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The Future of Seafood Labeling Under the World Trade Organization: Lessons from the Dolphin-Safe Tuna Dispute

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The Future of Seafood Labeling Under the World Trade Organization: Lessons from the Dolphin-Safe Tuna Dispute



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Table of Contents

Introduction: Domestic Marine Conservation Measures and the World Trade Organization	3
Chapter 1: Ecological Background and Policy and Legal History	5
1.1 The development of the purse-seine tuna fishery and its impacts on dolphins	5
1.2 The development of domestic and international dolphin conservation measures	7
1.3 The legal battle begins	8
Chapter 2: The WTO Dispute Settlement Process and Current Status of <i>US – Measures Concerning the Importation, Marketing, and Sale of Tuna and Tuna Products</i>	11
2.1 The WTO dispute settlement process	11
2.2 <i>United States – Measures Concerning the Importation, Marketing, and Sale of Tuna and Tuna Products</i>	12
2.3 Summary of the Panel and Appellate Body rulings and recommendations	13
2.4 Proposed remedies	16
Chapter 3: Implications of the Ruling on Seafood Labeling Initiatives	20
3.1 Background on ecolabeling schemes	20
3.2 The WTO’s position on environmental labeling under the TBT Agreement	21
3.3 Comparative analysis of ecolabeling governance structures	23
3.4 Discussion and recommendations	25
Conclusion: The Future of Seafood Ecolabeling under the World Trade Organization	27
References:	29

Acronyms

AIDCP	Agreement on the International Dolphin Conservation Program
DPCIA	Dolphin Protection Consumer Information Act
DSB	Dispute Settlement Body
DSU	Dispute Settlement Understanding
ETP	eastern tropical Pacific Ocean
FAD	Fish Aggregating Device
FAO	Food and Agriculture Organization of the United Nations
GATT	General Agreement on Tariffs and Trade
IATTC	Inter-American Tropical Tuna Commission
IDCPA	International Dolphin Conservation Program Act
ISO	International Organization for Standardization
MMPA	Marine Mammal Protection Act of 1972
MSC	Marine Stewardship Council
NGO	Non-governmental Organization
NMFS	National Marine Fisheries Service
NPR PPMs	Non-product related processing and production methods
TBT Agreement	Agreement on Technical Barriers to Trade
TTVP	Tuna Tracking and Verification Program
WTO	World Trade Organization

Introduction: Domestic Marine Conservation Measures and the World Trade Organization

Fish and fishery products are among the most traded commodities worldwide (Schorr 2008). About 38% of global fisheries production now enters the international market compared to 25% in 1976 when global fish trade statistics first became available (FAO 2012). Over the same time period, the export value of world trade in fish and fish products grew from US\$8 billion to US\$102 billion (FAO 2012). The United States now imports 91% of its seafood (NMFS 2011). The growing demand for seafood products contributes to overharvesting of fish by increasing prices even when stocks are declining, providing a perverse economic incentive to continue fishing unsustainably (Gudmundsson and Wessells 2000). Clearly, incentives must change to encourage fishers to stop overharvesting. The growing use of sustainability labels on seafood that is certified by a governmental or nongovernmental body is part of a relatively recent effort to address overfishing from the demand side. Such ecolabeling initiatives provide a positive, market-based incentive for sustainable fisheries management (Gudmundsson and Wessells 2000). Despite a lack of long-term information on the effectiveness of seafood ecolabels at improving stock sustainability, they are increasingly widespread.

Institutions designed to promote international free trade, define the Law of the Sea, and further international environmental protection have developed, for the most part, independently of one another (Young 2011). The controversy surrounding the harm to dolphins from commercial tuna fisheries epitomizes the disassociation between these institutions and their intentions (Urgese 1998). Bycatch from fisheries, defined under US law as "fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards (16 USC 1802(2))," is a significant cause of dolphin mortality worldwide that is exacerbated by international trade in tuna and tuna products (Urgese 1998). The public concern over the impact to dolphin populations in the Eastern Tropical Pacific Ocean (ETP) resulted in the development of a dolphin-safe label, the blue dolphin on cans of tuna.

The dolphin-safe label has a long history of legal controversy. The regulations that create dolphin-safe standards in the US have long been accused of being discriminatory towards imported tuna products from foreign producers (WTO 2011). Further, the idea of what is dolphin-safe is changing, and the label also will have to change to adequately achieve its purpose of protecting dolphins.

The World Trade Organization (WTO) is the institution responsible for promoting international free trade, considered by some, at the expense of other considerations such as the environment or social justice. The WTO's attitude towards market-based environmental conservation measures such as ecolabeling schemes has been evolving since the institution's inception in 1994. In an important development, the WTO has recently ruled that the US dolphin-safe tuna label violates international trade law and must be changed (WTO 2012). Unlike past rulings on the label, the United States cannot ignore the ruling because it is legally binding as a condition of membership to the WTO, and disregarding it could result in economic penalties via trade

sanctions (WTO 2008). How the US proposed changes to the labeling standards will affect the tuna industry, levels of dolphin bycatch from tuna fisheries, and relations between the US and Mexico are questions that remain to be answered

The complications of the dolphin-safe dispute have revealed that there are many legal issues regarding marine conservation that have not been fully considered on the international level. This analysis seeks to provide an overview of the ecological and legal foundation for the dolphin-safe label, an examination of the WTO's ruling on the regulations that establish the label, and an analysis of the implications of the ruling on future seafood ecolabeling schemes. By studying this timely subject, important conclusions about market-based conservation efforts can be drawn and used to inform future labeling programs.

Chapter 1: Ecological Background and Policy and Legal History

1.1 The development of the purse-seine tuna fishery and its impacts on dolphins

The history of the tuna-dolphin dispute is long and complex. It originated from a controversy over a large-scale, international and highly productive fishery that exploits a unique association between yellowfin tuna and dolphins. However, as productive as the fishery has been it has also been responsible for killing large numbers of dolphins. Because the tuna industry is so economically important to many countries worldwide and dolphins are so culturally important, the tuna-dolphin issue has been the focus of decades of multilateral negotiations and legal battles.

The Eastern Tropical Pacific Ocean (ETP) is an important tuna fishing area ranging from the western coastlines of North, Central, and South America to 40 degrees south latitude, 160 degrees west longitude, and 40 degrees north latitude (16 USC 1385(c)(2)). In this area of the ocean, schools of mature yellowfin tuna swim under schools of dolphins for reasons not fully understood by scientists (Scott *et al.* 2012). This association has been observed in other areas of the ocean, but because it is not as prevalent or consistent as within the ETP, it has not historically been exploited by fishers to the same degree (Joseph and Greenough 1979).

Advancements in fishing technology in the 1950's gave rise to the now ubiquitous purse-seine tuna fishery that was pioneered by the United States (McNeely 1961). In the ETP, large, powerful vessels are used to chase dolphins and encircle them with an enormous net, typically 1.6km in length and 200m deep (Hall 1998). Once encircled, the net is drawn closed like a purse around everything inside (Hall 1998). Speedboats drive around the net opening when it is being deployed to drive dolphins to the center, capturing the tuna below. This method of tuna fishing is known as "setting" on dolphins. Today, a single set of this type typically involves a 20-30 minute chase followed by 40-50 minutes of encirclement until the dolphins are released at the back of the net and swim away at high speeds for up to 100 minutes post-release (Noren and Edwards 2007).

Other types of tuna sets performed with a purse-seine vessel include setting on tunas associated with floating objects, a subset of which are known as fish aggregating devices (FADs), and setting on tunas swimming alone (unassociated sets) (Gerrodette *et al.* 2012). All types of tuna purse-seine sets produce bycatch because there is no way to separate nontarget species from the tuna while deploying the net. Compared to FAD sets, which incidentally capture many different species of fish, sharks, and turtles, dolphin sets today do not produce a significant amount of bycatch because only the largest and fastest yellowfin tuna can keep up with schools of swimming dolphins, and most of the dolphins are released (Hall 1998). Most of the tuna caught in purse-seining operations is destined for canneries (Hall 1998).

