# **OCEANA**

## One Name, One Fish: Why Seafood Names Matter

#### July 2015

Authors: Beth Lowell, Patrick Mustain, Kate Ortenzi and Kimberly Warner, Ph.D.

## **Executive Summary**

Seafood is the most valuable and highly traded food commodity in the world. Globally, billions of people rely on the oceans for sustenance, employment and recreation. Unfortunately, the future of our oceans' continued abundance is tenuous. Without proper stewardship, we could lose our last sustainable source of wild food and an essential component of a functioning global economy. Sensible, science-based management of commercial fishing is vital to ensure the health of ocean habitats and fisheries. But the strong fisheries management framework being built in the United States and elsewhere could be undermined by illegal fishing and seafood fraud. Seafood fraud encompasses any illegal activity that misrepresents the seafood you purchase, including mislabeling and falsifying documents, to adding too much ice to packaging. Illegal, Unreported and Unregulated (IUU) fishing operates outside of international and domestic rules and laws and can include fishing in closed areas or during prohibited times, using illegal gear or catching prohibited species.

The Presidential Task Force on Combating Illegal, Unregulated and Unreported Fishing and Seafood Fraud is poised to make important decisions that will enhance sustainability, protect honest fishermen and seafood businesses, and ensure that consumers are protected from economic fraud and food with health risks. One simple but vital step the federal government can take is requiring the use of species-specific names, or one name for one fish, throughout the seafood supply chain, from the fishing boat to the dinner plate. For documentation requirements and traceability, or tracking the fish through the supply chain, the Latin scientific name is universally recognized regardless of language and is already used on many regulatory documents around the world, providing a unique identifier for every species. For consumers, the common name or scientific name would provide more information about their fish choices. Using one name for one fish prevents ambiguity, whether intentional or unintentional, about the exact type of fish being sold or served.

Currently, there are many types of fish for which general names are used as categories, such as rockfish and snapper. This tendency to use ambiguous names for seafood sold in the U.S. can lead to confusion and undesired consequences. For instance, a fisherman in Panama could catch an International Union for Conservation of Nature (IUCN) listed critically endangered Warsaw grouper, and it could be legally sold in the U.S. as simply "grouper," with no ability to differentiate it from the 64 other fish that can be sold as grouper. Without requiring species-specific naming, seafood loses its identity through the supply chain.

Tracing seafood with species-specific information has become more common in seafood trade. In fact, some seafood industry members support the use of scientific names for documentation in the supply chain. Species-specific names can also help consumers who would like to support local domestic fisheries but are not supplied with the information to do so.

The adoption of species-specific names throughout the entire seafood supply chain has the ability to enhance honest businesses' bottom lines, decrease the cost of seafood-borne illness outbreaks, improve the ability of international treaties to protect endangered species, and enable better enforcement of the



illegal wildlife trade, as well as food safety and fisheries laws. At the consumer level, the use of one name for one fish will provide buyers with information to help them choose more sustainable products, allowing them to participate in the fight to end IUU fishing and seafood fraud.

Currently, the European Union requires all unprocessed fishery products sold in stores and online to be labeled with the scientific name, as well as other information on where and how it was caught. If the U.S. were to follow the EU's lead and require pertinent information on the consumer label for seafood, it is likely to become a global movement, since together they make up 50 percent of global seafood imports by value.

The level of specificity a unique name for each fish provides is necessary for effective enforcement and tracking of the seafood trade.

## **Introduction**

Seafood is the most valuable and highly traded food commodity, with global trade exceeding 160 million tons of seafood worth over \$136 billion in 2013.<sup>1</sup> The United States is the second largest seafood market in the world, only behind the European Union in 2013.<sup>2</sup> More than 90 percent of the seafood consumed in the U.S. is imported-more than any other seafood producing country-even though the U.S. controls a greater proportion of the ocean than any other nation.<sup>3</sup> The path that seafood travels from its source to the consumer is long, geographically disparate and multi-tiered. Throughout this journey, seafood is often transformed from whole fish to fillet, shrimp to cocktail and crab to cake. Oceana's studies on the prevalence of seafood fraud have demonstrated that this transformation process, and the absence of effective traceability requirements, often obscures the true identity of many types of seafood, creating frequent opportunities for fraud. Seafood traceability would provide the ability to track all information relating to seafood (who caught it, what species it is, and when and where it was caught) from the fishing vessel or farm throughout the entire supply chain. Oceana has observed threatened species being sold as more sustainable, expensive varieties replaced with cheaper alternatives, safe fish substituted with those that can cause illness.<sup>4</sup> Packing several species under a general acceptable market name, without providing the unique scientific or common name, diminishes the ability of the consumer to make informed purchasing decisions. If the species-specific name of every seafood product were required to accompany the product in question from the boat to the plate, it would be easier to prevent and deter seafood fraud. Additionally, making species-specific names available at the point of sale would allow consumers to make more informed seafood choices based on their preferences, whether it be taste, sustainability, health or other factors.

