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From Market Hunting to Hunting Markets

A Property Rights Approach

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Hunters are proud of the role they play in wildlife conservation. In North America hunters hang their conservation hats on the North American Model of Wildlife Conservation (NAMWC), measuring their successes on the recovery of wildlife populations decimated in the 19th century. The term model makes the North American approach sound as though it is based on legal and/or scientific principles that yield clear conservation prescriptions. To the contrary, the NAMWC is a malleable concept that is used by those who want to continue and strengthen the role of state wildlife regulation and prevent privatization and monetization of wildlife.

Efforts to promote state wildlife regulation in North America began at a time when nature in general and wildlife in particular were taken by individuals under the Roman law concept of *res nullius*, meaning animals were privatized (owned) once they were physically possessed and were monetized when they mostly were sold in the marketplace as meat, leather, feathers, and so on—hence *market hunting*. The resulting tragedy of the commons led states and the federal government to impose seasons and bag limits and successfully reduce the decimation of wildlife populations. From this somewhat limited regulatory role of the state, the NAMWC has come to mean that wildlife is a public resource held in trust by the state for the people. Therefore wildlife cannot be privatized or monetized through hunting markets.

By contrast, what I call the African Model of Wildlife Conservation (AMWC) went through a different evolution and resulted in a wildlife conservation system based more explicitly on property rights and more conducive to privatization and marketization of animals and habitat. Put differently the AMWC is a model that encourages *hunting markets* wherein hunters pay fees that directly or indirectly go to the people who live with wildlife and affect the extent and quality of habitat. Though the value chain that links the hunting demander with the habitat suppliers is

not always strong, the AMWC depends quite explicitly on monetization and on privatization or jurisdictional control through community governance groups. The concern for wildlife users and managers should be that the NAMWC with its heavy reliance on the public trust doctrine will erode the property rights pillars of the AMWC as this doctrine is implicitly or explicitly introduced into law and custom.

The purpose of this paper is to explore the origin of these two very different conservation models; to debunk the myth that the NAMWC is based on the public trust doctrine; to show how animals and habitat are inputs into the production of the hunting experience; to emphasize that confusing *market hunting* with *hunting markets* and thus concluding that the hunting experience should not be privatized or monetized breaks the value chain necessary for wildlife conservation in conjunction with private lands.

The Genesis of the NAMWC and the AMWC

Both North American and Africa were colonized by Europeans, but the transition from colonies to nation states was very different on the two continents. In North America, and particularly the United States, any suggestion that the Crown owned anything was rejected following the American Revolution out of concern that the Crown (state officials) would be the ones holding the right to hunt and fish or to hand out that right. Thereafter, laws governing wildlife evolved through common law courts, through legislation, and through constitutional interpretation by the Supreme Court (both state and federal). MORE

From the time the Pilgrims stepped ashore, Europeans took advantage of the abundant wildlife for food, shelter, clothing, and all manner of other utilitarian goods; little hunting was done for sport. The abundance of wildlife resulted from an abundance of habitat created by the

management of habitat by North Americans (burning prairies and forests, selective harvesting, and planting crops) and by low human population densities. Given the abundance of game, it made sense for settlers to harvest wildlife for food, shelter, and other market products such as beaver to meet the European demand for beaver felt hats and buffalo to meet the demand for leather. In the early days, the dead animal rather than the sport of hunting and killing it was the desired product.

Not surprisingly, with wildlife subject to *res nullius*, the tragedy of the commons resulted, witness the near extinction of American bison, passenger pigeons, and many predators. Though habitat remained abundant, wildlife became scarce.

To end the tragedy of the commons, local, state and federal agencies were pressured by hunters and conservationists to impose seasons and bag limits aimed at halting the extermination of wild game populations. In addition, pressure on wildlife populations as a food source declined as livestock and crops were substituted for wild products (e.g. cattle were substituted for bison to supply leather for belts to drive machines and for meat). This combination allowed most wildlife populations to rebound and flourish.

