# STOLEN SEAFOOD

The Impact of Pirate Fishing on Our Oceans

2013 MARGOT L. STILES ARIEL KAGAN EMILY SHAFTEL BETH LOWELL

Photo: Stock.Xchng





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# **INTRODUCTION**

Pirate fishing may be understood best by standing on the beach and gazing out to sea. Almost all crime at sea takes place beyond the horizon line, hidden from view. This vast wilderness is exploited not only for fish, but as a hiding place for criminal activities.

Stolen fish are caught illegally, evading a wide range of safeguards to undercut the costs of doing business. Blatant violation of catch limits, gear restrictions and safety

precautions are frequently carried out by a small fraction of fishermen, undermining the efforts of responsible fishing companies. The resulting damage to marine resources can lead to smaller catches, slowed recovery of depleted stocks or even collapse for the most vulnerable fisheries.<sup>1</sup>

#### "Illegal, unregulated and unreported fishing is a global phenomenon with devastating environmental and socio-economic consequences."

Joint Statement between the European Commission and United States Government, Maria Damanaki and Jane Lubchenco 2011

Pirate, or illegal, fishing is often lumped together with unregulated

and unreported fishing under the abbreviation "IUU." Unregulated fishing takes place in nations that lack the resources to establish fisheries laws or monitoring. Some unreported fishing stems from a lack of scientific data collection, while other unreported catches conceal illegal activity. These three dimensions of illegal fishing are a major threat to the oceans, consumers and seafood businesses around the world.

## HOW MUCH SEAFOOD IS STOLEN?

Global estimates suggest a minimum of 20 percent of seafood worldwide is caught illegally, representing economic losses between \$10 to \$23 billion and 11 to 25 million metric tons of fish.<sup>2</sup> While the precise estimates of pirate fishing are difficult to calculate due to its clandestine nature, it appears to be widespread.

#### \$10 to 23 billion of seafood is stolen each year.

Agnew et al. 2009

The majority of seafood businesses legally catch and sell fish. However, according to Tony Makkai, Director of the Australian Institute of Criminology, "there is a small but significant group of habitual offenders who deliberately and regularly flout the regulations."<sup>3</sup>

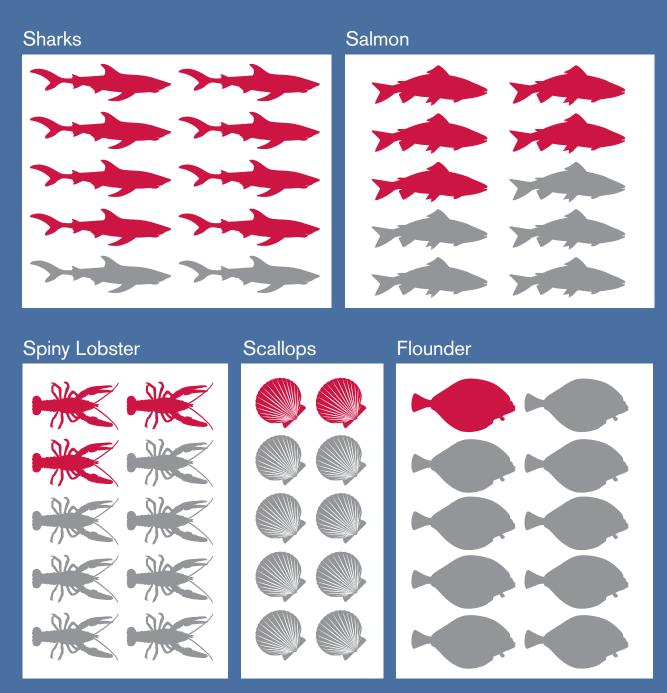
Comparing the amount of fishing reported to the amount of product actually being sold leads to market-

based estimates of how much illegal, unreported and unregulated fishing is occurring.

- The shark fin trade in Hong Kong suggests three to four times more sharks are killed than official reports claim, yielding \$292 to \$476 million in shark fin sales.<sup>4</sup>
- Russian sockeye salmon caught illegally is estimated to be 60 to 90 percent above reported levels based on the amount of fish being traded, representing economic losses of \$40 to \$74 million.<sup>5</sup>
- The infamous illegal trade in Chilean sea bass (a market name for toothfish) from waters around Antarctica is hard to pin down, with estimates for illegal catches ranging from five to 10 times greater than the official reported catch.<sup>6</sup>
- Swordfish and tuna in Greece and cod in the United Kingdom are estimated to be illegally caught half of the time.<sup>7</sup>
- Bluefin tuna on the black market may reach \$4 billion annually, with an estimated five to 10 times higher volume of illegally caught fish than the official catch.<sup>8</sup>
- Illegal catches of skipjack, yellowfin, albacore and bigeye tunas are estimated at \$548 million annually.<sup>9</sup>



# Seafood Most Likely to be Stolen



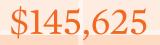
Red indicates the proportion of global catches that are illegally caught.

