples it tested were mislabeled.

The most common form of mislabeling was farmed Atlantic salmon being sold as "wild salmon." *(69 percent)*

Diners were far more likely to be misled in restaurants than grocery stores. *(67 percent vs. 20 percent)*

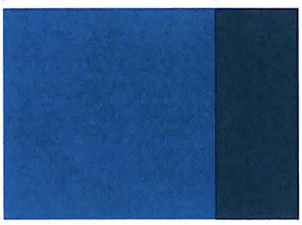
Overall, consumers are less likely to be misled in large grocery store chains that are required to give additional information about seafood.

U.S. fishermen catch enough salmon to satisfy *80 percent* of our domestic demand.



U.S. Salmon Demand

Yet *70 percent* of U.S. wild salmon catch is exported.



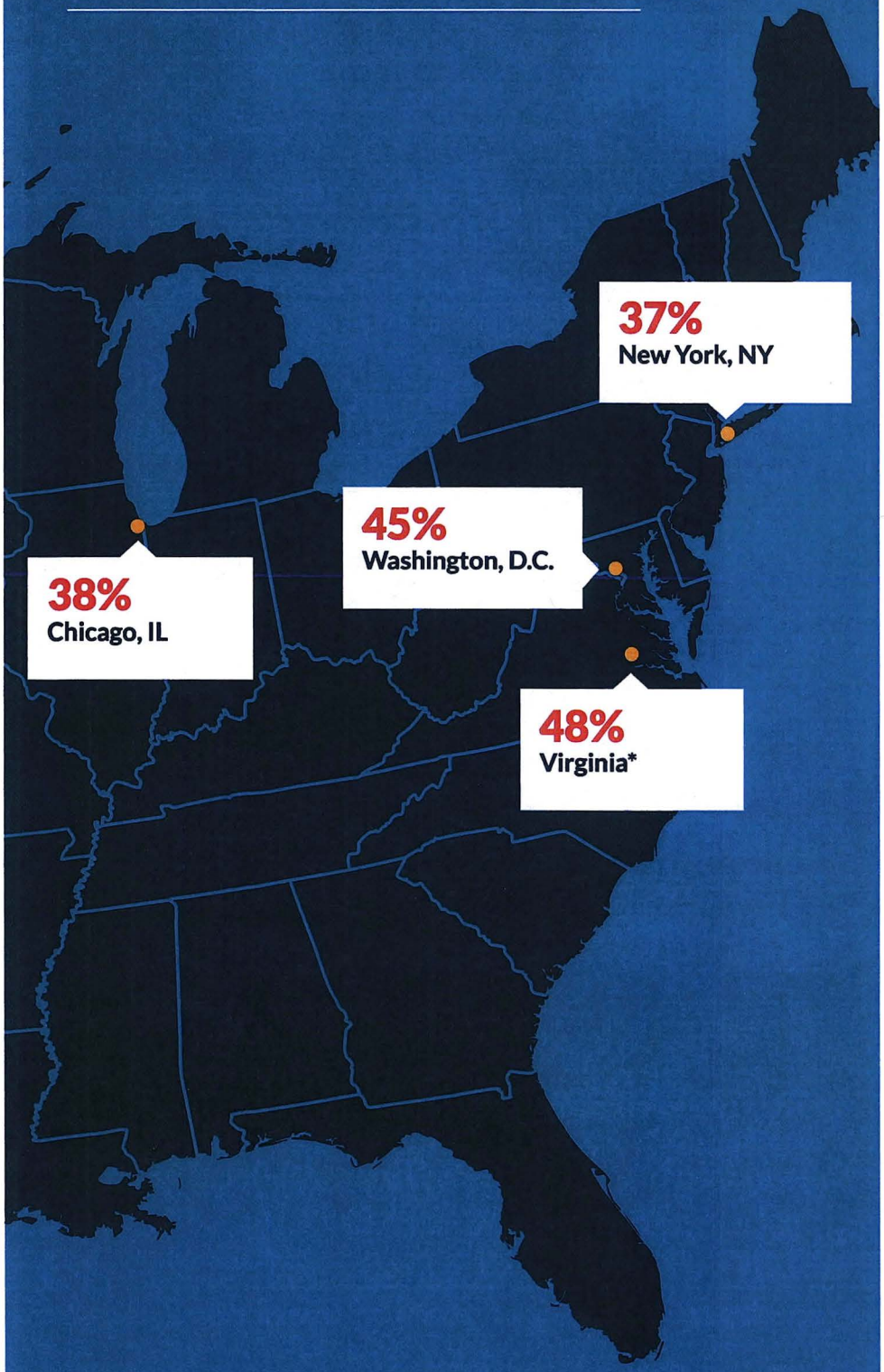
U.S. Wild Salmon Catch

Two-thirds **of what we consume in the U.S. is farmed salmon.**

U.S. Salmon Consumption

We send away some of the best salmon in the world, and we import lower-value products of questionable origin.

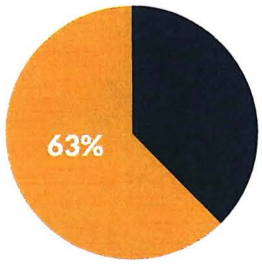
43 percent of the salmon samples tested were mislabeled.



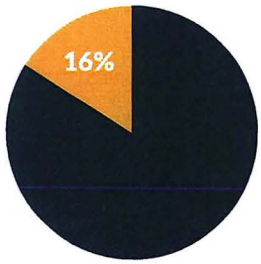
* Includes Virginia Beach, Norfolk, Newport News, Williamsburg, Richmond and Fredericksburg

Overall, diners were five times more likely to be misled in restaurants than grocery stores.

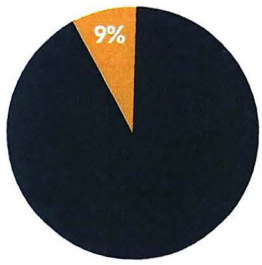
Correctly Labeled Mislabeled



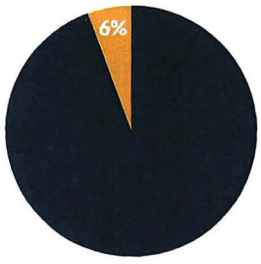
Out-of-Season Salmon from Restaurants



In-Season Salmon from Restaurants



Out-of-Season Salmon from Grocery Stores



In-Season Salmon from Grocery Stores

Oceana's combined salmon data (466 samples)

Recommendations

These problems have solutions. In 2014, the White House established the Presidential Task Force on Combating Illegal, Unreported and Unregulated Fishing and Seafood Fraud. The Task Force is set to implement measures to prevent illegal fishing and seafood fraud in the coming year, but as this report demonstrates, the new rules need to apply to all seafood entering the U.S. and throughout the entire seafood supply chain.

Oceana recommends that the federal government require all seafood sold in the U.S., including salmon, to have catch documentation to show it came from legal sources, and to require full chain traceability that passes this key information about where, when and how seafood was caught through the entire supply chain—from the fishing boat (or farm) to the dinner plate. Providing more information to consumers about their seafood will help them make more informed decisions, whether it is for health, economic or environmental reasons.

Until that happens, below are a number of ways consumers can reduce their chances of falling victim to a bait and switch when buying salmon.

© Copper River Salmon Marketing Association

What Consumers Can Do

- **Ask questions.** Seafood buyers should ask more questions, including what kind of fish it is, if it is wild-caught or farm-raised, and where and how it was caught.
- **Check the price.** If the price is too good to be true, it probably is. You may be purchasing a different fish than what is on the menu or label.
- **Support traceable seafood.** If the seafood has a story, you are more likely to be getting what you paid for. Products that included additional information for consumers, like the type of salmon (Chinook, king, coho, etc.), were less likely to be mislabeled.

© Jay Fleming

For Oceana's full salmon report, please visit oceana.org/salmonfraud.

ENVIRONMENT + CLIMATE

Bait and switch: UCLA study finds fish fraud runs rampant

Whether to turn a profit or skirt environmental regulations, half the time what's on the menu at L.A. sushi restaurants differs from what's on your plate

Alison Hewitt | January 11, 2017

iStock.com/malyugin

Fish was mislabeled nearly half the time at L.A.-area sushi restaurants, which undermines regulations limiting overfishing and introduces unexpected health risks.

Next time you go out for sushi in Los Angeles, don't bother ordering halibut. Chances are it's not halibut at all.

A new study from researchers at UCLA and Loyola Marymount University checked the DNA of fish ordered at 26 Los Angeles sushi restaurants from 2012 through 2015, and found that 47 percent of sushi was mislabeled. The good news is that sushi represented as tuna was almost always tuna. Salmon was mislabeled only about one in 10 times. But out of 43 orders of halibut and 32 orders of red snapper, DNA tests showed the researchers were always served a different kind of fish. A one-year sampling of high-end grocery stores found similar mislabeling rates, suggesting the bait-and-switch may occur earlier in the supply chain than the point of sale to consumers.

"Half of what we're buying isn't what we think it is," said Paul Barber, a UCLA professor of ecology and evolutionary biology and senior author of the study that **appeared today** in the journal Conservation Biology. "Fish fraud could be accidental, but I suspect that in some cases the mislabeling is very much intentional, though it's hard to know where in the supply chain it begins. I suspected we would find some mislabeling, but I didn't think it would be as high as we found in some species."

It's not just a question of being miffed that the wrong fish is on your plate — the fraud undermines environmental regulations limiting overfishing, introduces unexpected health risks and interferes with consumers' decisions, the researchers noted.

Over the four-year study, only bluefin tuna was always exactly as advertised. While only one of 48 tuna samples was not tuna, different kinds of tuna occasionally swapped places, including two samples that turned out to be Atlantic bluefin tuna and southern bluefin tuna, species classified as endangered and critically endangered. Out of nine orders of yellowfin tuna, seven were a different kind of tuna, usually bigeye — a vulnerable and overexploited species, the researchers said. Salmon remained a largely safe bet, with only 6 of 47 orders going awry. However, all halibut and red snapper orders failed the DNA test, and in 9 out of 10 cases, diners ordering halibut were served flounder. About 4 in 10 halibut orders were species of flounder considered overfished or near threatened.

Although some short-term studies have suggested that fish fraud is declining due in part to stricter regulations, this study uncovered consistent mislabeling year over year, indicating seafood misidentification is not improving. While the current study took place in Los Angeles, previous studies detected similar problems nationwide, suggesting that the UCLA findings are widely applicable, said Barber, who worked with lead author Demian Willette and researchers from UC Santa Cruz and UC Santa Barbara. Willette is a UCLA assistant research scientist and a Loyola Marymount University biology instructor.

"If we don't have accurate information on what we're buying, we can't make informed choices," Barber said. "The amount of mislabeling is so high and consistent, one has to think that even the restaurants are being duped."

For consumers trying to avoid threatened or overfished species, sushi fraud can thwart their efforts. For diners — especially pregnant women or small children — who wish to avoid high-mercury fish, mislabeling could harm their health. And some fish are riskier than others: a common parasite found in raw olive

flounder, which replaced halibut on researchers' plates a third of the time, has caused "rampant" food poisoning in Japan, the study noted.

The researchers used DNA barcoding, which uses a partial DNA sequence from a mitochondrial gene, to accurately identify the fish.

