# IWC & ICCAT: Power and Influence in International Environmental Regulatory Regimes By: Lauren Gilbert

Supervised by: Prof. Simon Nicholson

Submitted to the American University School of International Service and

the Honors Department for fulfillment of the graduation requirements for a

B.A. in International Studies with General University Honors

Spring 2011

#### Introduction

What ails the international environmental regulatory regimes? Be it a meeting of the Kyoto Protocol countries or an attempt to regulate international fisheries, sometimes it seems like it is impossible for these bodies to manage the resources that they are supposed to be protecting. This situation occurs because constituent nations will default to their national interest, which governments often take to be synonymous with "industrial interest," even within international organizations. Although such a default setting can be changed, it takes a long and concerted effort on the part of more conservation-oriented nations and non-governmental organizations (NGOs) at norm engineering. Until such an effort can take place, the present situation where free riders rule the regulatory institutions will remain the status quo, and the environment will continue to degrade, dragging unitary countries into international squabbles that they cannot win.

For just one example of such a squabble, in 2010, a heated dispute erupted between the different parties to the Convention on International Trade in Endangered Species (CITES) regarding the fate of the endangered Atlantic bluefin tuna, which has been mismanaged for years, nearly to the point of stock collapse (Safina & Klinger). In fact, the very organization that manages the Atlantic bluefin tuna has admitted its own failure to protect the species. "Based on the Committee's analysis, it is apparent that the catch limits set by ICCAT are not respected and are largely ineffective in controlling overall catch," they wrote in one report (Greenberg 217).

Tuna fishing has been held up over the years as a textbook example of the difficulties of regulating common-pool resources in the international system. Atlantic

bluefin tuna (from here on referred to simply as "bluefin tuna"), like many tuna, have long lifespans, some living for 20 years. Their particularly long lifespan results in a particularly long reproductive cycle – they reach sexual maturity after between 8-12 years (NMFS). This long reproductive cycle puts the species at particularly high risk for overexploitation, since it necessarily means that it takes the species longer to repopulate. There are a few different organizations in charge of regulating different species of tuna. For bluefin tuna, the relevant agency is the International Commission for the Conservation of Atlantic Tunas (ICCAT), which has faced repeated criticisms over its inability to manage the stocks under its jurisdiction.

This problem is not limited to a tuna-only dilemma. Many species of whales have faced problems similar to tuna, stemming from over-consumption on one hand and a long life span and similarly long maturation and reproduction cycles on the other (although the very practice of whaling has become quite controversial in recent years). While there have been some unilateral attempts to put an end to whaling (Mossop), much of the work is carried out by the International Whaling Commission (IWC). The IWC is sometimes thought to have been a resounding success, since it has had many victories over the decades for conservationists, such as the moratorium on whaling and the Southern Ocean Whale Sanctuary. In fact, it often receives criticism that it has gone too far in promoting conservation interests, possibly leading in the long run to degradation of its ability to protect whales. Therefore, it may be able to provide some lessons about what governs which interests international regulatory institutions will be more likely to heed.

The organizations in charge of both whales and bluefin tuna are supposed to use science in order to come up with quotas (ICRW art.5, ICCAT art. 6), but at varying times

have failed at their duties (Safina, Chasek 206). This paper will use these two organizations' efforts to conserve the populations of whales and tuna as case studies. It will examine these cases with particular focus on the interest groups involved in the negotiation process and the incentive structure of both the constituent nations to these regimes and the interest groups pressuring them to see what can be gleaned from these two for future efforts to conserve common-pool resources. At the very least, this research can provide some advice about how to avoid future debacles such as the past management of bluefin tuna, and with some luck, it may even help the that species among others to thrive under better management.

# **Understanding Analytical Frameworks**

In order to figure out what influences these regulatory institutions, it is first important to understand some basic dynamics of resource regulation both from economics and from political theory. Understanding both subjects is necessary in order to understand this complicated subject and to provide a foundation for a realist and an institutionalist view of the subject. After that, this paper will examine a much newer and developing lens on how governing bodies work from a combination of sociology and political theory. This will comprise a more constructivist view of the subject.

## The Economic Background

The inefficiency of bureaucracy has long been a tenet of liberal economic thought. However, many from other schools of thought have pointed out that as efficient as free markets can be, they can still be subject to market failure. In cases in which free market economics would cause market failure, it is then argued that the government should correct for those externalities. Some of the most notable causes of market failures tend to be in markets for non-excludable goods, such as public goods and the markets for common pool resources (CPRs) (Barkin & Shambaugh).

Public goods, on the one hand, are goods that are non-excludable, meaning that if one person benefits from them, all people benefit from them. Public goods are also nonrival, meaning that they do not run out. CPRs are similarly non-excludable, but they are also rival, meaning that they do run out if over-consumed (Barkin & Shambaugh 5). Both whales and tuna are CPRs, since they are both non-excludible and exhaustible. Within a free-market framework, it is very difficult to distribute public goods and common pool resources. Free markets tend to rely upon private property rights to solve appropriation issues. However, part of the definition of a CPR or a public good is the lack of excludability that private property rights rely upon. Without the ability to exclude individuals from the resource, the situation deteriorates into a traditional prisoners' dilemma.

The defining aspect of the prisoners' dilemma is that the Nash equilibrium (a position in which no party can gain by unilateral action to move away from the equilibrium) that the parties to the dilemma reach is not going to result in the highest utility for anyone (Nicholson & Snyder 178-184). When applied to CPRs, it is usually represented by all parties over-consuming under the assumption that the other party is simply going to over-consume and exhaust the resource no matter what any given country does, making all sacrifice for future consumption meaningless. With both parties over-consuming, they both get the additional short-term utility from having consumed more, but not the long-term utility that would have been greater from the perpetual sustenance of the CPR. This does not necessarily mean that all public goods and CPRs

are best nationalized. In fact, with resources that are under no national jurisdiction, such as anything on the high seas, nationalization is nearly impossible. Rather, it means that careful thought must go into figuring out what sort of method would most efficiently distribute the goods.

One particular subset of the prisoners' dilemma, called the tragedy of the commons, is very instructive regarding the most efficient distribution of non-excludable resources, and particularly CPRs. This construct shows that in the situation in which goods are publicly available, the incentives to every individual who partakes in the resource are toward continually exploiting it. When that happens, the resource eventually becomes exhausted. However, if each individual had maintained a smaller level of exploitation, the resource could have stretched on indefinitely, and every individual would have gotten more utility from it in the long term. This occurs because the possible utility gained by over-consuming a CPR would be the additional utility from consuming one more unit (will be shorthanded to "1") for consumers, while the cost of the damage to the CPR would be shared by all of the consumers, making it 1/n (n = the number of consumers). Since 1>1/n, the natural incentive for each individual is to over-consume the resource (Hardin). Once a commons has been identified, then, the goal becomes finding some way to preserve it by switching the formula for any consumer's cost. Until that cost formula is altered, the incentive for every individual consumer is to free ride, or overconsume and hope that someone else will bear the cost of preserving the commons.

Every framework for dealing with the tragedy of the commons, be it privatization, nationalization, or some other method, involves some sort of large coercive force that prevents the free-rider dilemma that plagues any kind of commons. In the case of

privatization, the source is property rights. With nationalization, it is governmental mandate. However, within the anarchic international system, in which it is very difficult to find a force that can credibly wield such coercive power, the tragedy of the commons can sometimes seem insurmountable.

One of the problems that make tuna fisheries particularly prone to issues of the commons is that most tuna are highly migratory species (HMS). Since they do not stay in the same place, it is very difficult for any individual regime to protect them. Elizabeth DeSombre provides an example of Latin American countries worried about the viability of the Pacific tuna stocks off their coasts. In order to protect them, they tried to assert ownership of 200-mile wide exclusive economic zones (EEZ) and refuse to allow other countries to fish there. Although they were successful in establishing the EEZs, the tuna did not respect the newly established jurisdictions, and foreign factory trawlers would catch them once they migrated elsewhere in the Pacific (Tuna 63).