<sup>&</sup>lt;sup>1</sup> Food and Agriculture Organization of the United Nations (FAO). (2015). *Food Outlook: Biannual Report on Global Food Markets.* See Appendix Table 20. <u>http://www.fao.org/3/a-i4581e.pdf</u>

<sup>&</sup>lt;sup>2</sup> Ibid. FAO

<sup>&</sup>lt;sup>3</sup> National Oceanic and Atmospheric Administration (NOAA). (2012). *Fisheries of the United States, 2011.* <u>http://www.nmfs.noaa.gov/stories/2012/09/09\_19\_12fisheries\_of\_the\_us.html</u>

<sup>&</sup>lt;sup>4</sup> Warner, K.; Walker T.; Lowell, B.; and Hirschfield, M. (2013). "Oceana Study Reveals Seafood Fraud Nationwide". Oceana, <u>http://oceana.org/sites/default/files/reports/National\_Seafood\_Fraud\_Testing\_Results\_FINAL.pdf</u>; Warner, K.; Golden, R.; Lowell, B.; Disla, C.; Savitz, J.; and Hirshfield, M. (2014). Shrimp: *Oceana Reveals Misrepresentation of America's Favorite Seafood*. Oceana, <u>http://oceana.org/sites/default/files/reports/oceana reveals misrepresentation of americas favorite seafood.pdf</u>; Warner, K.; Lowell, B.; Disla, C.; Ortenzi, K.; Savitz, J.; and Hirshfield, M., (2015). *Oceana Reveals Mislabeling of Iconic Chesapeake Blue Crab. http://oceana.org/sites/default/files/crab\_testing\_report\_final\_3.27,15.pdf*.



## Seafood Mislabeling

Between 2010 and 2015, Oceana conducted its own seafood fraud investigations of fish, shrimp and crab cakes in the retail market. In general, around one-third of the seafood examined in these studies was mislabeled—the product listed on the label or menu was often actually a less desirable or less expensive species. Fraud like this is not limited to any one sector of the supply chain, but can occur throughout. For instance, Oceana's crab cake study discovered that crab is likely entering the country already mislabeled. A 2014 Food and Drug Administration (FDA) investigation revealed a 15 percent mislabeling rate among seafood products tested at the wholesale level.<sup>5</sup> Law enforcement officers have found fraudulent and illegal fishing practices both at the import level and on the high seas.<sup>6</sup> Because seafood fraud has been identified throughout the supply chain, simply targeting any particular link would have a limited impact. Effective prevention of seafood fraud requires full supply chain traceability, tracking seafood from the fishing boat or farm to the final point of sale: the consumer.

## Naming Seafood

Most consumers might not know the fish they are buying may not be the species they think it is. This is due in large part to limited information at the point of sale. Seafood labels often feature vague market names, which do not reveal the true identity of the fish, misleading consumers as well as putting them at increased risk of foodborne illness and preventing them from making sustainable seafood choices. The FDA issues guidance on how to label seafood sold in interstate commerce, which is referred to as the Seafood List.<sup>7</sup> The Seafood List contains the Latin scientific name, common name, and "acceptable market name" for over 1,800 species of seafood known or thought to be sold in the U.S.

Ensuring that a species-specific name accompanies each catch from the boat to the plate is essential for traceability, which is a key tool to ending IUU fishing and seafood fraud. The scientific Latin species name is the obvious choice, as it is the only name recognized in every language and already used on regulatory documents around the globe. To provide consumers with the most accurate information, the scientific name or common name should be present, along with any other FDA-approved acceptable market name retailers choose to include. This species-specific information is necessary to mitigate health threats, ensure a fair and transparent marketplace, bolster consumer choice regarding sustainability, and engage the public in the fight to end IUU fishing and seafood fraud.