"DNA barcoding is becoming an increasingly popular tool to identify mislabeled products," Willette said. "Our finding of a persistently high rate of seafood mislabeling should encourage consumers to demand strong truth-in-menu laws from local public health agencies. Citizen-science and crowd-sourced data also have real potential to keep the consumer informed."

While some mislabeling could be unintentional, fraud could also result from the desire to skirt environmental regulations or the ability to sell a cheaper fish as a more expensive product, the researchers said. The global fish trade is a $135 billion industry, the study notes. New **federal regulations governing monitoring of seafood imports** went into effect Jan. 9 to address the problem. The UCLA study shows increased monitoring is needed, said Sarah Sikich, vice president of the environmental group Heal the Bay.

"As a foodie mecca, Los Angeles wields enormous influence," Sikich said. "Fish fraud at L.A.-area restaurants and grocery stores can pose health threats if substitute fish are contaminated or contain allergens, thwart consumers who are trying to buy sustainable, and impede fisheries policy. This study points to the importance of measures to improve traceability and monitoring to reduce the prevalence of fish fraud."

From 2012 to 2015, the UCLA researchers tested 364 samples of 10 popular varieties of fish used for sushi. Extending the project for four years was possible in part because it involved students from the UCLA class Introduction to Marine Science, in which Willette was an adjunct faculty member. The students were sent to sushi restaurants popular on the reviewing site Yelp to order specific types of fish from the menus. When their orders arrived at their tables, they asked the servers to confirm each fish type. Then they pulled out their forceps and scissors, snipped off a tiny piece off each kind of fish, and dropped it into prepared vials for DNA testing as part of the lab requirement for their class.

"It's a very powerful teaching tool for them to collect this data themselves," Barber said. "From an educational perspective, that has a massive impact, These students will never forget what they learned."

The researchers did not release the identity of the sushi restaurants involved in the study, in part because they expect that most sushi restaurants would fare similarly, Barber said.

"The goal is not to point fingers, but to make people aware of the larger issue," Barber said "I think it would be really cool to work with some restaurants to test their shipments so we can start to work out where in the supply chain the fraud is taking place. I would love to know what the restaurants think they're getting from the suppliers."

Oceana Reveals Mislabeling of America's Favorite Fish: Salmon

43% of Salmon Samples Tested in Grocery Stores & Restaurants Mislabeled

Press Release Date
Wednesday, October 28, 2015
Location: Washington, D.C.
Contact: Dustin Cranor: dcranor@Oceana.org 954.348.1314

WASHINGTON – Oceana released a new study today that reveals mislabeling of America's favorite fish – salmon. Oceana collected 82 salmon samples from restaurants and grocery stores and found that 43 percent were mislabeled. DNA testing confirmed that most of the mislabeling (69 percent) consisted of farmed Atlantic salmon being sold as wild-caught product.

"Americans might love salmon, but as our study reveals, they may be falling victim to a bait and switch," said Beth Lowell, senior campaign director at Oceana. "When consumers opt for wild-caught U.S. salmon, they don't expect to get a farmed or lower-value product of questionable origins. This type of seafood fraud can have serious ecological and economic consequences. Not only are consumers getting ripped off, but responsible U.S. fishermen are being cheated when fraudulent products lower the price for their hard-won catch."

Oceana found mislabeled salmon everywhere it tested, including 48 percent of the samples in Virginia (includes Virginia Beach, Norfolk, Newport News, Williamsburg, Richmond and Fredericksburg), 45 percent in Washington, D.C., 38 percent in Chicago, IL and 37 percent in New York, NY. Salmon samples were considered to be mislabeled if 1) they were described as being "wild," "Alaskan" or "Pacific," but DNA testing revealed them to be farmed Atlantic salmon; or 2) the samples were labeled as a specific type of salmon, like "Chinook," but testing revealed them to be different species (in most cases lower-value fish).

"While U.S. fishermen catch enough salmon to satisfy 80 percent of our domestic demand, 70 percent of that catch is then exported instead of going directly to American grocery stores and restaurants," said Dr. Kimberly Warner, report author and senior scientist at Oceana. "It's anyone's guess how much of our wild domestic salmon makes its way back to the U.S. after being processed abroad. Without traceability, it is nearly impossible to follow the fish from the farm or fishing boat

to the dinner plate. What we end up eating is mostly cheaper, imported farmed salmon, sometimes masquerading as U.S. wild-caught fish."

Oceana's salmon samples were collected during the winter of 2013-2014, when wild salmon were out-of-season. This mislabeling rate (43 percent) differed greatly from Oceana's nationwide survey in 2013, which found low rates (7 percent) of mislabeled salmon collected primarily in grocery stores at the peak of the 2012 commercial salmon fishing season, when wild salmon was plentiful in the market.

When looking at all of Oceana's salmon data combined (466 samples in total), we are able to make the following conclusions:

- Diners were five times more likely to be misled in restaurants than grocery stores (38 percent vs. 7 percent).
- Consumers are less likely to be misled in large grocery store chains that are required to give additional information about seafood.
- Salmon purchased out-of-season from all retail types was three times more likely to be mislabeled than salmon purchased during the commercial fishing season (23 percent vs. 8 percent, respectively).

Last year, the White House established the Presidential Task Force on Combating Illegal, Unreported and Unregulated (IUU) Fishing and Seafood Fraud. Oceana is now calling on the Obama administration to follow through on its commitment to tackle these important issues.

"The federal government should provide consumers with assurances that the seafood they purchase is safe, legally caught and honestly labeled," said Lowell. "Traceability needs to be required for all seafood to ensure important information about which species it is, whether it was farmed or wild caught, and how and where it was caught follows all seafood from boat (or farm) to plate. Providing consumers with more information about their seafood allows them to make more informed decisions, whether it is for health, economic or environmental reasons."

Background:

Since 2011, Oceana has worked to stop seafood fraud in the United States.

Oceana's previous investigations of fish, shrimp and crab cakes in retail markets and restaurants in the U.S. clearly demonstrate that traceability requirements need to apply to all seafood and extend through the full supply chain to the end consumer. On average, one-third of the seafood examined in these studies was mislabeled – the product listed on the label or menu was different than what the buyer actually received, often a less desirable or lower-priced species. Oceana has observed

threatened species being sold as more sustainable, expensive varieties replaced with cheaper alternatives, and fish that can cause illness substituted in place of those that are safe to eat.

In 2014, Oceana also conducted the most current and comprehensive review of seafood fraud literature to date, compiling 103 studies in 29 countries and on all continents except Antarctica. Every study found some level of seafood fraud, demonstrating that it is not just an issue that narrowly affects a handful of species or regions. In the U.S. alone, 50 different types of seafood have been found mislabeled, with over 150 species substituted in their place.

This July, Reps. Blake Farenthold (R-TX) and Stephen Lynch (D-MA) introduced the Protecting Honest Fishermen Act of 2015, which would ensure that traceability requirements apply to all seafood species, extend through the full supply chain and provide more information to consumers.

To access Oceana's full report and other materials, as well as learn how consumers can reduce their chances of falling victim to a bait and switch when buying salmon, please visit www.oceana.org/salmonfraud.

The New York Times https://nyti.ms/Wcy6O5

U.S.

Under Many Aliases, Mislabeled Foods Find Their Way to Dinner Tables

By KIM SEVERSON DEC. 15, 2012

ATLANTA — The menu offered fried catfish. But Freddie Washington, a pastor in Tuscaloosa, Ala., who sometimes eats out five nights a week and was raised on Gulf Coast seafood, was served tilapia.

It was a culinary bait and switch. Mr. Washington complained. The restaurant had run out of catfish, the manager explained, and the pastor left the restaurant with a free dinner, an apology and a couple of gift certificates.

"If I'm paying for a menu item," Mr. Washington said, "I'm expecting that menu item to be placed before me."

The subject of deceptive restaurant menus took on new life last week when Oceana, an international organization dedicated to ocean conservation, released a report with the headline "Widespread Seafood Fraud Found in New York City."

Using genetic testing, the group found tilapia and tilefish posing as red snapper. Farmed salmon was sold as wild. Escolar, which can also legally be called oil fish, was disguised as white tuna, which is an unofficial nickname for albacore tuna.

establishment claimed it was.

"This thing with fish is age old, it's been going on forever," said Anne Quatrano, an Atlanta chef who opened Bacchanalia 20 years ago and kick-started the city's sustainable food movement. "Unless you buy whole fish, you can't always know what you're getting from a supplier."

Swapping one ingredient for a less expensive one extends beyond fish and is not always the fault of the person who sells food to the restaurant. Many a pork cutlet has headed to a table disguised as veal, and many an organic salad is not.

The term organic is regulated by the Department of Agriculture, but many other identifying words on a menu are essentially marketing terms. Unscrupulous chefs can falsely claim that a steak is Kobe beef or say a chicken was humanely treated without penalty.

In cases of blatant mislabeling, a chef or supplier often takes the bet that a local or federal agency charged with stopping deceptive practices is not likely to walk in the door. "This has been going on for as long as I've been cooking," said Tom Colicchio, a New York chef and television personality. "When you start really getting into this stuff, there's so many things people mislabel."

At Mr. Colicchio's New York restaurants, all but about 5 percent of the meat he serves is from animals raised without antibiotics, he said. It costs him about 30 percent more, so he charges more. "Yet I have a restaurant down the street that says they have organic chicken when they don't, and they charge less money for it," he said. "It's all part of mislabeling and duping the public."

Consumers are misled most frequently when they buy fish, investigators say, because there are so many fish in the sea and such limited knowledge among diners. The Food and Drug Administration lists 519 acceptable market names for fish, but more than 1,700 species are sold, said Morgan Liscinsky, a spokesman with the agency.

Marketing thousands of species in the ocean to a dining public who often has to be coaxed to move beyond the top five — shrimp, tuna, salmon, pollock and tilapia —

is not an exact science.

The line between marketing something like Patagonian toothfish as Chilean sea bass or serving langostino and calling it lobster is a fine one.

Robert DeMasco, who owns Pierless Fish, a wholesaler in New York, used a profanity to describe someone who buys farm-raised fish and sells it as wild. "But on some of this, they're splitting hairs," he said.

In 2005, a customer sued Rubio's, a West Coast taco chain, for misleading the public by selling a langostino lobster burrito. The FDA ruled that practice acceptable, which allowed chains like Long John Silver's and Red Lobster to sell the crustacean called langostino and legally attach the word lobster to it. Maine lobstermen and lawmakers fought the decision unsuccessfully.

During the Florida grouper scandal of 2006, the state attorney general's economic crimes division prosecuted 17 restaurants in the Tampa area and a large food-service company for selling Cambodian ponga instead of the more expensive Florida grouper.

The investigation came after The St. Petersburg Times tested fish and found, for example, that a $23 order of grouper was actually a much cheaper piece of tilapia.

The Boston Globe conducted a similar investigation last year and discovered that Massachusetts consumers routinely paid for more expensive fish and got cheaper substitutes.

In some cases, as many as three-quarters of the samples tested were different fish than what the stores or restaurants said they were. Although state and federal lawmakers said they would improve oversight, a follow-up investigation published this month found that the problem was still widespread.

The battle often plays out on an international scale, where millions of dollars in tax revenue are at play.

For more than a decade, American catfish farmers and federal officials have been fighting Asian imports that are passed on as American catfish or even sole or

flounder, but are often something called pangasius.

But enforcement rarely filters down to individual restaurants. The F.D.A. only this year began testing genetic sequencing equipment in an effort to target wholesalers. And while the Federal Trade Commission takes on false advertising claims as it relates to food, the focus is usually on health claims.