Adapted from Agnew et al. 2009 and Marine Resources and Fisheries Consultants. 2005. Review of Impacts of Illegal, Unreported and Unregulated Fishing on Developing Countries, Final Report.

Beyond the fishermen at sea, many more individuals, companies and nations are involved in other transactions such as landing, processing and marketing illegally caught fish.<sup>10</sup> Vessel owners and others in the supply chain reap the benefits, while the fishermen themselves may see little profits.

The only comprehensive global records of how many fish are being caught are reported to the United Nations by individual countries. These reports are received as is without any external confirmation of their accuracy, and in many cases the individual countries do not monitor their fisheries catches on a nationwide scale. This data deficiency limits basic understanding of the problem of overfishing.

A Year Of Stolen Fish Examples of illegal fish caught in one year



of taxes evaded by smuggling Asian catfish into the U.S.<sup>11</sup>

343.5

pounds of illegally harvested queen conch<sup>12</sup>

3 to 4

sharks are finned by pirates for every one caught legally<sup>13</sup> \$1,000,000,000

taken from Africa by pirate fishing<sup>14</sup>

12,140

pounds of illegally harvested striped bass<sup>15</sup>

# of mislabe

# \$4,000,000,000

of bluefin tuna on the black market<sup>16</sup>

1,500

pounds of salmon changed from "Product of China" to "Product of Russia"<sup>17</sup>

\$13,300,000

in subsidies received by a single illegal fishing company<sup>18</sup>

\$1,000,000

of mislabeled shrimp in the U.S.<sup>19</sup>

160,072

pounds of coho salmon labeled as chinook for a profit of \$1.3 million<sup>20</sup>

## **ILLEGAL FISHING HURTS PEOPLE**

An estimated 260 million jobs are provided by marine fisheries around the world.<sup>21</sup> This number includes jobs in fishing and additional jobs in processing, distributing and marketing the catch. Many of these jobs support additional family members.<sup>22</sup> Fishing jobs are often available in poor countries and remote coastal communities with few other employment opportunities. Unfortunately these communities are also vulnerable to hazardous working conditions and human trafficking frequently caused by illegal fishing.

"Vessels involved in illegal, unreported, [and] undeclared fishing are really old and at the point of being scrapped. If they sink or are arrested, [financial] losses are minimal."

Survivor of the vessel *Amur*, which sank and killed 14 crew members, Mercopress 2005

#### **Sinking Ships**

Fishing is one of the most high-risk professions in the world, ranked alongside bomb detection and oil rig maintenance even under the best of circumstances.<sup>23</sup> Safety at sea is always a concern, and laborers working for illegal fishing companies are especially vulnerable to unsafe equipment, lack of emergency preparedness and vessels that may not be seaworthy.

A wrecked tuna boat off of Saipan. Photo: John Starmer/Marine Photobank

Owners tend to invest as little as possible in pirate fishing vessels to minimize the cost of confiscated gear should they be caught in the act.<sup>24</sup> Unseaworthy vessels that sink while operating illegally often take their crew's secrets with them to the grave. However, the stories told by survivors suggest that capsizing is not uncommon. In 2010, an illegal fishing vessel of South Korean ownership capsized and sank quickly off New Zealand, killing six people and leaving three missing.<sup>25</sup>

#### **Human Trafficking**

A recent review by the United Nations documented "cruel and inhumane treatment in the extreme" involving forced labor on fishing vessels, adult and child trafficking, abuse and some reported deaths.<sup>26</sup> One study estimated that 22,000 people from Laos were brought into the fishing industry in Southeast Asia against their will over the course of 10 years, with additional reports from Burma, Cambodia, Vietnam, Indonesia, Russia and Ukraine. These workers supply labor in nations with relatively high environmental and other regulatory standards on land — which are not effectively enforced at sea, including New Zealand, the United Kingdom and Ireland.<sup>27</sup>

Aquaculture and seafood processing are also affected. Conditions "little short of medieval" at one Thai shrimp factory were uncovered during a police raid.<sup>28</sup> The U.S. Department of Labor reported forced labor or child labor in seafood processing in Bangladesh, Burma, Cambodia, El Salvador, Ghana, Honduras, Nicaragua and Thailand (2010).



Young children working at a shrimp processing plant. Photo: Solidarity Center

#### **ILLEGAL FISHING HURTS PEOPLE**



A fish processing facility in Burma. Photo: Kieran Kelleher/Marine Photobank

"Only when foreign buyers come to the factory are we issued boots and gloves, and as soon as they are gone, these are taken away again."