Even when HMSs do not lead to a problem of jurisdiction, their wide ranges can still lead to a problem of enforcement. The ocean is a vast place, and it is nearly impossible to monitor what every fishing vessel is doing. In fact, frequently, the regulatory mechanisms have relied upon fishing fleets to provide conservation information so that the fishing seasons can be regulated properly. A lot of this information is likely false, since having the fishing fleets provide the information upon which season timing will be based gives them an incentive to underreport their catches in hopes of gaining a longer fishing season (Song 42). Some fishing fleets also fly "flags of convenience" of countries that are not members of the relevant regulatory bodies so that they will not be held to their regulations (Alexander 92). Catching fish in this manner is called illegal, unreported, and unregulated fishing (IUU) (Chasek 244). It is analogous to poaching. Sometimes regulations and bans can actually make a poaching or IUU situation worse, since it can raise the price of the good, making it more profitable to sell on the black market. If a complete ban is implemented, that effect can be compounded by the destruction of the value of the good for the national authorities who will actually enforce the regulation, leading them to put less effort into conserving the resource, since it no longer provides any legal benefit, while the resource is still valuable on the black market (Bulte & van Kooten). Thus, even though it is important to clamp down on over-fishing, it is important to do it in such a manner that it doesn't move the incentives too far toward IUU fishing.

In addition, both DeSombre and Joyner differentiate between resources that are valued for their existence, such as dolphins and whales respectively, and resources that are valued for their consumption, such as most types of fish. Parties are more likely to have aligned incentives and "shadows of the future" (i.e.: how much they value their future ability to gain utility by consuming a resource versus how much they value their present ability to gain utility by consuming a resource) when a species is valued for its existence. This is because a species that is valued for its existence will generally lead to parties having shadows of the future that extend into perpetuity, since consumption in the present (by, say, going on a whale-watching trip) does not conflict with their existence in the future. On the other hand, a species that is valued for its consumption leads to parties having competing interests – on the one hand, the utility of present consumption, and on the other, the value of future consumption. Thus, when a species is valued for its consumption, the nations' shadows of the future will vary depending upon how much

they value consumption in the present versus consumption in the future.

# The Realist View

The international regulatory regimes suffer from two different dysfunctions. They have trouble instituting laws that satisfactorily conserve resources, and they have trouble enforcing the laws that they do have in place. Under the realist perspective, attempts to solve these problems need to involve some form of hegemony (such as, most recently, the United States), with some significant mutual overlap in the effort to gain compliance (Byers & Nolte).

In pursuit of cooperation, a nation can use its international hegemony in order to go outside of the established institutions to retain a stock. The concept is somewhat analogous to having an acquaintance serve as an arbiter for a dispute, or in a more coercive situation, perhaps like a gang that uses its own power to establish order in an unpoliced neighborhood. In order to gain cooperation and pass rules that are desirable, a hegemon needs to pressure other states politically, economically, or militarily. This is a hegemon's specialty. However, the actors who will disobey the laws set down are not actors. They are individual fishing vessels. It is impossible for any nation, even a hegemon, to monitor every last ship and count the number of fish to make sure that they are within the catch limits. However, one way to control the vessels is to keep the countries that do business with the vessels in line with the law and cooperating with international efforts to conserve resources. If no country is willing to take in the boat's catch of fish, it becomes impossible for the fishermen to profit from catching more than the catch limit.

A person might wonder why a hegemon would bother going out of its way to

protect the conservation of a CPR. The reason is because the country in the role of a hegemon is at a natural disadvantage when it comes to the free allocation of public goods and CPRs within a group. This is because, assuming the hegemon has a vested interest in the good, it would invest a certain amount in the provision of the good of its own accord. Smaller parties then see the investment and have the incentive to free ride on the system (Olson 35). That free riding then wastes a portion of the hegemon's investment, giving the hegemon an incentive to prevent such behavior (Barkin & Shambaugh 16).

A hegemon not only has the incentive to stop the free riding; it has the means to as well. The means can take many forms, however. In worst-case scenarios, conflicts over CPRs may lead to military incursions, or even wars. In one notable case, the Canadian government (though not a hegemony) sent out warships after a Spanish fishing vessel that was suspected of over-fishing turbot (Schaefer). More commonly, however, a hegemon can punish by restricting access to its markets, by either tariff or embargo (Keohane 33). The story of the IWC will show a case of this.

There are two types of enforcement hegemony – benevolent and coercive. A benevolent hegemon will simply make up for another country's free riding by giving up more of its own portion of the resource. The more common form in international relations is the coercive hegemon, which punishes other countries for not investing their share in the resource. A benevolent hegemony is particularly useless when it comes to CPRs, since CPRs are exhaustible, meaning that at a certain point, even if the hegemon gives up all of its share of the CPR (which would be an incredibly irrational action), the resource would still become exhausted by countries' overconsumption without the hegemon having any ability to counteract it (Barkin & Shambaugh 16). After all, even if the US refused to consume any more tuna, it cannot do anything more than abstain from consumption. If smaller parties over-consume even that, the US cannot put more tuna into the ocean. Thus, a coercive hegemony tends to be the only type that has any hope of enforcing cooperation on protecting CPRs, although even it fails with alarming frequency.

## The Institutionalist View

Of course, both the traditional prisoners' dilemma and the tragedy of the commons frameworks that the realist's model is based on ignore the effects of communication between different nations. However, governments do communicate with each other as representatives of their respective citizenries, and other scholars suggest that such communication is, in fact, quite important to the outcomes of disputes over CPRs. The institutions through which they do this thus provide a way out of the selfdestructive dynamic that people would naturally tend toward (Snidal).

Institutionalists believe that international organizations can help to alleviate some of the problems associated with international commons. By becoming watchdogs that can let every other member of the system know when someone is misbehaving, they can coerce governments through shame and through retributions that may occur from other governments once they become aware of a breach. Although international organizations have their flaws and critics, they have collected quite a few successes over the decades in maintaining a certain degree of order (One example is the WTO's success in lowering barriers to international trade). They have also helped governments to pursue long-term protection of some resources, even if some cases have run into further problems stemming from their success (Stoett, To Trade).

However, such mechanisms have not worked particularly well when it comes to tuna fishing. To select a few among the many criticisms of the current group of systems: the quote assessments are sometimes thought to be off by commercial fishermen (Buck); there are concerns about the national loyalties of some of the scientists and regulators trumping their duty to regulate the tuna stocks (Van Dyke & Heftel 28); and many players aren't included in the regulatory system, making the CPR rife with free-riders (DeSombre 57, 66-67). Many of these are variations on a dilemma of enforcement – how to enforce the rules that are supposed to govern an institution and those it regulates. This fundamental problem of enforcement is only exacerbated by the structure of the laws that provide the legal framework for the institutions. As with much within the global system, a large amount of the legitimacy of the structures regulating the tuna fisheries relies upon the consent of the parties being regulated (Cassese). This can give undue leverage to those parties willing to be the most callous about the CPR, since they can always threaten to leave the regulatory body (DeSombre, Tuna 60). However, many of the regulatory bodies have provisions that allow countries within the body to take actions against those who would harm the desired outcome of healthy tuna stocks (Cassese 665-666). It can be very difficult to implement these provisions, however, and some nations become so frustrated that they remove themselves from the system in order to pursue conservation measures unilaterally.

However, there is a problem with unilateral conservation action. A nation needs to be a price-setter in order to be effectual in its efforts. DeSombre cites an example of the US banning imports of non-dolphin-safe tuna. Since the US is a large market for yellowfin tuna products, the ban was able to push international fisheries to make dolphinsafe tuna the standard (Tuna 58-59). However, on the issue of bluefin tuna, the United States lacks the leverage that it had in the case of yellowfin tuna. Unlike in the case of the yellowfin, the US is a producer of bluefin tuna and only a consumer of a small amount of the market. The market for consuming eastern Atlantic bluefin is largely concentrated in Japan, which consumes 80-90% of the trade in that species (Molyneaux). In contrast, the field of producers is very wide (Webster 273). Thus, the US is in a "price taker" position, rather than a "price setter," and the stock of bluefin tuna continues to decline.