Policing a restaurant or a grocery store for mislabeling food most often falls to a state attorney general or a consumer agency, whose offices do not always have the time or resources to track down whether a chicken is really organic or whether that piece of snapper is really tilefish.

Subsequently, both chefs and consumers need to educate themselves and ask more questions, said Karen Karp, a food industry consultant.

"There are many chefs unintentionally propagating this phenomena," she said. "They need to learn more."

So do diners. If a restaurant claims to have fresh Maine diver scallops in July, it helps to know that the tightly regulated bivalves can be harvested only from December to March. (And that they are rarely taken from the sea by actual divers.) Fresh wild Alaska salmon is rarely on plates in January.

And, chefs and others in the food industry say, diners need to push their willingness to try fish species beyond the familiar. That can be a hard sell in a culture that is eating out and buying cookbooks at a record pace but that also loves a dollar menu.

"People want cheap sushi, and this is what happens," said Mr. DeMasco, the New York wholesaler. "You pay for what you get. That's what I think gets lost in translation."

Still, most people do not want to arrive at a restaurant armed with an advanced degree and the phone numbers to regulatory agencies. "Unfortunately, what something like this does is turn people off to eating out," Mr. Colicchio said. "People stop going to restaurants because they think they are getting ripped off."

Correction: December 23, 2012

An article last Sunday about mislabeled food that finds its way to dinner tables referred incorrectly to serving wild Alaska salmon in January. A limited amount of fresh salmon is available at that time; it is not the case that wild Alaska salmon is not in season that time of year. The article also misidentified the fish that a restaurant substituted for a $23 dish of grouper. It was tilapia, not "a much cheaper piece of Asian catfish."

A version of this article appears in print on December 16, 2012, on Page A15 of the New York edition with the headline: Under Many Aliases, Mislabeled Foods Find Their Way to Dinner Tables.

Mislabeled fish a national problem

Tests show a third of samples from 21 states to be fraudulent

By Jenn Abelson

GLOBE STAFF FEBRUARY 21, 2013

US consumers are frequently served a different type of fish than what they pay for, according to results released Thursday from one of the nation's largest seafood fraud investigations.

Between 2010 and 2012, the nonprofit Oceana collected more than 1,200 seafood samples from 674 retail outlets in 21 states and conducted DNA testing that found one-third of the samples were mislabeled.

Fish advertised as grouper, cod, and snapper were often less desirable, cheaper, or more readily available species, according to Oceana, a Washington, D.C., group that focuses on fighting seafood fraud.

Grocery stores in the Boston region claiming to sell cod substituted another fish 31 percent of the time, the report said.

DNA testing found that 52 percent of the samples were misrepresented in Southern California, the highest mislabeling rate nationwide.

Of 120 samples from across the country that were advertised as red snapper, only seven turned out to be that fish.

"Everywhere we looked for seafood fraud, we found it," said Beth Lowell, a campaign director for Oceana. "It's not a regional issue. It's a widespread problem across the US that needs national attention."

The results are in line with The Boston Globe's 2011 "Fishy Business" investigation. The newspaper found that nearly half of the fish tested at 134 Massachusetts restaurants and supermarkets was mislabeled.

In many cases, less desirable and cheaper species took the place of fresh, local varieties. A follow-up report published last fall revealed most of these restaurants were still substituting seafood.

"Fish fraud is a nationwide problem, cheating consumers and fishermen from Massachusetts to California," said US Representative Edward Markey, a Malden Democrat.

"That's why we need a national solution that increases inspections, gives consumers simple labeling information, and punishes bad international actors. I will soon be introducing a bill that would do all of these things, bringing trust back to the table in seafood restaurants and stores across the country."

Last summer, Markey and now-retired US Representative Barney Frank filed legislation that would force the industry to publicly track fish from the time it is caught and impose hefty fines for violations.

Markey said that he plans to file the bill in the House of Representatives in coming weeks. Senator Mark Begich, an Alaska Democrat, is working on a similar proposal.

Massachusetts lawmakers have taken steps to combat seafood fraud with a bill introduced in January that would levy fines on supermarkets and restaurants that mislabel seafood.

It also calls for a ban on the sale of escolar, an oily species known as the "ex-lax" fish because of the gastrointestinal problems it can cause. Escolar is often misrepresented as white tuna at sushi restaurants.

Businesses caught substituting fish for varieties like Atlantic cod, Atlantic halibut, red snapper, and grey sole could, if the bill is signed into law, face fines of up to $800 and have their licenses to operate suspended or revoked after repeat offenses.

The measure has been referred to the Legislature's Joint Committee on Public Health.

Jenn Abelson can be reached at abelson@globe.com. Follow her on Twitter @jennabelson.

OCEANA

Oceana Reveals Mislabeling of America's Favorite Fish: Salmon

October 2015

Authors: Kimberly Warner, Ph.D., Patrick Mustain, Chris Carolin, Carlos Disla, Rachel Golden Kroner, Beth Lowell and Michael Hirshfield, Ph.D.

Executive Summary

Americans love salmon. It's our favorite fish, surpassing tuna in per capita consumption in 2013. And yet, it's easy to dig into some salmon cakes or a lox-covered bagel without thinking much about the path that fish took to reach the dinner (or breakfast) plate. It turns out, depending on when and where it is bought, there's a good chance that the fish on our plate is not the fish we expected. This bait and switch can have serious ecological and economic consequences.

Much of the salmon Americans eat travel much farther than one might guess, even those that are caught in the United States. Though fishermen catch enough salmon to satisfy over 80 percent of our domestic demand, on average, 70 percent of that catch is exported instead of staying in the U.S. Some domestic wild-caught salmon likely makes its way back, but only after entering an opaque and poorly regulated global seafood market. During this journey, information about the fish can get lost: which species it is, whether it was farmed or wild, and how and where it was caught. Failing to track this key information throughout the supply chain contributes to high rates of seafood fraud. While seafood fraud encompasses a number of practices meant to mislead consumers about seafood, this report focuses on a very common problem that can be prevented: mislabeling, or species substitution.

Oceana researchers found low rates (7 percent) of mislabeled salmon when samples were collected for the 2013 national seafood fraud report. This may have been because the large majority of samples were collected at the peak of the 2012 salmon fishing season, when wild salmon was plentiful in the market. To find out whether mislabeling would be more common during the off-season in the winter months, Oceana conducted another salmon study during the winter of 2013-2014 in Chicago, New York City, Washington, D.C. and several locations in Virginia.

Key Findings

Oceana researchers determined that the degree of mislabeling is, in fact, dependent on the time of year the salmon are purchased. The analysis of the winter salmon investigation returned the following findings:

- Forty-three percent of the salmon tested were mislabeled.
- The most common form of mislabeling was when farmed Atlantic salmon was being sold as "wild salmon."
- In restaurants, diners were three times more likely to be misled than shoppers in grocery stores. (67 percent of samples vs. 20 percent of samples mislabeled).

When combining the smaller winter survey (82 samples) with the larger national study (384 samples), a more robust picture emerges, showing that the time and place of purchase have a big impact on whether a consumer is likely to be misled. In keeping with what we found in our winter survey, most of the salmon mislabeling in the U.S. at the retail level was found in restaurants when salmon was out-of-season.

OCEANA

New findings which emerged from this nationwide analysis include:

- Consumers have a much higher chance of getting the salmon they pay for in grocery stores, regardless of whether wild salmon are in season.
- Shoppers in small markets are eight times more likely to be misled than shoppers in large grocery chains that are required to give information on species, country of origin and whether salmon is farmed or wild.

Seafood fraud, including mislabeling, can have serious ecological and economic consequences. When a less valuable product like farmed Atlantic salmon is sold as the more valuable Chinook, consumers aren't getting what they think they are paying for. At the same time, responsible fishermen who sell wild Chinook salmon are competing with fraudulent products, usually farmed salmon, and likely receiving less cash than they should be for their hard-won catch.

Imported farmed salmon (which makes up the majority of the salmon consumed in the U.S.) has many negative environmental impacts due to inefficient feeding practices, fish waste, misuse of antibiotics and pesticides, and diseases that can spread to wild populations. Environmentally conscious consumers may wish to opt for more ecologically friendly choices like wild-caught U.S. salmon. Unfortunately, our data show that people who think they are making an ocean-friendly choice by ordering "wild salmon" at a restaurant may very well be having the opposite effect and getting farmed salmon instead.

In contrast to imported farmed salmon, U.S. wild salmon fisheries are among the best managed in the world and yield high-quality, valuable products. Yet we export most of our fresh wild salmon and import mostly farmed salmon. In other words, we send away some of the best salmon in the world, and we import lower-value products of questionable origin. Imported salmon, both farmed and wild-caught, is far more likely to be associated with ecologically harmful practices, economic fraud and even illegal fishing.

These problems have solutions. Consistent naming and full-chain traceability would greatly reduce seafood fraud. The Food and Drug Administration's (FDA) guidance on seafood naming is neither clear nor consistent, and it does nothing to effectively eliminate confusion about seafood products in the U.S. In 2014, the White House established the Presidential Task Force on Combating Illegal, Unreported and Unregulated (IUU) Fishing and Seafood Fraud. The Task Force is set to implement measures to prevent IUU fishing and fraud in the coming year, but as this report demonstrates, the new rules need to apply to all seafood entering the U.S. and throughout the entire seafood supply chain to be effective.

Oceana recommends that the Task Force require all seafood sold in the U.S., including salmon, to be required to have catch documentation to show it came from legal sources, and to require traceability that passes key information through the entire supply chain—from the water where the fish is caught or farmed to the dinner plate where it's served. Providing more information to consumers about their seafood will help them make choices based on their preferences for domestic salmon or more environmentally friendly products.

This report is the largest salmon mislabeling study in the U.S. to-date. The results indicate that salmon mislabeling is common, especially in restaurants and especially in the winter. Consumers have a right to know that they will get what they ordered and what they paid for. U.S. fishermen have a right to know that their fish will not have to compete unfairly with fraudulent products, and that they don't have to settle for lower pay when they are delivering a superior product. The U.S. government has a responsibility to ensure a transparent and fair market. Consumers should urge the government to require catch documentation for all seafood, full-chain traceability and to provide more information at the point of sale. Transparency in the seafood supply chain is the only way for consumers to know what fish they are eating, whether it is farmed or wild, and where and how it was caught.

OCEANA

Introduction

In 2013, salmon replaced tuna as the most consumed fish in the United States.[1] Americans may love their salmon, but many are unfamiliar with its story. In this report, Oceana describes the complexities of the global salmon trade and demonstrates that the fillet on the plate may not be the fish the consumer expected, especially when bought out-of-season. Salmon fraud, particularly the substitution of farmed or other less desirable salmon for wild U.S. salmon, is a serious problem, but it could be prevented with proper naming and traceability. Our favorite fish can serve as one of the best examples of why we need to reexamine the way we track and regulate seafood.

Wild salmon undertake remarkable journeys and transformations. They hatch in freshwater streams, spending about one or two years in freshwater before heading out to the open sea. Salmon remain in the ocean for most of their lives, returning to their native waters to spawn after two to seven years. Many salmon undergo dramatic morphological changes during this trip. Some species sprout pronounced humps on their backs or develop hooked jaws. Their bodies change colors, some becoming bright red as they compete for mates.