The North American transition from open access hunting without limits to the closing of the hunting commons via government regulations was based on three premises (though some would argue four, a point addressed in the next section). The first premise was that because market demands for wildlife products were causing the decimation of wildlife populations, hunting animals and birds for sale in the marketplace was illegitimate. Second, in the late nineteenth century scientific management of resources (e.g. professional forest management as envisioned by Gifford Pinchot and the Forest Service) was emerging as the best way to ensure a sustainable flow from natural resource stocks. Hence, the solution to overharvesting wild game

was to entrust professional managers in local, state, and federal government agencies with setting seasons, bag limits, and hunting techniques. Third, during the Progressive Era in the late nineteenth and early twentieth centuries, the emphasis on egalitarian allocation of recreational resources encouraged that parks, rivers, and wildlife be open to all citizens without cost. The U.S. national park system epitomizes this philosophy. These three premises form the foundation of the NAMWC—elimination of market hunting, regulation by professional government managers, and free access. The legal basis on which the NAMWC is built, however, is open for debate, as we shall see below.

[Author’s Note: I am less familiar with the history of African wildlife populations following European colonization, but I hypothesize that *res nullius* resulted in the same tragedy of the commons and that the outputs from wildlife, i.e. meat, leather, feathers, etc., were supplied by domestic animals, hence reducing market hunting. Thereafter, governments issued permits to professional hunters (interesting to note that this term does not exist in NA) who effectively “owned” hunting territories subject to some licensing that limited bags and the number of hunters in a region, i.e. limited privatization. In short, the AMWC is based on property rights less than regulations.]

The nexus between European immigrants and African wildlife was not entirely different from North America. In the early years of colonization, *res nullius* governed wildlife taking as it did in North American, accompanied by a similar tragedy of the commons (e.g. the bluebok and the quagga in the Cape). Wildlife was either hunted as a product, as a means of controlling disease carried by the tsetse fly, and as a means of controlling animals that either competed for

forage or predated on livestock. (Note that this same explanation applied to the decimation of large bison herds that supplied many of the same products—meat and hides—competing for grass, but far more difficult to manage. See Peter J. Hill.) Under these conditions hunters were either hunting for markets or for reducing competition. Indigenous people, who had hunted for meat for millennia, were often banned from killing wildlife except in so far as it benefited the Europeans, and communal and customary land rights were more or less ignored under colonial rule.

One exceptional difference in Africa was that the colonizers, especially the British, were more inclined to set aside lands in the late 19th and early 20th centuries as wildlife preserves, in many cases open for regulated hunting. These areas, such as Kruger National Park, were in sharp contrast to the early national parks in North America that were established for their natural beauty more than their wildlife. Africa also differed in that the independence movement resulted in many different national governments rather than a federal collection of united states. This meant that there is no single rule of law governing wildlife.

One big difference between North America and Africa was that monetization and privatization were always a part of African hunting whether for trophy safaris or for meat. These ideas were even embedded in African wildlife laws. As Clark C. Gibson notes in his book, *Politicians and Poachers* (Cambridge University Press, 1999, p. 45), the Rhodesian Wildlife Conservation Act of 1960 allowed “Landowners to obtain permits to trade in wildlife. Wildlife, once a cost to settlers, became valuable, and the wildlife utilization industry developed rapidly. . . . The 1975 Parks and Wildlife Act transferred effective control over wildlife on private lands from the central government to landowners.” Gibson continues by calling this “momentous shift away from the preservationist concept of the “King’s Game.” Similarly, Brian Child notes that

“The key in southern Africa has been to give landholders strong use rights and to encourage the commercialization of wildlife and the development of new wildlife products” (Suich and Child, *Evolution & Innovation in Wildlife Conservation*, 2009, p. 104).

Nonetheless, proponents of more state control still tried to justify state regulation because of the “fugitive nature of wildlife and the need to control misuse and economic externalities” (Child, p. 104). One particularly obvious example of this came when Tanzania’s President Julius Nyerere declared, in his 1961 Arusha Manifesto, that Tanzania’s “natural treasures were held ‘in trusteeship’ for the whole world.” Interestingly, the words were penned by western conservation groups (see Mahash Rangarajan, “Parks, Politics and History: Conservation Dilemmas in Africa,” *Conservation & Society*, downloaded March 7, 2017, <http://www.conservationandsociety.org/article.asp?issn=0972-4923;year=2003;volume=1;issue=1;spage=77;epage=98;aulast=Rangarajan>).

