

Why Hunting Has Defined the North American Model of Wildlife Conservation

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Wildlife conservation in Canada and the United States emerged during the late 19th and early 20th centuries, recognizably distinct from other forms found worldwide. We refer to this form as the "North American model of wildlife conservation." The model has endured a test of time that has seen dramatic changes in society and the landscape of North America. The Model has also become a system of sustainable development of a renewable natural resource that is without parallel in the world. The strength of this model derives in great part from its continental scope. Early in the twentieth century, Canada, a British colony, could easily have adopted the mother country's wildlife policies. Instead, Canada chose a path that paralleled that of the United States, allowing the best minds on both sides of the border to engage in constructive cooperative efforts. The formation of a continental set of policies that was so successful in rescuing wildlife is somewhat parallel to the late 18th century constitutional fervor that engulfed the United States and gave rise to the most powerful democracy in the world. The revolution around wildlife likewise occupied the best minds of the time, and generated an equally brilliant solution that swept the continent. Currently, there is somewhat of a renaissance occurring with North Americans recognizing that wildlife conservation was the greatest environmental success story of the twentieth century (e.g., Ball 1985, Kallman 1987, Mansell 2000). Efforts are under way by The Wildlife Society (Conserve Our Wildlife Conservation Heritage) and Orion The Hunters Institute (J. Posewitz personal communication) to document the history of wildlife conservation on a state and provincial

basis. Among the countless remarkable species restoration successes that have been documented, it is important to note that not only huntable wildlife were restored. For example, songbirds and shorebirds were protected, converting their status into nongame species. In the case of songbirds, protection was not without utility as these were seen as important helpers in curbing agricultural insect pests. Perhaps most notable among the Model's achievements, is how it turned what was a "Tragedy of the Commons" (Hardin 1968), the uncontrolled and often competitive exploitation of a resource, into a triumph of the commons (Geist 1995), demonstrating that contrary to "Commons" theory, public ownership of a resource can result in its conservation without abuse.

In this paper we define the key components of the model and discuss the role hunters and hunting had in constructing these components, as well as what implications the loss of a hunting subculture might have on the future of this model.

The North American Model of Wildlife Conservation

The North American model of wildlife conservation has seven components that collectively form a foundation that yields its distinct structure.

1. *Wildlife as Public Trust Resources*

The reason that government agencies have legal oversight of wildlife has grounding in the public trust doctrine (Bean 1983). The concept of wildlife as a common resource held in trust for the people has been traced back to the Bible, Roman legal codes under Emperor Justinian (A.D. 529), and the Magna Charta of 1215 (Adams 1993). The "Law of Things" (*res*) in Roman law included *res extra patrimonium*—things that were outside of private ownership. Within this code, wild animals (*ferae naturae*) were further included within the category *res nullius*—things owned by no one. Ownership of a wild animal occurred only when it was physically possessed.

Following the decline of the Roman Empire, the Danish king Canute (A.D. 1018) changed the ownership of wild animals in England from property of no one (*res nullius*) to property of the landowner, who received land through grant from the sovereign (Adams 1993). The slow transition away from this royal power over wildlife began in the 13th century when the Magna Charta directed the removal of private fish weirs that were greatly impeding navigation (Bean 1983). This was later expanded to bar the king from granting private fisheries in tidal waters. In 1842, a riparian landowner's

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claim to exclude all others from taking oysters from certain mudflats in New Jersey, based on a land grant from King Charles II in 1664, made its way to the United States Supreme Court (*Martin v. Waddell*). Chief Justice Roger Taney, drawing from the Magna Charta, ruled that the king had held “the public common of piscary” as “a public trust,” and that trust was now in the hands of the state (Bean 1983:13). The fundamental elements of Taney’s decision have become known as the “public trust doctrine.”

Legal battles in the early 20th century solidified the status of wildlife held in common ownership by the state for the benefit of all people (Horner 2000). Taney’s decision was consistent with his record of ascribing powers to the states, in contrast to the decisions of his predecessor, John Marshall (1801-1836), who applied powers to the federal government based on the Constitution, of which Marshall was one of the original architects (Newmyer 1968). Many of these subsequent cases established the basis for federal trust responsibility over certain wildlife resources that fell within the constitutional framework of the commerce clause, the property clause or federal treaty-making power (Adams 1993, Bean 1983). As a result, wildlife conservation programs were in place at the state and federal levels across the nation by the early 20th century (Reiger 1975, Trefethen 1975). Provincial and federal oversight of wildlife was established in Canada as well during this time (Hewitt 1921, Gilbert and Dodds 1987).