The climb upstream is exhausting. Foregoing feeding during the swim, their bodies turn on themselves to provide sustenance. The stomach dissolves first, then the muscles and fats, providing just enough energy for their final act. Upon reaching their birth waters, the fish spawn, and then they die.

In a parallel journey, salmon that are caught before returning to their native streams similarly undergo drastic transformations. The product that is landed on the boat can travel thousands of miles, cross many borders, and take many forms and names before ending up on a dinner plate. Currently, there are no rules requiring important information — like where, when and how a fish was caught — to follow the fish from the moment it is caught until the final point of sale. This lack of traceability and the resulting opportunities for fraud has economic and ecological consequences. Without effective regulation, honest fishermen lose market share to dishonest actors, and consumers are unable to make informed decisions based on the environmental impact of their seafood choices.

Salmon: An Overview

"Salmon" is a general name applied to several species of fish in the Salmonidae family that are native to the North Pacific and North Atlantic oceans. Salmon are not unique to the United States or even North America. In fact, both Pacific and Atlantic salmon call the rivers and coastal waters of a combined 23 countries home.[2] Pacific salmon's native ranges vary by species, but traditionally they extend from Mexico to Alaska in the Eastern Pacific, and Taiwan to Northern Siberia in the Western Pacific.[3] Atlantic salmon may be commercially extinct in much of its U.S. native habitat, but limited wild populations exist in at least 17 countries in Europe and North America.[4] Additionally, farmed Atlantic salmon is raised and harvested globally, with significant production taking place in 17 countries,[5] with Norway and Chile

---

[1] Data from National Marine Fisheries Service (NMFS) as cited in About Seafood.com. Accessed 9/21/15 at https://www.aboutseafood.com/about/about-seafood/top-10-consumed-seafoods

[2] National Oceanic and Atmospheric Adminisitration (NOAA) Fisheries. Marine and Anadromous Fish. Accessed 9/15/15 at http://www.nmfs.noaa.gov/pr/species/fish/

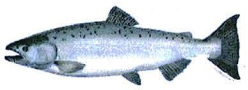
[3] Ibid

[4] Hendry, K. and D. Cragg-Hine (2003). Ecology of the Atlantic Salmon. Conserving Natura 2000 Rivers Ecology Series No 7. English Nature. Accessed 9/15/15 at http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.showFile&rep=file&fil=SMURF_salmon.pdf

[5] United Nations Food and Agriculture Organization (FAO), Fisheries and Aquaculture Department (2015). "Salmo Salar." Retrieved 9/15/15, from http://www.fao.org/fishery/culturedspecies/Salmo_salar/en

producing the bulk.[6] Pacific salmon are also farmed, though to a much lesser extent, with Chinook being farmed in New Zealand, sockeye in Japan and coho in Chile. Wild Pacific salmon have also been introduced, both purposefully and by accident, in New Zealand, Chile, Japan, the Great Lakes and other places.

Chinook



Value: $$$

The **largest and most prized** salmon species in the U.S.

Native range runs from Monterey Bay in California, Northward to Alaska and the Chukchi Sea.

Sockeye

Value: $$

Most popular species of salmon in United States. Coveted for its roe, which is exported primarily to Japan.

Known for their vibrant red color during spawning season.

Coho

Value: $$

Develop aggressively hooked jaws during spawning season and dark red coloration along sides.

Prized by private fisherman as powerful fighters. A staple of recreational fishing economies.

Chum

Value: $

The most widely distributed of all Pacific salmon, found farther north in Arctic seas than its related counterparts.

Known for mild-flavor, lower oil content and pale, pink flesh.

Pink

Value: $

Makes up **half of the total wild salmon catch obtained by U.S. fisheries**.

Famous for their humped backs during spawning season. Predominantly canned, though occasionally it is served fresh and whole or smoked.

---

[6] Ibid

OCEANA

Atlantic

Value: $

Most commonly farmed species and makes up the majority of total salmon consumed in the U.S. Most is imported from Chile, Canada and Norway – also farmed in Maine and Washington.

Wiped from their native ranges on the Atlantic coast in the early 1800's as a result of industrialization and dam construction.

Salmon facts and images from NOAA[7]

In the U.S., salmon are caught commercially in Alaska, Washington, Oregon, California and even Michigan (after being introduced to the Great Lakes).[8] The timing of spawning runs is species- and population-specific, and can be highly variable depending on environmental conditions such as snow pack, temperature and rainfall. Although wild salmon may be caught year-round in the ocean, the majority are caught before the major spawning runs, which can start as early as March with Chinook salmon, and continue as late as December with coho salmon.[9] Most salmon are caught in the U.S. between May and November, with peak salmon runs happening mid- to late-summer.[10] This is important because in winter months, when fresh wild salmon should be less abundant, it is suspiciously prevalent on American menus. As this report will show, the "freshness" and "wildness" of much of that winter salmon is questionable.

[7] See NOAA Fish Watch. Accessed 10/1/15 at http://www.fishwatch.gov/seafood_profiles/species/salmon/group_pages/index.html
[8] NMFS, Office of Science and Technology. Commercial Fisheries Statistics. Accessed 9/15/15 at http://www.st.nmfs.noaa.gov/commercial-fisheries/commercial-landings/index.
[9] California Department Fish and Wildlife. "Chinook Salmon." Accessed 9/15/15 from http://www.dfg.ca.gov/fish/resources/chinook/.
[10] NOAA. Office of Science and Technology. Commercial Fisheries Statistics. Accessed 9/15/15 at http://www.st.nmfs.noaa.gov/pls/webpls/MF_MONTHLY_LANDINGS.RESULTS

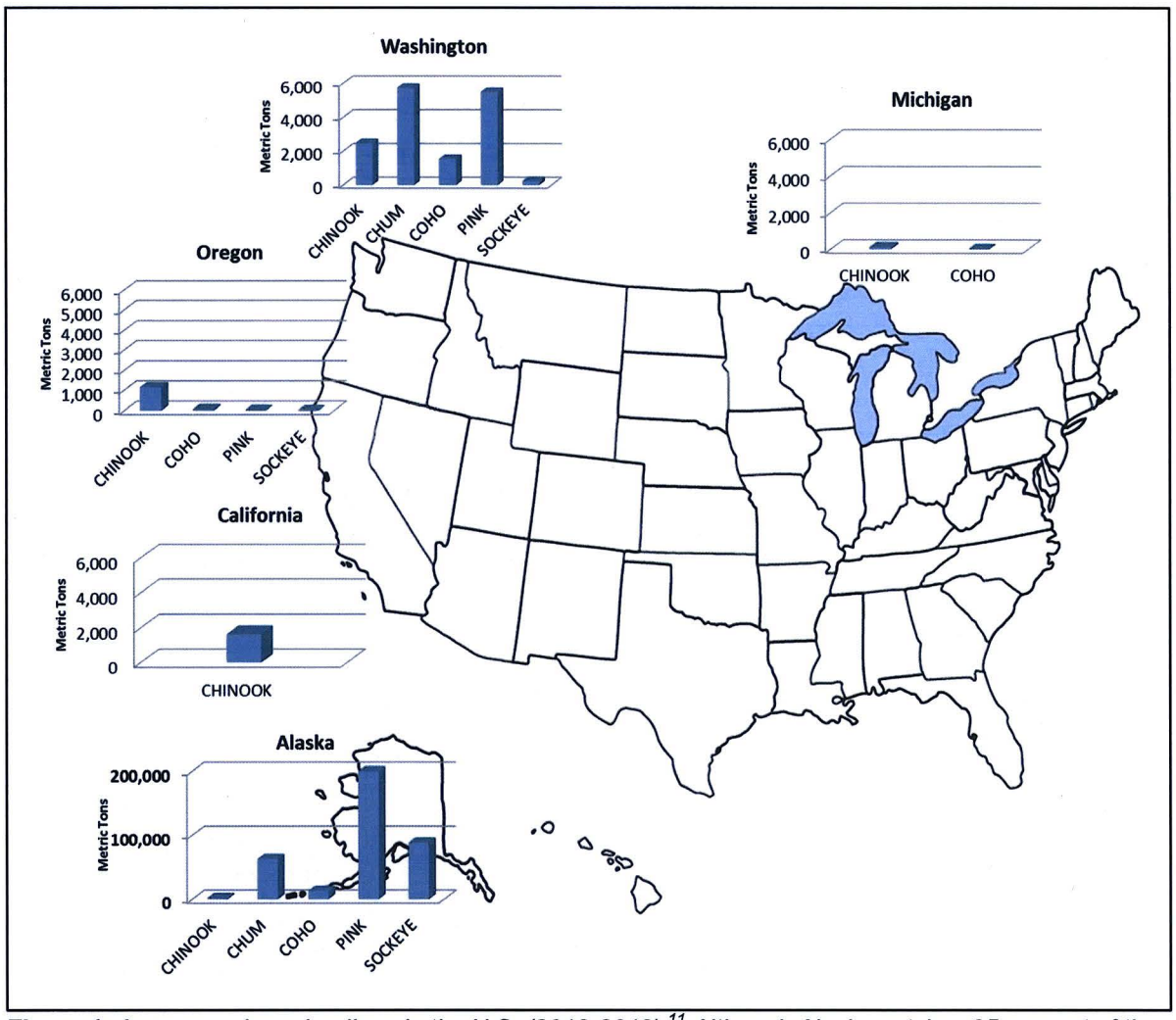


Figure 1: *Average salmon landings in the U.S. (2012-2013).*[11] *Although Alaska catches 95 percent of the salmon in the U.S. (note the different scale used for Alaska), Washington catches the most Chinook.*

Salmon are very sensitive to environmental changes, both man-made and natural. Pollution, dam construction, overfishing, poorly-managed fish farms, overuse of water resources, climate change, ocean acidification and habitat destruction can all negatively impact salmon populations.[12] Eighteen different populations of salmon are protected under the Endangered Species Act (ESA) in the U.S., including all wild U.S. Atlantic salmon and many in the Pacific Northwest.[13] The U.S. Atlantic salmon were wiped out of

[11] Ibid
[12] e.g. Pacific Marine Environmental Laboratory-Carbon Program. Consumption of Carbonate Ions Impedes Calcification . Accessed 9/15/15 from http://www.pmel.noaa.gov/co2/story/What+is+Ocean+Acidification%3F.
[13] NOAA. (2012). Status of ESA Listings and Critical Habitat Designations for West Coast Atlantic Salmon and Steelhead. Accessed 9/15/15 from http://www.westcoast.fisheries.noaa.gov/publications/protected_species/salmon_steelhead/status_of_esa_salmon_listings_and_ch_designations_map.pdf

their native ranges along the East Coast in the early 1800s because of heavy industrialization and dam building. As such, commercial fishing of Atlantic salmon is now prohibited in the U.S.[14]

The level of protection, conservation status and management scheme associated with salmon may vary species by species, state by state, and in some cases, watershed by watershed. So when buying salmon, consumers need to know the species of fish, and where and how it was caught or farmed. The easiest way to check whether salmon is sustainably sourced is to use the Monterey Bay Aquarium's Seafood Watch as a guide,[15] which takes these factors into account when establishing its ratings. For example, wild salmon caught in Alaska is considered to be a "best choice" by Seafood Watch. Wild salmon in all U.S. fisheries, including Alaska, are mostly caught commercially through the use of one of three primary fishing methods: gillnet, seine and trolling. These methods, due in part to the regions and time of year in which they are employed, lead to relatively little ecosystem damage and fewer problems with bycatch, or the unintentional killing of non-target species.[16] Generally, salmon populations are well-monitored and managed in the United States, with most salmon fisheries evaluated in the U.S. receiving a "best choice" or "good alternative" rating from Seafood Watch.[17]