Based on this brief history, we can discern the essential elements of the African Model of Wildlife Conservation. Under that model privatization and monetization are paramount in most game rich countries. Hunting markets are encouraged based on strong landholder rights, commercialization creates a strong link between wildlife and habitat in the value chain, and the state’s role is mostly in the form of oversight to discourage unethical hunting and poaching in areas where individual or communal land rights are not strong.

Contrasting the North American and African approaches reveals that the former uses the regulatory stick and the latter uses the property rights carrot. Under the NAMWC, wildlife remains in the commons with limits placed on individual use of the resource stock. Under the AMWC, wildlife is an asset from which the owner reaps the benefits for increasing the stock.

Moreover, the NAMWC severs the all-important link between wildlife and wildlife habitat, whereas the AMWC incentivizes owners to strengthen that link.

Note there are a few exceptions to this distinction in North American. For example, bison are raised on ranches where both sport hunting and meat are sold as end products. Similarly, deer under high fences on Texas ranches are privately owned, and free roaming elk on large land holdings such as Ted Turner's Vermejo Park and Flying D Ranches and the White Mountain Apache Indian Reservation are managed as if they are privately owned. These are exceptions to the NAMWC because they involve both privatization and monetization, and they are often denigrated for not being examples of "fair chase" hunting.

Similarly, there are exceptions to the regulatory/property rights distinction in Africa. Game agencies and professional hunters do impose some regulations. [e.g. banning canned lion hunts, requiring licenses, recording hunter success, permitting trophy exports, etc.] Kenya and now Botswana provide the extreme cases of the regulatory approach, effectively imposing zero seasons and zero bag limits, and the conservation results are clear.

Wildlife as a Trust vs. Wildlife as Property

[AUTHOR'S NOTE: This section will discuss the notion of the public trust doctrine under the NAMWC and contrast it with private ownership under the AMWC. It is borrowed from correspondence with my friend and hopefully co-author on a future draft of this paper, James Huffman. Understanding the difference between a trust approach and a property rights approach is crucial to building the case of hunting markets and strengthening the value chain for private conservation. This section is taken mostly from correspondence with Jim.]

As much as the historical evolution of the AMWC is based on strong landowner rights over wildlife management, the NAMWC is based on a fourth premise, namely that wildlife management is based on *res communis*, meaning it is owned by the public, community or state.

Under this Roman law concept, the rule of capture makes no sense. That would be a private taking from the public. Proprietary title to wildlife is only acquired by capture (whether by individuals or the state), and the reason that is possible is that prior to capture wildlife is *res nullius* (unowned).

The idea of state ownership under the guise of trusteeship crept into the NAMWC largely as a result of the legal writings of Joseph Sax in 1970. Under trust law the asset or corpus of the trust is held as a proprietary title – with equitable title in the beneficiary and legal title in the trustee. If the state is the trustee of a wildlife trust, then it must have legal title to the wildlife. But the U.S. Supreme Court has made it clear that the states do not hold legal title to wildlife.

Those who assert the trust theory for wildlife cite *Geer v Connecticut* (1896) in which the court did hold that the states hold title to wildlife. Justice Field dissented (161 U.S. 519 at 539-40) and his view was almost immediately the favored position in succeeding cases. In *Toomer v. Witsell* (1948) the court said: “The whole ownership theory, in fact, is now generally regarded as but a fiction expressive in legal shorthand of the importance to its people that a State have power to preserve and regulate the exploitation of an important resource.” 334 U.S. 385 at 402. In a footnote the court stated that “[t]he fiction apparently gained currency partly as a result of confusion between the Roman term *imperium* or governmental power to regulate, and *dominium*, or ownership. Power over fish and game was, in origin, *imperium*. (citing Pound, An Introduction to the Philosophy of Law, 197-202).