In theory, Japan could take actions based on its very large share of the market. However, it has shown absolutely no intention to do so. Herein lies the risk of trying to use the power of one nation with an overwhelming share of the market – if that nation does not wish to oblige, then there are relatively few options left.

Although all of the past arguments have dealt with the parties to a given regulatory body, there is another facet of institutionalism as well. Once a central authority becomes involved in any sort of regulatory function, it then becomes important to examine the problems that can come from the bureaucratic system itself. Since a regulatory body tries to merge the interests of many different groups into one, it necessarily causes parties to act in a way that may to a naïve observer appear to be against the interests of the party at hand. Indeed, intergovernmental organizations (IGOs) that were created to conserve resources and yet whose policies sometimes ignore or manipulate the science that they base their decisions on would appear in themselves to be parties acting against their own interests.

One of the most prevalent of the models to explain bureaucratic "irrationality" is the interest group model and variations thereof. The interest group model for the most part simply divides parties into smaller pieces than one might otherwise divide them. Usually, the model moves down from a state-centered model to an agency-centered one (Hansen & Park). In analyzing the actions of a regulatory body comprised of states comprised of agencies, then, it is necessary to extend the analysis one more step. What motivates the parts of this bureaucracy? What happens if the bureaucracy itself is somehow tarnished by conflicts of interest?

It is from this model that the consequence of regulatory capture is derived. Such occurs when the industry manages to get people who sympathize with it into the position of regulating their industry (Makkai & Braithwaite). Such a model, if it applies, could be quite useful in explaining the behavior of some of the regulatory IGOs over the years. Sato uses a similar model to examine an international dispute over another HMS, the southern bluefin tuna.

## The Constructivist View

All of these complicating factors play roles in any attempt at distribution of CPRs at maximum efficiency using international regulatory regimes. However, even they cannot fully explain the successes and failures of the past. To more fully understand, it may be necessary to break down the institutions into further parts and look into what causes individuals to respond to stimuli, through sociology.

In sociology, the term "norm" is used to describe any behavior or attitude that is expected or considered standard within a given social group. Often, norm engineering, or conscious attempts to change norms, are applied at the societal level – for example, focusing on marketing campaigns to convince a populace to buy more locally grown food or fluorescent lightbulbs. However, given that any group of people can constitute a social group, the idea is applicable to many different environments and fields, including international relations (Krebs & Jackson) and regulatory institutions (Pearson).

Norms do change over time as a natural aspect of the passage of time. To a certain extent, they are a matter of humans simply adjusting and doing things in the most efficient manner within a given environment. However, that doesn't explain normative change completely. Sometimes, societies adopt norms that actually decrease efficiency (Eisenberg). This can be for many reasons. Sometimes, the norm development may still be in flux and not have adapted yet to a new environment.

Sometimes, it may be based upon a different idea of what efficiency is. For example, the classic economic definition of efficiency is "...[A]n allocation of resources in which the sum of consumer and producer surplus is maximized. [It] reflects the best (utility-maximizing) use of scarce resources," (Nicholson & Snyder 638). However, if an actor bases that utility maximizing principle in the short term, then he will settle upon some very different actions to maximize efficiency in comparison to someone who is trying to maximize utility in the long run. Although both are efficient, they are efficient according to very different assumptions about what a consumer should focus on. The judgment of what time frame to focus on is influenced by the norms of the society that the person is immersed in. Indeed although economists have preferred to use various monetary measures as a proxy for utility, the truth is that utility itself is a concept that is decided based on the norms of a society.

Sunstein compares norms to subsidies and taxes in that they are not absolute, but merely change the social "price" of a given action. However, as he later elaborates, the comparison requires a number of caveats. Very few people like spending more money, but there are many people who, due to various factors, enjoy breaking social norms and getting reactions out of people (439-441). In spite of this and other caveats, although Sunstein argues that norms are often fragile, he writes that they often appear stronger than they actually are due to a free rider dilemma. In this case, individuals who may privately oppose a given norm may practice it anyway due to a fear of public stigma if no one else agrees. Since most individuals work under this assumption, no one signals that there is discontent regarding a given norm, and the norm remains the status quo. (927-928)

The term "norm entrepreneur" refers to an actor who wants to change a social norm (Sunstein). Norms can be influenced both organically and by government intervention. These entrepreneurs serve as signals to the public that there is discontent with a given norm and give people who agree with them a chance to say so, knowing that there are others who will back them up.

There are two different ways that a norm entrepreneur can stimulate normative change. Kubler refers to these two methods as "regulation of motives" and "regulation of meaning." Regulation of motives follows a standard economic model wherein there are monetary or legal incentives to do or not to do a given action. Regulation of meaning, on the other hand, focuses on the symbolic aspect of norms, wherein the social norm serves as a signal of loyalty to a given group (Posner). Most regulation of meaning takes the form of advertisements or publicity campaigns that spread a certain message. Under the assumption that the people who work in the international regulatory regimes are also affected by norms both within the institution and carried over from their nations of origin, a person may be able to argue that the problem within these regimes is a

normative one to be solved by norm engineering.

These ideas will form the basis of the analysis of the IWC and ICCAT. All of them highlight important aspects of how regimes function. What is particularly important to this paper is the actions of the parties within the institutions. Although that is technically under an institutionalist framework, since the individual parties are often nations, the analysis will have a distinctively realist component to it. However, the terms of the debate within these institutions tend to be surprisingly similar to the constructivist view. This fact is intriguing, since the lens has only recently begun to be applied to institutions, rather than societies.

One thing that should be understood from all of these frameworks is that international environmental regulatory regimes have many things that stop them from "rationally" performing the regulatory duties that are their core missions. Under the realist point of view, the hegemon can hijack the institution in order to serve its own interests, rather than those of the institution. Under the institutionalist model, different components of the institution can be captured by the very special interests that the institution is supposed to be regulating. Under the constructivist point of view, the norms within the institutions may not yet match up with the institution's goals, or people might carry with them norms from their native countries. Various types of "irrationality" and the dysfunction that may follow come into play repeatedly in the analysis.

#### Analysis

The irrationalities of both the IWC and ICCAT begin in the same place – nations pursuing their short-term economic interests at the expense of their long-term economic interests. However, while ICCAT still remains in a similar position to when it was founded in 1969, the IWC has reversed its position completely, after many efforts by the United States to recruit nations that had no direct economic interest in whales, but would vote reliably against pro-whaling measures. The IWC's story may provide a helpful look into what can spur regimes into action.

# The IWC

The IWC has its roots more in industrial interests than in environmental concern. Started in 1946 under the auspices of the International Convention for the Regulation of Whaling, the IWC began not as a way to preserve whales, but in order to divvy up the potential catch among whaling nations. "Indeed, the total number of whales killed more than doubled between 1951 and 1962" (Chasek 206). It is made up of multiple parts: an assembly made up of one representative from each party state to vote on new policies, an administrative secretariat, a technical committee to assess measures before they go up for a vote, and "a scientific committee of cetologists and other marine mammal experts" (Stoett, International Politics 57-58).

The role of the scientific committee, although marginal before, became more important after 1975, according to Stoett, with the establishment of what was termed the "New Management Procedure" (NMP) (International Politics 58). The NMP declared a focus on scientific harvesting of whales according to a sustainable yield to be calculated. However, the databases that the IWC had at the time were inadequate for the task (Day 30). According to Stoett,

The NMP ordered the world of Cetacea in three categories: initial management stocks, which could, in the committee's opinion, be reduced to [the maximum sustainable yield (MSY)] without damaging future population levels; sustained management stocks, which could be hunted only with great care, since they were already at MSY levels; and, finally, protected stocks, which were already below the MSY and needed full protection from hunting (International Politics 58). The NMP was supposed to later be replaced by the Revised Management Procedure

(RMP) – an algorithm by which different whale stocks could be assessed quite accurately by the scientific committee (Darby 167). However, the topic has devolved over the years into a dispute that will be covered later in the paper.