Aquaculture

Farmed salmon makes up an estimated two-thirds of the salmon consumed in the U.S. each year,[18,19] and the vast majority is imported from Chile, Canada and Europe (See Appendix 2). Salmon farmed in Chile, and certain farms in Canada, Scotland and Norway that use open-water net pens, are rated as "avoid" by Seafood Watch due to their negative impact on the surrounding environment, the potential for disease transfer to wild populations, and the liberal use of antibiotics and pesticides.[20] The feeds used on many farms can be highly inefficient, requiring between 1 and 3 pounds of wild fish to produce enough fish oil for 1 pound of farmed salmon.[21] While the industry today depends on less wild fish and fish oil than in the past, the growth in global aquaculture and associated consumption of fishmeal and fish oil raises concerns regarding pressure placed on wild forage fish species. Many of these species are at risk of being overfished, due in large part to their use as feed.[22]

Global Salmon Trade & "Disappearing" American Salmon

The salmon caught in U.S. waters between 2012 and 2013 could have supplied 82 percent of our domestic salmon demand.[23] However, on average, 70 percent of our wild salmon catch is exported to foreign buyers. The majority of the salmon imported to the U.S. is actually farmed. In the 1990s, the U.S. enjoyed a trade surplus in the salmon market, but the current disparity results in a trade deficit from $1.1

[14] NOAA, Fishwatch: Atlantic Salmon. Accessed 9/15/15 at http://www.fishwatch.gov/seafood_profiles/species/salmon/species_pages/atlantic_salmon.htm
[15] Monterey Bay Aquarium (MBA) Seafood Watch, "Salmon Recommendations" Accessed 8/1/15 at http://www.seafoodwatch.org/seafood-recommendations/groups/salmon?q=Salmon&location=domestic
[16] NOAA, "Fishwatch: U.S. Seafood Facts"
[17] MBA Seafood Watch Accessed 9/15/15 at http://www.seafoodwatch.org/seafood-recommendations/groups/salmon?q=Salmon&location=domestic
[18] See NOAA Fish Watch "The surprising sources of your favorite seafoods." Accessed 9 /15/15 at http://www.fishwatch.gov/features/top10seafoods_and_sources_10_10_12.html.
[19] Knapp, G., Roheim, C. A., & Anderson, J. L. (2007). The Great Salmon Run: Competition Between Wild and Farmed Salmon. Chapter 8: Overview of U.S. Salmon consumption. TRAFFIC North America. Accessed 9/15/15 from http://www.iser.uaa.alaska.edu/people/knapp/personal/pubs/TRAFFIC/The_Great_Salmon_Run.pdf
[20] MBA Seafood Watch. (2014) Farmed Atlantic Salmon Fact Sheet. April 2014.
[21] Ibid
[22] Alder, J., Campbell, B., Karpouzi, V., Kaschner, K., Pauly, D. (2008). Forage fish: From ecosystems to markets. *Annual Review of Environmental Resources* 33:153-166.
[23] See Appendix 1

billion to $1.4 billion annually.[24] In short, most of our wild-caught salmon—some of the healthiest, most sustainable and most valuable fish in the world— is being shipped overseas, and most of what we get back is lower-value farmed salmon.

China is the world's largest importer, exporter and processor of seafood by volume.[25] In fact, in 2013, we exported more of our wild domestic salmon to China than to any other country.[26] While this trade relationship has worked well for U.S. business interests seeking cheaper processing costs overseas, significant issues remain concerning traceability and legality of fish entering China.[27] For instance, according to U.S. government trade data for 2013, the U.S. exported around 85,000 metric tons of wild-caught American salmon to China to be processed.[28] Of that number, only 37,000 metric tons of what is presumed to be U.S. domestic salmon was exported back to the U.S. in its new, processed form (e.g. deboned, frozen, etc.), but only 3 percent was returned labeled as a Pacific species.[29] A 2014 study estimated that up to 70 percent of the wild salmon exported to the U.S. via China is illegally caught Russian salmon.[30] Additional investigations have connected Russian salmon to organized crime, poaching and criminal environmental abuse in Russia, as well as corruption and tax evasion that extend to several trading partner countries in East Asia.[31,32,33]

It's unknown exactly how much the American economy loses each year by allowing illegally caught fish to enter our markets, though the amount is likely significant, as salmon trade between the U.S. and China is valued in the hundreds of millions of dollars annually.[34]

Salmon Naming, Labeling & Traceability

Oceana made the case for properly labeling and tracing fish in its recent report One Name, One Fish.[35] Adopting a species-specific name that would follow a fish throughout the entire supply chain is vital for effective traceability, which in turn is necessary to protect the oceans, public health and seafood consumers.

The FDA's Seafood List provides acceptable market names for seafood sold in the U.S.[36] While some acceptable market names can encompass a group of species (the name "grouper," for example, covers 64 fish that can all be sold as "grouper"), the acceptable market names for salmon are all species-specific names like Chinook salmon or sockeye salmon (Table 1). However, the Seafood List is only provided as guidance and is often not followed when it comes to salmon. Today, if a diner orders "salmon" from a restaurant, he or she could be getting the highly valued and sustainably wild-caught Chinook salmon or a farm-raised Atlantic salmon from a poorly managed, large-scale aquaculture facility in another country.

---

[24] Ibid
[25] FAO (2014). World Review of Fisheries and Aquaculture, Accessed 9/15/15 at http://www.fao.org/3/a-i3720e/i3720e01.pdf
[26] See Appendix 2
[27] Clarke, S. (2007)*Trading Tails: Linkages between Russian Salmon Fisheries and East Asian Markets*. Traffic.
[28]See Appendix 2
[29] Ibid and Appendix 2
[30] Pramod, G., K. Nakamura, T. J. Pitcher and L. Delagran. (2014). Estimates of Illegal and Unreported Fish in Seafood Imports to the USA. *Marine Policy* 48: 102-113.
[31] Clarke, S.(2007)
[32] Phelps Bondaroff, T. N. *The Illegal Fishing and Organized Crime Nexus*. The Black Fish: Global Initiative Against Transnational Organized Crime and The Black Fish, 2015
[33] The Wild Salmon Center. (2009).*A Review of IUU Salmon Fishing and Potential Conservation Strategies in the Russian Far East*. The Wild Salmon Center,.
[34] See Appendix 2
[35] Lowell, B., Mustain, P., Ortenzi, K., & Warner, K. (2015). One Name, One Fish: Why Seafood Names Matter. Washington, DC: Oceana.
[36] FDA Seafood List. Accessed 9/15/15 at http://www.accessdata.fda.gov/scripts/fdcc/?set=seafoodlist

Without traceability tracking the fish from farm or fishing vessel to the dinner plate, along with more information provided to consumers like species-specific names, the diner can never be sure.

Table 1: FDA Guidance on Acceptable Market Names for Salmon		
Common Name	**Acceptable Market Name**	**Latin Name**
Chinook Salmon	Salmon, Chinook or King or Spring	*Onorhynchus tshawytscha*
Chum Salmon	Salmon, Chum or Keta	*Oncorhynchus keta*
Coho Salmon	Salmon, Coho or Silver or Medium Red	*Oncorhynchus kisutch*
Pink Salmon	Salmon, Pink or Humpback	*Oncorhynchus gorbuscha*
Sockeye Salmon	Salmon, Sockeye or Red or Blueback	*Oncorhynchus nerka*
Atlantic Salmon	Salmon, Atlantic	*Salmo salar*
Danube Salmon[1]	Salmon, Danube	Hucho hucho
Cherry Salmon[2]	Salmon, Cherry	Oncorhynchus masou

[1] *Danube salmon are found only in the Danube River in Europe and comprise a small percentage (1 percent) of 2013 U.S. salmon imports*
[2] *Cherry salmon are native to Asian and Russian waters and do not appear in 2011-2013 U.S. import records*

Confusion deepens when getting into Country of Origin Labeling (COOL) for seafood. COOL regulations are enforced both by the U.S. Department of Agriculture[37] as well as U.S. Customs and Border Protection,[38] under two different sets of rules. Under both agencies' COOL rules, seafood must be labeled with its country of origin, but not necessarily where it was caught and whether it is farmed or wild, unless it has been "transformed" (Custom's rules), or "processed" (USDA's rules). But even "processed" and "transformed" have different definitions and different sets of rules depending on where an item was purchased, the agency involved and the type of seafood. Therefore, consumers cannot rely on the COOL requirements to find out more about their seafood.

The President's Task Force on Combating Illegal, Unreported and Unregulated Fishing and Seafood Fraud is in a position to correct these shortcomings. The Task Force was formed in 2014 to develop recommendations to prevent IUU fishing and seafood fraud, and the final recommendations and action plan were released in March 2015. The Task Force intends to phase in traceability requirements by first starting with a select number of species at high risk of seafood fraud and illegal fishing. At this point, it is not evident that salmon will be included in the first phase of these requirements. Also, the traceability elements would only be required to follow the fish up to the first point of entry into U.S. commerce in the first phase. It is critical that the Task Force expand the documentation requirements to all seafood and extend traceability to the full supply chain to truly tackle these global problems. The Task Force should require that all seafood have catch documentation as a condition to market access. That information, which verifies that the fish was legally caught, should accompany that fish through the supply chain. The final seafood buyer or consumer should find out more about their seafood—including what specific fish it is, where and how it was caught or farmed—so that they can make informed decisions to ensure their seafood is safe, legally caught and honestly labeled.

[37] Country of Origin Labeling for Fish and Shellfish, 7 C.F.R. § 60.101
[38] 19 C.F.R. § 134.1(b)

OCEANA

Winter Salmon: The Investigation

The most frequently sampled type of fish in Oceana's initial 2013 nationwide investigation into seafood fraud was salmon, comprising nearly one-third of all fish samples.[39] Earlier studies had shown salmon fraud to be a problem in the U.S., but Oceana's 2013 report found the overall mislabeling rate for salmon collected from both grocers and restaurants to be comparatively low at 7 percent.[40,41,42]

The majority of those samples were sockeye salmon collected from grocery stores during a time of year when sockeye were in season and plentiful in the market. Oceana researchers reasoned that the timing and locations of that sampling may have contributed to the low rate of mislabeling. To test this, another survey was conducted during winter months (December 2013 through March 2014) in several regions when wild salmon were not in season. Eighty-two samples from a variety of restaurants, large grocery stores and smaller markets were identified using DNA analysis.[43] Only fish sold as "wild salmon" or having some indication thereof (labeled as Pacific, Alaska, or with a species-specific name like sockeye or coho) were tested.

It is important here to revisit labeling and naming of salmon and to describe how Oceana's researchers determined whether a fish was mislabeled or not. The FDA guidelines offer inconsistent and murky principles for naming seafood. One principle indicates that scientific common names for seafood are the "acceptable market names," as delineated in the FDA Seafood List guidance.[44] In the case of salmon, acceptable market names follow this principle and are species-specific, like coho or sockeye. According to this principle then, fish sold simply as "wild" or "Pacific" salmon would be mislabeled. However, another principle says that it is okay to label fish with "names that are recognized nationally or commonly used by consumers to identify a species." By this principle, fish sold as "wild salmon" would not necessarily be considered mislabeled, as long as the salmon was indeed wild and not farmed.