In *Douglas v. Seacoast Products, Inc* (1977) the Supreme Court wrote: “A State does not stand in the same position as the owner of a private game preserve and it is pure fantasy to talk of “owning” wild fish, birds, or animals. Neither the States nor the Federal Government, any more than a hopeful fisherman or hunter, has title to these creatures until they are reduced to

possession by skillful capture. *Geer v. Connecticut*, 161 U.S. 519, 539-540, 16 S.Ct. 600, 608, 40 L.Ed. 793 (1896) (Field, J., dissenting). The “ownership” language of cases such as those cited by appellant must be understood as no more than a 19th-century legal fiction expressing “the importance to its people that a State have power to preserve and regulate the exploitation of an important resource.” *Toomer v. Witsell*, 334 U.S., at 402, 68 S.Ct., at 1165; see also *Takahashi v. Fish & Game Commission*, 334 U.S. 410, 420-421, 68 S.Ct. 1138, 1143, 92 L.Ed. 1478 (1948). Under modern analysis, the question is simply whether the State has exercised its police power in conformity with the federal laws and Constitution.” (431 U.S. 265, 284-85). (The police power referenced in *Douglas* is the *imperium* of Roman law in the Pound reference above.)

Finally, in *Hughes v. Oklahoma* (1979) the Supreme Court formally over-ruled *Geer v. Connecticut*. The court stated: “The case before us is the first in modern times to present facts essentially on all fours with *Geer*.¹⁶ We now conclude that challenges under the Commerce Clause to state regulations of wild animals should be considered according to the same general rule applied to state regulations of other natural resources, and therefore expressly overrule *Geer*. We thus bring our analytical framework into conformity with practical realities. Overruling *Geer* also eliminates the anomaly, created by the decisions distinguishing *Geer*, that statutes imposing the most extreme burdens on interstate commerce (essentially total embargoes) were the most immune from challenge. At the same time, the general rule we adopt in this case makes ample allowance for preserving, in ways not inconsistent with the Commerce Clause, the legitimate state concerns for conservation and protection of wild animals underlying the 19th-century legal fiction of state ownership.” (441 U.S. 322 at 335-36)

In summary, wildlife, like other natural resources, are subject to the states' police powers. The states can regulate them for the public benefit, subject to any limits of the state and federal constitutions. That means the federal government can preempt state regulations when exercising the commerce clause and other federal powers. In another Supreme Court case (*Missouri v. Holland*, 1920) the court upheld the Migratory Bird Treaty Act against a claim of state ownership of the federally regulated wildlife. That the states are only exercising their police powers with respect to wildlife also means the states must respect due process, equal protection, private property rights and the many other constitutional liberties.

The trust theory in wildlife law has been an effort to assert state proprietary title to something the state never owned and thus it circumvents the limits of federal power and individual liberties. The public trust theory from *Sax* is an effort to assert state title (or public title in an even broader sense that would limit state power) to seemingly vested private property rights.

Now it is appropriate for the reader to ask why this long discussion of the mundane history of the public trust doctrine as it applies to the NAMWC. The answer is simple: expansion of the public trust doctrine breaks the link in the value chain that connects private land with *res nullius* wildlife. When the public trust doctrine is combined with the other elements of the NAMWC—non-privatization and non-commercialization—there is little possibility for private landowners who control and manage habitat to benefit from incorporating wildlife management decisions into their bottom line.

When taken to its limit, incorporating the public trust doctrine into the NAMWC means that the public cannot be denied access to its wild resource. In the words of Organ and Mahoney, “the public must understand that wild animals, regardless of whose property they are on, belong

to everyone.” They call for codification of the public trust doctrine to ensure that “citizens continue to have free access to enjoy wildlife in traditional as well as emerging pursuits.”

The Wildlife Society, arguably the strongest representative of professional game management, also pushes the notion of the wildlife trust without considering its ramifications. A [2010 publication titled “The Public Trust Doctrine: Implications for Wildlife Conservation and Management in the United States and Canada”](#) states that natural resources “are deemed universally important in the lives of people, and that the public should have an opportunity to access these resources for purposes that traditionally include fishing, hunting, trapping, and travel routes (e.g., the use of rivers for navigation and commerce). Among the threats to this access are “inappropriately claiming ownership of wildlife as private property; unregulated commercial sale of live wildlife; prohibitions on access to and use of wildlife; personal liability issues; and a value system oriented toward animal rights.”

