Holes in the Model

IS IT TIME TO REVISIT THE NORTH AMERICAN MODEL?

By Chris Madson

▼ The laws to protect the snowy egret (*Egretta thula*) and other species and their habitats were championed by a combination of birding, hunting, and conservation interests after the bird was shot to the brink of extinction to provide plumes for the millinery.

In 2001, a paper presented at the 66th North American Wildlife and Natural Resources Conference, "Why hunting has defined the North American Model of wildlife conservation" (Geist, et al. 2001), was immediately hailed as a groundbreaking analysis of the influence hunters have had on the recovery of wildlife populations, many of which were on the brink of extinction little more than a century ago.

As hunting and hunters have come under renewed attack, the message this paper delivered has become even more important. For generations, hunters have provided irreplaceable funding and political support for conservation, and their demand for abundant, widely distributed game populations has protected millions of acres of habitat and provided the impetus for the creation of millions more. Many of the most persuasive voices in the conservation movement have belonged to hunters who convinced the American public that wildlife and wild lands are essential parts of our national heritage.

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For all these reasons, the wildlife profession not only embraced the tenets presented in the Geist paper but began to refer to it in the same reverential tones once reserved for *A Sand County Almanac*. Since then, The North American Model has become a catch phrase in any philosophical discussion of wildlife management and an instant rebuttal to nearly any criticism leveled against the profession. Since we in the wildlife profession offer the Model as a comprehensive defense against any attack, it should come as no surprise that in recent years a small but growing number of critics have pointed out what they believe to be shortcomings in our implementation of the Model and, in a few cases, blind spots in the Model itself, including most recently the authors of a paper in *Science Advances* (Artelle, et al. 2018).

This ongoing interchange has led to several newer publications. Perhaps the most comprehensive is The Wildlife Society's Technical Review, "The North American Model of Wildlife Conservation," undertaken by sixteen wildlife professionals, including the three authors of the 2001 paper (Organ, et al., 2012). In that document, the authors list challenges the seven tenets of the Model face. I'd like to raise some additional concerns about several of the tenets.

Where clarification is needed

I'm an enthusiastic supporter of the first tenet: wildlife in America is "held in trust for the people." This precept has been upheld in court and custom throughout our history. But, over the last two decades, it has come under increasing attack as well described in the TWS review. For that reason, our profession should commit to maintaining it as a central theme in our system of wildlife conservation.

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The same can said for two other tenets in the Model: "allocation of wildlife by law" and the "democracy of hunting." These provisions would seem to be an automatic extension of our democratic system, but as the TWS review points out, they are both under attack and require wholehearted advocacy from wildlife professionals and anyone else who cares about wildlife and wild places.

However, I find elements of the other four tenets to be confusing and even contradictory.

Elimination of markets in wildlife. The original paper states that a key element of our system is the "elimination of markets for wildlife." Then, six lines down, it makes a huge exception because, according to the authors, "it has been demonstrated that furbearers can be managed as sustainable resources."

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▲ **Although less sought-after than the snowy egret, the plumes of the great egret (*Ardea alba*) were also valuable in the milliner's market in the Gilded Age.**

We need to justify this apparent contradiction. If the modern system of regulations and law enforcement is enough to guarantee that fur can be taken sustainably, then I struggle to understand why it can't regulate the market in other wild animals. The distinction between "furbearers" and "game" is largely an artifact of tradition. There are sound reasons for maintaining that tradition in our system of wildlife management; but if we're going to continue to support sustainable fur harvesting, this tenet should reflect our commitment to that tradition — for recreation, even profit, and occasionally as a tool for dealing with issues like depredation and epizootic disease, as long as it is done sustainably. This should be noted in the bold print at the top of the page, not in the footnotes at the end of the chapter.

The TWS review points out several other markets in wildlife or access to wildlife that contradict the assertion that we have eliminated markets or even that we are trying to eliminate them. It would be easier to defend this tenet if we had a clearer notion of the reasons behind the exceptions we tolerate as a profession or even embrace.

Wildlife can only be killed for a legitimate purpose. The TWS review offers an extensive review of the history of this tenet, when prominent members of the Boone and Crockett Club railed against "pot hunters" who hunted only for meat and, most of all, against those who killed "merely for the fun of killing." The review catalogs the attributes of a sportsman, which include the idea that he "will not waste any game that is killed."

I think the ethical tide has turned ever more strongly against people who kill only for the fun of killing. But at the same time, surveys of public opinion show that nonhunters are much less distressed by modern pot hunters who are hunting for the freezer than they are by sportsmen who hunt "primarily for the pursuit or chase" and may be more interested in a big rack than in roasts and tenderloins from animals.

And the idea of "wasting" an animal is itself open to broad interpretation. Most hunters leave the hearts, livers and small intestines of big game animals in the field, when all these parts are edible. The law in Wyoming, where I live, allows me to leave the ribs and neck of a big game animal in the field. If I were to do that in Alaska, I would be guilty of wanton waste. When I have killed an animal, how much do I have to use in order to consider my action legitimate?

From a strictly ecological point of view, the whole idea of meat, hide, extremities or internal organs left in the field as being somehow wasted is a curious notion. Unused parts from a dead animal are more surely wasted if they are consigned to a sanitary landfill than if they are left in the habitat where the animal died. Our profession approaches this issue with remarkably little underlying thought or consistency. At the very least, we should consider a more nuanced definition of the word "legitimate."

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Wildlife are considered an international resource. I would be more comfortable with this tenet if it began with the word *some*. Clearly, there are many species of wildlife that are relatively sedentary and can be managed quite well without worrying about international borders. There are, of course, species whose distributions cross borders. Some, like waterfowl, migrate back and forth, almost demanding close international cooperation in their management. Still other species are international in distribution, even if individuals seldom, if ever, leave the jurisdiction where they were born. As a profession, it seems we often struggle to take an international view of these.