Oceana used the latter principle—a more conservative interpretation of mislabeling—for this analysis. Had the researchers used the FDA's first principle for naming seafood, there would actually be higher rates of mislabeling than were described in this report. It should also be noted that requiring one name for one fish, as Oceana has recommended, would reduce the confusion inherent in current seafood naming and labeling guidance.

A sample labeled as wild, Pacific or Alaska, but with no species common name, was not considered mislabeled if it was genetically identified as any one of the wild, Pacific or Alaska salmon species (Chinook, sockeye, coho, pink or chum). For example, if a species was sold as Pacific salmon, and DNA testing revealed that it was sockeye salmon, that sample would not be considered mislabeled. It is true that a small amount of Pacific salmon is now being farmed, and a very limited amount of wild Atlantic salmon are wild-caught in Europe. However, based on an analysis of trade data on salmon being imported to the U.S., the researchers made the assumption that virtually all Pacific salmon species identified by DNA testing were wild and that all Atlantic salmon species were farmed.[45]

---

[39] Warner, K., Timme, W., Lowell, B., & Hirschfield, M. (2013). Oceana study reveals seafood fraud nationwide. Washington, DC: Oceana.
[40] Burros, M. (2005). Stores say wild salmon, but tests say farm bred. *New York Times*. April 10, 2005
[41] Consumer Reports (2006). The salmon scam: "wild" often isn't. *Consumer Reports,* 15. August 2006
[42] Cline, E. (2012). Marketplace substitution of Atlantic salmon for Pacific salmon in Washington State detected by DNA barcoding. *Food Research International, 45*, 388-393. doi: 10.1016/j.foodres.2011.10.043
[43] Samples were analyzed for species identity via DNA Barcoding at the Canadian Centre for DNA Barcoding in Guelph Canada.
[44] FDA Seafood List Guidance Accessed 9/15/15 at http://www.fda.gov/Food/GuidanceRegulation/ucm113260.htm
[45] Less than 1% of 2013 U.S. salmon imports were farmed Pacific salmon or wild Atlantic salmon. See NOAA Office of Science and Technology. Commercial Fisheries Statistics http://www.st.nmfs.noaa.gov/commercial-fisheries/foreign-trade/applications/annual-product-by-countryassociation

OCEANA

Overall, 43 percent of winter salmon samples were mislabeled – a large increase over the 7 percent mislabeling rate found in the 2013 survey (Table 2). The out-of-season salmon mislabeling rates were more than three times higher in restaurants (67 percent) versus grocery stores (20 percent). Salmon fraud varied by region as well. Mislabeling was highest in Virginia restaurants, where eight of nine samples collected (89 percent) were mislabeled. Eight of 11 samples from Washington, D.C. restaurants were mislabeled. New York City had the lowest restaurant mislabeling rate, at 38 percent, but the highest grocery and market mislabeling, at 36 percent.

Table 2: Winter Salmon Mislabeling 2013/2014[1]

	Percent Mislabeled		
Region	**All**	**Restaurant**	**Grocery/Market**
All regions	43 % (35/82)	67 % (27/41)	20 % (8/41)
Virginia	48 % (10/21)	89 % (8/9)	17 % (2/12)
Washington, DC	45 % (9/20)	73 % (8/11)	11 % (1/9)
Chicago, IL	38 % (5/13)	71 % (5/7)	0 % (0/6)
New York City	37 % (10/27)	38 % (5/13)	36 % (5/14)

[1]*See Appendix 3 for detailed sample results, including the one restaurant result for Savannah, GA.*

The most common form of mislabeling was farmed Atlantic salmon being sold as "wild salmon." There were also six instances in which supposed high-value Chinook or king salmon were actually farmed Atlantic, and one in which the cheaper chum salmon was sold as king salmon. It appears vague names, like "wild," "Alaskan" and "Pacific," lent themselves to higher mislabeling rates. With the exception of the lucrative Chinook/king salmon substitutions, none of the fish that featured a species-specific name was mislabeled (the one "silverbrite" sample does not count, since "silverbrite" is not an acceptable market name) (Figure 2).

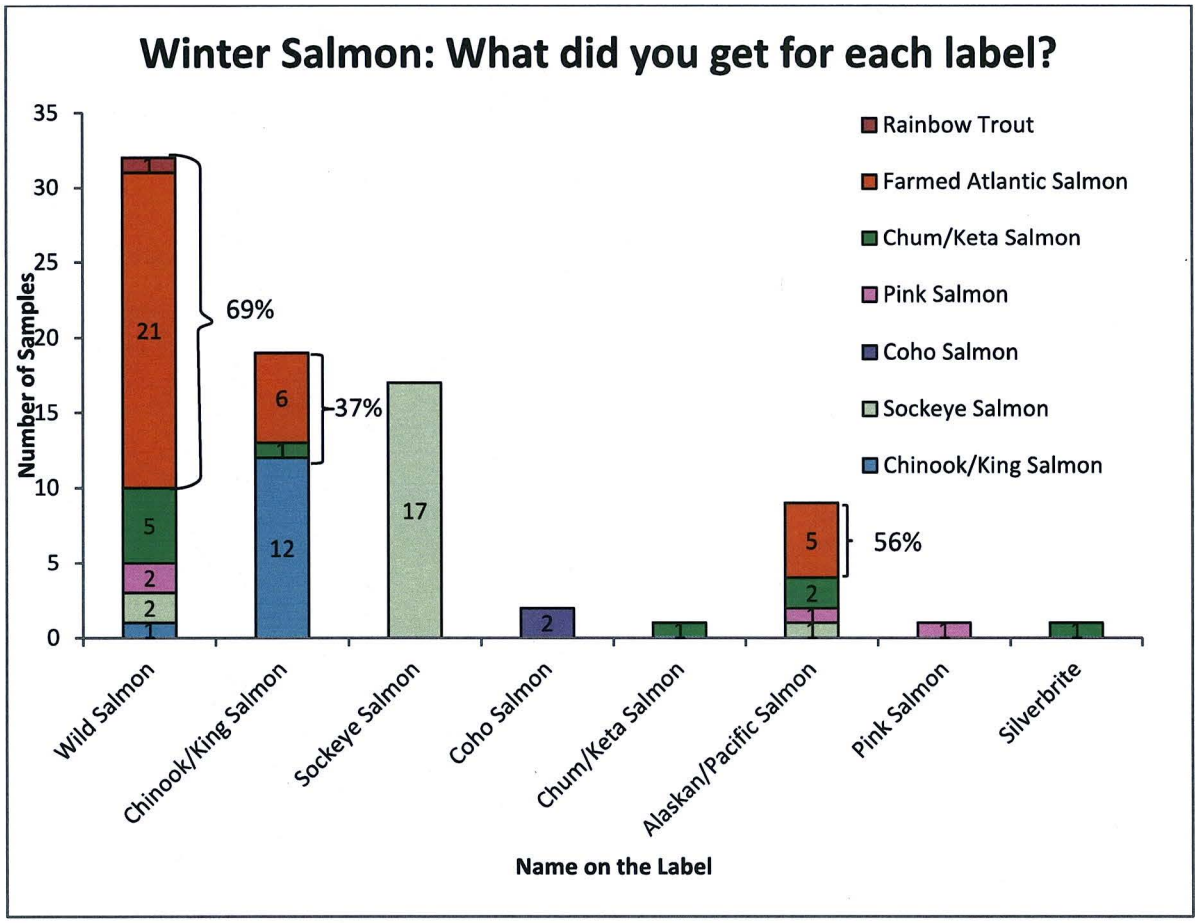


Figure 2: *Salmon species identified as sold under each label during winter 2013/2014 sampling. Percentages reflect the amount of mislabeling in each label.*

The Bigger Picture: Combining the Data

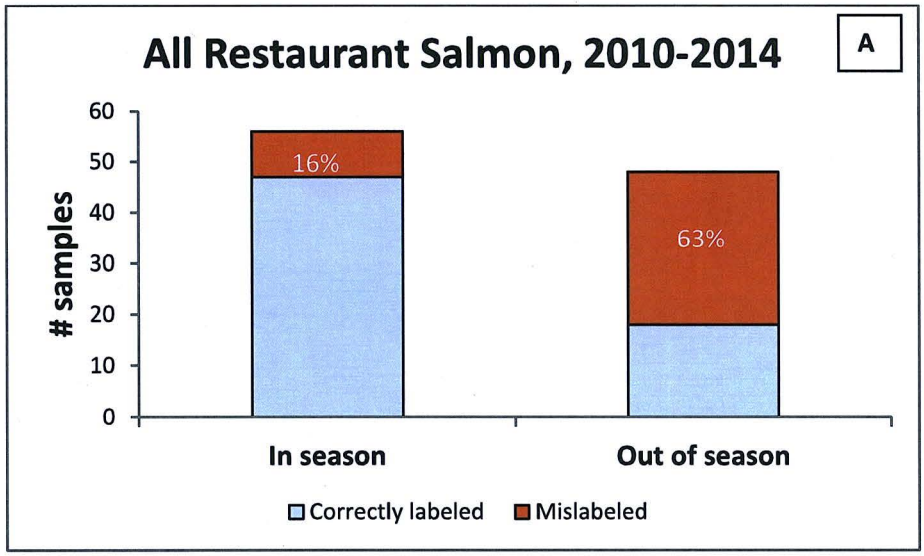
To get a more robust picture of salmon mislabeling, Oceana's investigators combined the 384 salmon samples from the 2013 national seafood fraud report with the 82 samples from this winter salmon survey. This data set of 466 samples[46] represents the largest single study of salmon mislabeling in the U.S., covering fish purchased from 2010 through 2014, in over 100 municipalities in 19 states and the District of Columbia. Salmon were purchased from all types of retail outlets, including fish markets, small and large grocers, sushi venues, and casual and fine dining establishments.

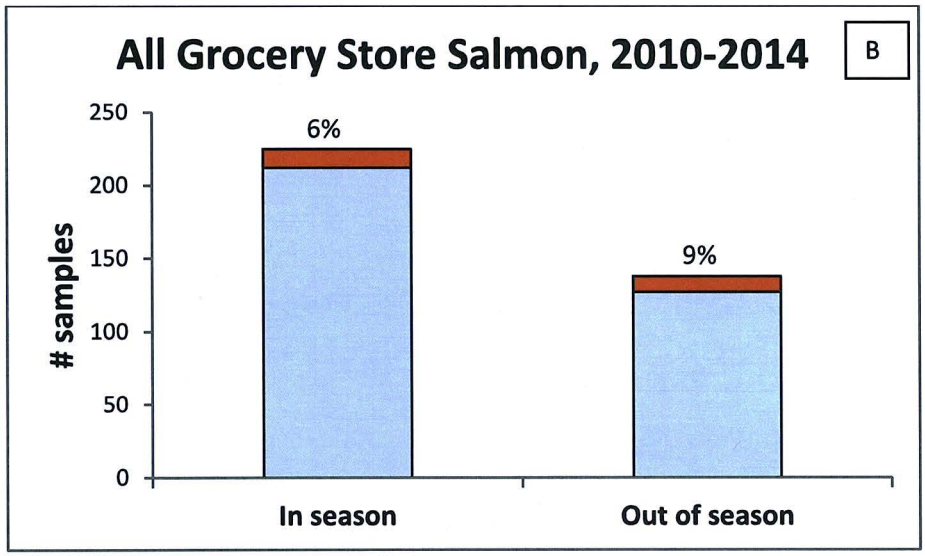
The overall salmon mislabeling rate, regardless of season and type of venue, was 14 percent, double the rate from the 2013 report. However, when teasing out purchase retail type and season, a starker picture emerged. Diners were five times more likely to be misled in restaurants than grocery stores, regardless of

[46] The data set includes 281 in-season (May-Nov) and 186 out-of-season (Dec-April) samples; 363 from grocery stores and 104 from restaurants.

season (38 vs. 7 percent) Salmon purchased out-of-season from all retail types was three times more likely to be mislabeled than salmon purchased in-season (23 percent vs. 8 percent, respectively).