## Seafood Names and Consumer Health

#### Mercury

The FDA recommends that women who might become pregnant, pregnant women, nursing mothers and young children incorporate fish and shellfish into their diets because of the health benefits these foods

http://www.accessdata.fda.gov/scripts/fdcc/?set=seafoodlist

<sup>&</sup>lt;sup>5</sup> Blank, C. (2014)"FDA seafood fraud investigation finds fewer offences". Seafood Source.

http://www.seafoodsource.com/news/foodservice-retail/27075-fda-seafood-fraud-investigation-finds-fewer-offenses. Oct, 27, 2014. <sup>6</sup> NOAA. NOAA Fish Watch, "Combatting Seafood Fraud". <u>http://www.fishwatch.gov/buying\_seafood/combating\_seafood\_fraud.htm</u> (6/1/15);

Doyle, Alister.( 2013) "Interpol targets illegal fishing, seafood fraud". Reuters. February 25, 2013. <sup>7</sup> Food and Drug Administration of the United States (FDA). "The Seafood List". Accessed *6/18/2015* 



impart, especially for heart health and proper growth and development. Unfortunately, these same populations are also more vulnerable to health problems associated with ingesting mercury at levels found in some fish species. The FDA's current advice is for these risk groups to completely avoid certain fish, specifically tilefish, king mackerel, shark and swordfish, and to limit consumption of some tunas due to higher mercury levels.<sup>8</sup> But consumers are rarely given the information they need to respond to and avoid these risks, even when these advisory fish are "properly labeled" with their FDA "acceptable market names."

For example, a pregnant woman trying to follow the FDA advice may order "Spanish mackerel," unaware that it is actually a king mackerel (Scomberomorus cavalla), which is one of the fish she is advised to avoid. This is because the FDA lists "Spanish mackerel" as one acceptable market name for king mackerel.<sup>9</sup> The FDA urges these same consumers to avoid tilefish that are found in the Gulf of Mexico, but three of seven species marketed as tilefish in the U.S. are not found in the Gulf, while the other four (blue, blueline, goldface and sand tilefish) range in both the Gulf of Mexico and the Atlantic.<sup>10</sup> Given this lack of specificity in labeling, people who want to avoid mercury would need to avoid all fish species called tilefish, even though they only need to skip the Gulf species. Only referencing the acceptable market name limits their options unnecessarily.

The government also currently advises at-risk groups to limit consumption of albacore and tuna steaks due to their high mercury content, while encouraging consumption of "light" tuna.<sup>11</sup> Although regulations define what species of tuna is allowed in "white" canned tuna (albacore), no such regulation governs which tuna species may be included in the "light" tuna can.<sup>12</sup> For the other 15 species of fish sold simply as "tuna," it is anyone's guess as to what consumers are actually getting. Since mercury levels in tuna can vary greatly by species and location of harvest, offering species-specific names for tuna will allow consumers the ability to purchase and eat lower-mercury tuna.<sup>13,14,15</sup>

#### **Poisonings/Toxins**

Ciguatera fish poisoning (CFP) is caused by toxic algae and primarily affects reef fish in the tropics and semi-tropics. In the U.S., fish eaters from Florida, Hawaii, Puerto Rico, the U.S. Virgin Islands, Guam and the Marshall Islands are at particular risk, but the wider trade of reef fish from affected waters spreads this risk more broadly. CFP is a costly illness that affects over 50,000 people worldwide every year.<sup>16</sup> On

<sup>&</sup>lt;sup>8</sup> Environmental Protection Agency (EPA) and FDA. (2004) What You Need to Know About Mercury in Fish and Shellfish. (March, 2004.) Accessed 6/15/15 at http://water.epa.gov/scitech/swguidance/fishshellfish/outreach/advice\_index.cfm

FDA. "The Seafood List". (See footnote 7)

<sup>&</sup>lt;sup>10</sup> Ibid; World Register of Marine Species (WoRMS) distribution maps. Accessed 6/22/15.at http://www.marinespecies.org/aphia.php?p=checklist <sup>11</sup> EPA and FDA. (2004). "What you Need to Know..." (see footnote 8)