It was not always the case that dolphins were all released when capturing tuna. Since the fishery began in the ETP, an estimated six million dolphins have been killed because of their inclusion in tuna purse-seine sets (Reilly *et al.* 2005). Purse-seining for tuna in the ETP has caused mortality

in 14 species (20 stocks) of dolphins and has led to significant declines of three stocks in particular: the northeastern offshore spotted dolphin (*Stenella attenuata*), the eastern spinner dolphin (*S. longirostris oreintalis*), and the coastal spotted dolphin (*S. attenuata graffmani*) (Noren and Edwards 2007). These three stocks are considered “depleted” under the Marine Mammal Protection Act (MMPA) (16 USC §1361-1407) because their population abundance is less than 60% of carrying capacity (Reilly *et al.* 2005).

Between the 1960’s and today the fishery transitioned from one that was exclusively comprised of US vessels to one that is dominated by foreign-flag vessels. During this same period, improvements in fishing gear and procedures reduced the annual observed mortality from an estimated 300,000 in the 1960’s to less than 1,200 in 2008 (IATTC Annual Report 2010). Nevertheless, the three dolphin stocks most severely impacted by the fishery are not recovering at growth rates (4% annually) consistent with the level of depletion (Gerrodette and Forcada 2005). The most recent estimates indicate that these populations may be slowly recovering, but the authors caution against an overly optimistic interpretation because of uncertainties rooted in geographic scope, the ability of dolphins from other stocks to migrate across stock boundaries, and deficiencies in assessment models (Gerrodette 2008).

Scientists at the National Marine Fisheries Service (NMFS) put forward four main hypotheses to explain the lack of clear recovery (Reilly *et al.* 2005). It may be because: 1) the fishery is causing significant unobserved mortality or reproductive suppression in dolphins, 2) the fishery is decreasing dolphin habitat, 3) the fishery has severe underreporting of observed mortality, or 4) the lack of recovery is based on flawed expectations of dolphin population recovery (Gerrodette and Forcada 2005). Of these, the first hypothesis is considered to be the most likely by NMFS researchers, a belief founded on results from a suite of scientific studies measuring annual exposure of individual dolphins to purse-seine sets (Reilly *et al.* 2005), stress response from repeated chase and encirclement (Forney *et al.* 2002), and frequency of separation of dependent calves from their mothers during the set (Archer *et al.* 2004).

Scientists at the Inter-American Tropical Tuna Commission (IATTC), the regional fisheries management organization (RFMO) responsible for regulating and monitoring the international tuna fishery in the eastern tropical Pacific Ocean, interpret the research results differently. In their own analysis of the data presented in the fishery interaction studies, the IATTC staff found that NMFS misinterpreted the findings in an overly precautionary way. The IATTC staff argue that a 4% per year population growth rate is unrealistic and views the lower estimated growth rates as an indication that dolphin populations are stabilizing (IATTC 2002).

Given the level of statistical uncertainty around much of the available information, either interpretation could be true. Further, NMFS has not conducted a dolphin abundance survey of the three depleted stocks since 2006 (Gerrodette *et al.* 2008). Both interpretations of the results were argued during the dolphin-safe tuna dispute. The conclusions made by NMFS were presented in support of the United States while the IATTC staff’s interpretation was presented in support of Mexico. The debate continues as to the magnitude of unobserved kills in dolphin

sets; however, until ETP dolphin populations show clear signs of recovery, concern over this practice will persist.

1.2 The development of domestic and international dolphin conservation measures

Partially in response to the revelation that so many dolphins were being killed in the ETP, Congress enacted the MMPA in 1972 (Hall 1998), which banned the take of marine mammals except incidental take (16 U.S.C. 1371(a)(5)). In response to the MMPA, a mandatory observer program was created in 1974 to count the number of dolphins killed, assess dolphin stocks, and determine the main cause of dolphin mortality from the US tuna purse-seine fishery (Hall 1998). A 1984 amendment to the MMPA mandated that the governments of foreign tuna vessels importing tuna into the US were required to be certified by NMFS as having a similar on-board dolphin mortality observer program (16 USC §1371(a)(2)).

A combination of dolphin conservation requirements and the closure of coastal ETP waters to foreign fishing fleets with the international adoption of the United Nations Convention on the Law of the Sea Treaty (UNCLOS) resulted in the gradual disappearance of the US tuna fleet in the ETP (Cullet and Kameri-Mbote 1996). In the 1960's, 99 percent of the ETP purse-seine tuna fleet were US vessels but by 1986 that number was down to just 36 percent (Cottrell and Trubeck 2012). Today, all remaining US purse-seine tuna vessels fish in the western and central tropical Pacific Ocean, where the tuna-dolphin association is neither regular nor sustained at a level that would support a fishery that targets dolphins to catch tuna (WCPFC 2012).

The original international trade dispute dates back to the late 1980's when an American biologist by the name of Sam LaBudde filmed a video showing dolphins being killed during a set by a Panamanian tuna purse-seine vessel. The video was used in a large-scale campaign by environmental non-governmental organizations (NGOs) to launch a nationwide boycott of canned tuna (Parker 1999). Soon after, the three major canning companies, Bumblebee, Chicken of the Sea, and Starkist, pledged to only purchase tuna caught without chasing and encircling dolphins in purse-seine nets in the ETP (Parker 1999). To advertise to consumers that they were not using tuna caught by targeting dolphins, the companies placed a blue dolphin-safe label on the can. This effectively closed the US market to tuna from foreign purse-seine vessels in the ETP (Parker 1999). In 1990, Congress supported the boycott by passing the Dolphin Protection Consumer Information Act (DPCIA) which amended the MMPA to prohibit tuna sellers from labeling their tuna products "dolphin-safe" if the tuna was caught by chasing and encircling dolphins with purse-seine nets in the ETP or harvested on the high seas using a drift gillnet (16 USC §1385).

Subpart H of Part 216 of the DPCIA implementing regulations governs the requirements for using labels that imply the tuna product meets the dolphin safe standard described in the DPCIA (50 CFR 216, Subpart H). Sec. 216.91 describes the different labeling standards for purse-seine vessels within the ETP, purse-seine vessels outside of the ETP, large-scale drift gillnet vessels, and other vessels that have been identified as having significant mortality or serious injury of dolphins (Id §216.91). Sec. 216.92 specifically regulates the dolphin safe requirements for tuna

harvested in the ETP by large purse-seine vessels, and requires different procedures and documentation for US and foreign purse-seine vessels fishing in the ETP (Id §216.92). These implementing regulations became the focus of most of the debate in the recent WTO dispute.

1.3 The legal battle begins

When the foreign fleet in the ETP did not reduce their dolphin mortality levels to those comparable to the shrinking US fleet by 1990, the US was forced through litigation to place trade embargoes on yellowfin tuna from nearly all major ETP tuna fishing nations (Parker 1999). In response to the embargo, Mexico sued the US under the General Agreement on Tariffs and Trade (GATT) in 1991 (GATT 1991). Mexico successfully argued to the GATT dispute settlement panel that the MMPA embargo provisions of tuna products from Mexico amounted to a “quantitative restriction” in violation of Article XI of GATT, and recommended that the US bring the MMPA into compliance (Urgese 1998). However the ruling, referred to as *US – Tuna I*, was never adopted due to mutual political concerns over negotiations on the North American Free Trade Agreement (Urgese 1998).

US – Tuna I was the first challenge to the MMPA’s trade provisions at an international level (Urgese 1998). A follow-up GATT dispute panel was convened at the request of the European Economic Community and the Netherlands out of their frustration that the US never brought the MMPA into compliance with the GATT (GATT 1994). The conclusion made by the Panel was the same as in *US – Tuna I*, although they did make the important determination that the US conservation measure was a legitimate objective (GATT 1994). Rather than responding to the recommendations of either panel, the US blocked the adoption of the rulings, as it had a right to under the GATT dispute settlement procedure.