Looking at both the season and the place of purchase in the combined data set revealed a clear pattern: salmon purchased in restaurants in winter months had the highest likelihood of being mislabeled (63 percent), consistent with what was found in the smaller winter survey (Fig. 3a). Salmon purchased in grocery stores, regardless of season, were the most likely to be properly labeled (Figs 3b). Samples obtained from smaller local markets (61) were far fewer than those collected from large national or regional chains (302), but shoppers in small markets were eight times more likely to get mislabeled salmon than shoppers in large grocery chains (25 vs. 3 percent, respectively).





Figures 3 A & B: *Effect of salmon season and retail type on salmon mislabeling in U.S. Note the different scale for A & B.*

OCEANA

What This All Means

This investigation demonstrated that salmon mislabeling and species substitution is widespread, but varies depending on when and where salmon is purchased — findings that are similar to what others have found in some smaller regional studies.[47,48] Consumers are most likely to get what they pay for if purchasing salmon at a large grocery store, as opposed to a small market. Selections called "wild salmon" purchased at a restaurant, especially in the winter, are more likely to be mislabeled.

Not only does this kind of mislabeling cheat consumers out of getting the higher-value fish they expect, but it also can mislead consumers into thinking they are getting more sustainably caught fish that support domestic economies, rather than lower-value, potentially ecologically damaging substitutions. If all seafood (including salmon) were required to be accompanied by information like species-specific names, where and how a fish was caught or if it was farmed, then it would be more difficult to intentionally defraud consumers.

The U.S. has some of the highest-quality salmon, caught by responsible fishermen, in some of the best-managed fisheries in the world. Yet most of the salmon we consume is lower-value, imported fish, supporting farming practices that can be detrimental to the environment. In some cases, the purchase of America's favorite fish may even be even supporting organized crime as well as governments that are poor stewards of natural resources. If more Americans were aware of these issues, we might see a purchasing shift toward the more sustainable, domestic salmon. But for that to happen, people need to know where their fish was caught or if it was farmed as well as its real name.

The Presidential Task Force on Combating IUU Fishing and Seafood Fraud is poised to create new rules to close our markets to pirate fishing and protect consumers and seafood buyers. Catch documentation for all seafood, full-chain traceability and making more information available to consumers would help ensure that all seafood sold in the U.S., including salmon, is safe, legally caught and honestly labeled.

Until that happens, below are a number of ways consumers can reduce their chances of falling victim to a bait and switch when buying salmon:

- Ask questions. Seafood buyers should ask more questions, including what kind of fish it is, if it is wild-caught or farm-raised, and where and how it was caught.
- Support traceable seafood. If the seafood has a story, you are more likely to be getting what you paid for. Products that included additional information for consumers, like the type of salmon (Chinook, king, coho, etc.), were less likely to be mislabeled.
- Check the price. If the price is too good to be true, it probably is. You may be purchasing a different fish than what is on the menu or label.

[47] Consumer Reports (2006)
[48] Cline (2012)

OCEANA

Appendices

Appendix 1: Global Salmon Trade and U.S. Demand-Methodology

Oceana calculated an estimated average U.S. salmon demand for 2012 and 2013 as follows:

{Landings (3386663) + Imports (356484)} – Exports (271200) = Demand (471947) tons round weight, (2012/2013 averages).

When compared to round weight U.S. landings, Oceana determined that U.S. fishermen catch enough wild salmon to supply 82 percent of our *national demand* (i.e. (Imports+Landings)-Exports), while exporting 70% of that total catch abroad (based on round weight comparisons between exports and landings). These findings are consistent with those cited in Greenberg.[49] Because the U.S. does not track how much of our domestic wild salmon is returned to the U.S. as processed salmon imports, we can only be assured that, on average, 24% of the salmon consumed in the U.S. is of domestic origin, i.e. ((landings-exports)/ demand).

All trade data were converted to (metric ton) round weight to be consistent with landings data which are reported in round weight. Trade weight conversion factors for whole fish (1.15) and fillets [and cured] (1.3) were taken from Tate[50], while canned salmon conversion factors (1/0.66) were the average of canned conversion factors reported in Knapp et al.[51]

Salmon landings and trade data for 2012/2013 were obtained mostly from the 2013 Fisheries of the U.S. (FUS)[52] but supplemented with NOAA trade statistics for imported cured salmon and roe for 2012 and 2013[53], which were not included in the 2013 FUS.

Trade Deficit

The trade deficit was determined by calculating the difference between imports and exports, using averages of 2012 and 2013 dollar values from the NMFS trade statistics database.[54] The trade deficit utilized averages of 2012/2013 statistics in order to remain consistent with earlier calculations.

---

[49] Greenberg, P. (2014). *American Catch: the Fight for our Local Seafood.* New York: Pengun Press.

[50] Tate, M. *Oregon Adminstrative Rules.* Edited by Department of Fish and Wildlife. 2015. Accessed 9/15/15 at http://www.dfw.state.or.us/OARs/recently_adopted/Tribal%20Dressed%20Salmon%20ef%205-1-15.pdf

[51] Knapp, G., C. A. Roheim and J. L. Anderson. 2007 *The Great Salmon Run: Competition between Wild and Farmed Salmon.* TRAFFIC North America; World Wildlife Fund,

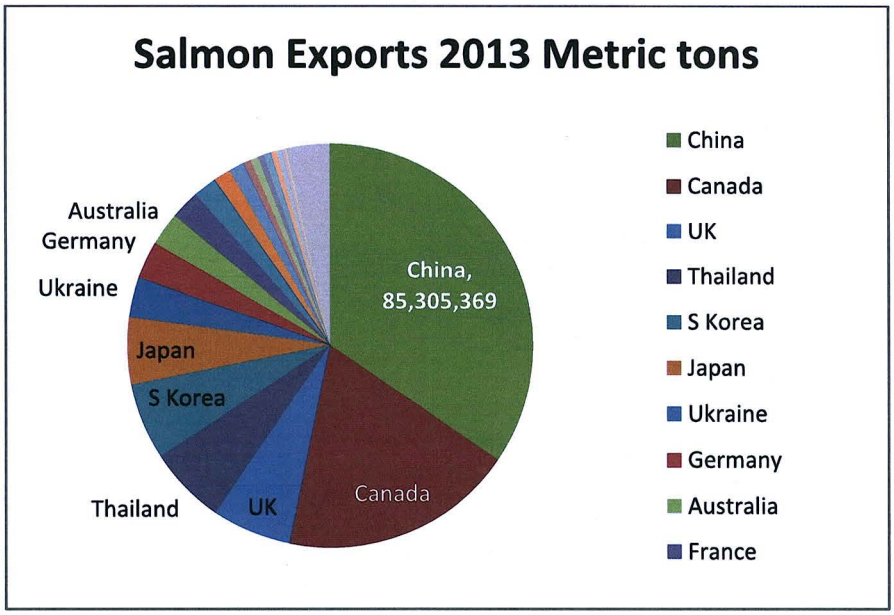
[52] NOAA Office of Science and Technology. 2013 *Fisheries of the United States 2013.* National Oceanic and Atmospheric Administration.

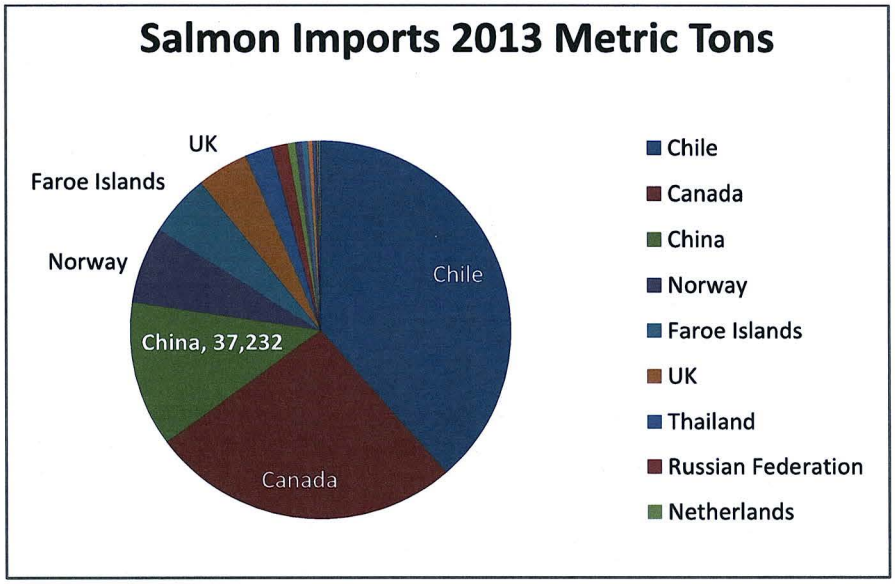
[53] NOAA Office of Science and Technology, "Annual Trade Data by Product, Country/Association", National Marine Fisheries Service http://www.st.nmfs.noaa.gov/commercial-fisheries/foreign-trade/applications/annual-product-by-countryassociation (accessed August, 2015).

[54] Ibid

OCEANA

Appendix 2: U.S. Salmon Exports[55] and Imports[56] for 2013 and Trade with China





[55] Ibid
[56] Ibid

OCEANA

China – U.S. Trade

The value of Chinese-U.S. salmon trade was reached by accessing the U.S. NMFS trade statistics database for imports and exports of salmon to China over the years 2011-2014. For each year assessed, imports were listed as being valued at, at-least, $200,000,000 (see table below). As a total valuation of trade, the U.S.-China salmon trade is worth roughly $470,000,000 on average, or "hundreds of millions of dollars annually."

Table A1: U.S.-China Salmon import and export value

Year	Imports $	Exports $	Sum $	Yearly average ($)
2011	243000000	306665000	549665000	
2012	212700000	209660000	422360000	
2013	207600000	242300000	449900000	
2014	245000000	215400000	460400000	**$470,581,250**

Data source: http://www.st.nmfs.noaa.gov/commercial-fisheries/foreign-trade/applications/monthly-product-by-countryassociation

Oceana used the NMFS trade statistics database for the salmon trade between the U.S. and China in the years 2012 and 2013 as a data source, and sorted the salmon imports and exports by product name, noting the total weight of each product type listed, and averaged the 2012 and 2013 data.[57] This analysis revealed that while U.S. exports of wild salmon to China are 97% properly named (by species-56 percent pink, 36 percent chum, 5 percent sockeye, only 3 percent "not-specified"), salmon imports from China are predominantly categorized as "not-specified." Specifically, imports of salmon from China are 74 percent "not-specified"; 20 percent Atlantic (most likely farmed); 3 percent "salmon fillet blocks frozen"; and 3 percent pink salmon. In summation, the U.S. exports to China, wild salmon that is 97 percent correctly labeled by species, and then imports from China 97 percent "not-specified" or farmed salmon. This naming and labeling issue likely allows illegally caught Russian salmon to enter the US (as was discussed previously in the report).