2. Elimination of Markets for Wildlife

Elimination of legal trafficking in meat, parts and products of game animals and nongame birds, while maintaining markets for less vulnerable furbearer species, was critical in halting what would have been a “tragedy of the commons” (Hardin 1968), occurring with North American wildlife (Geist 1995, Trefethen 1972). History has shown how rapidly declines can occur when value is placed on dead wildlife (Hewitt 1921, Mathiessen 1959). Conversely, it has been demonstrated that furbearers can be managed as sustainable resources in a commercial market through a combination of reduced vulnerability (relative to game species), restrictive regulations and advocacy of trappers for land stewardship (Organ et al. 1998a, Prescott-Allen and Prescott-Allen 1996).

3. Allocation of Wildlife by Law

Surplus wildlife is allocated to the public for consumption by law, not by the market, land ownership or special privileges. Public input is an integral

part of the process of determining this allocation, typically on an annual basis. This process fosters opportunity for all citizens to become involved in the management of wildlife (Geist 1995).

4. Wildlife Can Only be Killed for a Legitimate Purpose

Killing wildlife for frivolous reasons is prohibited by law. Therefore, wildlife can only be killed for legitimate purposes, such as for food, fur, self-defense or property protection (Geist 1995). The "Code of the Sportsman" (Organ et al. 1998b), articulated by pioneering conservationist George Bird Grinnell, mandated use without waste of all wildlife killed by sport hunters. The Royal Commission on Seals and Sealing in Canada (Hamilton et al. 1998) recognized that harvest of wild animals must serve a practical purpose if society is going to sanction the activity.

5. Wildlife Are Considered an International Resource

Recognition of the fact that migratory species in particular transcend boundaries, and one sovereign state's interests can be affected by another's management, has led to cooperative management among such states. The first significant international treaty for the management of wildlife in the world—the Migratory Bird Treaty of 1916—was established between the United States and Canada (Hewitt 1921, Jahn and Kabat 1984). The former was an excellent product of global thinking that also included Russia and Japan.

6. Science is the Proper Tool for Discharge of Wildlife Policy

The concept that science should be the determining factor in allocation of uses of natural resources is a key pillar of the Roosevelt Doctrine (Leopold 1933). To some extent, this concept has its roots in the Prussian Forestry System and was introduced to North America by Bernhard Fernow and Gifford Pinchot, both disciples of Prussian forestry (Gill 1996). It was not successfully applied to wildlife, however, by the Germans. Science arose as a source of best information to manage a public trust from the core of the Bone and Crockett and Campfire Clubs, headed up forcefully by Roosevelt. Leopold (1930) articulated application of science to management of wildlife resources as part of the 1930 American Game Policy. Leopold's call for science to be the driving wheel of a program of wildlife restoration led to the formation of the wildlife profession in North America. In this regard, North Americans were decades ahead of their global neighbors.

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have to be combined with other management alternatives (Brown et al. 2000), but hunting and its advocates can again be the force that ensures sustainable wildlife resources are a priority for society.

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7. Democracy of Hunting

The concept of "sport hunting" has origins in Europe (Herbert 1849). The term "sport" as applied to hunting refers to a code of honor rather than a frivolous recreational pursuit, was adopted to distinguish hunting under codes of fair chase from market hunting, and is not an appropriate descriptor of North American hunting (Organ et al. 1998). The European archetype was dramatically different than what emerged as sport hunting during the 19th century in North America. The European model allocated wildlife by land ownership and privilege, whereas in North America, all citizens in good standing can participate. The European model, a manifestation of class conflict between aristocracy and commoners, often led to wildlife poaching as a means for inflicting revenge on the ruling class (Manning 1993). Indeed, in Africa today, efforts to combat poaching have led to development of programs designed to direct economic returns on hunting fees to the rural indigenous peoples who otherwise would have no reason to stop poachers (Kock 1996). In North America, where all citizens have the opportunity to participate, everyone is a stakeholder, not just the privileged. This was termed by Leopold "democracy of sport" (Meine 1988:169). The foremost spokesman for egalitarian allocation, and the participation of the common man in hunting, was Theodore Roosevelt. He wrote eloquently of the societal gains to be made by keeping land available for hunting by the common people (Roosevelt et al. 1902:18-20).

The Role of Hunters in Establishment of the North American Model

Much has been written about the role of hunters as the leaders in the development of wildlife conservation in North America (Grinnell 1913a, Hewitt 1921, Mahoney 1995, Organ et al. 1998b, Reiger 1975, Trefethen 1972). Other interest groups, most notably bird enthusiasts, had roles in the conservation movement as well and allied with hunters to promote conservation (Dunlop 1988, Hornaday 1913). It is hunters, however, or, more accurately, *hunting*, that led to development of the components listed above that form the foundation for North American wildlife conservation.