One other interesting feature of the IWC, and yet a common one among international institutions, is its voluntary nature. States, very jealously protective of national sovereignty, tend to look askance at any international organization that compels states to act in a way against their intra-governmental decisions. For that reason, membership in most international organizations, including the IWC, is completely voluntary. A state must opt in through payment of dues.

Although a state must opt into the IWC, it is not a particularly exclusive group. For instance, there is nothing to state that only whaling countries may join the IWC. As long as the dues are paid, any country can join. Both sides of the whaling dispute have taken advantage of this fact in the past. Leading countries from both sides would often pay the IWC dues of other nations in order to recruit them in to cast important votes. For example, since the IWC was made of whaling countries that would veto any measure to ban whaling, throughout the seventies, the few countries in the IWC who wanted a ban, including the US, recruited non-whaling countries into the commission in order to overwhelm those that actually did whale.

However, Japan has used the same strategy beginning in the 1990s to create a coalition of nations who would oppose the moratorium. These were not necessarily nations who actually had an interest in the whaling issue, whether or not they whaled. Rather, it was based on Japanese economic and monetary incentives, either in the form of foreign aid (DeSombre, Tuna 187-188) and in some cases, personal bribes (Darby 222).

The United States attempted to augment its political maneuverings by using its economic power as a coercive hegemon to inflict economic sanctions on certain prowhaling nations – such as Chile, Peru, and Taiwan – that were not members of the IWC. Because of those nations' dependency on trade with the US, this sort of maneuvering forced them into compliance with IWC rules, even though they had no official obligations under international law (DeSombre, Distorting 190).

Thanks to such political wrestling, the anti-whaling nations managed to patch together a majority to gain two important successes. The first was a moratorium on commercial whaling in 1982. Four countries held reservations to this moratorium, but initially didn't challenge it (Chasek 208). Indeed, by the mid-1990s, most of those countries had removed their reservations, albeit due to the threat of sanctions (Schrijver 85). The moratorium has become a lightning rod for controversy.

This is because, although the IWC calls this measure a moratorium, it may be more accurate to call it a ban. Most moratoria are implemented under the assumption that eventually, the party issuing the moratorium will move either to re-allow the activity to take place or will eventually switch the moratorium to an official ban. However, this moratorium has remained in place from 1982 up through the writing of this paper, despite multiple attempts at its elimination. The key to its elimination would be the establishment of the RMP, but anti-whaling nations have objected repeatedly to efforts to implement it, due to its lacking detailed enforcement mechanisms. Nevertheless, although the antiwhaling nations have rejected pro-whaling nations drafts of such a scheme, none have, as of yet, submitted their own, thus creating a stalemate wherein no action can occur, and so the moratorium remains as a de facto ban that remains as challenged by whaling nations as the other anti-whaling victory (Friedheim 35).

This second victory was the establishment of the Southern Ocean Whale Sanctuary in all water below 40 degrees south latitude (Chasek 209). Established in 1994, the sanctuary was established mainly to target one country – Japan. Among the nations that oppose the whaling moratorium, Japan is the only one that does much fishing in the southern hemisphere (Friedheim 5). From its inception, the sanctuary was controversial. Some scholars, such as Burke, make a case that creating such a preserve is outside the IWC's jurisdiction, absent compelling evidence that the whales in that region are particularly threatened.

Due in part to the controversy surrounding these two whale preservation efforts, the IWC has maintained a conflicted image over the years. Some claim it to be a bright example of institutional reform, citing its roots as an intra-industry cabal and its current position as a relatively conservationist body (Stoett, International Politics 61). Others, however, see it as an example of dysfunction, pointing to a tendency for science to play second fiddle against emotions and political bargaining once a decision needs to be made, as well as its difficulty in getting compliance with the regulations it does set out.

One frequent criticism of the IWC by pro-whaling parties is that the decisions from the commission are not based on the scientific committee's findings regarding the sustainability of whaling, but in fact based on a moral judgment of nations that have whaling as a part of their culture and wish to continue it. This criticism raises questions regarding the function of the scientific committee and its relationship with the rest of the IWC.

William Aron, a former member of the IWC's scientific committee is one of the

IWC's more outspoken western critics. One of his most common criticisms is that the IWC of today does not pay attention to its own scientific committee's advice. He divides the IWC's history into three periods: its inception through 1972, 1972 – 1975, and 1975 through the present day. From its inception in 1947 until 1972, he says, the IWC was ruled largely by the whaling industry, and the scientific committee was largely servile to those interests. To the extent that it showed independence from those interests, it was ignored. Because of this unfortunate state of events, whale stocks naturally crashed. Aron seems to mark 1972 -1975 as the golden age for the scientific committee, during which time there were many reforms, most notably the NMP, that gave the committee a lot more influence over policy. 1975 to the present day, he considers rather like 1947-1972, but in reverse. Now, he feels that the committee is subservient to the political interests of the anti-whaling nations, as the research of the scientific committee is discarded for reasons of uncertainty.

There are other problems too with the basic function of the IWC. DeSombre sums this idea up when she states,

The goal of international governance to address resource issues is often to convince states to work together to provide a collective benefit they all value and could not individually ensure. ... [There is an] underlying problem of incompatible goals among the actors involved in making and influencing policy with respect to whaling (Distorting 184). In other words, the IWC started out as a group of nations that were interested in the

sustainable harvest of whales for the sake of their economies. Now there is one camp within the IWC that is still interested in that, and another that is interested in the complete abolishment of whaling. Although they are both interested to some extent or another in there being whales in the oceans, the levels of the action of whaling that the nations consider to be acceptable are completely different. Thus, instead of having one group of nations working for a common purpose, there now are two factions within the group working at cross-purposes.

Because of this factional dispute, one member, Norway, has come to ignore the IWC's moratorium completely (Halverson). Japan, on the other hand, only ignores certain parts, such as the Southern Ocean sanctuary (Mossop). Japan does continue to whale, but it does so under a loophole in the moratorium that allows for "scientific whaling," although some think it to be simply a thin cover for commercial whaling (Gales et al). In 1992, one country, Iceland, left the IWC in protest, only to return a decade later. However, when it returned, it issued a reservation that it wished to whale commercially after 2006 (IWC Secretariat).

Some scholars are very concerned about the state of the future legitimacy of the IWC when not all of the nations respect the regulations that the IWC has set out (Stoett, International Politics 177-180). It remains to be seen whether these two can settle their differences by renegotiating the charter of the IWC, as Burke recommends, or whether the institution will ultimately fall apart, but it serves as an incredible example of normative change within an institution over time.

Although each nation began following its short-term economic interest, the membership recruitment campaign that the United States went on, as well as multiple economic incentives in favor of following the IWC's regulations led to a worldwide shift in normative reasoning. Today, it is difficult for the IWC to even lift the whale moratorium because nations are worried about the backlash that they will have to deal with politically from the environmental communities. In this case, the domestic environmental interests have managed to counterbalance the industrial interests, even though it is very difficult sometimes for them to gain sway in the political discourse. The story of ICCAT is both one of hegemonic power to remake institutions and normative engineering to change the discourse within the institutions.

The next case study, ICCAT, is a story that should stand in contrast. ICCAT has yet to have left the first stage where nations are ruled by short-term economic interest. There are many reasons for this, all of which shall be explored. Among them include: the lack of a real price-setting power, the divisions among conservationist nations, and the inherent bargaining difficulties that the system of national sovereignty leads to.