[insert discussion of paper “What Makes Wildlife Wild? How identity May Shape the Public Trust versus Wildlife Privatization Debate,” Wildlife Society Bulletin, July 2016. “Thus, we suggest policy decisions regarding privatization of wildlife will be more accurately deliberated if society and wildlife professionals more completely considered the degree to which freedom is essential to a wild species identity and the degree to which that identity is inviolable.”]

Strengthening the Habitat Link in the Value Chain

As effective as the North American model has been in preventing over-exploitation of wildlife resources by assigning property rights to state authorities, it has been relatively ineffective at linking the hunting demand with the habitat supply. State wildlife agencies have

little or no control over habitat that is privately owned or publically managed, especially by the federal government. As Wayne Long, founder of [Multiple Managers Inc.](#), a company specializing in private land wildlife management, put it, “I took lots of courses in college focusing on population management, but few on habitat management. When I took a job with a state agency, I realized why – we had no control of habitat. That is when I decided to start a company helping private landowners manage their land and wildlife.”

The problem with the NAMWC is that it fails to create a link in the value chain between demander-hunters at one end and suppliers along the way. As hunters our willingness-to-pay for transportation, guides, lodging, and food drives the value chain. The link to the supply side is obvious for most of these goods and services, but it is easy to ignore the most important part of the supply chain—habitat.

In the hunting market value chain, the final product is mainly the hunting experience—though the hunter also values the end product that he or she takes home in the form of a trophy or meat—that includes not only guides, cooks, tents, and so on, but it is also the environment or habitat in which the hunt takes place. Creating the link to this crucial part of the value chain must be forged and strengthened.

Wildlife habitat is especially important in our modern world where fish and wildlife must compete with people and their other demands for water and land. In our world, habitat is not something that is simply supplied by Mother Nature. It is supplied by those who control land and water use and who determine whether those resources produce food, timber, or housing or whether they produce wildlife and fish. In some cases these demands do not compete with one another—for example, pheasants or wild turkeys can live on agricultural lands with little

reduction in crop value. But in most cases, human demands for food and shelter compete with wildlife habitat and vice versa.

Moreover, strengthening the habitat link in the value chain gives local people a greater stake in measuring and monitoring dynamic environmental forces. Especially at a time when climate change is a major environmental concern, adapting to dynamic changes is crucial. This is not to say that professional wildlife managers do not have a role to play in providing expertise in wildlife management. Science does matter. However, local people who interact with wildlife and control land use have access to time and place specific information that is lacking in top-down regulatory regimes. That is why [Multiple Use Managers, Inc.](#) depends on knowing the land and the landowner: “We consider ourselves wildlife biologists first, and hunting outfitters second. We believe everything radiates out from having healthy habitats. All positive outcomes happen because the land is being cared for with a proper conservation ethic.”

This is especially true in developing countries where people trying to lift themselves out of subsistence can ill-afford to give up food production in favor of wildlife production. Elephants eating and trampling corn crops or lions killing cattle are a liability, not an asset. Like any good portfolio manager, those who live with the liabilities would rather get rid of them and increase their assets, and wildlife is no exception.

Now let’s apply the value chain concept to hunting in Africa. Hunters like to brag about how much they spend on their safaris. For example, a new paper by Enrico DiMinin, Nigel Leader-Williams, and Corey J.A. Bradshaw in *Trends in Ecology and Evolution* (February, 2016) reports that the top four sub-Saharan countries in 2012 grossed hunting revenues of US\$68 million for South Africa, US\$56 million for Tanzania, US\$40 million for Botswana, and US\$28 million for Namibia.

These are impressive numbers, but in the value chain context, the relevant question is how much goes to the providers of habitat. Because much safari hunting in South Africa, Namibia, or on private ranches in the United States is on private or community lands, the value link is strong and the results are obvious. Wildlife populations in those two countries are healthy and sustainable. This explains why DiMinin, *et al.* report “a substantial increase in the abundance of many wildlife species and in the total area of land falling under community protection through conservancies.”