Meanwhile, under the auspices of the IATTC, a series of multilateral agreements were established to attempt to solve the tuna dolphin issue. In 1992, a coalition of nations and environmental NGOs signed the La Jolla Agreement, a voluntary commitment by IATTC Members to reduce total dolphin mortality in the ETP to less than 5,000 annually by 1999 (La Jolla Agreement 1992). It included provisions to create dolphin mortality limits for each fishing nation and to establish caps specific to each qualified vessel (Parker 1999). In 1995, the La Jolla Agreement was formalized with the Panama Declaration, which envisioned that the US would: 1) lift all embargoes of tuna caught in compliance with the Declaration, 2) open US markets for to tuna caught in any set which resulted in no observed mortality, and 3) amend the definition of dolphin-safe to apply to any tuna caught in a set which resulted in no observed dolphin mortality (Declaration of Panama 1995).

The 1998 Agreement on the International Dolphin Conservation Program (AIDCP) codifies the specific agreements made in the Panama Declaration (AIDCP 2009). The AIDCP also requires that all purse-seine vessels over 363 metric tons carry an observer during each fishing trip in the ETP (AIDCP 2009). Under the AIDCP, the term “dolphin-safe” applies to any tuna caught in a set which resulted in no mortality or serious injury of dolphins (AIDCP 2009). The AIDCP standard

does not consider the unobserved causes of mortality or potential for reproductive suppression from the act of chasing and encircling dolphins in the pursuit of yellowfin tuna.

The US Department of State, the federal agency responsible for negotiating the AIDCP, intended to hold up its end of the bargain, asking Congress for the authorization to weaken the labeling standards to match those outlined in the AIDCP by amending the DPCIA (Parker 1999). However, Congress was concerned that there was no scientific evidence that dolphin stocks were not still being harmed by the purse-seine tuna fishery. Rather than simply amend the DPCIA to allow "dolphin-safe" to refer to tuna caught by intentionally chasing and encircling dolphins provided no dolphin mortality or serious injury occurred, Congress passed the International Dolphin Conservation Program Act (IDCPA) in 1997 (16 USC 1361).

The IDCPA amendment allowed the changing of the label contingent on the results of three scientific studies to determine whether, "the intentional deployment or encirclement of dolphins with purse-seine nets" is "having a significant adverse impact on any depleted dolphin stock in the ETP" (16 USC § 1385(g)). In 2002 after a series of lawsuits, the Assistant Secretary for NMFS, Dr. William Hogarth, issued the Final Finding that the purse-seine tuna fishery in the ETP was not having an adverse impact on dolphin populations (67 Federal Register 164). The environmental NGO Earth Island Institute immediately brought suit against NMFS, claiming that the Final Finding was arbitrary and capricious and therefore should not be implemented (9th Cir. 2007). The court sided with Earth Island, accusing the agency of being influenced by political, rather than scientific, concerns (9th Cir. 2007). The court vacated the Secretary's Final Finding, effectively prohibiting any changes to the label standards (9th Cir. 2007). This was viewed by Mexico and other dolphin-fishing nations as a failure of the US to uphold commitments it made in negotiating the AIDCP and created an uncomfortable political situation that consequently landed the US and its dolphin-safe labeling standard in front of the WTO dispute settlement body.

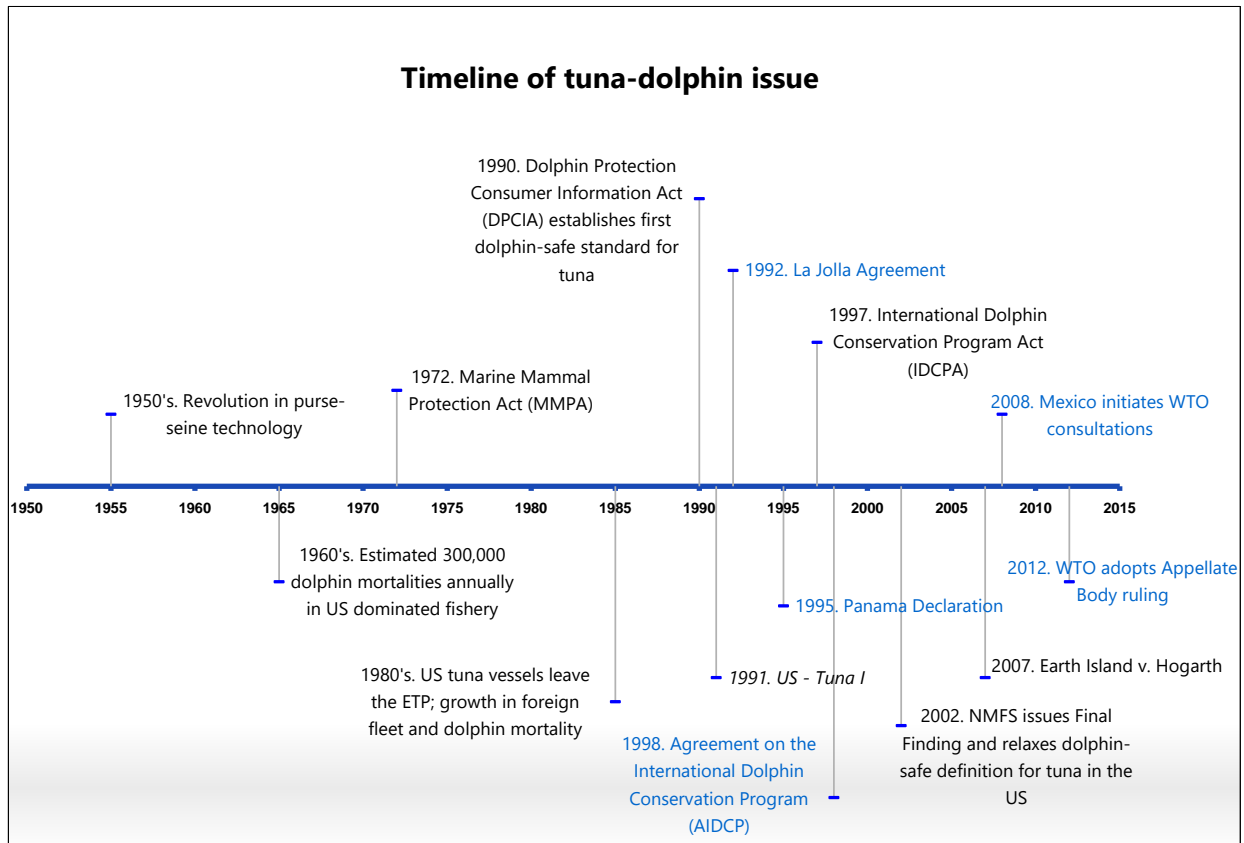


Figure 1. A timeline of the tuna-dolphin issue. Blue font indicates international efforts to address tuna-dolphin problem.

Chapter 2: The WTO Dispute Settlement Process and Current Status of *US – Measures Concerning the Importation, Marketing, and Sale of Tuna and Tuna Products*

2.1 The WTO Dispute Settlement Process

As a condition of membership to the WTO, nations are required to comply with a package of multilateral trade agreements that oblige members to adhere to the commitments reached during the Uruguay Round of trade negotiations. If a Member believes that their rights under these rules are being infringed by another Member, they are entitled to initiate an investigation of the violation through a dispute settlement process. The Understanding on Rules and Procedures Governing the Settlement of Disputes (Dispute Settlement Understanding, or DSU) provides the mechanism for WTO Members to resolve disputes (GATT 1994). The Dispute Settlement Body (DSB), consisting of representatives of all WTO Members, is responsible for establishing panels to consider cases, accepting or rejecting panel findings and results of appeals, and authorizing retaliation when a nation does not comply with a ruling (WTO 2008).

The settlement process consists of three stages: 1) consultations, 2) panel and (if requested) appellate body review, and 3) implementation (Shedd 2012). In the consultation stage, Members are encouraged to resolve the disagreement through peaceful talks between themselves. If no agreement can be reached or if both Members agree that a solution cannot be reached at any point during consultations, the complaining Member can request a panel to evaluate the transgression (WTO 1994 Art. 6). If either Member, or both Members in some cases, takes issue with the legal interpretation of the evidence by the panel than they can appeal the panel's ruling. The appeal is heard by three members of the permanent seven-member Appellate Body who can uphold, modify, or reverse the panel's legal findings (WTO 2008).

