

PRACTICAL INTERPRETATIONS OF THE NORTH AMERICAN MODEL OF WILDLIFE CONSERVATION

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ABSTRACT

The North American Model of Wildlife Conservation is recognized world wide as one of, if not the, most successful wildlife conservation effort ever implemented. Admittedly, there are other models that have produced spectacular conservation successes such as the National Park model and high-fenced wildlife ranching in South Africa and Texas, but for nation-wide success in very disparate landscapes that include humans, the North American Model has no peers. However, because the model has seven interacting tenants, it is too complex to be of practical use for most typical, day-to-day management decisions. This paper presents a more simplified and accurate three part model that, it is argued, can and is used by wildlife managers in real world situations. The three pieces of the new model are: Political Will, Financial Support and Social Ownership. This new three piece model of wildlife conservation is used to explain and predict current issues concerning the conservation of wildlife.

SEVEN TENANTS OF NORTH AMERICAN WILDLIFE CONSERVATION MODEL

The North American Model is typically represented by the following seven tenants (based on [8]):

1. Wildlife is “owned” by all of us; it is NOT private property. When Americans are asked, “Who owns the wildlife?,” they will most like say, “We all own the wildlife.” Technically, wildlife is held in trust by the states, but for most citizens, that means the people own the wildlife. The legal construct supporting this social norm is known as the public trust doctrine. Susan Horner [4] wrote a comprehensive legal review of the doctrine, clearly demonstrating its robustness. It should be noted the Federal Government has for good and bad increased its role relative to the states in wildlife management during the past decades [10].
2. Wildlife will not be used for commercial consumption. Historically, certain species of wildlife were excellent examples of the “tragedy of the commons” where public resources were used and consumed for profit to near or complete destruction. In this tragic scenario entrepreneurs harvested publically owned wildlife resources for little or no cost to them. Other users such as sport hunters and wildlife watchers suffered severe, high costs. Although some political economists make persuasive arguments that the solution to this problem is to privatize the resource [1], the North American Model is built on science-based government regulations versus private ownership. Minimizing private ownership, which maximizes wide cultural ownership and use of wild animals, has been instrumental in the success of the North American Model.
3. Because wildlife is a public resource, laws will dictate how humans interact with wild animals. Local, state and federal laws and regulations will control what humans can and cannot do in regard to wildlife. It should be noted courts interpretation of laws and treaties have played a major role in defining the interaction between humans and wildlife as seen in the recent listing-delisting-listing-delisting again battles over wolves.

4. Only ethical hunting, trapping and management killing will be allowed. The majority of Americans have always supported ethical hunting. However, if the killing of animals is perceived to not be ethical, public support is completely lost.
5. It is recognized that wildlife does not follow human constructed political boundaries. These boundaries can be between cities and counties, between one state and its neighbor, between one state and national parks, between private versus public land and perhaps most significantly between and among nations. Because wild animals move among man-made, land-based jurisdictions, laws and treaties among neighboring land owners must be put in place to maximize conservation efforts.
6. Decisions about wildlife management and conservation will be based on scientific research and theories. The development of reputable wildlife curricula at the most respected universities in the United States and Canada was a result of the demand for scientific support for public resource decision makers. This is perhaps the most powerful tenant of the model. Having trained biologists provide reliable data and professional suggestions to guide the development of wildlife systems explains the vast majority of the model's success. However, it is naïve to think that all decisions associated with wildlife laws, regulations and court decisions are based exclusively on scientific data and theories. There are many current contentious debates associated with wildlife management involving strong nonscientific core values held by key players and their organizations.
7. Access to wildlife, especially to hunt and fish, is a democratic process. Every responsible citizen will have equal access to the resource. During the past few decades this tenant has been greatly reduced by the exercise of trespass rights associated with private property. For the most part access to hunting and fishing licenses is democratic, with a few significant exceptions like land owner permits, resident versus nonresident discrimination and guaranteed outfitter sponsored licenses. However, having actual access to hunt certain species like elk and whitetail deer in some southern states is significantly controlled by private land owners

The North American Model of Wildlife Conservation has proven a very effective tool for helping decision makers maximize their conservation efforts. The amazing health of most game animal populations in the United States, Canada, and to some extent, Mexico is a testament to its success. However, it can be argued that most decision makers do NOT consider the entire model when they are thinking about the well being of wildlife populations. Even trained wildlife biologist will have difficulty recalling all seven tenants unless they have reviewed them recently.

If it is true that the entire North American model, with all of its nuances, is difficult for decision makers to use in making day-to-day decisions, can the model be conceptualized into a smaller number of its basic elements so it can be used more readily in day-to-day decision making? In other words, can a more simplified, easily remembered basic elements model be developed?