# ICCAT

ICCAT was established in 1969 (Joseph & Greenough 18) under the auspices of the International Convention for the Conservation of Atlantic Tunas (also ICCAT). It is set up as a voting body with four committees to offer functional recommendations to the commission and four panels on different types of fish that are under its jurisdiction. (ICCAT Organization) Each of these panels has one representative from each member nation. (Joseph & Greenough 194) Most important is the Standing Committee on Research and Statistics (SCRS). The SCRS "is responsible for developing and recommending to the Commission all policy and procedures for the collection, compilation, analysis and dissemination of fishery statistics." (ICCAT SCRS) However, all decisions must be made on a consensus basis, and countries are still allowed to "opt out" of measures with which they do not agree (Webster 12). One problem that this leads to is a traditional international regulatory problem of the lack of an enforcement mechanism.

ICCAT's job is to regulate Atlantic tuna and billfish stocks as necessary to maintain a sustainable catch. Their methods include minimum catch limits, catch quotas,

and regulation of the fishing seasons for different species under their jurisdiction. From its inception through the 1970s, ICCAT had a generally laissez-faire approach to regulation of fish stocks. However, that changed by the 1990s for many reasons. The most notable one, however, is simple necessity – by the 1990s, many stocks had come perilously close to collapse.

The threat of collapse forced countries to negotiate and compromise regarding the dispute that they were having over which countries should bear the majority of the burden of rebuilding stock levels. Since one of ICCAT's techniques to regulate stocks is to set catch limits, a fight broke out between the developed countries and the developing countries within ICCAT. On the one hand, the developing countries did not want to be limited in how much they could build up their fleets. On the other hand, developed countries didn't want to trim down their fleets in order to give developing countries more room to expand so that they were roughly equal. Although multiple attempts have been made to solve the dispute once and for all, to this day, these matters still tend to be handled on an ad hoc basis through negotiation. (Webster 11)

ICCAT has recently become a subject of controversy, since the US has backed multiple efforts to move jurisdiction over bluefin tuna, an endangered and highly overfished species of tuna, from ICCAT's jurisdiction into Appendix 1 of the Convention on International Trade in Endangered Species of Flora and Fauna (CITES). (Crook) According to The Economist,

The bluefin [tuna] was supposed to have been managed by an intergovernmental body, the International Commission for the Conservation of Atlantic Tunas... But this was so stunningly bad at the job that it was dubbed the International Conspiracy to Catch All Tuna. In one recent year the scientific advice was to catch at most 15,000 tonnes of tuna. ICCAT imposed a limit of 30,000 tonnes. The actual catch was 60,000 tonnes. Little wonder the bluefin is vanishing fast. (Fin)

Problems abound within ICCAT, but the most commonly cited one is that the

ultimate decisions do not match the scientific reports issued by the SCRS. Regarding bigeye tuna and swordfish, "For many years, scientific advice was ignored or downplayed by members of the commission, and the measures that they adopted failed to match up with SCRS recommendations." (Webster 9-10) These two fisheries' regulations and catches were later improved due to a lot of negotiation with the European Union and the developing countries, which were initially against tighter regulations. This case serves as an example within the same organization that might provide some guidance for more troubled stocks.

However, despite bluefin tuna having been over-fished for such a long time, a similar ending is unlikely. The political outcomes have thus far borne relatively little resemblance to the scientific advice. Despite the SCRS conceding that a trade moratorium may, in fact, be necessary (Greenpeace et al), it still set its catch limit for the next year at 13,500 tons of tuna (International Commission).

The reason for this dilemma comes back to the problem of free rider nations who have short "shadows of the future." Some of the nations within ICCAT, usually the ones who are profiting off of a given species, tend to place more value on an extra tuna eaten today than an extra hundred tuna a few years from now. Those nations always have the possibility, since ICCAT is a completely voluntary organization, to simply drop out of ICCAT so as to not be bound by its rules anymore. Such is sometimes referred to in the literature as a "low discount rate." In the meantime, conservationist nations who are interested in preserving species have it in their interest to keep the profiting nations within the regulatory structure of ICCAT, since the only alternative is for them to consume however much they want with no limits whatsoever. Thus, the profiting nations have an enormous bargaining chip – that of free riding – to hold over the heads of the conservationist nations. (DeSombre, Tuna 59-61) The catch limits that result will thus naturally be weighted away from the science-based numbers.

Even when ICCAT does set regulations, however, it is difficult for it to gain cooperation from fishing fleets, due to the lack of an effective enforcement mechanism. In fact, for a long time, ICCAT had to rely upon the fishing fleets themselves to provide data regarding the catches of fish in a given year, due to a lack of funding for independent monitoring. (Joseph & Greenough 18) It would then base its future projections off of such data.

However, such a method of data collecting has a glaring flaw. It naturally creates a conflict of interest. Since the fishing fleets naturally want a longer fishing season in order to make money in the short term and have no incentive to look to the long term themselves (after all, that is precisely why international regulatory mechanisms such as ICCAT exist in the first place [DeSombre, Distorting 184]), they thus have every incentive to lie in the reporting. They thus would underreport their catches, and ICCAT would base its recommendations on faulty data. (Song)

Although they have tried over the years to keep up with the increasingly dire problems that the bluefin tuna stocks run into, ICCAT has yet to find a way to manage either the collective action aspect of resource conservation, nor the enforcement aspect. In spite of the fact that ICCAT has had some success stories in the past – Webster relates some about bigeye tuna and swordfish – it does not appear to be able to keep up in order to prevent stock collapse. Although this is a tragic situation for the tuna, at the very least, it can provide a case study of an institution whose actions have largely been captured by the very industrial interests that ICCAT is supposed to be regulating.

# Theoretical Analysis

There are some lessons regarding international regulatory institutions that can be gleaned from these two cases. The first is the relative unimportance of science in the decision-making processes of these institutions. Rather, they tend to be monopolized by political interests, with science being implemented only as an afterthought to back up decisions that have already been made. Note that political interests do not necessarily equate to industrial interests or economic interests. Indeed, the term "interests" can be very broad. In the IWC, the environmental movement has exerted pressure even surpassing that of the whaling industry on the countries involved in the decision-making process. Whether there is a way to make science more important to the decision-making process, rather than the justification-making process, is an area that merits much further study. Indeed. Regarding the IWC in particular, Aron has made some suggestions to strengthen the scientific committee's hand, such as reducing the number of people who attend the scientific committee (in order to make working papers more coherent) and having the committee give majority and minority opinions instead of the current practice of trying to lump all of the opinions together in one paper (119).

Within a situation where national interests are going to rule, this paper proposes that it would be better for the conservation interests to have the general advantage, if only because maintaining a resource in the long term will always mean that it is exploitable at a later time, whereas if a stock is completely used up in the present, then absolutely no utility can be gained from it later. Presumably, maintaining a stock into the future is in all of the nations' economic interest as well. The reason that they are not pursuing it is because it is in their long-term interest, which governing officials and industrial bosses rarely tend to think in, due to natural paradoxes like the prisoners' dilemma. Thus, although the ideal would be that the regulatory institutions be run completely by the scientific advice, until that occurs on a regular basis, the conservation interests are the lesser of the two evils.

Regarding that point, what is just as intriguing as the dilemma of the scientific committees is what the IWC case reveals about how interests develop. Before the United States began its efforts at norm engineering, the IWC defaulted to being under the thrall of the whaling industry. It may be helpful to consider these economic and strategic interests the default ruling interests and norms of international regulatory bodies. However, the IWC case demonstrates that the default setting is not necessarily the only possible one.

To review, conservationist nations, beginning in the early 1970s, began seeking to change the norms of the institutions, pressed on by normative changes in their domestic dialogues and laws. For example, without the Endangered Species Act's passage in 1969, it is certainly possible that the US may not have taken any interest in the whaling issue, since its own whaling industry had been effectively dead since the 1920s. Thus, one important thing to recognize is that effective normative change will first occur at the domestic, and even local levels, before it can be pushed onto the international stage.