This is less true in Tanzania and Botswana. DiMinin, *et al.* report that in Tanzania “accrued revenue allocated to the Wildlife Division in 2008 amounted to 22% (US\$12,353,180) of the gross revenue generated by hunting in that year. The remainder of the revenue went to the private sector.” The “private sector” includes service suppliers and concessionaires, but does not include payments to compensate the people who live with the wildlife. The blanket hunting ban recently imposed in Botswana guarantees that the value chain for habitat will be broken, and the results are likely to follow those in Kenya where wildlife is all but non-existent outside national parks.

Anti-hunters correctly argue that ecotourism provides another way to integrate wildlife into the value chain, but, as with hunting, to be effective money spent on ecotourism must go to habitat, which it typically does not. Ecotourism dollars pay mainly for cameras, camps, guides, and park entrance fees. Moreover, ecotourists are not interested in the more remote areas where common species such as impala and warthogs live; they want to see the mass wildebeest migrations and large elephant herds found in national parks. Because hunters are more likely to want a wilderness experience with multiple species and solitude, they offer the best hope of integrating habitat outside protected areas into the value chain.

We as hunters need to step up our entrepreneurship in the hunting market. We need to find ways to channel our hunting dollars directly to wildlife habitat. It is not enough to pay hunting license fees if those fees go to corrupt governments or concessionaires who pass little or nothing onto those who live with the wildlife. In Africa this means ensuring that local communities get a share of our dollars—the more directly the better. Putting habitat directly into the hunting market value chain is the best way to guarantee that “if it pays, it stays.”

Conclusion

It is time to abandon archaic, romantic notions of hunting in Teddy Roosevelt’s days—whether in North America or Africa. He argued that “The movement for the conservation of wildlife and the larger movement for the conservation of all our natural resources are essentially democratic in spirit, purpose, and method.” But if wildlife management “essentially democratic in spirit, purpose, and method,” depends on the democratic spirit, what chance is there that hunting will play much of a role in wildlife management. With the number of hunters declining and with the number of non-hunting animal rights advocates rising, democratic processes will not be the friend of hunting. Simply witness the use of the endangered species regulations in the United States to regulate hunting in Africa.

If hunting is to continue to play a role in wildlife management, it will come through strengthening value chain links between what hunters are willing to pay and what landowners—private and public—are willing to supply. Hunting markets that connect wildlife ranchers with hunting clients are a proven way of improving this link. The link will be made even stronger if we can better measure and monitor the outputs from this value chain that go beyond trophies on the wall. When habitat is managed for the hunting market many other ecological outputs are

produced including non-hunted species (e.g. birds and insects), clean water, and open space, to mention a few. Demands and suppliers will do well to quantify these outputs.

The value chain will be even stronger if these other ecosystem services, as they are called, can be monetized and commercialized. If hunting markets can be coupled with other ecosystem service markets, more habitat will be produced.

If advocates of the NAMWC continue to push the public trust doctrine to its limits by arguing the access to the public's wildlife should be free whether on public or private property, the value chain will be broken and quality habitat will disappear. North America now enjoys some of the greatest abundance of ungulates in centuries. Some of that abundance is due to professional management, but much is due to the quality of habitat on private land. In that scenario the scarce resource is open gates—access. By trying to force access by arguing that the wildlife are held in trust for the people and people should not be denied free access to their wildlife, advocates of the NAMWC will close more gates than they open and discourage habitat management that favors wildlife. The AMWC has resisted this tendency, but it remains to be seen whether that will hold given the forces pushing for free access.

Perhaps the best way to understand the importance of hunting markets and the value chain they create is to return to the words of the godfather of North American wildlife conservation, Aldo Leopold. As he put it in his essay on “Conservation Economics,” “Conservation will ultimately boil down to rewarding the private landowner who conserves the public interest.” The future of wildlife management requires finding ways to integrate Leopold's admonition into the NAMWC and to buttress it in the AMWC.