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# Biodiversity and the Courts: Endangered Species Law in the US, Australia, and Canada

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In early 2005, prompted by concerns over global warming and receding sea ice in the Arctic, a coalition of environmental groups petitioned the US government to list the polar bear under the federal Endangered Species Act. According to the environmentalists, between 50–100% of the polar bear’s sea ice habitat was likely to disappear over the next century, placing the bear at serious risk of extinction [3, p. 4]. However, despite these warnings, government officials were extremely reluctant to take action, and missed or ignored a number of key, non-discretionary deadlines outlined by federal endangered species law. In response, the petitioners decided to move the battle out of the normal channels of administrative law and public policy, and shifted the fight into the courts.

Hi everyone; my name is Robert Shaffer. I’m a political science student working with Professor Eric Biber over in the law school, and the title of my presentation is “Biodiversity and the Courts: Endangered Species Law in the US, Australia, and Canada.” As a broader project, my thesis explores the implications of judicial involvement in American biodiversity law through a comparative analysis of endangered species policy in the US, Australia, and Canada. For this presentation, though, I focus on examining a key criticism of the American policymaking process articulated by many academics and public commentators. According to these scholars, the courts provide a powerful and responsive source of policy change in the US, but they also tend to be costly, cumbersome, and unpredictable. Viewed from an international standpoint, though, I argue that these criticisms miss an important point. When compared with other, less lawsuit-centric programs of biodiversity protection, the American system of endangered species law actually seems to hold up remarkably well, at least in terms of its speed of action.

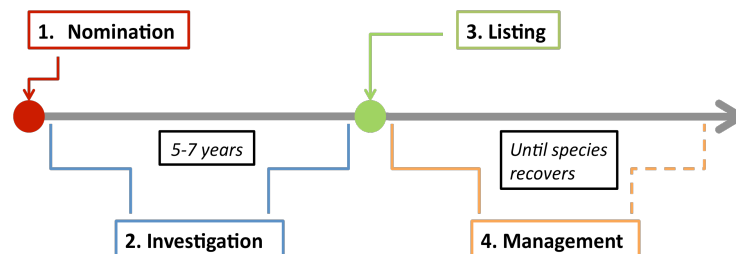
To support this claim, I examine and compare the conservation experiences of two high-profile species—polar bears and loggerhead sea turtles—in the US and Canada and the US and Australia, respectively. Because of their wide geographic ranges, these two species offer an excellent opportunity to compare the

efficacy of the biodiversity regimes in my countries of interest. Afterwards, I utilize these two cases to provide a broader assessment of the relative effectiveness of the American biodiversity regime from an international perspective.

As noted above, much of my thinking is shaped by an effort to respond to a series of criticisms of the American courts articulated by academics here in the US. Robert Kagan, a prominent legal scholar at UC Berkeley, provides one of the best-known versions of these critiques through a framework he refers to as “adversarial legalism.” According to Kagan, the legal system in the United States is marked by a high degree of formality and citizen participation. As a result, the courts in the US are more accessible, but also adhere to a decision-making process that “tends to be particularly complex, protracted, and costly” [12, p. 9]. Though I argue that these criticisms are largely overblown, the ideas advanced by Kagan and other scholars still form the theoretical backdrop for much of my work. Methodologically, I utilize a case-based, comparative approach, relying heavily on government findings, judicial opinions, expert scientific publications, and interest group documents to make my conclusions.

Before diving into the cases, I want to explain a few key legal concepts I’ll be using in this paper. In the US, as in Australia, Canada and many other nations around the world, animal and plant species in danger of extinction are granted special protections under a class of environmental law known as biodiversity law. Though the particulars of these laws are quite variable, most of them do share some basic procedural similarities (summarized in Figure 1).

**Fig. 1:** Approximate biodiversity law listing and management flowchart.



Essentially, in each of the three countries I examine, the endangered species protection process has two main phases: the “investigation” phase and the “management” phase. To begin the process, a species must be nominated for protection, which can usually be done either by government officials or by private citizens. Once nominated, specialists within the governmental agencies investigate whether or not the species faces a sufficient risk of extinction to merit protection under the law. After this period is over, which takes an average of 5–7 years [2, p. 321–400, 395], government officials must make a decision on whether or not to “list” the species under the law, which provides it with a set of formalized legal protections. Usually, species can be listed at several different

levels of protection; for example, in the US, a species can be classified as either “threatened” or “endangered.” If the species is listed, the government moves into the “management” phase, and begins to work to prevent the species from declining further. This phase, which lasts until the species has fully recovered, has no set timetable, and can potentially last years or even decades.

Finally, I want to make one general point about the role of the courts in this process. According to the laws in each of these countries, listing and management decisions must be made on the basis of scientific evidence alone, with no weight given to economic, political, or other factors [9, (8) (A) (2)]. Significantly, though, private citizens in the US are allowed to challenge government decisions in court if they feel that officials have not followed these guidelines. Though the courts are generally fairly deferential to administrative agencies in these kinds of cases, these so-called “citizen suits” can, in theory, provide a powerful check on recalcitrant administrative agencies. In recent years, in particular, these suits have come to play a pivotal role in the biodiversity protection system in the United States; according to one study, fully 100% of the species listed under the Endangered Species Act from 2001–2004 were litigated at some point during the listing process [2, p. 321–400, 399]. By contrast, in Canada and Australia, courts do not possess the same powers of review over agency rulings that they do in the US, making it much harder for private citizens to overturn administrative findings through the legal system. As a result, in these two countries, lawsuits play a relatively minimal role in environmental law.