If such change needs to begin at the lower and more local levels of government, then such change is by nature going to take a lot of time – time that a lot of species, bluefin tuna among them, do not have. Here lies the dilemma. By the time that a species becomes endangered enough that conservation interests begin to think that the public needs to be made aware, a time limit has already been set on how long the normative change will make a difference for the species in question. Turning the species' survival into a discourse on human well-being (by preserving jobs, food, etc) may speed up such change. However, the most important thing about these efforts is that they must be consistent. Norm engineering may be a long process, but some nations are farther along in it than others and may be able to push others along.

Once norm engineering does make it onto the international stage, the most easily used avenues of normative change for governments to utilize involve economic pressure such as through tariffs or embargoes. Kubler refers to such techniques as "regulation of motives." (452) The US embargoes on trade in fish with countries that didn't follow the IWC's rules are a very good example. However, it is unlikely that such measures would work today, due to the creation of the World Trade Organization (WTO), which has garnered a reputation in some circles as being anti-conservation and pro-trade no matter what the non-monetary costs may be (DeSombre & Barkin).

However, the WTO does explicitly allow for some barriers to international trade for the purpose of environmental protection as per GATT Article 20, subsections b & g:

...nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures...

(b) necessary to protect human, animal or plant life or health...

(g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption...
 (General Agreement on Tariffs and Trade)

In spite of this, upon their submission to the WTO, certain cases have shown there to be significant limits to this article. When the United States and Mexico had a disagreement regarding a US embargo on all non-dolphin-safe tuna, the case was settled by an advisory panel of the GATT against the US (although the panel did permit domestic labeling of such products) on the basis that the US could not enforce its own environmental laws

extra-territorially, or outside its own territory (Report of the Panel). Although this decision does not actually carry force of law, since Mexico didn't pursue it further, it still serves as precedent that indicates a likely outcome if the US were to attempt such actions again.

Another case against the United States, involving sea turtles, provides a little more detail. As explained by DeSombre & Barkin, in 1998, the WTO ruled against the US's implementation of an embargo on shrimp not caught with gear that separated out turtles. The WTO panels focused on three important aspects: "the need for environmental rules to be applied in a fair and nondiscriminatory manner, to be accompanied by goodfaith efforts to address the issues multilaterally, and to demonstrably assist in conservation." (14) These principles are the guidelines for how the WTO judges environmentally motivated barriers to trade.

Assuming functional regulations are determined by scientific evidence rather than industrial interests, the only aspect that the whaling embargoes would have failed on is the second principle – a good-faith attempt at multilateral regulation. Normally, this is what international regulatory bodies are supposed to accomplish. However, given the fact that countries with strong industrial interests have an advantage in the negotiation process, it may make sense for conservationist nations to go around them. This requirement of multilateralism may in fact be a boon in disguise for conservationist interests, since unilateral measures, unless hegemonic, do not have a strong history of success. In addition, although the US has been the hegemonic power for more than half a century, there is a strong debate about whether it still is (Layne). Certainly, with countries like China (which do not have wonderful records regarding conservation [MacBean]) on the rise, countries that would have once been punished by a US trade-based embargo may have another place to turn. Moreover, given the less-than-spotless record that the United States itself has with regard to environmental policy, if industrial interests overwhelm conservationist ones at the domestic level, then putting all hopes in US hegemony could be fruitless on some issues and counterproductive on others.

However, with multiple countries' share of the international market, it may be possible to re-bolster the economic strength of the conservationist nations to nearhegemonic, if not perfectly hegemonic, levels. Even if hegemony cannot be reached, if a large enough share of the market is amassed by these countries that they can affect the world market price substantially, they will have hit price-setter status, which is also enough to force change. One possibility that is worth further exploration would be for like-minded nations to come together to form a sort of "Environmental Union," in which the nations promise to vote on enviro-economic issues as a bloc and harmonize their enviro-economic regulations. This would allow for collective action on the part of these conservationist nations and ensure more power.

One criticism of such an institution is that nations are not conservationist all the time. When their economic interests override the environmental interests, nations will naturally take a stance that is more industry-centered and less conservation-centered. This is true to a certain extent. However, some nations have conservation as a far more dominant part of their political discourses than others and will be willing on occasion to sacrifice short-term economic expediency for the ability to partake in the resource in the future. In other words, they have long general shadows of the future when it comes to environmental resources. In addition, if a particular individual nation wishes to backtrack

on a given issue, it would need to overcome the other countries in the union, who may have completely different views. Although it could remove itself from the union in that case, it would have to deal with the cost of losing influence on many other environmental issues.

The core of any such union would most likely be those nations that have environmental protection as a dominant thread in their domestic discourse, such as the Scandinavian countries (and perhaps the entire EU as well by extension), New Zealand, Australia, and some of the smaller Pacific nations. However, that is not to say that there would be no place in an environmental union for other nations as well. Nations that are driven more strongly by economic and industrial concerns may still take the conservationist side of the debate more or less frequently than others.

Here is an example of just one way that potential members of such a union might be scouted. Webster has a framework for predicting how often and how quickly states will be pushed through economic concerns to press for international fishery regulations. She uses a type of game theory that she calls the "vulnerability response framework," in which states' vulnerabilities to depletion of a stock (their shadows of the future) are functions of each state's fleet's cost of production ("competitiveness") and the opportunity cost of fishing another stock ("flexibility"). A modified version of this framework may be useable for other conservation issues. States that are in the "highly vulnerable" quadrant of the framework with particular frequency would also be strong candidates for joining such an environmental union, and, depending upon how much power the conservationist nations have in comparison to how much other nations in the union have, the effects of joining might push the discourses within the other nations to become more consistently conservationist.

This brings the analysis to the second type of norm engineering that Kubler discusses – "regulation of meaning" Regulation of meaning works through either symbolic governmental actions or targeted messages to discourage the norm on a social level. (453) Although the United States' own laws regarding whaling might be considered a type of this, the organizations that rely most heavily on this strategy are the relevant NGOs. For example, in an effort to counter the belief within Japan that opposition to Japanese whaling is based on anti-Japanese sentiment within western countries (Tanno & Hamazaki), Greenpeace International launched an action campaign under the slogan "I love Japan, but whaling breaks my heart." (Greenpeace)

However, it is most likely that within an international regulatory framework, the most persuasive regulation of meaning will come not from members of the international community, but from localized, domestic efforts. According to Krebs & Jackson,

...It is not the imposing capacity of foreign publics, let alone some elusive global public, to sanction state action that makes rhetorical coercion potentially successful on the international scene. When rhetorical coercion is operative internationally, the critical punishing agent is more often a domestic audience prepared to exact costs for violations of standards of rhetorical appropriateness. (56)

Returning to the Greenpeace campaign slogan, if a person studies the sentence carefully, only half of the sentence has an anti-whaling message, and the message that does exist is phrased very gently. It can, in fact, be argued that the goal of this slogan is not necessarily to convince anyone to end whaling but to disassociate the anti-whaling stance from foreign anti-Japanese sentiment. As long as their audience thinks, after all, that the anti-whaling movement is based in a type of xenophobia, it will not listen to the actual arguments against whaling, but simply reject the stance then and there.

The Japanese reaction to foreign criticism of their policies can be seen as a

variation on the infamous "rally round the flag effect" that occurs when a president decides to go to war against another country. (Baum) The one exception to this pseudo-rally-round-the-flag effect that Krebs & Jackson note is when rhetoric and similar attempts at regulation of meaning are used between countries that share close regional identities. (55-56) However, rarely do two countries of particularly close regional identity tend to be on opposite sides of an issue in the first place, rendering this exception relatively useless for the purposes of this paper.

#### Conclusion

Although successful cooperation on international CPR regulation is very difficult, it is very possible to achieve it successfully. The two biggest obstacles facing current regimes are difficulty in passing the regulations necessary to conserve a CPR and difficulty enforcing the regulations that are passed. Of the different schools of thought on international relations, both realism and constructivism offer some helpful insights. However, realism is more useful as a way to frame the dilemma, while constructivism is the lens that seems to offer the most straightforward solution.

