FROM SEA TO TABLE:
RECOMMENDATIONS FOR TRACING SEAFOOD

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Key Findings

- Tracing seafood is an important step in increasing the supply of sustainable seafood.

- There are a wide range of perceptions about seafood tracing within the industry.

- Tracing systems are not fully effective without third party verification.

- There are currently tracing options available than can be used to create a effective, verifiable seafood tracing system.

WHAT SEAFOOD TRACING SYSTEM SHOULD MONTEREY BAY AQUARIUM RECOMMEND TO ITS INDUSTRY PARTNERS?

The seafood industry currently lacks a standardized, widespread method to easily trace the chain of custody of products that they purchase. With global overfishing leading to declining fish stocks around the world, it is vital for seafood providers to have the ability to identify and buy products from sustainable fisheries that are well managed, target abundant species, and fish or farm in environmentally responsible ways. **A tracing system that incorporates a combination of online inventory reporting and physical product tagging, augmented by independent supply chain verification, will give companies and consumers the information they need to make sustainable seafood choices.**

landings have changed dramatically, leading to a decrease in the number of important predatory species. Overfishing is costly, and altered fish landings have created economic hardships for fisherman worldwide. In addition, illegal, unreported, and unregulated (IUU) catches threaten the sustainability of many sensitive fisheries. Increased tracing of seafood products has the potential to help alleviate these problems by giving suppliers and consumers relevant information that allows them to make sustainable choices.

Fisheries Collapse

The worldwide demand for seafood has led to industrialized fishing on a scale that has severely depleted fish stocks and has negatively impacted the health of marine ecosystems. As fisheries are exploited and fishermen "fish down the food chain", the trophic levels of

Our Client

Monterey Bay Aquarium formed their Seafood Watch program in 1999 to promote the purchase of sustainable seafood and encourage the protection of the ocean ecosystem. Seafood Watch develops and publishes recommendations that consumers can use to help guide their seafood purchases. Fish species are designated as "Best Choices", "Good Alternatives", or species to "Avoid", based on a series of standards the Aquarium has established, including the status of the stock, the management plans in place and the method in which the fish are caught.

Tracing Schemes

Online Reporting: Information is self reported by each member of the supply chain. The information is stored in a central location and used to build a complete chain of custody report for each shipment of fish

Product Tagging: Includes fish tags, barcodes, catch certificates, or fin markings that physically accompany an individual product or group of products throughout the supply chain. May include information on species, catch location, and catch method. Remains with the fish until it is processed or sold to an end user

Third Party Verification: Auditing by an outside company that occurs on a regular basis and verifies the presence of a chain of custody system.

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Seafood WATCH®

CHINOOK SALMON
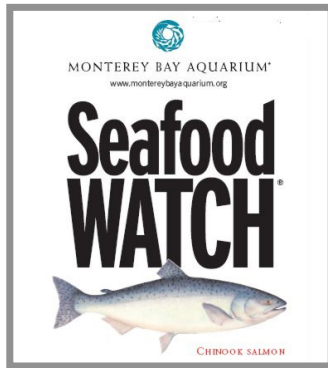
Seafood Watch also forms partnerships with members of the seafood industry in order to increase the availability of sustainable seafood. In 2009, the Aquarium entered into an agreement with Santa Monica Seafood, the largest seafood distributor in the Southwestern United States. As part of this partnership, Santa Monica Seafood has agreed to increase the overall percentage of "Best Choices" and "Good Alternatives" designated seafood products that they sell. In order to achieve this goal, Santa Monica Seafood needs more information on the source of many of their products. They turned to us to produce a set of recommendations for a verifiable tracing system that would allow Santa Monica Seafood to confidently identify the source and supply chain movements of the seafood products that they buy.

Tracing Options

We began our research by examining possible options for tracing that may be implemented by the seafood industry. While many other industries such as timber, agriculture and organics have instituted product tracing, many of these systems are limited "One-Up, One-Down" models which do not provide comprehensive, accessible and verifiable information on the source and movement of seafood products. We decided to focus on three tracing options that are currently commercially available and have the potential to provide full chain of custody tracing and verification: Online Reporting, Third Party Verification, and Product Tagging. Please see the sidebar for more information on each of these options.

Industry Perceptions

In order to uncover the industry perceptions of and concerns that a tracing system would have to address, we contacted and interviewed a variety of members of the seafood industry, including fishermen, buyers, brokers, distributors, retailers, and auditors. We combined these industry perceptions with quantitative cost information that we

gathered from the literature review and interviews with companies offering tracing services. This analysis revealed that for several characteristics there was a consensus of opinion. However, with some characteristics there were differing opinions between industry members who bought and sold high volume products such as farmed salmon and those who dealt with low volume products, such as yellowfin tuna. Opinions were most varied when asked about the effect of tracing on product speed and on the overall acceptability of tracing by the seafood industry. This split of opinion should be taken into consideration when analyzing tracing needs and concerns.

Recommendations

Using the information from our literature review and stakeholder interviews, we created recommendations for the implementation of tracing by the seafood industry. We developed a tiered approach that includes immediate implementation as well as steps to be taken once the initial system is established.

Option One starts with Online Reporting, the most cost effective tracing system and the only system that allows all of the supply chain information to be easily accessed in one location. Option Two can be implemented for supply chains where initial members do not have access to the necessary technology and Product Tagging would be used to record catch method and location until the product reaches a point in the supply chain where data can be entered online. Following the establishment of either of these two options, Third Party Verification can be added to verify that these tracing systems are in place and being used properly.

Option 1

Online Reporting

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Online Reporting
+
Third Party Verification

Option 2

Online Reporting
+
Product Tagging

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Online Reporting
+
Product Tagging
+
Third Party Verification