The final stage in the dispute settlement process is implementation. If the Member cannot comply with the ruling immediately, they are allowed a "reasonable period of time" to do so; a period of time either proposed by the Member concerned and approved by the DSB, mutually agreed upon by the parties to the dispute, or determined through binding arbitration (WTO 1994b Art. 21.3). If the defending Member does not comply with the ruling, they must enter into negotiations with the complaining Member to reach an agreement on compensation (WTO 1994b Art. 22.2). If no satisfactory compensation is agreed upon, the complaining Member can ask the DSB for permission to impose trade sanctions against the defending Member, typically in the same sector as the dispute (i.e. the fisheries sector). If the defending Member objects to the trade sanctions, the matter is referred to an arbitrator, who determines whether the trade sanctions were equivalent to the harm done by the original violation of the Agreement (WTO 1994b Art. 22.6).

2.2 United States – Measures Concerning the Importation, Marketing, and Sale of Tuna and Tuna Products

In 2008, after an already extensive history of litigation dating back to the 1991 tuna-dolphin decision, Mexico initiated WTO dispute settlement proceedings challenging the US dolphin-safe labeling scheme as a violation of the GATT and the Agreement on Technical Barriers to Trade (TBT Agreement) (78 FR 2064). As previously discussed, the GATT is the original international agreement expanding and guiding free trade. The TBT Agreement covers technical regulations with mandatory requirements and standards under which compliance is voluntary (WTO 1994a). The most important aspects of the TBT Agreement used in the US – Tuna decision are Annex 1.1, Article 2.1, Article 2.2, and Article 2.4.

Annex 1 of the TBT Agreement provides definitions of the terms of the agreement (WTO 1994a Annex 1). Annex 1.1 describes a technical regulation as a “document which lays down product characteristics or their related processes and production methods... with which compliance is mandatory. It may also include... packaging, marketing, or labeling requirements as they apply to a product, process, or production method” (WTO 1994a Annex 1.1).

Article 2.1 of the TBT Agreement provides that, “Members shall ensure that in respect of technical regulations, products imported from the territory of a Member shall be accorded treatment no less favorable than that accorded to like products of national origin and to like products originating in any other country” (WTO 1994a Art 1.2). The purpose of this article is to ensure that WTO Members do not implement technical regulations that lay out different requirements for imported products than domestic products. For example, in *US – Clove Cigarettes*, a recent case that was found to violate Article 2.1, the US had enacted a ban on flavored cigarettes that are produced almost exclusively outside of the US but exempted menthol cigarettes that are almost exclusively produced domestically (Stewart 2012). The WTO’s evolving interpretation of the phrase “treatment no less favorable” is a significant aspect of the TBT Agreement with regards to product labeling.

Article 2.2 of the TBT Agreement prohibits technical regulations that are, “more trade-restrictive than necessary to fulfill a legitimate objective, taking account of the risks non-fulfillment would create.” Article 2.2 includes environmental considerations in its list of legitimate objectives that justify a technical regulation, stating that, “(S)uch legitimate objectives are, *inter alia*, national security requirements; the prevention of deceptive practices; protection of human health or safety; animal or plant health, or the environment” (WTO 1994a Article 2.2). Article 2.2 is arguably the most important with regards to marine conservation. If a dispute results in a panel or Appellate Body ruling that a technical regulation aimed at protecting marine biodiversity violates Article 2.2, they essentially rule that the conservation objective was too ambitious to justify its impact on international free trade. Whether or not the WTO is an appropriate forum to evaluate the necessity of environmental laws is a topic of much debate (Joyner and Tyler 2000), but will not be discussed here.

Article 2.4 of the TBT Agreement requires the use of relevant international standards to use as a basis for a technical regulation unless those standards do not fulfill the legitimate objectives pursued (WTO 1994a Article 2.4).

Using these aspects of the TBT Agreement, Mexico brought the dolphin-safe labeling measure to the WTO in defense of the multilateral AIDCP. Three relevant legal instruments together establish the dolphin safe labeling scheme, referred to collectively in the case as "the measure at issue:" 1) the DPCIA, 2) the US implementing regulations for the DPCIA, and 3) *Earth Island Institute v Hogarth* (WTO 2011).

2.3 Summary of the Panel and Appellate Body Rulings and Recommendations

Panel Report

The original panel decision was issued on September 15, 2011 (WTO 2011). Though Mexico brought arguments against the US under both the GATT and the WTO Agreement on Technical Barriers to Trade (WTO 1994a), the panel chose to exercise judicial economy on claims under the GATT (WTO 2011 para. 6.41) and only ruled on the following four questions brought to claim under the TBT Agreement:

Is the measure a technical regulation under Annex 1.1?

The panel used a three-tier test to determine if the measure is a technical regulation under the TBT Agreement (WTO 2011 para. 7.55). Mandatory measures and those found to be *de facto* mandatory are considered to be "technical regulations" and those that are found to be voluntary are categorized as "standards" under the TBT Agreement (WTO 1994a). The panel considered, "whether the US dolphin-safe labeling provisions apply to an identifiable group of products; whether they lay down one or more characteristics of these products; and whether compliance with them is mandatory within the meaning of Annex 1" (WTO 2011 para. 7.55). Mexico successfully convinced the panel that the dolphin-safe labeling measure is *de facto* mandatory because the dolphin-safe label is the only one that can be used in the US market, is monitored and enforced with penalties, and because consumer preference makes it that there is practically no market for non-dolphin safe tuna (WTO 2011 para. 4.43). After considering the arguments of the US and Mexico, the majority of the panel found that although the measure is voluntary, it establishes *de facto* mandatory labeling requirements, and is therefore a technical regulation (WTO 2011 para. 7.145). There was one Panel member who did not agree with the finding and issued a detailed dissenting opinion (WTO 2011 para. 7.147-7.188).

Is the measure consistent with Article 2.1?

The United States and Mexico agreed that dolphin-safe tuna from the US and tuna without the dolphin-safe label are like products so the question under Article 2.1 became whether the US accords less favorable treatment to Mexican tuna. Mexico argued that the US labeling measure discriminates against Mexican tuna because the US and other foreign tuna fleets fish outside of

the ETP where regulations are not as stringent and therefore, the measure affords protection to the domestic US tuna industry (Shaffer 2013). The United States countered that Mexico had an equal opportunity to comply with the labeling standards by not setting on dolphins with purse-seine nets in the ETP or by fishing outside of the ETP (Shaffer 2013). The Panel ruled in favor of the US, concluding that Mexico failed to demonstrate that the labeling provisions afford less favorable treatment to Mexican tuna products because the label provisions depend on a number of factors other than nationality (WTO 2011 para. 7.378).

Is the measure consistent with Article 2.2?

The Panel first determined that the label has two legitimate objectives: to ensure that consumers are not misled about whether the tuna they purchase was caught in a manner that adversely affects dolphins (WTO 2011 para. 7.426) and to protect dolphins generally by discouraging the use of harmful fishing practices (WTO 2011 para. 7.421). The Panel concluded that although the objectives of the US dolphin safe provisions are legitimate, the label is more trade restrictive than necessary in relation to the level of protection pursued by the US because it allows tuna caught outside the ETP to be labeled dolphin-safe without certification that dolphins were not killed or seriously injured in the process (WTO 2011 para. 7.532).

The Panel also found that the alternative suggested by Mexico, which would allow the AIDCP label and the US dolphin safe label to coexist, would achieve a level of protection equal to that achieved by the US provisions outside of the ETP (WTO 2011 para. 7.618). The panel's finding indicates that it was not persuaded that the unobserved effects of chase and encirclement that are unique to the ETP are of a magnitude that warrants greater protection.

Does the measure constitute an international standard under Article 2.4?

The Panel agreed with Mexico that the AIDCP dolphin safe definition and certification constitute a relevant international standard (WTO 2011 para. 7.707) but ruled that the AIDCP standard is not an effective and appropriate means to fulfill the objectives pursued by the United States (WTO 2011 para. 7.620). They determined that, like the US measure, the AIDCP standard was too limited in its geographic scope, too focused on a single fishing technique, and too focused on observed injuries and mortalities to achieve the level of protection chosen by the US (WTO 2011 para. 7.621).