<sup>&</sup>lt;sup>12</sup> Code of Federal Regulations of the United States of America (CFR). Title 21, Volume 2, Chapter I- Food and Drug Administration, Department of Health and Human Services, Subchapter B-Food for Human Consumption-Fish and Shellfish-Canned Tuna. (CFR 161.190). Updated 2014. http://www.gpo.gov/fdsys/granule/CFR-2012-title21-vol2/CFR-2012-title21-vol2-

sec161-190 <sup>13</sup> EPA. Mercury Levels in Commercial Fish and Shellfish (1990-2010). Last accessed 6/21/15 at http://www.fda.gov/food/foodborneillnesscontaminants/metals/ucm115644.htm

Sunderland, E.M.; (2007) Mercury Exposure from Domestic and Imported Estuarine and Marine Fish in the U.S. Seafood Market Environ Health Perspectives 115:135-142. doi:10.1289/ehp.9377

<sup>&</sup>lt;sup>15</sup> Lowenstein, J.H.; Burger, J; Jeitner, C.W.; Amato, G.; Kolokotronis, Sergio-Orestis; Gochfeld, M. (2010). "DNA Barcodes Reveal Species-Specific Mercury Levels in Tuna Sushi that Pose a Health Risk to Consumers". Biology Letters. 6: 692-695 http://rsbl.royalsocietypublishing.org/content/early/2010/04/13/rsbl.2010.0156. <sup>16</sup> CDC. Chapter 2. The Pre-Travel Consultation: Counseling and Advice for Travelers. (2013). Accessed 6/21/15 at



average, the annual U.S. cost of treating CFP is estimated to be \$21 million.<sup>17</sup> Much of this cost could be avoided if consumers had access to more accurate information about their fish, including the species they are eating. For example, seven different species may be marketed as "Spanish mackerel," but only two, the narrow-barred mackerel and the king mackerel, carry any risk of causing CFP.<sup>18</sup> King mackerel is also a FDA high-mercury advisory fish, that can masquerade under the name of Spanish mackerel.

A naturally occurring toxin contained in puffer fish, known as tetrodotoxin, ranks as one of the most dangerous marine toxins because it can be fatal and is more poisonous than cyanide. Another marine toxin, saxitoxin, or paralytic shellfish poisoning, has similar toxic properties. Consumers are exposed to both of these toxins through the consumption of certain species of puffer fish, but not others, as some species are harmless and others may be rendered harmless when farmed.<sup>19</sup> Knowing which puffer species one is eating, whether it was farm raised or wild caught and how it was handled is therefore vital. Despite this threat, some species of puffer fish are a highly prized and expensive delicacy in Japan, but must be prepared by a specially trained chef who can remove the toxin before it is served. Because there are tight import restrictions on the expensive but toxic puffer species from Japan, the potential for illegal trade and mislabeling of this species is high.<sup>20</sup>

At least 11 species of puffer fish are known to be sold in the U.S., as are several related groups (or genera) that contain many more species. These include domestic species that harbor the saxitoxin, particularly in Florida waters, for which the FDA and Florida have issued health advisories.<sup>21</sup> All of these fish, including those which are harmful or deadly (e.g. southern, bandtail, and checkered puffer), are legally sold under the acceptable market name of "puffer." At the same time, some puffer fish on this list are harmless, like the domestic northern puffer and the longnose puffer, if farmed.<sup>22</sup> In these cases, the availability of a species-specific name can be a matter of life or death.

#### Some puffer fish are harmless. Others can kill you. Wouldn't you like to know which one is on your plate?

Known puffer fish species number around 120 and are found mostly around the tropics and semitropical regions of all oceans. All of them puff up to several times their normal size when threatened. Puffer fish are sometimes sold under colloquial or vernacular names like fugu, bok, blowfish, globefish, swellfish, balloonfish or sea squab.

http://wwwnc.cdc.gov/travel/yellowbook/2014/chapter-2-the-pre-travel-consultation/food-poisoning-from-marine-toxins Anderson, D.M., Hoagland, P.; Kaoru, Y.; White, A.W. (2000). Estimated Annual Economic Impacts from Harmful Algal Blooms (HAB's) in the United States. Woods Hole Oceanographic Institution (WHOI). Accessed 6/18/15 at

https://www.whoi.edu/fileserver.do?id=24159&pt=10&p=19132 <sup>18</sup> FDA. (2011). Fish and Fishery Products Hazards and Controls Guidance, 4<sup>th</sup> edition-April 2011. Chapter 3 http://www.fda.gov/downloads/Food/GuidanceRegulation/UCM251970.pdf