Although a realist perspective would suggest that hegemony is the best way to solve such dilemmas, there are two things that make such a proposition problematic. First, the most recent hegemony, the United States, may or may not be hegemony anymore. If it is not, then it is safe to say that a new hegemony has not yet risen up to replace it. Without a hegemony already established, using one to enforce cooperation becomes irrelevant. Second, even if the US still is a hegemon, it too tends to be ruled by its industrial incentives, and so reliance on it to conserve CPRs may mean consigning certain resources to become exhausted. The better option would be to have a group in the role of "hegemon," or at least price setter. Then, states with different industrial interests but common conservationist interests could serve as checks on each other.

One of the most necessary illusions to throw away regarding the international regulatory regimes (at least the ones of today) is that they are ruled by science. Rather, the political interests of their constituent nations rule the institutions, with science only used in variable amounts to justify the decisions already made based upon the political interests. Such interests can take manifold forms, but the apparent default for most nations appears to be economic, and particularly industrial, interests. This default setting can lead to a case of bureaucratic capture by the industries that the regimes are supposed to be regulating. However, it is possible to retrieve a regime from such a situation by changing the domestic political discourse, and through that the institutional political discourse.

Under this analysis, ICCAT is an organization that, although built to provide nations a path away from the prisoners' dilemma, has been captured by its constituent nations' default tendency to support their domestic economic interests at the expense of conservation interests. Such a view might liken ICCAT to the pre-1970s IWC. What changed the IWC was a campaign of norm engineering by the United States, among others, fueled by changes in the domestic political discourse. Such norm engineering, along with possible stopgap multilateral actions outside of ICCAT's framework, is the best hope that ICCAT has of maintaining the stocks of bluefin tuna.

Governments that wish to engage in international norm engineering are for the most part constricted to regulation of motives through behaviors such as economic sanctions. International attempts at regulation of meaning should probably be restricted to attempts to lead by example via a government's domestic code of regulations. Any further obvious attempts will most likely not bear results and are much more likely to backfire, due to a pseudo-rally-round-the-flag-effect that the attempts would likely trigger. Of course, normative change via one's domestic legal code may be unwise given the prisoners' dilemma scenario that nations using a CPR will find themselves in. If an individual government can afford such efforts and thinks that they have a chance to yield results, then leading by example may be a commendable tactic. If not, then the country will find itself restricted to regulation of motives. That is a challenge for individual governments to determine individually.

## Works Cited

- Alexander, Ronni. "Governing the Commons?: The Bluefin Tuna Dispute and the Creation of an Endangered Species." *Journal of International Cooperation Studies* 8.2 (2000): 89-106. *Kobe University*. Web. 9 Feb. 2011.
- Aron, William. "Science and the IWC." *Toward a Sustainable Whaling Regime*. Ed.Robert L. Friedheim. Seattle: University of Washington, 2001. 105-22. Print.
- Barkin, J. S., and George E. Shambaugh. "Hypotheses on the International Politics of Common Pool Resources." *Anarchy and the Environment: The International Relations of Common Pool Resources.* Albany: SUNY UP, 1999. 1-25. Print.
- Baum, Matthew A. "The Constituent Foundations of the Rally-Round-the-Flag
  Phenomenon." *International Studies Quarterly* 46.2 (2002): 263-98. *JSTOR*. Web. 19 Apr. 2011.
- Buck, Eugene H. Atlantic Bluefin Tuna: International Management of a Shared Resource. Rep. no. 95-367 ENR. Washington DC: Congressional Research Service, 1995. LexisNexis Congressional. Web. 10 Feb. 2011.
- Bulte, Erwin H., and G. C. Van Kooten. "Economics of Antipoaching Enforcement and the Ivory Trade Ban." *American Journal of Agricultural Economics* 81.2 (1999): 453-66. *JSTOR*. Web. 11 Feb. 2011.
- Burke, William T. "A New Whaling Agreement and International Law." Toward a Sustainable Whaling Regime. By Robert L. Friedheim. Seattle: University of Washington, 2001. 51-79. Print.

Byers, Michael, and Georg Nolte. United States Hegemony and the Foundations of

International Law. Cambridge: Cambridge UP, 2003. Electronic.

- Cassese, Sabino. "Administrative Law without the State?: The Challenge of Global Regulation." *New York University Journal of International Law and Politics* 37.663 (2005): 663-94. *HeinOnline Law Journal Library*. Web. 6 Mar. 2011.
- Chasek, Pamela S., David L. Downie, and Janet W. Brown. *Global Environmental Politics*. 5th ed. Boulder, CO: Westview, 2010. Print. Dilemmas in World Politics.
- Clayton, Mark. "Tuna's Plight Is a Problem the World Must Solve." *Christian Science Monitor* [Boston] 7 Oct. 2009, Environment sec.: 25. Print.
- Crook, John R. "US Efforts to Gain CITES Protection for Atlantic Bluefin Tuna, Sharks, and Polar Bears Unsuccessful." *American Journal of International Law* 104.2 (2010): 289-90. *JSTOR*. Web. 2 Apr. 2011.

Darby, Andrew. *Harpoon: Into the Heart of Whaling*. Cambridge: Perseus, 2008. Print. Day, David. *The Whale War*. London: Routledge, 1987. Print.

- DeSombre, Elizabeth. "Distorting Global Governance: Membership, Voting, and the IWC." *Toward a Sustainable Whaling Regime*. Ed. Robert L. Friedheim. Seattle: University of Washington, 2001. 183-99. Print.
- DeSombre, Elizabeth R. "Tuna Fishing and Common Pool Resources." Anarchy and the Environment: The International Relations of Common Pool Resources. Ed. J. S.
   Barkin and George E. Shambaugh. Albany: SUNY UP, 1999. 51-69. Print.
- DeSombre, Elizabeth R., and J. S. Barkin. "Turtles and Trade: The WTO's Acceptance of Environmental Trade Restrictions." *Global Environmental Politics* 2.1 (2002): 12-18. *Academic Search Premier*. Web. 15 Apr. 2011.

Eisenberg, Melvin A. "Corporate Law and Social Norms." *Columbia Law Review* 99.5 (1999): 1253-292. *JSTOR*. Web. 23 Apr. 2011.

"Fin Times." Editorial. *Economist* 18 Mar. 2010. Web. 2 Apr. 2011.

- Friedheim, Robert L. "The IWC as a Contested Regime." Introduction. *Toward a Sustainable Whaling Regime*. Seattle: University of Washington, 2001. 3-48. Print.
- Gales, Nicholas J., Toshio Kasuya, Phillip J. Clapham, and Robert L. Brownell. "Japan's Whaling Plan Under Scrutiny." *Nature* 435 (2005): 883-84. *Academic Search Premier*. Web. 26 Mar. 2011.
- Greenberg, Paul. Four Fish: The Future of the Last Wild Food. New York: Penguin, 2010. Print.
- "Greenpeace Action Center: Whaling Breaks Our Hearts." *Greenpeace USA*. Greenpeace International. Web. 19 Apr. 2011.

<a href="http://usactions.greenpeace.org/action/start.php?action\_id=182">http://usactions.greenpeace.org/action/start.php?action\_id=182</a>>.

- Greenpeace, Pew Environmental Grp, and WWF. A Guide to the ICCAT Scientific *Committee's Advice on the Listing of Atlantic Bluefin Tuna Under CITES Appendix I. Publication.* N.p.: n.p., 2009. NGO Guide to ICCAT Scientific *Committee's Advice on the Listing of Atlantic Bluefin Tuna Under CITES Appendix I.* Greenpeace International, 27 Oct. 2009. Web. 23 Apr. 2011.
- General Agreement on Tariffs and Trade art. 20, Oct. 30, 1947, 61 Stat. A-11, *T.I.A.S.* 1700, 55 *U.N.T.S.* 194.
- Halverson, Sonja M. "Small State with a Big Tradition: Norway Continues Whaling at the Expense of Integration and Nordic Cooperation." *Syracuse Journal of*

International Law and Commerce 31.1 (2004): 121-40. Hein Online Law Journal Library. Web. 26 Mar. 2011.