Appendix Table A2: List of mislabeled salmon collected in the U.S. from 2010-2014

Type of salmon (#mislabeled/ #total)	Salmon label	Species ID	Scientific common name (FDA market name)	Retail code[1]	Year	City, State
Salmon, Wild (29/65)	salmon, wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Chicago, IL
	salmon, wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Chicago, IL
	salmon, wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Chicago, IL
	salmon, wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Chicago, IL

[57] Ibid

salmon, wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Silver Spring, MD
salmon, wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Washington, DC
salmon, wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Washington, DC
salmon, wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Washington, DC
salmon, wild	*Salmo salar*	salmon, Atlantic (Atlantic salmon)	M	2012	Los Angeles, CA
salmon, wild	*Salmo salar*	salmon, Atlantic (Atlantic salmon)	S	2011	Fort Lauderdale, FL
salmon, wild	*Salmo salar*	salmon, Atlantic (Atlantic salmon)	R	2011	Fort Lauderdale, FL
salmon, wild	*Salmo salar*	salmon, Atlantic (Atlantic salmon)	R	2012	Queens, NY
salmon, wild	*Salmo salar*	salmon, Atlantic (Atlantic salmon)	G	2012	New York, NY
salmon, wild	*Salmo salar*	salmon, Atlantic (Atlantic salmon)	M	2012	Forest Hills, NY
salmon, wild	*Salmo salar*	salmon, Atlantic (Atlantic salmon)	M	2012	New York, NY
salmon, wild	*Salmo salar*	salmon, Atlantic (Atlantic salmon)	G	2012	Kew Gardens, NY
salmon, wild	*Oncorhynchus mykiss*	trout, rainbow (trout, rainbow or steelhead)	M	2012	New York, NY
salmon, wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	M	2014	New York, NY
salmon, wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	M	2014	New York, NY
salmon, wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	New York, NY
salmon, wild	*Oncorhynchus mykiss*	Rainbow Trout (trout, rainbow or steelhead)	R	2014	New York, NY
salmon, wild, organic	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	New York, NY
salmon, wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Long Island City, NY
salmon, wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Astoria, NY
salmon, wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	S	2012	Portland, OR
salmon, wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Savannah, GA

	salmon, wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Norfolk, VA
	salmon, wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Newport News, VA
	salmon, wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Richmond, VA
Salmon, labeled by location (7/35)	salmon, wild, Alaska	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Chicago, IL
	salmon, wild, Canada	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	M	2014	Washington, DC
	salmon, wild, Alaska	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Washington, DC
	salmon, Pacific	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2012	San Francisco, CA
	salmon, wild, Canada	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	M	2014	Williamsburg, VA
	salmon, Pacific	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Norfolk, VA
	salmon, wild, Faroe Island	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Virginia Beach, VA
	salmon, wild, Pacific	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Fredericksburg , VA
	salmon, wild, Alaska	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Richmond, VA
	salmon, wild, Atlantic	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	G	2014	Astoria, NY
Salmon, King or Chinook (14/77)	salmon, king	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Washington, DC
	salmon, king	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Silver Spring, MD
	salmon, king	*Oncorhynchus keta*	salmon, chum (salmon, chum or keta)	R	2014	Falls Church, VA
	salmon, king Alaska	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2011	Miami, FL
	salmon, king	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	G	2012	New York, NY
	salmon, king	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2012	New York, NY
	salmon, king Scottish wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	M	2012	New York, NY
	salmon, wild, king	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	G	2014	New York, NY

	salmon, wild, king, USA	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	M	2014	New York, NY
	salmon, king wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	S	2012	Astoria, OR
	salmon, king wild	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	S	2012	Portland, OR
	salmon, king	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	M	2012	San Francisco, CA
	salmon, king	*Oncorhynchus kisutch*	salmon, coho (salmon, coho or silver or medium red)	G	2012	San Francisco, CA
	salmon, king	*Salmo salar*	Atlantic Salmon (salmon, Atlantic)	R	2014	Williamsburg, VA
Salmon, Sockeye (5/205)	salmon, sockeye Alaskan	*Oncorhynchus keta*	salmon, chum (salmon, chum or keta)	G	2012	Seal Beach, CA
	salmon, sockeye	*Oncorhynchus kisutch*	salmon, coho (salmon, coho or silver or medium red)	R	2012	New York, NY
	salmon, sockeye	*Salmo salar*	salmon, Atlantic (Atlantic salmon)	G	2011	Laguna Beach, CA
	salmon, sockeye	*Oncorhynchus tshawytscha*	salmon, chinook (salmon, chinook or king or spring)	M	2012	Davis, CA
	salmon, sockeye wild Alaskan	*Oncorhynchus tshawytscha*	salmon, chinook (salmon, chinook or king or spring)	R	2012	Seattle, WA
Salmon, Coho (3/27)	salmon, coho	*Oncorhynchus tshawytscha*	salmon, chinook (salmon, chinook or king or spring)	G	2012	Santa Fe, NM
	salmon, coho	*Oncorhynchus nerka*	salmon, sockeye (salmon, sockeye or red or blueback)	G	2012	New York, NY
	salmon, coho Alaskan	*Oncorhynchus nerka*	salmon, sockeye (salmon, sockeye or red or blueback)	R	2012	Portland, OR
Salmon, Keta/chum (1/7)	salmon, keta	*Oncorhynchus gorbuscha*	salmon, pink (salmon, pink or humpback)	G	2012	Austin, TX
Salmon, silverbrite[2] (2/2)	salmon, wild, silverbrite, USA	*Oncorhynchus keta*	salmon, chum (salmon, chum or keta)	G	2014	Virginia Beach, VA
	salmon, silverbrite, wild, US	*(no data)*		G	2014	Falls Church, VA

[1] *G: grocery store; M: market; R: Restaurant; S: Sushi venue.*
[2] *"Silverbrite" is not an acceptable market name for any salmon species*

UNITED FISHERMEN OF ALASKA

Mailing Address: PO Box 20229, Juneau AK 99802-0229
Physical Address: 410 Calhoun Ave Ste 101, Juneau AK 99801
Phone: (907) 586-2820 Fax: (907) 463-2545
Email: ufa@ufafish.org Website: www.ufafish.org

Draft March 16, 2018

Senator Wielechowski
State Capitol Bldg., Room 419
Juneau, Alaska 99801

Re: Support SB 210- An Act relating to the misrepresentation of seafood and seafood ingredients by retail food establishments.

Dear Senator Wielechowski,

United Fishermen of Alaska (UFA) is the statewide commercial fishing trade association, representing 35 commercial fishing organizations participating in fisheries throughout the state, and the federal fisheries off Alaska's coast.

UFA supports SB 210: An Act relating to the misrepresentation of seafood and seafood ingredients by retail food establishments. The Alaska seafood industry has worked hard to maintain a high level of prestige and authenticity for Alaska seafood, while producing a quality product that distinguishes itself from others. Many states already have laws and penalties for seafood mislabeling and it is past time for Alaska, as the largest seafood producing state in the nation, to follow suit.

The mislabeling of seafood brings up two major concerns: human health and conservation concerns. Without proper labeling, consumers may unknowingly purchase a contaminated product, which may lead to severe illness or even death. Fraud may also undermine conservation efforts which are put in place to protect threatened seafood and provide for sustainable fisheries. Mislabeling illegally caught seafood jeopardizes populations that are at risk of extinction.

In closing, UFA fully endorses SB 210 and thanks you for your time in this matter.

Sincerely,

Jerry McCune
President

Frances H. Leach
Executive Director

MEMBER ORGANIZATIONS
Alaska Bering Sea Crabbers • Alaska Independent Tendermen's Association • Alaska Longline Fishermen's Association • Alaska Scallop Association
Alaska Trollers Association • Alaska Whitefish Trawlers Association • Armstrong Keta • At-sea Processors Association • Bristol Bay Fishermen's Association
Bristol Bay Reserve • Cape Barnabas, Inc. • Concerned Area "M" Fishermen • Cook Inlet Aquaculture Association • Cordova District Fishermen United
Douglas Island Pink and Chum • Freezer Longline Coalition • Golden King Crab Coalition • Groundfish Forum • Kenai Peninsula Fishermen's Association
Kodiak Regional Aquaculture Association • North Pacific Fisheries Association • Northern Southeast Regional Aquaculture Association
Petersburg Vessel Owners Association • Prince William Sound Aquaculture Corporation • Purse Seine Vessel Owner Association
Seafood Producers Cooperative • Southeast Alaska Herring Conservation Alliance • Southeast Alaska Fisherman's Alliance
Southeast Alaska Regional Dive Fisheries Association • Southeast Alaska Seiners • Southern Southeast Regional Aquaculture Association
United Cook Inlet Drift Association • United Southeast Alaska Gillnetters • Valdez Fisheries Development Association

Fiscal Note

State of Alaska
2018 Legislative Session

Bill Version: SB 210
Fiscal Note Number:
() Publish Date:

Identifier: SB210-DEC-EH-03-23-18
Title: SEAFOOD MISREPRESENTATION ON MENUS
Sponsor: WIELECHOWSKI
Requester: Senate State Affairs

Department: Department of Environmental Conservation
Appropriation: Environmental Health
Allocation: Environmental Health
OMB Component Number: 3202

Expenditures/Revenues

Note: Amounts do not include inflation unless otherwise noted below. (Thousands of Dollars)

	FY2019 Appropriation Requested	Included in Governor's FY2019 Request	Out-Year Cost Estimates				
OPERATING EXPENDITURES	**FY 2019**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**
Personal Services							
Travel							
Services							
Commodities							
Capital Outlay							
Grants & Benefits							
Miscellaneous							
Total Operating	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Fund Source (Operating Only)

None							
Total	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Positions

Full-time							
Part-time							
Temporary							

Change in Revenues

None							
Total	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Estimated SUPPLEMENTAL (FY2018) cost: 0.0 *(separate supplemental appropriation required)*
(discuss reasons and fund source(s) in analysis section)

Estimated CAPITAL (FY2019) cost: 0.0 *(separate capital appropriation required)*
(discuss reasons and fund source(s) in analysis section)

ASSOCIATED REGULATIONS

Does the bill direct, or will the bill result in, regulation changes adopted by your agency? No
If yes, by what date are the regulations to be adopted, amended or repealed?

Why this fiscal note differs from previous version/comments:

Not applicable, initial version.

Prepared By: Christina Carpenter, Director — Phone: (907)269-7645
Division: Environmental Health — Date: 03/23/2018
Approved By: Alice Edwards, Deputy Commissioner — Date: 03/23/18
Agency: Department of Environmental Conservation

FISCAL NOTE ANALYSIS

STATE OF ALASKA
2018 LEGISLATIVE SESSION

BILL NO. SB 210

Analysis

This bill adds a section to AS 17.20 that prohibits a retail food establishment from misrepresenting on a menu the identity or origin of seafood or a seafood ingredient in a prepared food product. There are already existing statutes and regulations that address labeling and advertisement of food products that require the Department of Environmental Conservation to take action if any food is misrepresented on a menu. This legislation would not change the work the Department is already doing and would have no fiscal impact.