With that background out of the way, I’m going to move on to describing my first case study: polar bears. As an ice-dependent species, polar bears are particularly vulnerable to the receding sea ice boundaries predicted to result from global warming over the next fifty to one hundred years. In a 2007 study, scientists estimated that “realization of the sea ice future which is currently projected would mean loss of about two-thirds of the world’s current polar bear population by mid-century” [1, p. 2]. As such, based upon the leading scientific evidence, polar bears clearly appear to be headed towards major population loss or extinction, and would seem to be prime candidates for statutory protections.

Armed with these findings, in the mid-2000s, environmental activists in the United States began to put pressure on the US government to provide protections for the bear. In 2005, an environmental organization called the Center for Biological Diversity petitioned the US government to list the polar bear as “threatened” under the federal Endangered Species Act [3]. However, government officials stalled, missing two key non-discretionary deadlines during the investigation stage of the ESA process. As a result, in 2005 and 2008, the Center filed a pair of lawsuits to force government officials to release their findings and make a listing decision, both of which were successful [4, p. 2811–28303]. Pressured by the courts, the federal government in 2008 finally agreed to list the bear as “threatened,” providing the species with substantial—though incomplete—protection under federal law [8]. Since then, environmentalists have brought another major lawsuit against the government in an effort to “uplist” the bear from “threatened” to “endangered,” which is still pending before the courts [11]. As such, though polar bear conservation remains a live issue in the US, govern-

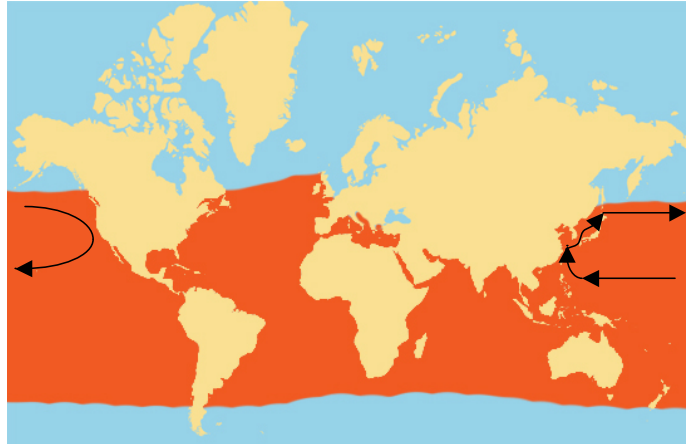
ment officials and environmentalists have made substantial progress in providing protections for the species.

In Canada, polar bear conservation has followed a relatively similar timeline. In 2008, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC, a Canadian advisory board on endangered species issues) produced a report expressing “considerable concern [...] over the future of this species in Canada,” and advised that the bear be listed as a “species of special concern” under Canadian law [7, p. iii]. The “special concern” designation, the lowest level of protection offered by Canadian law, only requires the government to produce a management plan intended to prevent the species from declining further, without mandating specific actions or conservation targets. The report was roundly criticized for under-emphasizing the threat posed by global warming to polar bear populations [17, p. 371–385], with some observers accusing the Canadian government of manipulating the scientific evidence in order to reach its own predetermined conclusions [18, p. 323–326]. Nevertheless, Canadian officials largely followed the board’s recommendations, and produced a preliminary rule classifying the bear as a “species of special concern” in mid-2011 [16, p. 2143–2170]. Barring any setbacks, that rule is likely to be finalized sometime later this year.

Overall, in the polar bear case, the biodiversity laws in the US and Canada appear to have performed at a roughly similar level. Though Canadian officials started the listing process a few years later than their counterparts in the US, both countries took about three years to complete the investigation phase, and both decided to list the bear for protection. Indeed, if anything, the system in the US may have actually worked better than the system in Canada, adhering more closely to scientific recommendations and providing the bear with a substantively higher level of protection.

The experience of my second case species, loggerhead sea turtles, provides further support for this assessment of US endangered species law. As a globally distributed species, loggerhead sea turtles are found in most of the world’s major oceans, and are extremely migratory; for example, the Northern Pacific loggerhead population breeds predominantly off the coast of Japan before migrating over to foraging grounds in Baja California Sur and the East China Sea (Figure 2) [14, p. 8-10]. Perhaps unsurprisingly, most loggerhead populations around the world tend to conflict with large-scale commercial fisheries, which exploit many of the ocean regions that loggerheads utilize for their migrations. Two particularly high-impact fishing practices are trawling and long-line fishing, both of which are used widely throughout the world’s oceans. Generally speaking, trawling involves dragging a giant net through the water to capture shrimp and other high-density taxa. Long-line fishers, on the other hand, string out huge, miles-long fishing lines out behind a boat, usually equipped with hundreds or even thousands of hooks. Because of their scale, both of these fishing practices tend to produce a large amount of bycatch, snaring and killing large numbers of turtles, birds, and other species each year. Though other threats, including habitat destruction and poaching, are significant in some parts of the world, commercial bycatch has been identified as “the most significant manmade factor

affecting the conservation and recovery of the loggerhead” [14, p. 108].