The Panel ruling was characterized by the news media as a weak victory for Mexico because the labeling measure, though voluntary, was determined to be a *de facto* mandatory regulation due to the preferential treatment of dolphin safe labeled tuna by consumers (Wilke and Schloemann 2012). In ruling the measure as being more trade restrictive than necessary under Article 2.2, the Panel appears to have had the welfare of dolphins in mind,

“We note that where such tuna is caught outside the ETP, it would be eligible for the US official label, even if dolphins have in fact been caught or seriously injured during the trip, since there is, under the US measures as currently applied, no requirement for a

certificate to the effect that no dolphins have been killed or seriously injured outside the ETP" (WTO 2011 para. 7.532).

Reaching this conclusion after a 293 page discussion, the Panel ruled that current US regulations are legitimate in their objective, but not in their geographical and technological application (Wilke and Schloemann 2012). Out of mutual disappointment with the ruling, both the US and Mexico appealed immediately.

Appellate Body Report

On May 16, 2012 the WTO Appellate Body tasked with evaluating the Panel decision came out with a final decision on the matter (WTO 2012). There were five issues that they reviewed:

The Panel's use of judicial economy

To begin, the Appellate Body found that the Panel erred in exercising judicial economy on claims under the GATT and therefore acted inconsistently with Article 11 of the Dispute Settlement Understanding (WTO 2012 para. 405). However, because Mexico only requested that their claims under the GATT be considered if the Appellate Body found US measures to be *consistent* with Article 2.1 of the TBT Agreement, the Appellate Body did not attempt a legal analysis to correct the error (WTO 2012 para. 405).

Are the measures a technical regulation under Annex 1.1?

The Appellate Body confirmed the Panel's finding that the label is a technical regulation, arguing that the measure establishes a single definition of 'dolphin safe' and considers other dolphin safe labels as deceptive (WTO 2012 para. 199). So even though the use of the label is voluntary, any mention of dolphin safety is prohibited unless the tuna product meets the US regulatory requirements (Shaffer 2013).

Are the measures consistent with Article 2.1?

After a lengthy discussion on the meaning of "treatment no less favourable" the Appellate Body reversed the Panel's finding that the measure does not discriminate against Mexican tuna products and instead found that the US measure is not, "even-handed in the way in which they address the risk to dolphins arising from different fishing techniques in different areas of the ocean." (WTO 2012 para. 298). The Appellate Body agreed with the Panel that the measure allowed tuna that was caught using methods that have been found to occasionally cause mortality or serious injury to dolphins to be labeled as dolphin-safe (WTO 2012 para. 297). They also determined that the measure modifies the conditions for competition, and in doing so, it is not consumer choice so much as the regulations that deny like Mexican tuna products access to a dolphin-safe label in the US market (WTO 2012 para. 239). The Appellate Body concluded that the US measures are not "calibrated" to the level of possible harm to dolphins because there are different requirements for tuna caught by setting on dolphins in the ETP and tuna caught by

other fishing methods outside of the ETP (WTO 2012 para. 298). By indicating to the US that it could attain the measure by simply requiring a captain's statement for all tuna that is dolphin-safe, the Appellate Body provided a way for the US to bring the measure into compliance with the TBT Agreement (WTO 2012 para. 296).

Are the measures consistent with Article 2.2?

The Appellate Body confirmed the finding that US dolphin protection objective is legitimate (WTO 2012 para. 339). However, they reversed the finding of the Panel that the label is more restrictive than necessary to fulfill US objectives because they did not agree that the AIDCP label is a "reasonably available less-restrictive alternative to the dolphin safe label." (WTO 2012 para. 331). The Appellate Body found that under the AIDCP alternative scenario, tuna caught by setting on dolphins would be eligible for a dolphin safe label, which would result in a lesser degree of consumer information and dolphin protection (WTO 2012 para. 330). In reaching this conclusion, the Appellate Body seemed to indicate the evidence of unobserved impacts on dolphins warranted enough concern to be included in the US labeling standard.

Do the measures constitute an international standard under Article 2.4?

A detailed analysis of what constitutes an "international body" versus an "international standardizing organization" resulted in the Appellate Body reversing the Panel's finding that the AIDCP dolphin safe definition and certification constitute a relevant international standard (WTO 2012 para. 399). They found that the AIDCP is not, "open to the relevant body of every country" and is therefore not an "international standardizing organization" with the power to create international standards (WTO 2012 para. 399). Therefore, by default, the Appellate Body confirmed the Panel's determination that the AIDCP standard is not an effective and appropriate means to fulfill the United States' objectives (WTO 2012 para. 407).

2.4 Proposed Remedies

On June 13, 2012, the DSB adopted the WTO panel and Appellate Body reports, finding that the dolphin safe labeling scheme constitutes a technical barrier to trade under Article 2.1 of the TBT Agreement (78 FR 2064). The final ruling in *US – Tuna II* by the Appellate Body is binding under WTO law, requiring the US to bring the measure into conformity with Article 2.1 of the TBT Agreement by July 13, 2013 (78 FR 2064).

In response, NMFS has developed and released a proposed rule to make changes to the dolphin-safe labeling standards (§216.91) and tracking and verification program (§216.93) of the Department of Commerce DPCIA regulations to address the WTO Dispute Settlement Body's ruling (78 FR 2064). Taken together, these changes would,

“(M)odify the requirements for certification that accompany the Fisheries Certificate of Origin (FCO); change storage requirements related to dolphin-safe and non-dolphin-safe tuna on board fishing vessels; create new requirements for processors, other than tuna

canners, of tuna product labeled dolphin-safe; and modify the reporting requirements associated with tracking domestic tuna canning and processing operations. (78 FR 2064)

The proposed revision of §216.91 would require that for all tuna labeled dolphin-safe, including tuna harvested by any fishing method and in any area of the ocean: 1) a captain's statement be provided that no dolphins were killed or seriously injured in the sets or other gear deployments, 2) a statement be provided by an observer or authorized representative of the nation participating in an observer program determined by NMFS as qualified and authorized to certify that no dolphins were killed or seriously injured in the sets or other gear deployments, and 3) tuna caught in sets or gear deployments designated as dolphin-safe must be kept separately from non-dolphin-safe tuna from the time of capture through unloading (78 FR 2064). This means that for all tuna vessels operating with the intention of selling their catch in the US market, the captain will be required to certify that no dolphins were killed or seriously injured and, if an observer participating in a reputable observer program is present, he or she will also be required to make that certification. The Assistant Administrator of NMFS will identify fisheries that are monitored by observers participating in a national or international observer program. The proposed rule is unclear in defining the mechanism for determining if an observer program is qualified and authorized to certify that tuna is caught in a dolphin-safe manner.

The proposed revisions of regulations at §216.93 change the documentation requirements of the Tuna Tracking and Verification Program (TTVP) to include any tuna product labeled dolphin-safe that was harvested by any fishing method in any area of the ocean. In addition to tuna canners, other tuna processors would also be required to submit monthly receipt reports to NMFS to monitor and track tuna. Modifications to the Fisheries Certificate of Origin document required to import tuna products would direct importers to attach a captain's statement and, where applicable, an observer statement or statement by a government representative certifying that no dolphins were killed or seriously injured in any gear deployment in any area of the ocean.

In the view of the United States, making these changes to the Department of Commerce DPCIA regulations brings the US into compliance with Article 2.1 of the TBT Agreement by calibrating the dolphin-safe labeling provisions to the risks posed by fishing techniques other than setting on dolphins. This interpretation of the ruling allows the US to continue rejecting tuna caught by chasing and encircling dolphins in the ETP access to the dolphin-safe label and addresses the use of FADs and other fishing techniques that were criticized in the Appellate Body report.

The proposed rule has received mixed reviews from stakeholders within the US members of Congress and environmental NGOs are applauding NMFS for its proposed changes to strengthen the dolphin-safe labeling scheme. Conversely, comments from the tuna industry on the proposed rule express aggravation at the prospect of additional regulatory requirements that may result in higher costs and unnecessary paperwork for American tuna fishers (ATA comment) and the three largest tuna canners.