SIMPLIFIED THREE ELEMENTS OF THE NORTH AMERICAN MODEL

The remainder of this paper will present a simplified proposed model and provide examples of its use. It is suggested that the North American Model of Wildlife Conservation has the following three basic elements:

Political Will

All significant conservation efforts are impacted by their legal and political environment. Effective decision makers must be politically astute to be effective. Individuals and their organizations must be willing to invest the time, effort and money to be effective political powers. Regardless of how noble and righteous the wildlife cause, if battles in political arenas are not won, wildlife and its habitat will not prosper. This element of the model also includes the politics of dealing with public bureaucrats, large for-profit corporations and the hundreds of NGOs (non-government organization) that have been created in the name of conservation. Many public and private careers have been created to impact the management of wildlife and its habitat.

Most important wildlife decisions have a political component. If you or your organization are not politically savvy, you will see decisions made that do not further your agenda, regardless how worthy or unworthy your agenda is. Those individuals and organizations that understand and use public and political arenas effectively and efficiently will have more say about the outcome of wildlife based policy decisions than those individuals and organization that do not.

For example the experimental, nonessential introduction of a subspecies of wolves that was never naturally occurring in the Rocky Mountains in the United States has had unexpected consequences. Elk herds in and around the northern half of Yellowstone National Park have been dramatically reduced beyond predictions and probably due substantially to wolf predation. There are many citizens who want the return of larger herds of elk in these areas and are exercising their political will to have wolves hunted as big game species under state law to reduce their predation on elk herds.

Those who think the courts have gone too far to extend protection to the wolves in the northern Rocky Mountains exercised their political will and guided the Federal legal process to exempt wolves from the Endangered Species Act. In a clever rider to a budget bill, congress passed and President Obama signed into law a change in the Endangered Species Act allowing the hunting of wolves now in Montana and Idaho. Wolf hunting will also likely be allowed in Wyoming in the near future. Clearly only those individuals, and their organizations, who are politically powerful have significant impacts on the Endangered Species Act and the management of wolves in Montana, Idaho and Wyoming [5].

Financial Support

Wildlife conservation requires habitat and habitat requires land and land is a very expensive resource. Conservation also requires scientific and managerial expertise and those individuals who possess these skills must be paid for their services. Fortunately, tax, license and fee mechanisms such as the Pitman-Robertson Act, Dingell-Johnson Act, Duck Stamps and Land and Water Conservation Fund have been invented and implemented to provide relatively large amounts of money to support wildlife conservation efforts. Also hunters and anglers as consumers purchase huge amounts of goods and services that stimulate local, regional, national and international economies thus rewarding private individuals and companies to improve wildlife and its habitat access to it [11] [12].

In 2006, more than 87 million Americans, or 38 percent of the United States' population age 16 and older hunted, fished or observed wildlife. They spent \$120 billion that year pursuing those activities – an amount roughly equal to Americans' total spending at all spectator sports, casinos, motion pictures, golf courses and country clubs, amusement parks and arcades combined [7].

Social Ownership

We defend what we love [6]. Wildlife conservation is most successful when advocates are passionate about their support. The strongest, visceral, emotional support for wildlife conservation in North America has clearly been demonstrated by sport hunters for game mammals, upland birds and waterfowl and by sport anglers for fish. These hunter-conservationists and angler-conservationists must have significant, relatively low cost access to “their” wildlife to participate in their sports. If this democratic public access is not maintained and expanded, public “ownership” of wildlife will be diminished as will the wide-based support needed for significant ecosystem-wide wildlife conservation efforts. Certainly others outdoor enthusiasts in addition to hunters and anglers think wildlife “belongs” to them but if this sense of ownership does not translate into social action and commitments, wildlife conservation may not make significant gains.

Those individuals and organizations that can produce the strongest emotional bonds between their members and wildlife will be more successful at motivating political will and generating financial resources for increased wildlife wellbeing. The huge successes of the North American Model would not be possible if there were not a high proportion, if not a majority, of Americans who think and feel they own the wild animals. This culturally based emotional attachment to wild animals and their habitat is essential in driving the conservation of these resources. We rise to the defense of the things we love, and fortunately for wildlife, it is loved by the American public.

The migration from the idea of nature being created for the exploitation of mankind to the concept that wildlife is to be conserved for future generations is an interesting and fascinating story. Most conservationists know the history of the conservation ethic as developed by recreational hunters and anglers, but the facts are not generally known outside the hunter-conservation circles. The good news for wildlife and its habitat is that the conservation ethic is embraced by most Americans even if they don't know the facts associated with its development.

Three Legged Stool

These three basic elements of the North American Model of Wildlife Conservation can be visualized as the legs of a three legged stool. If one of the legs is missing or is shorter or longer than the other two, the stool is not stable and will fall over. Wildlife conservation efforts have in the past been most effective when the three components are strong and in balance. It can be argued that the same dynamics will hold true for the future. Those wildlife conservation efforts will be most successful that have strong and balanced representation of political will, financial resources and social ownership. There are of course synergistic interactions between and among the three components. For example the stronger the social ownership of wildlife in an individual, the more likely he or she will reach in his or her pocket and financially support the resource, and the more likely that individual will advocate in political arenas for wildlife.