**Fig. 2:** Loggerhead Sea Turtle range map. Black arrows show the approximate migration path for the Northern Pacific loggerhead population. Image credit: Defenders of Wildlife.

As a result of these threats, the loggerhead turtle was listed, with little controversy, as “threatened” in the US in 1978. In an effort to reduce turtle mortality, in the late 1980s the United States became the first nation in the world to require shrimp trawlers to utilize so-called Turtle Excluder Devices (TEDs). Though designs vary, TEDs generally resemble large gratings woven into the net, which allow smaller animals to pass through while preventing the bigger ones from becoming ensnared.

During the 1990s, there was relatively little new action on loggerhead conservation, but starting in the early 2000s, outside environmental groups began to focus on limiting the impact of longline fisheries on turtle populations. As a part of this campaign, environmentalists brought a number of lawsuits against the government in the early 2000s, forcing officials to close off several high-impact long-line fisheries in the Pacific Ocean.<sup>1</sup> In response, government officials and commercial fishermen began to develop a variety of new types of fishing gear, redesigning hooks, nets, and lines in order to reduce turtle mortality. In US territorial waters, where these turtle-friendly gear innovations have become mandatory, bycatch rates from shrimp trawlers and other large-scale fishing operations have dropped somewhat, though death rates still remain high [6, p. 134–137]. As a result, in 2010, the US government issued a proposed rule upgrading the loggerhead from “threatened” to “endangered” throughout most of its range [15].

<sup>1</sup> For a more complete list of the legal actions brought on behalf of loggerhead turtles, see “Loggerhead Sea Turtle Action Timeline,” Center for Biological Diversity, last accessed August 19, 2011, [http://www.biologicaldiversity.org/species/reptiles/loggerhead\\_sea\\_turtle/action\\_timeline.html](http://www.biologicaldiversity.org/species/reptiles/loggerhead_sea_turtle/action_timeline.html)

In Australia, loggerhead sea turtle management has followed a relatively similar pattern. As in the US, loggerheads have been protected under Australian law in one capacity or another since the late 1960s and early 1970s [13, p. 56]. Throughout the 1960s, 70s, and 80s, most loggerhead conservation efforts were focused on reducing nest predation by introduced European foxes, which were wreaking havoc on turtle nesting beaches in eastern Australia. However, through a concerted campaign of baiting and removal, fox predation was essentially eliminated by the late 1980s [13, p. 20–22].

Commercial fishing operations, the other major threat faced by loggerhead turtles, were not closely regulated in Australia until the late 1990s. In 2000, though, Australian officials began to require shrimp trawlers to utilize TEDs in their nets, significantly reducing bycatch rates off the coast of eastern Australia [13, p. 40–42]. Since then, Australian officials have also begun to investigate the impact of other fisheries, including some of the same kinds of oceanic longline fisheries currently being targeted by the US government. Due to lack of data, though, the impact of most of these fisheries on loggerhead populations in Australia is currently unclear, and little action has been taken so far [10].

Based on these two cases, then, the main criticisms of the litigation-oriented approach to biodiversity protection in the US do not appear to hold up. According to the ideas expressed by scholars like Robert Kagan, the lawsuits and legal actions that have characterized the polar bear and sea turtle listing processes in the US would likely produce results at a slower pace than the less litigation-oriented systems utilized in other countries. Far from delaying conservation efforts, though, the lawsuits brought against the government in the course of the listing process may have actually helped speed up the system. As noted earlier, both of the polar bear suits brought against the government between 2005 and 2008 were intended to compel officials to meet statutory deadlines that they had missed in the course of the “investigation” stage, effectively forcing the government to stick to its own timetables. In the loggerhead sea turtle case, the story is much the same; during the 1980s, 90s, and 2000s, the US and Australia have done a roughly equivalent job at protecting loggerhead sea turtles, addressing threats like nest predation and shrimp trawling at essentially the same speed. And, in both cases, the US actually seems to have provided a higher level of protection to the species in question, hewing more closely to expert scientific recommendations. As such, in both cases, the biodiversity protection process in the US appears to have functioned as well, if not better, than the systems utilized in other countries.

As I wrap up this talk, I want to make one final point clear. Though I have spent much of my time in this presentation trying to downplay the traditional criticisms of the courts in the US, these ideas clearly have some merit; in an ideal world, if the US political system could produce identical results without the involvement of the courts, the government would clearly be able to make its decisions more efficiently. However, in my view, this analytical framework asks the wrong questions. As my research into the polar bear and sea turtle cases indicates, though the legal system in the United States may seem frustrating and inefficient when compared with some absolute, ideal standard, when compared

with actual, real alternatives used around the world, the American system of biodiversity management holds up remarkably well. As such, scholars ought not to be so quick to dismiss it.

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