It is a near certainty that Mexico will argue to the DSB that the US has not brought the program into compliance with Article 2.1 of the TBT Agreement. Under the proposed rule, tuna captured by vessels in fisheries where observer programs have less than 100% observer coverage would still be able to have their catch labeled dolphin-safe if the captain, a person with an economic stake in the matter, certifies it. Mexico may argue that because their fishers are still held to strict requirements mandating 100% independent observer coverage while other fisheries may not be held to those same requirements, the US dolphin-safe label still accords less favorable treatment to Mexican tuna. If Mexico successfully argues that their tuna is still being discriminated against under Article 2.1 of the TBT Agreement, they will ask the DSB to move the case into the penalties phase of the dispute settlement process, possibly requiring compensation from the US or enacting trade sanctions.

Outside of the WTO regime, Mexico may seek to revisit the AIDCP to weaken the 100% observer coverage requirements, which they have long argued to be expensive and unnecessarily burdensome on their tuna fishers (WTO 2011 para. 4.122). It can be argued that the proposed rule lends support to this action because it would allow other tuna fisheries without robust observer programs to still label their tuna dolphin-safe. This could be used to justify decreasing the observer coverage required on ETP purse-seine vessels.

Weakening AIDCP observer coverage would not be a desirable outcome. In fisheries with individual vessel quotas on bycatch like the purse-seine tuna fishery in the ETP, 100% observer coverage is generally required to ensure that limits are not exceeded (Babcock and Pitich 2003). It is important to recall that higher observer coverage in the ETP tuna fishery has revealed suspiciously low mortality estimates in the past; from 1985 to 1986 when Mexico agreed to participate in the IATTC's observer program, the estimated mortality from the non-US fleet jumped from 40,000 to 112,000 dolphins (Parker 1999). The increased observer coverage resulted in a nearly threefold increase in estimated dolphin mortality, revealing what had been a serious problem with misreporting.

Observers are helpful with reporting mortalities and their presence also has an observer effect on the operations of the fishing vessel, potentially causing the vessel crew to change what fishing grounds to fish, which species to target, how to configure the fishing gear, and which species to discard (Babcock and Pitich 2003). Even just the presence of an observer often deters noncompliance with regulations (Karp 2005) so weakening coverage would likely translate into more harm to dolphins. Reducing the number of independent observers on tuna fishing trips in the ETP has the potential to result in a significantly higher number of dolphin mortalities or serious injuries from the fishery.

Another possible action by Mexico and other nations in the AIDCP is to create an ecosystem friendly tuna label that indicates that the tuna was caught in accordance with AIDCP and IATTC standards of dolphin-safe (AIDCP 2011). The ecosystem-friendly label idea is based on the work of Martín Hall, an ecologist with IATTC, and considers the ecological impacts from different methods of purse-seining for tuna. As stated earlier, dolphin sets rarely result in dolphin mortalities and also have very low bycatch of other species because only the largest and most

mature yellowfin tuna are able to keep up with the dolphins during the chase (Hall 1998). However, even if an "ecosystem friendly" label was implemented, such tuna is unlikely to garner consumer preference over dolphin-safe tuna because the three major US tuna canning companies, remaining committed to current purchasing practices, would still refuse to purchase it (Starkist 2010; Chicken of the Sea 2013; Bumble Bee Foods 2013).

It is interesting to consider what impacts the proposed rule, if implemented, will have on tuna operations outside the ETP other than adding paperwork. There is a lack of independent observer programs in most tuna fisheries that have the potential to be certified by NMFS as being qualified and authorized. Studies on self-reporting by fishing vessel captains provide evidence that honesty is the exception, not the rule (Walsh 2000). Noncompliance with bycatch regulations can be easily covered up by misreporting by captains (Anderson 1989).

The WTO should accept the proposed rule as bringing the labeling measure into compliance with the TBT Agreement because it complies with the ruling (WTO 2012 para. 296). However, it remains to be seen whether or not the proposed rule will actually advance dolphin conservation. If the proposed rule does anger Mexico to the point of revisiting or even leaving the AIDCP, then the new rule will only serve to weaken dolphin conservation. Outside of the ETP purse-seine fishery, dolphin bycatch in tuna fisheries is rare enough that requiring captains to certify that their catch is dolphin-safe is almost meaningless. It is also questionable whether NMFS will work to quickly identify fisheries with a robust observer program or if the agency will turn to other matters once the WTO turns away from the problem.

Chapter 3: Implications of the Ruling on Seafood Labeling Initiatives

The development of the World Trade Organization's position on marine conservation has been evolving since the days of the GATT and will likely continue to evolve as global concerns about the marine environment grow. The decision in *United States – Tuna II* is important to the WTO's ongoing legal interpretation of the legitimacy of ecolabeling schemes based on foreign processing and production methods (Shaffer 2013). It is important to consider what these recent developments may mean for other current and future seafood ecolabeling schemes.

3.1 Background on ecolabeling schemes

The technical definition of an "ecolabel" is a market-based economic instrument that influences consumers' purchasing behavior so that they take account of product attributes (i.e. environmental impacts) other than price (Wessells *et al.* 2001). Producers are better informed about such attributes than consumers, resulting in information asymmetry. There is asymmetric information associated with consumers' purchase of seafood products because they do not have the same information as the producer regarding the nature of the product. Therefore, the basic economic rationale for labeling at the point of sale is that it links fisheries products to their production processes and so overcomes the problem of asymmetric information (Deere 1999). Seafood ecolabeling schemes vary considerably in their purpose, covering single species bycatch, fishing methods and gear types, sustainability of stocks, ecosystem conservation and even social and economic development (Washington 2008).

Ecolabels can offer consumers information about a range of product attributes, including non-product related processing and production methods (NPR PPMs) that do not affect final product characteristics (Bonsi 2008). Ecolabeling schemes in the fisheries sector are typically based on NPR PPMs, especially those based on harvesting methods such as type of gear, impacts on marine habitat, compliance with regulations, or bycatch issues (Bonsi 2008). As an example, imagine that two cans of tuna are for sale, one contains tuna that is dolphin-safe under the US standards and one does not. A consumer would not be able to tell by looking at the tuna, tasting it, smelling it, or sensing it in any other way which tuna was caught without intentionally chasing and encircling herds of dolphins.

The International Organization for Standardization (referred to as ISO), an organization that develops and publishes international standards, identifies three types of environmental labels. Type I involves a voluntary third-party certification system, in which an outside certifying body determines if a product meets a set of criteria for sustainability (Bonsi *et al.* 2008). The Type I labeling category can be further deconstructed to include government-linked (i.e. US dolphin-safe) and nongovernmental (i.e. Marine Stewardship Council) labels (Sainsbury 2010). Under the Type I category, there is also the potential for an intergovernmental labeling scheme like the "ecosystem friendly" tuna label being discussed by AIDCP members. Consumers find Type I certification to be the most credible because of the review process (Gardiner and Viswanathan 2004).

Type II is a self-declaration labeling type where manufacturers, distributors, retailers, or other stakeholders make claims about the environmental qualities of their product. Labeling programs of this type do not use predetermined criteria and normally only cover one product attribute; for example, a label proclaiming, "made with recycled material" does not give any information about the percentage of recycled material used or about any other product attributes (Bonsi *et al.* 2008). Type III labels provide a list of impacts a product is likely to pose to the environment throughout its life cycle, similar to nutrition labels (Bonsi *et al.* 2008). Consumer seafood guides such as the Monterey Bay Aquarium's Seafood Watch guide can be considered Type II or Type III labels because they provide self-declared claims about the sustainability of a seafood product that are not verified through a third-party certification process (Sainsbury 2010). Labeling schemes of these types are a rapidly growing source of information for the public on the environmental impacts of seafood (Sainsbury 2010). Reasons for this may include their convenience, accessibility on websites and mobile phones, presence at seafood counters and in restaurants, and straightforwardness in providing information for the consumer to make an environmentally conscious decision at the point of sale.

There are no international laws governing or enforcing seafood ecolabeling schemes. However, recognizing that labeling is an emerging tool to encourage sustainable fisheries, the Food and Agriculture Organization (FAO) Committee on Fisheries developed and adopted the "Guidelines for the ecolabeling of fish and fishery products from marine capture fisheries" (FAO 2005). These guidelines provide definitions of terms and principles, lay out the minimum substantive requirements for ecolabels, and provide guidance on setting the standards of sustainable fisheries, accreditation, and certification (FAO 2005). The FAO guidelines are based on the UN Convention on the Law of the Sea (UNCLOS 1982), the UN Fish Stocks Agreement (UNFSA 1995), the FAO Code of Conduct for Responsible Fisheries (FAO 1995), the Convention on the International Trade in Endangered Species of Wild Flora and Fauna (CITES 1994), and other international instruments (Sainsbury 2010).