- Hansen, Wendy L., and Kee Ok Park. "Nation-State and Pluralistic Decision Making in Trade Policy: The Case of the International Trade Administration." *International Studies Quarterly* 39.2 (1995): 181-211. Print.
- Hardin, Garrett. "The Tragedy of the Commons." *Science* 162.3859 (1968): 1243-248. *JSTOR*. Web. 1 Mar. 2011.
- ICCAT. Atlantic Bluefin Tuna. Rep. no. 8.5 BFT. Madrid: ICCAT, 2010. Atlantic Bluefin Tuna. US Delegation to CITES. Web. 17 Feb. 2011.
- "ICCAT Organization." *ICCAT*. International Commission for the Conservation of Atlantic Tunas. Web. 29 Mar. 2011.
- "ICCAT SCRS." *ICCAT*. International Commission for the Conservation of Atlantic Tunas. Web. 04 Apr. 2011.
- International Commission for the Conservation of Atlantic Tunas. *ICCAT Fortifies Its Management of Bluefin Tuna Fisheries. ICCAT*. International Commission for the Conservation of Atlantic Tunas, 16 Nov. 2009. Web. 23 Apr. 2011. <www.iccat.int/.../COMM2009/PressReleaseCom2009-ENG.pdf>.
- International Convention for the Conservation of Atlantic Tunas art. 6, May 14, 1966, 20 U.S.T. 2887, 673 U.N.T.S. 63.
- International Convention for the Regulation of Whaling art. 5, Dec. 2, 1946, 62 *Stat.* 1716, 161 *U.N.T.S.* 72.
- IWC Secretariat. "Iceland and Commercial Whaling." Homepage of the International Whaling Commission. IWC, 31 Mar. 2009. Web. 25 Apr. 2011.

- Joseph, James, and Joseph W. Greenough. International Management of Tuna, Porpoise, and Billfish: Biological, Legal, and Political Aspects. Seattle: University of Washington UP, 1979. Print.
- Joyner, Christopher C. "Managing Common-Pool Marine Living Resources: Lessons from the Southern Ocean Experience." *Anarchy and the Environment: The International Relations of Common Pool Resources*. Ed. J. S. Barkin and George E. Shambaugh. Albany: SUNY UP, 1999. 70-96. Print.
- Keohane, Robert O. *After Hegemony: Cooperation and Discord in the World Political Economy*. Princeton: Princeton UP, 1984. Print.
- Krebs, Ronald R., and Patrick T. Jackson. "Twisting Tongues and Twisting Arms: The Power of Political Rhetoric." *European Journal of International Relations* 13.35 (2007): 35-66. *SAGE Complete*. Web. 19 Apr. 2011.
- Korman, Seth. "International Management of a High Seas Fishery: Political and Property-Rights Solutions and the Atlantic Bluefin." *Virginia Journal of International Law* 51.3 (2011): 697. *LexisNexis Academic*. Web. 2 Apr. 2011.
- Kubler, Dorothea. "On the Regulation of Social Norms." *Journal of Law, Economics, & Organization* 17.2 (2001): 449-76. *Oxford Journals*. Web. 18 Apr. 2011.
- Layne, Christopher. "US Hegemony in a Unipolar World: Here to Stay or Sic Transit Gloria?" *International Studies Review* 11.4 (2009): 784-87. *Wiley Online Library*. Web. 15 Apr. 2011.
- MacBean, Alasdair. "China's Environment: Problems and Policies." *World Economy* 30.2 (2007): 292-307. *Wiley Online Library*. Web. 25 Apr. 2011.

Makkai, Tony, and John Braithwaite. "In and out of the Revolving Door: Making Sense

of Regulatory Capture." *Journal of Public Policy* 12.1 (1992): 61-78. *JSTOR*. Web. 7 Mar. 2011.

- Molyneaux, Paul. "The War Over Bluefin Tuna Limits." *New York Times* 15 Nov. 1998, late ed., sec. 8: 13. *LexisNexis Academic*. Web. 10 Feb. 2011.
- Mossop, Joanna. "When Is a Whale Sanctuary Not a Whale Sanctuary?: Japanese Whaling in Australian Antarctic Maritime Zones." *Victoria University of Wellington Law Review* 36.4 (2005). Australasian Legal Information Institute. *AustLII*. Web. 7 Mar. 2011.
- Nicholson, Walter, and Christopher Snyder. *Intermediate Microeconomics and Its Application*. 11th ed. Mason: Cengage Learning, 2010. Print.
- NMFS. "FishWatch Atlantic Bluefin Tuna." *NOAA :: National Marine Fisheries Service*. NMFS, 5 Oct. 2010. Web. 17 Feb. 2011.
- Olson, Mancur. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge: Harvard UP, 1971. Print. Harvard Economic Studies 124.
- Pearson, Margarett M. "The Business of Governing Business in China: Institutions and Norms of the Emerging Regulatory State." World Politics 57.2 (2005): 296-322. JSTOR. Web. 23 Apr. 2011.
- Posner, Eric A. "Symbols, Signals, and Social Norms in Politics and the Law." *Journal of Legal Studies* 27.S2 (1998): 765-97. *JSTOR*. Web. 24 Apr. 2011.
- Report of the Panel, *United States Restrictions on Imports of Tuna*, DS21/R (August 16, 1991), GATT B.I.S.D. (39th Supp.) at 155, 205 (1993).
- Safina, Carl, and Dane H. Klinger. "Collapse of Bluefin Tuna in the Western Atlantic." *Conservation Biology* 22.2 (2008): 243-46. *JSTOR*. Web. 10 Feb. 2011.

- Sato, Yoichiro. "Fishy Business: A Political-economic Analysis of the Southern Bluefin Tuna Dispute." *Asian Affairs* 28.4 (2002): 217-37. *JSTOR*. Web. 10 Feb. 2011.
- Schaefer, Andrew. "1995 Canada-Spain Fishing Dispute (The Turbot War)." Georgetown International Environmental Law Review 8.3 (1996): 437-50. HeinOnline Law Journal Library. Web. 24 Apr. 2011.
- Schrijver, Nico. Development Without Destruction: The UN and Global Resource Management. Bloomington: Indiana UP, 2010. Print.
- Snidal, Duncan. "Coordination versus Prisoners' Dilemma: Implications for International Cooperation and Regimes." *American Political Science Review* 79.4 (1985): 923-42. *JSTOR*. Web. 25 Apr. 2011.
- Song, Yann-huei. "The Efforts of ICCAT to Combat IUU Fishing: The Roles of Japan and Taiwan in Conserving and Managing Tuna Resources." *International Journal* of Marine and Coastal Law 24 (2009): 101-39. Academic Search Premier. Web. 7 Apr. 2011.
- Stoett, Peter J. The International Politics of Whaling. Vancouver: UBC, 1997. Print.
- Stoett, Peter. "To Trade or Not to Trade?: The African Elephant and CITES." *International Journal* 52.4 (1997): 567-74. *JSTOR*. Web. 16 Apr. 2011.
- Sunstein, Cass R. "Social Norms and Social Roles." *Columbia Law Review* 96.4 (1996):903-68. *JSTOR*. Web. 24 Apr. 2011.
- Tanno, Dai, and Toshihide Hamazaki. "Is American Opposition to Whaling Anti-Japanese?" *Asian Affairs* 27.2 (2000): 81-92. *JSTOR*. Web. 19 Apr. 2011.
- Van Dyke, Jon, and Susan Heftel. "Tuna Management in the Pacific: An Analysis of the South Pacific Forum Fisheries Agency." *University of Hawaii Law Review* 3.1

(1981): 1-66. HeinOnline Law Journal Library. Web. 6 Mar. 2011.

Webster, D. G. Adaptive Governance: The Dynamics of Atlantic Fisheries Management. Cambridge: MIT, 2009. Print.