Shrimp processing worker in Chittagong, Bangladesh

#### **Marginal Food Safety**

Operators that cut corners on fishing and labor laws may also ignore food safety standards. Fish processing on land is reviewed by the U.S. Food and Drug Administration, and is required to have a plan in place for sanitation, including the cleanliness of work surfaces and elimination of pests.<sup>29</sup> However, illegally caught seafood may spend days or weeks on rat-infested ships.<sup>30</sup>

One illegal fishing vessel, the *Bangun Perkasa*, was rat-infested and streaked with rust when intercepted by the U.S. Coast Guard south of Alaska in 2011.<sup>31</sup> The 30 tons of squid on board the vessel were captured illegally using destructive driftnets that also kill whales, sea turtles and other marine life.

Cholera has sickened U.S. consumers who ate "illegally smuggled, temperature-abused" seafood imports from South America.<sup>32</sup> Cholera is associated with poor sanitation and contaminated water and can be contracted by eating raw shellfish or shellfish that has been cooked and then recontaminated during processing or shipment.<sup>33</sup> A government agency report from Hong Kong advises consumers to avoid illegal seafood vendors to reduce the risk of cholera.<sup>34</sup>

During an interview, a shrimp processing worker in Chittagong, Bangladesh described deliberate efforts to evade enforcement of sanitary standards: "Only when foreign buyers come to the factory are we issued boots and gloves, and as soon as they are gone, these are taken away again."<sup>35</sup>

### ILLEGAL FISHING HURTS VULNERABLE SPECIES

#### **Raiding National Parks**

The remote Galapagos Islands hold a special place in our collective imagination, home to penguins, fur seals, whales, dolphins, albatrosses and marine iguanas. The government of Ecuador set aside the islands in 1959 with additional marine protections in 1974 and 1998.<sup>36</sup> The Galapagos Islands are designated as a national park and are surrounded by 133,000 square kilometers of protected waters inside a marine reserve. Recognized as a World Heritage Site, these islands nonetheless remain under constant threat from illegal fishing by poachers.<sup>37</sup>

Enforcement agents monitor all fishing activity and intercept violators on a regular basis. Large commercial vessels are required to have tracking devices registered with the Ecuadorian fisheries agency, though some bend the rules by sending in smaller vessels to catch fish on longlines and deliver the catch across the boundary.<sup>38</sup> In the summer of 2011, park rangers, along with members from the Ecuadorian navy, apprehended 30 fishermen on a commercial longline fishing vessel inside the reserve with 357 sharks, including 286 thresher sharks — a species listed as vulnerable by the International Union for Conservation of Nature (IUCN).<sup>39</sup>

National parks in Australia, Thailand and Guinea Bissau are also plagued by illegal fishing.<sup>40</sup> Pirate fishermen often target the richest and most vulnerable ecosystems in spite of efforts to protect them.



#### **Poaching Protected Species**

Marine animals preyed upon by pirate fishing are also some of the most depleted, including abalone, spiny lobster, sharks, seahorses, sturgeon, aquarium fish, groupers, wrasses and other reef fish.<sup>41</sup> In addition to the ecological value of endangered species like sea turtles and sharks on a coral reef, scuba divers are willing to pay more for a

"Systematic criminal activity... is more likely to target the vulnerable and most valuable species."

Putt 2007

dive where they are likely to see these species, adding up to hundreds of millions of dollars annually in added value for countries where these species are protected.<sup>42</sup>

The trade in dead sea turtle shells is the primary reason why hawksbill turtles

are now critically endangered.<sup>43</sup> Malaysian authorities captured a pirate fishing vessel with more than 250 hawksbill and green sea turtles on board, all dead except for 20 survivors, despite national and international laws protecting both species of sea turtles.<sup>44</sup> The vessel was only 17 nautical miles offshore and followed a similar arrest days earlier of another pirate vessel with 72 dead turtles.

Like sea turtles, sharks are slow-growing and long-lived, making them particularly vulnerable to overexploitation. Illegal fishing for sharks takes place worldwide, with high levels of poaching in Central and South America, the Western and Central Pacific and

northern Australia.<sup>45</sup> Many of these sharks have their fins cut off and are then thrown back in the water to die. On one vessel, officials arrested fishermen from Louisiana who were hiding 12 sacks of shark fins in a secret compartment. In the world's largest market for shark fins, Hong Kong, nearly 10 million kilograms of fins were imported from 87 countries in just one year.<sup>46</sup>

Dolphins and whales are killed by illegal fishing using banned gears, with severe consequences for their populations. At the peak of their illegal use, driftnets in the Mediterranean captured up to 10,000 dolphins, porpoises and whales each year.<sup>47</sup> These illegal nets are one of the main reasons for dolphin strandings on European beaches. Destructive smallmesh nets are also used illegally in West Africa and other regions.<sup>48</sup>