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▲ Most raptors, even the smaller species like the sharp-shinned hawk (*Accipiter striatus*), were considered threats to poultry in the last century. The coalition of hunters and birding enthusiasts of that era worked tirelessly to convince farmers that most nongame birds, including birds of prey, were a benefit to agriculture, not a pest.

Here in the United States, we mandate relatively intensive management for mammals like the wolverine (*Gulo gulo*), gray wolf (*Canis lupus*) and Canada lynx (*Lynx canadensis*) — three species that are still relatively common and widely distributed in Canada. At the same time, Canada lists the northern swift fox (*Vulpes velox*) as threatened and the greater sage-grouse (*Centrocercus urophasianus*) as endangered, even though there are still extensive populations of both species south of the border.

This tenet, as it has been understood and is currently applied, seems to be the subject of extensive debate and no small amount of disagreement. If we can't reach broad consensus on what it means and how it should be applied, we could at least insert a word or two of qualification to recognize that this tenet has some limits in its application.

Science is the proper tool for the discharge of wildlife policy. These are the words in the original 2001 paper, and they are carefully chosen. Certainly, we would be remiss if we did not collect pertinent data on how a given management decision affects the wildlife population it's designed to influence. Easily said, although it's much harder to do. Dependable indices of population size are a starting point in nearly any management effort; but, as any field professional will tell you, getting really dependable annual indices is remarkably difficult and expensive for most big game populations, and nearly impossible for most species of small game.

The profession does the best it can, but I think we have to admit that our application of science to the task of monitoring wildlife populations is still far from perfect. Where data are incomplete or lacking, management decisions still have to be made.

The TWS review rightly recognizes the problems associated with scientific technique and limited funding. Even further, it recognizes the need for social science as an aid to defining public opinion on wildlife issues. The review goes on to observe that wildlife management appears to be increasingly "politicized." "Politics meddling in science have challenged the science foundation," it concludes.

After nearly 40 years in two state wildlife agencies, I can appreciate the frustration the professional faces when an interest group demands a management action that simply won't deliver the expected result. If that's what the authors of the Geist paper had in mind when they drafted this tenet, I fully support it.

However, I challenge the notion that management can be *based* on science. Management is a set of actions intended to reach a goal. Science can help with the choice of actions. An unbiased approach to collection of data can answer a lot of questions about the current state of a wildlife population and its habitat. It can help us understand the effect of a management action or other changes in the environment. In a few cases, it may even predict the effect of an action we haven't yet taken.

What it cannot do is answer any question that starts with: "Should we . . . ?" Science can't tell us whether we should protect a species from extinction. It can't tell us whether we should allow construction in a deer migration corridor, dam a creek, log a hillside, apply a pesticide, impose antler restrictions or close

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a hunting season. These are questions that can only be answered by consulting our values.

Wildlife policy has always been driven by collective preference, prejudice, and, quite often, moral judgment. The tenets of the North American Model are an excellent example. Setting wildlife policy is an innately political process and always has been. To suggest that science can somehow help us decide what we want is not only inaccurate but opens science to accusations of bias that damage the discipline.

The missing eighth tenet

The North American Model should have an eighth tenet, something like, "All native wildlife should be sustained, whether it is hunted or not." This tenet would account for our efforts on behalf of the huge gathering of wildlife that is classified as "nongame."

I'm not surprised that Geist and his co-authors neglected this element of wildlife conservation in North America. Their goal in drafting the paper for the North American Conference was to defend hunting as a critical part of the broader conservation movement. The other tenets that stress elimination of markets, allocation of wildlife, and the democracy of hunting suggest strongly that, in this paper, wildlife mostly means game. In the context of the argument the authors were making, this is understandable.

What I have more trouble understanding is why the wildlife profession has still not included nongame explicitly in our North American Model. It certainly isn't because we've ignored nongame. As early as 1705, natural historians traversed the American wilderness, risking their lives to catalog wildlife, game and nongame alike. In the nineteenth century, a new generation of conservationists — almost all of them hunters — began the effort to protect nongame animals from the ravages of habitat loss, overharvest and pest control. In the modern era, wildlife managers are moving mountains to understand the ecology of nongame species, from plants to mammals, and to protect populations that are in trouble.

None of this is even mentioned in the tenets of the North American Model as they are currently presented. The TWS review argues that the Model "is not exclusive to game species;" but the title of the 2001 paper itself — "Why hunting has defined the North American Model of Wildlife Conservation" — certainly leaves the impression that it focuses primarily on game management.

Credit: Chris Madson©

▲ **Once valued in the meat markets of the nineteenth century, the American avocet (*Recurvirostra americana*) was extirpated in the eastern United States before the provisions of the Migratory Bird Act gave it permanent protection.**

This omission neglects a rich part of our history as a profession and fails to stress that, over the history of conservation, many hunters have been motivated by much more than a selfish interest in producing targets. It also leaves the profession and the community of ethical hunters open to criticism from mainstream conservation groups and anti-hunting organizations.

I don't offer this critique to impugn the contribution represented by the original paper. However, I think there are difficulties with our current description of the Model; and I don't agree with the authors of the TWS review that we should not "revise, modify, or otherwise alter what has heretofore been put forward as the Model." We should do precisely that.

Game and hunter management are subsets of the profession of wildlife conservation. We would serve ourselves better if we gave the world a Model that accurately reflects everything we do, not just a part.

I hope these comments encourage discussion to that end. ■

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