E.g. Nuñez-Vazquez, E. J., Garcia-Ortega, A., Campa-Cordova, A. I., de la Parra, I. A., Ibarra-Martinez, L., Heredia-Tapia, A., & Ochoa, J. L. (2012). Toxicity of Cultured Bullseye Puffer Fish Sphoeroides annulatus. Marine Drugs, 10(2), 329-339. doi:10.3390/md10020329 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3297000/

<sup>20</sup> FDA. (2012). The Bad Bug Book. 2nd edition. Accessed 6/15/15 at

http://www.fda.gov/downloads/Food/FoodbornellInessContaminants/UCM297627.pdf <sup>21</sup> FDA. (2007). "Advisory on Puffer Fish". Updated January 17, 2014. Accessed 6/15/15 at

http://www.fda.gov/Food/RecallsOutbreaksEmergencies/SafetyAlertsAdvisories/ucm085458.htm

<sup>&</sup>lt;sup>22</sup> Nuñez-Vazquez, E. J., Garcia-Ortega, A., Campa-Cordova, A. I., de la Parra, I. A., Ibarra-Martinez, L., Heredia-Tapia, A., & Ochoa, J. L. (2012). "Toxicity of Cultured Bullseye Puffer Fish Sphoeroides annulatus". Marine Drugs, 10(2), 329-339. doi:10.3390/md10020329 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3297000/



#### Health and Shrimp

Americans consume more than four pounds of shrimp per person every year, making it the most consumed seafood by volume in the U.S. To meet this demand, 94 percent of the shrimp in the U.S. is imported—mainly from India, Indonesia and Thailand—and the vast majority of this shrimp is farmed.<sup>23</sup> Some shrimp farmers may make liberal use of antibiotics in an attempt to prevent infections that easily spread in the crowded and dirty ponds. These antibiotics can increase the development of antibiotic-resistant bacteria, raising the possibility of serious or life-threatening infections.<sup>24</sup> Technically, shrimp found with antibiotic residue are not allowed in the U.S., however, only a very small percentage of shrimp entering the U.S. is subject to a physical inspection. In contrast, many of the countries that export shrimp to the U.S., like China and Vietnam, do not have such restrictions on antibiotics, so these drugs may very well be entering the U.S. seafood supply.

Along with the concern over antibiotic use, is the worry of exposure to harmful bacteria. A recent Consumer Reports investigation analyzed domestic, wild-caught shrimp, as well as imported farmed and wild shrimp, for the presence of bacteria. An average of 62 percent of imported shrimp contained bacteria, compared to 20 percent for U.S. wild–caught. Some of the bacteria identified had the potential to cause food-borne illness, or even fatalities, including vibrio, e-coli and even MRSA, an antibiotic-resistant form of staphylococcus bacteria.<sup>25</sup> Using the scientific name for each shrimp species would help mitigate these threats. Globally, almost all shrimp farms use one of just two species: whiteleg shrimp (*L. vannamei*) and the giant tiger prawn (*P. monodon*).<sup>26</sup> Therefore, using a species-specific name throughout the supply chain would help prevent importers from passing off farmed shrimp as wild, in an attempt to avoid testing for drug contamination. Providing consumers with a species-specific name would also allow them to make more informed decisions about their shrimp.

Using species-specific names for consumer-facing goods will decrease the incidence of seafood-borne illnesses as well as create new opportunities for seafood consumption.

#### Seafood Names and Ocean Health

From dolphin bycatch in the tuna fishery to worries over dwindling fish stocks, seafood sustainability is a growing concern for Americans. According to a 2012 survey conducted by Mintel, a consumer market analyst, 84 percent of Americans were concerned about the depletion of the seafood they consume, and more than one-third of respondents were confused about which seafood options are sustainably sourced.<sup>27</sup> Providing one name for one fish to consumers could allay this confusion and would allow consumers to make more sustainable choices.