The fisheries most attractive to organized crime are high value, low volume and exported globally. Once within the criminal realm, fish and marine life are traded along with endangered species, including rhino horns and ivory. Expensive, easily transported seafood products become currency traded in other illegal commodity transactions involving drugs, arms and human trafficking.<sup>49</sup>



A long snouted seahorse. Photo: Enrique Talledo

#### **ILLEGAL FISHING HURTS THE ECONOMY**



# **ILLEGAL FISHING HURTS THE ECONOMY**

Responsible fishermen can suffer price gouging and loss of business when selling in the same market as illegal operators who do not meet the same environmental or sanitary standards. Florida law enforcement agents estimate that a single illegal fisherman stole an estimated \$1,400 per week from other fishermen by exceeding the catch limit on king mackerel.<sup>50</sup>

Economic modeling suggests that illegal fishing reduced profitability by 10 percent for fisheries operating in Australia's Gulf of Carpentaria, reducing total revenues by about one million Australian dollars in a single year.<sup>51</sup> Eliminating this illegal activity could increase profits for responsible fishermen by up to 15 percent over time.<sup>52</sup>

Cracking down on illegal fishing can boost the economy, restoring profitability to the fishery. By eliminating illegal small-mesh nets in Guinea-Bissau, profits for other fishermen could increase between 50 and 100 percent.<sup>53</sup> Analysis of illegal catches of bluefin tuna predicts that tuna fishermen reap more benefits if illegal activity is eliminated and current catch levels are strictly enforced, with a projected increase in net present value of \$18 million over five years.<sup>54</sup>

#### **Delaying Recovery from Overfishing**

Severely overfished species are targeted by poachers in violation of the regulations put in place to allow fish populations to recover. Despite strong restrictions, illegal fishing can undermine the best efforts of fishery managers and cause collapse of the fishery.

Overfishing of bluefin tuna is made worse by stolen fish, which are sold in legal markets after being moved through aquaculture holding pens that accept fish caught in violation of catch and size limits.<sup>55</sup> In Australia, illegal foreign fishing is an obstacle to the recovery of several fish populations, including mackerel, black-tip shark and billfish.<sup>56</sup>

In South Africa, a single South African company systematically overfished and underreported south coast rock lobster for a decade, driving a 50 percent decline in catch per unit effort for everyone else. When the company was prosecuted and stopped fishing, catch per unit effort recovered nine percent per year for the next five years.<sup>57</sup> Abalone fishing businesses in Canada and South Africa have also suffered protracted losses as a result of poaching.<sup>58</sup>

"Illegal, unreported and unregulated fishing is one of the most serious threats to American fishing jobs and fishing communities."

Dr. Jane Lubchenco, Under Secretary of Commerce for Oceans and Atmosphere and NOAA Administrator

#### ILLEGAL FISHING HURTS THE ECONOMY



Small-scale subsistence fishers like these in Mozambique lose income and suffer from reduced catches because of illegal fishing. *Photo: OCEANA/Ana de la Torriente* 

#### **Exploiting Developing Countries**

Foreign vessels often perpetrate illegal fishing in the waters of developing countries. Plundering this critical food supply can bankrupt local fishing businesses and stall long-term economic growth. In Somalia alone, illegal, unreported and unregulated fishing removes \$300 million from the national economy each year.<sup>59</sup>

West Africa is especially vulnerable to illegal fishing by foreign fleets, in addition to heavy fishing pressure from officially sanctioned foreign vessels.<sup>60</sup> Fishermen in Cameroon report wanton destruction to artisanal fishing gear by illegal trawlers from China, who also overexploit coastal fisheries.<sup>61</sup> The combined losses for artisanal fishermen in West Africa due to poachers represent nearly 35 percent of their total catch.<sup>62</sup>

# THE PROFIT MOTIVE

#### ILLEGAL FISHING TARGETS THE MOST EXPENSIVE SEAFOOD IN THE WORLD



Shrimp. Peeled brown shrimp: up to \$47/Ib63



Live Reef Fish.Grouper, snapper, various species: up to \$79/Ib<sup>64</sup>



King Crab. Lump meat: \$108/Ib65



Shark Fin. Single fin: up to \$100<sup>66</sup>



Sea Urchin Uni. Up to \$205/Ib67



Fugu Pufferfish. Serving: up to \$5068



Lobster. Lump meat: \$80/Ib<sup>69</sup>



Abalone. Whole: \$117/Ib<sup>70</sup>



Bluefin Tuna. Tuna belly: \$64/Ib71



Caviar. Up to \$12,500/Ib72

#### THE PROFIT MOTIVE

Pirate fishing has several root causes, including global overcapacity – the world's fishing fleet is too large for the number of fish in the sea.<sup>73</sup> The resulting depletion of fish populations drives fishermen further and further away from their catch, into protected waters or caught by illegal means. Harmful subsidies that promote overcapacity and lack of alternative livelihoods exacerbate the situation.<sup>74</sup> Too many boats chasing too few fish make legal fishing an increasingly difficult business, driving some operators into the black market.