The need for public ownership of wildlife reflected "a fundamental nineteenth-century conception of the purpose of wildlife law, the preservation of a food supply" (Bean 1983:16). The cultural tradition of the "pioneer spirit" in North America was believed by many, including Theodore Roosevelt and George Bird Grinnell, to be the essence of America's greatness (Organ

and Fritzell 2000). The ability for all North Americans to be able to cultivate these pioneer skills through sport hunting meant that there could be no private ownership outside of the public trust.

This public trust was threatened by the markets for wildlife that were driving many species to extinction. The strongest proponents for elimination of the markets and all trafficking in game were the organized sportsmen and sporting publications. The most notable of these, respectively, were the Boone and Crockett Club and *Forest and Stream* (Trefethen 1972). Throughout the 1880s and 1890s they led the charge against market hunting that resulted in significant legislation at the state, provincial and federal levels that ended the markets for game (Grinnell 1913, Hewitt 1921, Reiger 1975).

The elimination of markets for game led to game surpluses being allocated by law. Fundamental to the legal allocation of game is the guiding principle that such allocation should not jeopardize the sustainability of wildlife so that future generations will be able to benefit from them. The concept of sustainability was recognized and first applied in developing wildlife policy by members of the Boone and Crockett Club (e.g., Sanger 1897). The Club's Game Preservation Committee worked for the enactment of laws at state, provincial and federal levels that would sustain wildlife either through protection or allocation of surpluses. Excerpts from reports of the committee attest to this: "We desire to hand down to future generations opportunities for sport as well as the animals that we have hunted, but the sport must be consistent with the effective preservation of the animals" (Grinnell 1913b:432). Additionally, they recognized the leadership role hunters needed to maintain: "We would completely prohibit where necessary, or approve the shooting of animals and game birds where it can be done without detriment to the breeding reserve to maintain the stock unimpaired in numbers. We believe that to discourage the sportsman will destroy the most effective force now working for game protection" (Grinnell 1913b:427).

The leadership role hunters assumed included advocacy of value placed on wild animals while alive, as they combated the markets that placed value on dead animals (Geist 1995). Killing wild animals had to have a legitimate purpose, and with the increase in ranching for domestic food animals, killing wildlife solely for food was not considered legitimate anymore. The code of the sportsman (Organ et al. 1998b, Reiger 1975) placed emphasis on the chase, not the kill, but mandated use without waste of any wildlife killed.

The legal framework to recognize wildlife as an international resource was developed by hunters in Canada and the United States. Canadian

Charles Gordon Hewitt was the "father" of the Migratory Bird Treaty signed with the United States and a pivotal figure in developing wildlife policy in Canada (Geist 2000). Hewitt credited four Americans with aiding Canada's Commission on Conservation established under The Conservation Act of 1909 (Hewitt 1921). All of these Americans were members of the Boone and Crockett Club. The Migratory Bird Treaty was one of the crowning achievements of the Commission.

The need for application of science towards implementing wildlife policies developed during the conservation movement was again initially advocated by hunters (Leopold 1933), and formalized in game policy (Leopold 1930). A key component of policy was the recognition that wildlife stewardship would be fostered through equal access for all, the democracy of sport. This would alleviate the risk of wildlife becoming a pawn in class conflict as was the case during the Tudor and Stuart Periods in Britain (Manning 1993).

Would the Model Endure without Hunting?

Threats to the model over the course of the last century have been multifaceted. One of the most significant threats has been efforts to commercialize wildlife. This has taken many forms, most notably game ranching and fee-hunting (Geist 1985, 1988, 1995). The most powerful argument against these efforts—which would undermine the components of public trust, eliminate markets, and allocate through law, science and democracy in sport—is made by hunting constituents.

The success of wildlife restoration programs coupled with societal trends and human population growth has resulted in locally overabundant populations of some game and furbearer species (Organ and Ellingwood 2000). The North American model of wildlife conservation was formed when wildlife was scarce and declining. Humans tend to place higher value on rarity. As certain species become common enough to cause conflict with humans, will humans value them less? Will high levels of abundance and conflict make people comfortable with using bears for fertilizer? The role of hunters in an era of abundance and conflict could be integral to maintaining the structure of the model. Hunters may actually play a role in keeping wild animals wild; for example, maintaining avoidance response to people within populations of large carnivores that are potentially dangerous. Appropriate allocation of abundant wildlife to hunters within a public trust context can help alleviate conflicts, and maintain stakeholders that value wildlife. This may