The FAO noted in the guidelines that labeling schemes should be, "transparent, market-driven, accessible (in terms of costs) to operators irrespective of their size and economic contexts, non-discriminatory based on best available scientific evidence, and fully consistent with WTO rules so as not to create unnecessary obstacles to international trade and to allow for fair competition and respect the sovereign rights of States" (Sainsbury 2010). The FAO guidelines do not elaborate on how to avoid creating barriers to trade.

3.2 The WTO's position on environmental labeling under the TBT Agreement

The WTO Members agree that ecolabeling schemes can be economically efficient and less trade restrictive than other conservation measures as long as they are voluntary, inclusive of all sides in their design (interpreted as being the result of bilateral or multilateral negotiations), market-based, and transparent (WTO 2013). More specifically, ecolabeling based on final product characteristics or production methods that leave a trace on the final product is acceptable to most Members (Gudmundsson and Wessells 2000). For example, ecolabels based on certified organic produce are acceptable because the use of pesticides leaves chemical residue and

changes the final product (WTO 2013). WTO Members have the right under the TBT Agreement to regulate PPMs such as these through product standard requirements (OECD 2011).

However, labeling based on non-product related processing and production methods continues to be controversial among WTO Members and is considered by many to be beyond the scope of the TBT Agreement (Manoj 2004).” In the first sentence of the definition of a “technical regulation” in the TBT Agreement, it explicitly refers to “product characteristics or their *related* processes and production methods” (WTO 1994b; emphasis added). The inclusion of the word related in the definition could be interpreted to mean that only processes and production methods that leave a trace on the final product’s characteristics are allowed. If the word related had been left out, it would have been clearer that both product characteristics and all types of processes and production methods are covered under the TBT Agreement.

WTO Members that do not want to interpret the TBT Agreement to allow NPR PPMs as a foundation for labeling because of their worry that it would open the door to allowing nations to create unfair trade barriers (Melser and Robertson 2005). For example, with the true objective of protecting its domestic fishing industry, a national government could create an ecolabeling scheme promoting the social welfare of fishers by requiring imported fish to be harvested only by fishers who earn wages comparable to domestic fishers. In this example, the final products are the same but the way that the products are harvested (which does not directly influence their final characteristics) makes them unlike and therefore is a fair reason to treat imported fish less favorably than domestic fish.

Clearly, this perception assumes that the methods used during the production process have no significant impact on product likeness. However, consumer preference for labeled seafood indicates that NPR PPMs do alter the likeness of seafood products (Kysar 2004; Voon *et al.* 2013). Consumers who choose to buy labeled seafood over non-labeled seafood do so because they prefer seafood that was harvested in an environmentally-friendly way, indicating that the seafood products are not like under the TBT Agreement (Voon *et al.* 2013).

The questions of where to draw the line on the NPR PPM issue is likely one of the major considerations made by the Appellate Body in the *US – Tuna II* case. Had the Appellate Body ruled that the labeling measure was not a technical regulation, it would have created a precedent for many labeling standards that may or may not be disguised trade barriers (Shaffer 2013). The Appellate Body perhaps ruled in this manner to avoid a nasty political disagreement on the legality of product differentiation among WTO Members.

Given the suspicious view of ecolabeling schemes held by many WTO Members (Kysar 2004), it is important to consider whether government-linked labels are worth the risk to implement. It can be argued that the United States government did not need to become involved in the dolphin-safe labeling scheme. By 1990, when the DPCIA was passed by Congress, dolphin mortality from tuna purse seining in the ETP had dropped 99% and the three largest tuna canning companies had pledged to only purchase tuna caught without the involvement of dolphins, effectively closing the market to non-dolphin safe tuna (Parker 1999). Taking these

facts into consideration, are governments the best institutions for creating effective seafood ecolabeling schemes? If so, under what circumstances?

3.3 Comparative analysis of ecolabeling governance structures

Seafood ecolabeling schemes offer numerous benefits and should continue to be used as market-based conservation tools. Whether or not a government-linked or a nongovernmental labeling program should be chosen over the other should be determined by a thorough consideration of the ecolabeling scheme's conservation objective.

3.2.1 Government-linked

The basic purpose of government-linked seafood ecolabeling schemes is to create an economic incentive for nations importing seafood to change their harmful fishing practices. Keep in mind that ecolabeling's environmental objective is different from a labeling regulation such as country-of-origin or mercury content that is focused on promoting traceability or food safety (OECD 2011). A domestic government first identifies a national marine conservation objective (for example, reducing bycatch of marine mammals in a fishery to a biologically acceptable level) that is being threatened by the fishing practices of an importing nation. The government has three options to address the problem. They can 1) enact a trade embargo on the importing nation, create a domestic, 2) create a market-based regulation, or 3) engage in bilateral or multilateral agreements. Over the long history of the tuna-dolphin issue, the United States used all three options to varying levels of success.

Where initial bilateral or multilateral negotiations fail and where trade embargoes are too trade restrictive, market-based regulations such as seafood ecolabeling schemes can be the most advantageous option. Government-linked ecolabeling schemes have been found to be more trusted by consumers (Sønderskov and Daugbjerg 2011). They are also necessary to inform consumers about the existence of conservation problems that may warrant consideration in their purchasing decisions. Many consumers in the US are now aware that overfishing is a problem and buy NGO labeled products that indicate the stock is harvested sustainably (i.e. MSC certified seafood products) (Gutiérrez *et al.* 2012).

Perhaps the most important advantage of government-linked seafood labeling schemes is in their potential to catalyze multilateral conservation agreements. The dolphin-safe labeling program is a perfect example because its creation eventually resulted in the AIDCP (Joyner and Tyler 2000) which, among other things, sets strict dolphin mortality limits and requires 100% observer coverage on large purse-seine vessels in the ETP (AIDCP). Labeling schemes administered by NGOs or retailers do not have the power to bring nations together over a negotiating table because they are not so deeply rooted in international issues. Therefore, efforts should continue to identify other potential trade and marine environment disputes to ensure that multilateral negotiations can be commenced before the conservation problem becomes too difficult to manage. Product labeling can be an excellent tool to hurry importing nations to change their fishing practices before it is too late.

The greatest disadvantage of government-linked seafood labeling schemes is that, if they are based on NPR PPMs, their legal status is not clear under WTO trade law. These programs also have not been used in the United States except as single species conservation tools, so it is difficult to determine if they could be used successfully in other situations.

3.2.2 Nongovernmental

The majority of seafood ecolabeling programs have been set up by nongovernmental organizations and are inspected by third-party certifiers accredited by those bodies (Gulbrandsen 2005). Their purpose is to encourage sustainable fisheries management by certifying well-managed fisheries based on a set of criteria and allowing them access to a label to differentiate their products. The most well-known seafood ecolabel is administered by the Marine Stewardship Council, an international nonprofit that was developed jointly by the World Wildlife Fund and Unilever in the late 1990s (Unilever 2002). Other similar NGO seafood ecolabeling schemes include Friend of the Sea, KRAV, and Naturland from Italy, Sweden, and Germany respectively (Washington 2008). These organizations typically involve a third party accreditation company that evaluates a fishery on a set of ecological criteria based on the FAO's marine capture seafood ecolabeling guidelines.

Nongovernmental organizations have several significant advantages in administering seafood ecolabeling schemes. The first is that they do not violate WTO law under any circumstances because by definition they are not linked to national governments. Only the laws and regulations of national governments who are Members of the WTO can be called into question under the Agreements.