The persistence of pirate fishing is not surprising when you consider how much money can be made on high-end seafood with microscopic chances of enforcement of relatively minor taxes and penalties. Poachers focus on high-value seafood products that are globally traded, including some of the most expensive seafood in the world. Annual income for one of Australia's notorious abalone poachers exceeded \$1 million Australian dollars by a 1997 estimate.<sup>75</sup>

## ORGANIZED CRIME INVOLVED IN STOLEN FISH?

Organized crime's use of fishing vessels and involvement in illegal fishing has been alleged in many regions of the world, from New York's Fulton Fish Market to groups from the former Soviet Union, China, South America and South Africa.<sup>80</sup> Following the 1930s decline of New York's South Street Seaport, mobsters took over the fish trade and the neglected buildings of the port. The mob set prices and led to racketeering and brutality associated with the sale of fish.<sup>81</sup>



#### Big Subsidies, Small Penalties

On top of profits from the sale of stolen fish, some pirate fishermen also receive government paychecks as part of a highly subsidized industry. Owners of the company Vidal Armadores in Galicia, Spain, were convicted of illegal fishing for Chilean sea bass and deep sea sharks aboard nine different fishing vessels.<sup>76</sup> More than 40 violations included targeting protected species and using destructive fishing gear.<sup>77</sup> Vidal Pego was charged with a \$400,000 fine in the U.S. for importing 26 tons of stolen fish through Miami, Florida in 2004.

Despite its notoriety and formal blacklisting of their vessels by international fisheries management organizations, this company received subsidies of nearly 10 million euros from the European Union and the national and state governments of Spain.<sup>78</sup> Even after Vidal Pego's conviction, an additional four million euros of subsidies were offered by the Galician government to support construction of a new processing factory at the same address as the known illegal vessels.<sup>79</sup> Tax evasion can also motivate underreporting and lack of reporting. Mislabeling, informal sales and co-mingling of seafood is often carried out expressly for the purpose of evading taxes and import tariffs, as was the case for hundreds of thousands of pounds of Vietnamese catfish, also known as basa, tra or swai.<sup>82</sup>

Penalty fines are typically minor compared to the value of stolen fish.<sup>83</sup> Penalties paid within the European community averaged between 1.0 and 2.5 percent of the value of IUU landings, effectively a cost of doing business rather than a deterrent. Underreporting by individual vessels of up to 36 percent is accepted in the European Union with no penalty, suggesting that some amount of poaching is the norm rather than the exception.<sup>84</sup>

CRIME	VALUE OF CATCH	PENALTY	PROFIT
UNITED STATES Shifco Inc., Lacey Act Violations*	Up to \$1,000,000*	\$3,500	\$996,000
UNITED STATES Stephen Delaney, Lacey Act Violation*	\$203,000	\$5,000	\$198,000
UNITED STATES Douglas Jay, Lacey Act Violation*	\$1,300,000	\$347,202	\$953,000
UNITED STATES Richard Stowell, Lacey Act Violation*	\$1,000,000	\$200,000	\$800,000
RUSSIA Illegal fishing in Southern Ocean	\$809,000	\$89,900	\$719,100
URUGUAY Illegal fishing in Southern Ocean	\$2,696,000	\$54,800	\$2,641,200
SEYCHELLES Illegal fishing in Southern Ocean	\$1,348,000	\$21,600	\$1,326,400
TOGO Illegal fishing in Southern Ocean	\$1,437,950	\$122,200	\$1,315,750

#### **Poaching Profits vs. Penalties**

Examples from public cases.

All values shown in real U.S. dollars, Sources: Griggs and Lugten, NOAA Office of Law Enforcement reports.

\*The Lacey Act prohibits trade in wildlife, fish, and plants that have been illegally taken, possessed, transported or sold.

#### Weak Enforcement

Many countries do not dedicate sufficient enforcement resources to fight illegal fishing and lack capacity to prevent trade of stolen fish.<sup>85</sup> Even vessels that have been blacklisted for illegal fishing activities by international organizations are intercepted at port only 25 percent of the time.<sup>86</sup> Lack of government oversight and resources, poor enforcement and corruption all contribute to the failure of fisheries enforcement.<sup>87</sup>

Reviewers of illegal fishing and compliance reform in South Africa specifically noted budget cuts, including a two-thirds decline in natural resources agency staff over the course of a decade, which prevented South African officials from conducting any visible policing.<sup>88</sup>

#### **Few Laws**

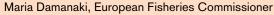
Some fisheries are not bound by any law at all. Authorities can only carry out enforcement when their nation provides regulatory and legal backing, including adoption of international conventions.