 <sup>&</sup>lt;sup>23</sup> Consumer Reports. (2015). "How Safe is Your Shrimp? Consumer Reports' Guide to Choosing the Healthiest, Tastiest, and Most Responsibly Sourced Shrimp". April 24, 2015. <u>http://www.consumerreports.org/cro/magazine/2015/06/shrimp-safety/index.htm#trip</u>
<sup>24</sup> Ibid.

<sup>&</sup>lt;sup>25</sup> Ibid.

 <sup>&</sup>lt;sup>26</sup> Warner, K.; Golden, R.; Lowell, B.; Disla, C.; Savitz, J.; Hirschfield, M. (2014). Shrimp: Oceana Study Reveals Misrepresentation of America's Favorite Seafood. Oceana. October, 2014.
<sup>27</sup> Plume, C. Seafood Consumption Trends in the US, and the Coral Triangle Connection. (2014). World Wildlife Fund. March 11,

<sup>&</sup>lt;sup>27</sup> Plume, C. Seafood Consumption Trends in the US, and the Coral Triangle Connection. (2014). World Wildlife Fund. March 11, 2014. <u>http://wwf.panda.org/what\_we\_do/where\_we\_work/coraltriangle/?217632/Seafood-consumption-trends-in-the-US-and-the-Coral-Triangle-connection</u>



In Oceana's studies on seafood fraud, snapper and grouper were among the varieties most consistently replaced with other fish.<sup>28</sup> This is probably due to the fact that they fetch a high market price (a great incentive for fraud), and also because the current labeling rules make the names "snapper" and "grouper" surprisingly confusing.

According to the FDA, 56 different species of fish can be sold under the acceptable market name of "snapper." Even so, Oceana's investigations found that 87 percent of snapper were mislabeled nationwide. In fact, not only were fish within the snapper family mislabeled, but 33 different species of fish were found to be substituted for the snapper sold. The majority of snapper sold in the U.S. (82 percent of the species) have not had the population status of their stocks evaluated, so it is unclear whether most snapper species are actually sustainably fished or in jeopardy. Of the minority of the species that have been assessed, 20 percent face a high risk of extinction in the wild.<sup>29</sup> Seafood buyers have difficulty differentiating the responsibly caught snapper without the use of species-specific names.

 <sup>&</sup>lt;sup>28</sup> Warner, K. et al. (2014). Shrimp: Oceana Study Reveals... (See footnote 26).
<sup>29</sup> IUCN. (2015). The IUCN Red List of Threatened Species. Version 2015.1. Accessed 6/15/15 at <a href="http://www.iucnredlist.org">http://www.iucnredlist.org</a>.





\*Extinction risk as determined by IUCN. Purple area depicts the fraction of snapper species sold in the U.S. that have been evaluated.

The FDA also allows 64 different species of fish to be sold under the acceptable market name "grouper."<sup>30</sup> Oceana identified a lower fraud rate of grouper compared to snapper (26 percent), but the types of fish being misrepresented were much more disconcerting. For example, gulf grouper, an IUCN endangered species, and speckled hind, an IUCN critically endangered species, were both misrepresented and passed off as more sustainable fish. Most of the species marketed under the name "grouper" have been evaluated for sustainability. Thirty six percent (23/64) of these species are at risk of extinction and 3 percent of those are critically endangered.

<sup>&</sup>lt;sup>30</sup> FDA. "The Seafood List". (See footnote 7)





\*Extinction risk as determined by IUCN.

#### Industry Initiatives

Many industry stakeholders have advocated for the use of Latin scientific names in supply chain labeling, and species-specific names for consumers, as being in the best interest of their bottom lines. The Southern Shrimp Alliance, an organization of shrimp fishers and processors in eight states, ranging from South Carolina to Texas, have recommended species-specific labels that are both industry-employed and consumer-facing for all types of shrimp because of their concern over unfair competition with cheaper



farmed imports.<sup>31</sup> Since wild and farmed shrimp are largely different species.<sup>32</sup> species-specific information is essential for consumers to determine the difference among all the species named simply "shrimp." It would also enable regulatory bodies to more effectively identify fraud when imported, farmed species are misrepresented as wild-caught shrimp.