The second is that NGO seafood ecolabeling schemes have growing support from large, influential retailers that have enough market share to make an impact on unsustainable fisheries. Large retailers are beginning to see labels as an effective seafood marketing tool. Indeed, in 2006, the global retailer Walmart pledged to purchase 100% of their wild-caught fresh and frozen seafood and (Walmart Stores Inc. 2006). The restaurant chain McDonald's, grocery chain Safeway, retail chain Target, and many other large retailers are following WalMart's lead, choosing to buy MSC labeled products that capitalize on consumers' preference for information about the goods they purchase. Efforts by these companies to engage more environmentally conscious consumers translate into significant gains towards sustainable fishing on a global scale. Increasing retailer participation in purchasing sustainable seafood should continue to be encouraged.

Of course, nongovernmental seafood ecolabeling schemes are not without their disadvantages. One major concern is the lack of consensus on the definition of "sustainability" and the different criteria for achieving it among NGO ecolabeling initiatives, possibly leading to confusion among seafood consumers (Jacquet *et al.* 2009). The growing use of NGO seafood ecolabeling schemes also presents a problem as different standards and recommendations confuse consumers and may even reduce their trust in well-established ecolabeling schemes (Gulbrandson 2005).

The number of fisheries that are available to be certified by NGOs is very small compared to the global fisheries production. NGO-certified fisheries are, as a condition of the ecolabel, already well-managed or on the way to being well-managed. So even before the fishery is certified, it is not likely that the fishery is contributing to a major conservation issue like one that might be addressed by a government-linked label. Because so few fisheries are part of a certified ecolabeling scheme, there are also concerns that the demand for non-certified fisheries will marginalize the impact of certified fisheries (Gardner and Viswanathan 2004).

The credibility of some seafood ecolabeling NGOs has also recently come into question. The Marine Stewardship Council and Friend of the Sea have both recently received criticism because some ecolabeled stocks are overfished and are subject to ongoing overfishing (Froese and Proelss 2012). These discoveries result in a lack of public confidence in NGO ecolabeling schemes and create the impression that such efforts are simply another form of greenwashing.

3.4 Discussion and Recommendations

Understanding the purpose of ecolabeling, the circumstances under what types of ecolabeling schemes work best, and how such schemes fit in with WTO law allows one to provide recommendations for how the WTO and the United States should move forward on seafood ecolabeling schemes.

World Trade Organization Members should agree to allow non-product related processing and production methods under the TBT Agreement because it will clear up the uncertainties surrounding ecolabeling schemes. With the legal questions of ecolabeling out of the way, national governments could provide more comprehensive information to consumers about seafood products without fearing retribution. Keeping the NPR PPM issue in a gray area is simply a delay tactic by WTO Members that do not want to take a stance on the issue yet. The Appellate Body is guilty of doing this in the dolphin-safe case when they ruled that the US measure was in compliance with Article 2.2 but not Article 2.1 of the TBT Agreement.

Labeling NPR PPMs should be protected under the TBT Agreement because products that are produced using different production methods are not "like products." They are different, and nations should be allowed to label products based on those differences and consumers should be allowed to choose whether or not to buy labeled or non-labeled products based on those differences.

Arguing that consumers should be given the opportunity to choose products based on their final characteristics but not the processes that went in to making them does not reflect the reality of consumer demand for information. Consumers have a right to be informed and have a right to make a choice. The WTO should support this choice by making it easier for nations to create labeling programs that reflect the demands of their citizens. Why would it be unfairly discriminatory to require that imported seafood be caught by fishers with wages that are comparable to the livable wages of domestic fishers? Why should raising the standards for

working conditions through market-based incentives be an illegal objective? Perhaps it may be a ploy to protect domestic fishers, but it gives an incentive for importing nations to improve. In advancing a more sustainable seafood industry, these choices should be readily available. As long as the scheme is completely voluntary, there should be no question as to its discriminatory nature. At the very least, the WTO should come out with a set of guidelines for ecolabeling schemes that will make it easier to avoid creating unintentional trade barriers (Joyner and Tyler 2000).

Given the outcome of the dolphin-safe ruling and its implications for government-linked ecolabeling, the United States should continue to identify international marine conservation issues rooted in trade that may be adequately addressed through voluntary ecolabeling schemes. It would be wise if the US sought to create a label with the participation of other nations involved in the marine conservation issue, but it is not absolutely necessary. Any seafood ecolabeling scheme that the government decides to regulate must unequivocally satisfy Article 2.1 and 2.2 of the TBT Agreement. This would be an easier task if the question of NPR PPMs was adequately addressed by the WTO, but even mandatory programs can still be in compliance with the TBT Agreement as long as they have a legitimate conservation objective, do not modify the conditions of competition, and are not more trade restrictive than necessary taking into account the risks failing to achieve the objective would create.

The US government should also be consistent if they continue to push for labeling products based on NPR PPMs for the benefit of consumers. Their stance on labeling genetically engineered seafood is particularly egregious. When creating or administering seafood labeling schemes, the US must value consumer information and choice over political concerns.

Sustainable fishing practices are not yet so widespread that governments can take a back seat role in managing them. Many consumers are not aware of serious marine conservation issues and government labels bring those issues to national attention, and this is where government-linked labels that act as trade-based conservation measures are the most successful. Efforts should be made to identify other potential trade and marine environment disputes to stimulate multilateral negotiations. If an ecolabeling scheme results in an effective multilateral agreement that fulfills the ecolabeling scheme's objective completely, the labeling scheme could be removed or altered to accept imported products according to the standards reached in the agreement. In this way, the label can be a means to reach an international conservation goal or it can be a long-term, permanent solution.

Conclusion: The Future of Environmental Labeling under the World Trade Organization

As conditions in the oceans, political factors, market dynamics, and consumer preferences change, so too must methods for differentiating seafood products, even as they necessarily maintain a focus on sustainability of the product (Goyert 2010). With growing concern over stock collapses, protected species bycatch, and an awareness that ocean resources are not as limitless as we once thought, ecolabels are valuable tools in improving long-term fisheries management.

Future government-linked labeling schemes are inevitable. The governments of Australia, Africa, and the Nordic countries, are considering fisheries ecolabeling schemes, and the government of Japan has started one (Sainsbury 2010). In the most recent "Managing our Nation's Fisheries" conference of fisheries stakeholders in the US, the idea of a national sustainable seafood certification program was one of the main recommendations for improving fishery sustainability (NMFS 2013). It is a fine line that governments walk when they mandate seafood standards that essentially signal to importing countries what harvesting methods they should have (Kysar 2004). However, given the deteriorating state of marine capture fisheries and associated environmental problems, the incentives that these ecolabeling schemes have the potential to provide are worth it.

Absent of a WTO Member-wide embrace of NPR PPMs under the TBT Agreement, the danger of triggering the dispute settlement process remains, but if the US is successful at diplomacy with nations in influencing their fishing methods, the dispute settlement need not be triggered. Measures like dolphin-safe bring nations who have similar interests to the table, and strengthen the growing international call for more sustainably fished seas. Perhaps in the future the US will not feel obligated to enact domestic regulations with the purpose of affecting international fishing practices, but for now, these measures are effective in convincing countries to comply with US marine conservation strategies. It is in this context that the dolphin-safe ruling and ongoing implementation can be thought of as a weak victory for marine conservation. Not only because dolphin-safe itself has (arguably) been improved and has set a precedent for future ecolabeling schemes, but because it has been validated as resulting in successful conservation.

Both NGOs and governments interested in seafood ecolabeling programs should engage retailers business. Retailers appear to be the true driving force behind seafood ecolabeling schemes, enjoying the benefits from enhancing their reputation, adding value to their private brand, and improving risk management through easing procurement and guaranteeing traceability (Washington 2008). Recall that twenty years ago, the dolphin-safe label originated from pledges by Starkist, Chicken of the Sea, and Bumble Bee to refuse tuna that was caught using dolphin sets in the ETP.

More quantitative studies must be done to examine the impact of all types of labels on seafood fish stock sustainability and overall ocean ecosystem health. Despite the growing use of labels,

there is a lack of empirical evidence showing their contribution to increased sustainability (Stokstad 2009). Such evidence could enable governments and consumers to place more confidence in labeling schemes and their legitimacy.

The lessons learned from the long history of the US dolphin-safe label have great significance for the future of marine capture fisheries. In a world where global fish production has reached its peak and where demand for fish continues to grow, market-based conservation measures like ecolabeling schemes must be part of the future.

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