Unregulated fishing may also include fishing in remote locations or by seasonal participants who are not part of a local community. Though 70 percent of people living in Raja Ampat, Indonesia participate in fishing, their fisheries remain unregulated because human settlement is dispersed over great distances.<sup>89</sup> Transient fishermen also migrate into Raja Ampat and fish with no catch limits or official reporting, despite anchovy catches estimated at \$1.6 million in 2006. These offshore, uncontrolled operators earn income nearly twice as high as local fishermen in the region.<sup>90</sup>

Remote locations include the majority of the ocean's waters that are beyond national boundaries, known as the high seas. There is no designated police force responsible for the high seas, and the laws binding fishing and other activities in international waters

are minimal. In a notorious chase, an Australian patrol boat pursued a Chilean sea bass fishing vessel across the high seas for 4,000 miles – yet this kind of enforcement is the exception rather than the rule.<sup>91</sup>

Sections of the ocean are managed with varied success by "regional fisheries management organizations (RFMOs)" which include Antarctica's Commission for the Conservation of Antarctic Marine Living Resources. In one study, half of ports visited by known illegal vessels were located in nations that belong to a regional fisheries management organization, though these visits did not always lead to enforcement action.<sup>92</sup> The effectiveness of RFMOs is limited by the political will, regulations and capacity of participating nations, suffering the same weaknesses as the United Nations.<sup>93</sup> "Flying over the Atlantic, I looked down and wondered, how many boats are fishing that shouldn't be fishing? Do we really know?"





# THE SHELL GAME

Illegal fishing is a shell game, with constantly moving vessels that change names to stay ahead of enforcement authorities.<sup>94</sup>When the ship returns to port, fraud, bribery, false documentation and money laundering facilitate the sale of stolen seafood. Finally, some of the most valuable illicit catches tap into organized crime networks for international distribution. Fraud, crime networks and the lack of government controls or traceability systems make it easy to distribute stolen seafood around the globe.



#### Fake IDs for Fish

**Rum runners were the first to use flags of convenience.** *Photo: Courtesy of the Boston Public Library, Leslie Jones Collection* 

Flags of convenience are notoriously

used to cover up crimes committed at sea. The United Nations Law of the Sea requires that all vessels fly their national flag while on the high seas. Every vessel is required to be registered in its home country and issued an identification number and documents for the purposes of law enforcement and safety at sea. The state of registry is known as the "flag state" and linked to the vessel through its owner, manager or nationality. Pirate vessels deliberately evade policing efforts by hiding their flag, identity and ownership. This deception can be as simple as not flying a flag, or covering its name and registration while conducting illegal activity.

Panama and other countries began allowing non-nationals to fly their flags for a fee in the early 1900s in response to U.S. Prohibition laws against alcohol.<sup>95</sup> Ever since then, countries in need of foreign income compete for ship registration fees and have neither the incentive nor capacity to enforce regulations that ensure safety at sea, environmental, labor and other standards.<sup>96</sup> Mongolia, which is completely landlocked, brings in about \$200,000 each year by selling flags of convenience.

Illegal fishing vessels use flags of convenience like a fake ID to conceal stolen fish and reduce liability for the owners if the vessel is captured. Illegal vessels also register in international tax havens, through front companies or joint ventures and frequently change their registration to new countries.<sup>97</sup> Vessels registered under flags of convenience do not necessarily have nationals from that country as owners or crew and may never visit the country issuing the flag.<sup>98</sup>

An Australian patrol boat, the *Ocean Protector*, approached a flagless vessel fishing in the Southern Ocean and requested identifying information over the radio. The vessel *Lome* quickly raised a Togolese flag. On checking the vessel ID number, the patrol learned the *Lome* was formerly known as the *Zeus*, a black-listed vessel that was kicked out of Togo in 2007 due to poaching. Asked again what country the vessel was registered to, the *Lome* crew took out their paintbrushes and began to paint a new name on the stern of the vessel. Soon, the newly christened *Lana* was flying the Mongolian flag on its mast. The *Lana* refused to allow the patrol boat to board and proceeded on its path.<sup>99</sup>

#### THE SHELL GAME



Vessels hide their names and registration information. Photo: OCEANA/Juan Cuetos

During the 1990s and 2000s, long-standing flags of convenience from Panama and Belize were joined by flags from Togo, Equatorial Guinea, Russia, China and North Korea among others, as suspected criminals continually sought new places to hide.<sup>100</sup> Popular ports for the sale of stolen Chilean sea bass also expanded from Mauritius to Southern Africa and East Asia.<sup>101</sup> Stolen catches are widely blamed for the Chilean sea bass's precipitous decline. Chilean sea bass are particularly vulnerable to overfishing because they are slow-growing and long-lived.