Tri Marine, an international company supplying canned tuna brands, tuna processing plants and fishing companies, is another group advocating for the use of a single species-specific name for consumerfacing seafood goods. For instance, terms like "light meat" for canned tuna can be used for several different species, some of which have limitations or prohibitions in place, creating an inherent risk of IUU fishina.<sup>33</sup> Use of generic terms like "light meat tuna" impedes the verification of the type of species fished, where it was fished, the conservation status of that species as well as its mercury level.

#### International Trade and Regulation: Trending Toward Species-Specific Labeling

Tracing seafood with species-specific information is becoming the norm in the seafood trade. To successfully combat IUU fishing and seafood fraud, however, international and domestic data collection and seafood naming must be consistent and universal. Several U.S. regulatory agencies and treaties already require the scientific name of seafood to be reported. The FDA's Food Export Certificate requires that the scientific name be listed for every seafood product,<sup>34</sup> and the Magnuson-Stevens Act mandates that the scientific name of each species caught in U.S. waters be identified upon landing.<sup>35</sup> The U.S. Tuna Tracking and Verification Program also requires the scientific name of each species landed, as do a number of other international tuna treaties.<sup>36</sup> The U.S. Bioterrorism and Response Act of 2002 and the U.S. Farm Security and Rural Investment Act of 2002 both collect the Latin name of seafood caught as a condition of the management rules. Additionally, certification programs like the Marine Stewardship Council, Global Trust, Friends of the Sea either suggest or require this information to remain with the catch throughout the supply chain and to be available to consumers.

The Latin scientific name is increasingly used internationally as the identifying name for seafood species because of its universality. The U.S. exported over 816 million pounds of seafood products to the European Union in 2014, totaling over \$1.3 billion and accounting for over 20 percent of U.S. seafood exports.<sup>37</sup> The EU requires that all unprocessed fishery products sold in stores and online are labeled with the commercial name of the fish, the scientific name, the relevant geographical catch area, the production

<sup>&</sup>lt;sup>31</sup> Williams, J. (2015). "Comments Regarding Recommendation of the Presidential Task Force on Combatting IUU Fishing and Seafood Fraud." The Southern Shrimp Alliance. Comment 10. January 20, 2015. Accessed 6/15/15 at

http://www.shrimpalliance.com/wp-content/uploads/2015/01/SSA-comments-Task-Force-Recommendations-1-20-15-final.pdf <sup>32</sup> Warner, K. ( 2014). Shrimp: Oceana Study Reveals...(See footnote 26).

<sup>&</sup>lt;sup>33</sup> Tri Marine. (2015). "Presidential Task Force Recommendations on IUU Fishing and Seafood Fraud." Recommendation 10. January 20<sup>th</sup>, 2015. Accessed 6/15/15 at <u>http://www.regulations.gov/#!documentDetail;D=NOAA-NMFS-2014-0090-0083</u> <sup>34</sup> FDA. "Food Export Certificate Application-Step-by-Step Instructions". September, 2012. Accessed 6/21/15:

http://www.fda.gov/Food/GuidanceRegulation/ImportsExports/Exporting/ucm260332.htm#enaSection3.

http://www.fda.gov/Food/GuidanceRegulation/ImportsExports/Exporting/ucm260332.htm#enaSection3

The Magnuson-Stevens Fishery Conservation and Management Act of 1976, Section 303, 16 U.S.C. §§ 1801 et seq. (1976) <sup>36</sup> Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR), April 1982.

https://www.ccamlr.org/en/document/publications/basic-documents; International Convention on the Conservation of Atlantic Tunas (ICCAT), 1972. https://www.iccat.int/Documents/Commission/BasicTexts.pdf; Convention for the Conservation of Southern Bluefin Tuna, May 1993. http://www.ccsbt.org/userfiles/file/docs\_english/basic\_documents/convention.pdf <sup>37</sup> National Marine Fisheries Service (NMFS)-Fisheries Stats. and Economics Division. "Exports-January 2014 to December 2014".