Since the mid-1800s [10], through Theodore Roosevelt's mighty leadership at the turn of the century [2] to today's huge wildlife conservation successes, the powerful blending of these three components have produced an institutionalized conservation ethic in the general public. United States citizens have an acquired cultural imperative to conserve wildlife. Decision makers who understand the three basic components of the North American Model will be more effective conservationists and be able to harness and guide this culturally acquired, institutionalized conservation ethic.

Clearly, the North American Model addresses these three new tenants. But by simplifying the model to three easily understood postulates, a more powerful understanding by front-line, day-to-day managers and interested persons can be achieved.

Tragedy of the Commons and Externalized Costs

At the beginning of the European colonization of North America, wildlife was viewed as a natural resource to be harvested at will. “Meat” or “pot” hunters shot and caught animals and fish with little or no regard to harvest amounts or ethical hunting or fishing methods. Pot hunters used wildlife extensively to feed their families. At that time in history, wildlife was viewed in a similar manner as trees. Natural resources were to be used as citizens saw fit even if it meant there would be a tragedy-of-the-commons event that would severely negatively impact the resource.

In addition to using the nation’s wildlife by citizens for their personal and familial use with little to no regard to its conservation, there was unbridled **commercial** use of wildlife to sell to huge markets for food, clothing and byproducts. In addition the U.S. military killed bison in vast numbers to help subdue native Americas during the Indian wars. Wildlife could not withstand the relentless harvest of their populations. Passenger pigeons that once numbered in the billions were all killed as were Carolina parakeets. Bison were reduced from possibly 60 million to less than a hundred living wild in Yellowstone National Park. Today’s wild bison herds were rebuilt from animals captured by livestock producers in Montana [9].

It has been demonstrated many times that if the nation’s natural resources are given away to private citizens and corporations so they can sell them in for-profit markets, dire environmental cost are externalized and not passed on to their consumers. Instead of the consumers paying a higher price to cover the conservation of the resource and its ecosystem, other often non-consumer citizens suffer the cost of lost opportunities in life styles and business opportunities [3].

Sport Hunters Create and Lead Conservation Movement

Fortunately for game animals in particular, **sport** hunters came to the rescue of animals that were hunted. Professor John Reiger [10] clearly demonstrates that sport hunters starting in the mid 1800s began to use their political will and financial resources to produce a sense of social ownership that became the American cultural norm during the beginning of the 19th century. Professor Doug Brinkley [2] also produced a well written, powerful book clearly showing how Theodore Roosevelt used his huge political will to persuade the American public that conserving wildlife and its habitat was the right thing to do and should be supported financially by both public and private funds.

Theodore Roosevelt used the sport hunting community’s emotional commitment to conserving wildlife and its habitat to further his conservation agenda. He is the best example of an individual shaping the cultural norm to seeing wild animals as a valuable resource to be conserved for future generations. This social norm began with sport hunters, those who hunted and fished for pleasure and not for commercial gain. These sport hunters took on the pot hunters and commercial harvesters. They changed the social norm about wildlife and won the battle to have animals protected for hunters to hunt for recreation, sport and pleasure. As a significant additional benefit is the expansion of this norm to include conservation of ecosystems beyond the narrow role of producing fish and wildlife for angling and hunting. Many sportsmen embraced the larger goal of protecting entire ecosystems in addition to simple smaller habitats needed to maintain huntable and catchable populations of species used for recreation.

Sport hunters continue to lead the way in wildlife conservation today. Thanks to conservation efforts by politically savvy hunters, most game animals were also brought back from the brink of extinction. For example in 1900 there were 12,000 antelope (pronghorns); there are now 1,000,000. There were 100,000 turkeys in 1900; there now are more than 4,000,000. In 1900 there were 500,000 whitetail deer; now there are about 30,000,000. There were 41,000 elk then; now there are around 1,000,000.

Conclusion

The positive conservation impact of the North American Wildlife Conservation Model is well documented [9]. However it can be argued that the seven tenants of the North American Model are too cumbersome to facilitate front line managers' decision when making day to day decisions. The North American Model serves researchers well when they write academic papers explaining why conservation decisions were made. However a more simple theoretical structure that includes only three elements may more easily explain conservation advances and loses better than the full model with its seven tenants.

The three elements presented in this paper are:

1. Political will,
2. Financial support and
3. Social ownership.

Most, if not all, conservation changes can be explained by these three components and their interactions. Those with the most political influence will prevail in political battles that are played out in the legislative, judicial and executive arenas. The policy, strategies and tactics derived from these political debates and struggles will not be implemented without financial backing. Few conservation programs blossom without substantial monetary support. The more people and their organizations take ownership for wildlife and its habitat, the more they will exercise political will, and the more likely they will reach into their pockets and pay money to support wild places and the animals that live there. Those who use this three-pronged theoretical construct will have a deeper, more complete understanding of the world of modern wildlife conservation.

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