Fraudulent identities also extend to shipping manifests and catch documents. In some cases the name and shipping codes are incorrect for the species name, weight or product form (fresh vs. frozen). In other cases the same catch document may be reused for multiple shipments. Shipping codes can be similar for different fish and may not receive close inspection from customs agents.<sup>102</sup> Mislabeling early in the supply chain can then be perpetuated all the way to the consumer, who may end up with a fraudulent or stolen product.

When the U.S. banned imports of Chilean sea bass from two severely overfished areas near Antarctica, illegal fishing operations simply shifted to adjacent areas.<sup>103</sup> The regional management organization, Convention for Conservation of Antarctic Living Marine Resources (CCAMLR), relies on vessels to report where they have been fishing — yet the records suggest these reports are sometimes false. Despite the fact that 96 percent of Chilean sea bass live in areas within the jurisdiction of CCAMLR or individual nations, the vessels claim that nearly half of their catches are caught outside these boundaries.<sup>104</sup>

#### **Mixing Fish at Sea**

One of the most common ways that stolen fish enter mainstream seafood trade is by mixing legal and stolen catches together at different steps along the supply chain. Some countries require fishing vessels to report how much fish they catch, where it is caught and other details to monitor compliance with fishing laws. By mixing in stolen fish, they then take on all of the documentation of the legal fish and are effectively laundered.

Transfer of fish at sea, known as trans-shipment, is one of the ways that legal and stolen fish are combined. Refrigerated cargo vessels collect catches from many different fishing vessels. Because they do not catch fish, cargo vessels are exempt from catch documentation and monitoring and provide a gap in the chain of custody.<sup>105</sup>



Fish can be transferred between vessels at sea, resulting in the mixing of legal and stolen fish. Photo: Kieran Kelleher/Marine Photobank

#### **Mixing Fish in Aquaculture Pens**

Transfer through aquaculture facilities provides another way to mix stolen fish in with legal fish. Bluefin tuna ranches in particular have been identified as a place where undersized fish are accepted from fishing vessels and exact numbers of fish are not reviewed by inspectors, facilitating misreporting of catches.<sup>106</sup> Tuna ranches are aquaculture facilities where wild-caught tuna, often juveniles, are kept in pens until they reach a marketable size. When bluefin tuna leave the ranch, they receive official documentation in compliance with requirements from the International Convention for Conservation of Atlantic Tunas (ICCAT), regardless of practices prior to that point.<sup>107</sup>

The mixing of documented and undocumented fish happens frequently at bluefin tuna ranches. *Photo: OCEANA/Keith Ellenbogen* 





Photos from routine inspections. Photo (left): U.S. Coast Guard; Photo (right): Oceana/LX

"Yes, the inspectors come... but they always inform the management first. The management then arranges everything... The inspectors know the management, they are all friends."

Shrimp worker from Khulna, Bangladesh

#### **Corruption and Bribery**

Corruption and bribery of authorities can happen anywhere seafood is being inspected.<sup>108</sup> When government observers are onboard fishing vessels, they are vulnerable to attacks, harassment and bribery. Individual relationships between fishing businesses and local officials can develop over time, leading to tolerance of illegal activity, bribery and collusion.<sup>109</sup> Stolen fish can move with the assistance of fees paid to local officials or through gangster-controlled transportation networks.<sup>110</sup>

For example, the director of the South Africa-based fishing company, Hout Bay Fishing Industries, was convicted of 301 charges of bribery of fisheries inspectors.<sup>111</sup> Institutionalized corruption can trickle through an agency or corporation.<sup>112</sup> Pirate fishing operations forge or alter paper catch documents, bribing inspectors to accept entry of stolen fish as legal product.<sup>113</sup> Customs and border patrols are also vulnerable and have in some cases have accepted bribes, signed off on blatantly false catch documents or allowed stolen seafood to enter without proper documentation.<sup>114</sup>

### **STOPPING STOLEN SEAFOOD**

How can the problem of illegal fishing be stopped? Effective at-sea enforcement will require much greater investment by individual nations in their detection and patrolling capacity, prosecution and penalties against poachers. In China's fisheries, the number of violations dropped from the 1990s to the 2000s after modest increases in both penalties and enforcement for illegal fishing.<sup>115</sup> Another enforcement study predicted that an increase in the chance of being caught is even more likely to prevent fishing crime than a similar increase in fines.<sup>116</sup>