Updated 2015. Accessed 5/15/15 at

http://www.st.nmfs.noaa.gov/pls/webpls/trade\_prdct\_cntry\_ind\_mth.results?qtype=EXP&qmonthfrom=01&qmonthto=12&qyearfrom= 2014&gyearto=2014&gprod name=%25&gcountry=EU&gsort=COUNTRY&goutput=TABLE



method and whether the fisheries product has been previously frozen.<sup>38</sup> Since the EU is the largest global importer of seafood, were the U.S. and the EU to use the same naming system for seafood, the rest of the world would likely follow suit. Together the U.S. and the EU account for 50 percent of global seafood imports by value.<sup>39</sup>

Other nations are also currently redesigning their import forms to require Latin species names. In January of this year, Indonesia revised its seafood import rules to require species-specific information, due to a reduction of acceptable seafood imported for domestic consumption.<sup>40</sup> Additionally, the China Customs Administration is currently in the process of upgrading its commodity coding system to align with the species-level specificity required by the EU import system.<sup>41</sup>

The National Fisheries Institute, representing member companies from American fishing vessels to seafood restaurants, recently organized a traceability working group project to identify the key data elements necessary to properly identify seafood sources along the supply chain. The working group's first recommendation was to use the Latin scientific name for seafood product identification throughout the entire supply chain.<sup>42</sup> This recommendation was met with support from both industry groups and non-governmental organizations, as they have recognized that using the scientific name is standard across countries and regulatory systems, reduces redundancy and is consistent with standards set by the Food and Agriculture Association of the United Nations.

## Conclusion: What's in a Name? Quite a Lot

A universal and consistent, species-specific naming scheme is needed in order to ensure a safe, legal, and transparent. The scientific name is demonstrably the most useful candidate for such a system in international and domestic trade. Many of the problems plaguing the seafood industry could be mitigated or eliminated if a scientific species name were to follow every seafood product, from the fishing vessel or farm to the consumer.

A simple name could have dramatic effects on consumer safety, market fairness and our oceans' biodiversity and abundance. One name for one fish would benefit consumers, the seafood industry, and governments across the world.

<sup>&</sup>lt;sup>38</sup> Commission Regulation (EC) No 1010/2009 of 22 October 2009 laying down detailed rules for the implementation of Council Regulation (EC) No 1005/2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing . October 22<sup>nd</sup>, 2009. Office Journal of the European Union; Commission Implementing Regulation (EU) No 1420/2013 of 17 December 2013 repealing Regulations (EC) No 347/96, (EC) No 1924/2000, (EC) No 1925/2000, (EC) No 2509/2000, (EC) No 2813/2000, (EC) No 2814/2000, (EC) No 150/2001, (EC) No 939/2001, (EC) No 1813/2001, (EC) No 2065/2001, (EC) No 2183/2001, (EC) No 2318/2001, (EC) No 2493/2001, (EC) No 2306/2002, (EC) No 802/2006, (EC) No 2003/2006, (EC) No 696/2008 and (EC) No 248/2009 following the adoption of Regulation (EU) No 1379/2013 of the European Parliament and of the Council on the common organization of the markets in fishery and aquaculture products. Office Journal of the European Union. December 17<sup>th</sup>, 2013.

<sup>&</sup>lt;sup>39</sup> FAO. (2015). Food Outlook. (See footnote 1)

 <sup>&</sup>lt;sup>40</sup> USDA Foreign Agriculture Service. (2015) "Indonesia Revises Seafood Import Rules". *Global Agricultural Information Network.* http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Indonesia%20Revises%20Seafood%20Import%20Rules\_Jakarta\_Indone sia\_1-13-2015.pdf
<sup>41</sup> Clarke, S. (2009). "Understanding China's Fish Trade and Traceability Systems". Traffic, East Asia. Accessed 6/15/15 at

<sup>&</sup>lt;sup>41</sup> Clarke, S. (2009). "Understanding China's Fish Trade and Traceability Systems". Traffic, East Asia. Accessed 6/15/15 at <u>http://www.traffic.org/fisheries-reports</u>.

<sup>&</sup>lt;sup>42</sup> National Fisheries Institute. (2015). "Pre-Conference Workshop: Exploring the Elements of Effective Seafood Traceability, Including Key Data Elements." Sea Web Seafood Summit. February 8<sup>th</sup>, 2015. Accessed 6/15/15 at http://www.fishwise.org/images/pdfs/2015.03.12 Summary\_Seafood%20Summit%20Traceability%20Workshop.pdf



The president's task force should recommend the use of the scientific name for documentation and traceability purposes as well as provide consumers with either the scientific name or common name. Consumer safety, market fairness and the continued economic and ecological viability of our oceans depend on it.