In addition to at-sea enforcement, more systemic concerns must also be addressed to stop illegal fishing. Pirate fishing happens quickly, sometimes in a few hours, making detection by law enforcement even more difficult. The actual fishing is then followed by days to months of elaborate transactions designed to disguise the origins of stolen fish. Each fish is shuffled and relabeled many times in the black market to break any obvious links to the scene of the crime. By the time stolen fish arrives on consumers' plates, its true identity is a mystery. The global problem of pirate fishing involves the "entire range of economic transactions associated with catching fish and bringing them to market" and will require a suite of reforms in fisheries management.<sup>117</sup>

Harmful government subsidies currently distort the fishing fleet, propping up corrupt businesses involved in illegal fishing and inflating the total number of vessels beyond what can be sustained by the world's fish populations. These subsidies must be redirected to transition the fleet toward a sustainable future.

In addition to enforcement and subsidy reform, the lack of transparency and traceability throughout the seafood supply chain represents a lost opportunity to catch poachers after the crime has been committed. Pirate fishing vessels frequently evade detection at sea, and stolen fish is relatively easy to sell in international seafood markets with few controls in place.

The illegal sale of fish at a harbor in Spain. Photo: OCEANA/Juan Cuetos





Illegal driftnets in the Mediterranean. Photo: OCEANA/Juan Cuetos

#### Seafood Traceability Deters Illegal Fishing

Industry and government initiatives to stop illegal fishing are increasingly focused on traceability — tracking seafood from boat to plate. Despite increased at-sea enforcement, it will always remain a challenge to catch poachers in the act of illegal fishing. However, traceability provides an opportunity to catch poachers each time stolen seafood is sold or transported. It may be intercepted at the dock, in the warehouse for processing and freezing, at the airport customs desk and all along the distribution channels for seafood.

The European Union is currently implementing regulations to ensure that seafood imports are fully documented and legally caught. Similar catch documentation is already in place elsewhere and being refined for the fisheries with the most illicit activity, including bluefin tuna and Chilean sea bass.

Experience from the Chilean sea bass traceability system emphasizes how important it is for traceability to include the entire supply chain across all fishing gears, products and jurisdictions.<sup>118</sup> This includes the need to ban any imports that do not participate in traceability. Additional lessons learned include the need for centralized data and surveillance systems, online documents and advance notification of landings to allow inspectors to verify the catch.

The U.S. has no traceability requirements for domestic or imported seafood and few regulations for imports or catch documentation. Additionally, the majority of U.S. seafood imports are neither inspected nor labeled with basic information as to when, where and how the fish was caught.

#### **Recommendations to Stop Pirate Fishing**

Several solutions for pirate fishing surround traceability of our seafood. Despite formidable institutional challenges, seafood traceability is well within reach. Simply by keeping track of where our seafood comes from at every step of the supply chain, we can make progress against pirate fishing.

#### • Full chain traceability of seafood

Tracking seafood from boat to plate is essential to keep illegally caught fish from entering the U.S. market. Traceability requires documentation to follow the fish through the entire supply chain. In order to stop flow of illegal seafood products, a traceability system must be transparent and verifiable. Frequent inspections confirming the identify of seafood products is critical to the success of any documentation scheme.

#### Global information systems

A global fishing vessel database is needed to connect existing vessel registers maintained separately by different governments and regional fishery management organizations. Though global vessel identifier numbers are issued by the International Maritime Organization, these numbers focus on shipping and are not currently required for fishing vessels.<sup>119</sup> The High Seas Task Force identified information-sharing between agencies as a critical gap in intelligence currently exploited by illegal operators to evade enforcement. A minimum standard must be established for vessel and catch documentation to facilitate information sharing across jurisdictions and through the supply chain.

#### Trade flow analysis

Patterns in trade and financial flows that indicate suspicious activity could be applied to identify pirate fishing, similar to their use in anti-terrorism efforts. Identifying critical points in the supply chain where trade flow analysis will help will assist in directing enforcement interventions.

#### Cooperation between authorities

Pirate fishing sometimes escapes detection due to overlapping jurisdictions within the U.S. government and between member countries of regional fishery management organizations. As recommended by the Government Accountability Office report on seafood fraud,<sup>120</sup> fighting fraudulent fish requires increased sharing of information and inspection resources between the Food and Drug Administration, Customs and Border Patrol and the National Oceanic and Atmospheric Administration. Most cases where pirate vessels are apprehended on the high seas have involved cooperation between authorities from several different countries. A detailed inspection of boxes of frozen seafood and accompanying documents is necessary in order to decrease the illegal sale of fish. Photo: OCEANA/Enrique Pardo



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