The North American Model of Wildlife Conservation

Decadal Review, Testimonials, and Recommendations
# The North American Model of Wildlife Conservation

## Decadal Review, Testimonials, and Recommendations

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We are grateful for the support of the Association of Fish and Wildlife Agencies (AFWA) Presidents serving over the course of this Decadal Review—Curt Melcher (Director, Oregon Department of Fish and Wildlife), Tony Wasley (former Director, Nevada Department of Wildlife), and Sara Parker Pauley (Director, Missouri Department of Conservation). This effort was approved by AFWA’s Executive Committee in December 2020 and was made possible through the steadfast coordination of Gordon Batcheller (Coordinator, Association of Fish and Wildlife Agencies). Finally, we acknowledge with gratitude the financial support provided by the U.S. Fish & Wildlife Service’s Multi-State Conservation Grant Program, No. F23AP00471 and No. F22AP00744.

EXECUTIVE SUMMARY

Wildlife conservation is many things at once—a set of varied and interdependent professions, a vital and endlessly complex area of government policy, a tapestry of cultural and historical practices—but in a word it is irreducible. This is not for a lack of trying.

Several times over the past century, wildlife professionals have sought to capture the field’s most important developments in brief. Resulting from these efforts were an American Game Policy in 1930—just a few years before the first federal excise tax to fund wildlife conservation; a North American Wildlife Policy in 1973—the year of the Endangered Species Act, whose fiftieth anniversary our community celebrated last year; and, finally, in the late 1990s and early 2000s, a conceptual and historical narrative called the North American Model of Wildlife Conservation (“North American Model” or “Model”).

Be it Aldo Leopold or Professor Durward Allen or Valerius Geist, the originators of these frameworks have always identified contemporary challenges to sustaining wildlife populations, conserving habitat, and building coalitions of users that are capable of meeting the tasks before them. With each successive framework the circle of concern has widened, and ever-greater ecological challenges have shaped the missions and programs of wildlife agencies. But as conservation becomes more complex and wide-ranging, so does maintaining clarity, inclusion, and relevancy for the paradigm of the day.

To the extent that the North American Model is one such paradigm, it must be continually assessed for adequacy and consistency with contemporary needs. This Decadal Review was conducted with the expertise of conservation professionals representing state, Tribal, and federal wildlife agencies and non-governmental organizations representing scientists and recreational enjoyers of wildlife.
The remainder of the Review covers the following:

I Briefly, the history of previous policies and paradigms including the 1930 Game Policy and the 1973 Wildlife Policy, and the contexts in which they emerged.

II The formulation and introduction of the North American Model.

III The Wildlife Society’s 2012 Technical Review of the Model, which set the table for this Decadal Review.

IV Two Special Sessions convened by the Association of Fish and Wildlife Agencies in 2022 and 2023 as part of this Decadal Review.

V Testimonials that provide contemporary viewpoints on the Model, drawn and edited from the 2023 Special Session.

VI Initial conclusions to guide continued work on the Model and potential complementary frameworks.

VII Appendix- Recommendations for AFWA.

Our goal is for readers of this Review to see a substantive effort to lend the Model with essential historical, cultural, legal, and ecological context that in some cases has been missing from arguments in support of the Model or direct use of the Model in professional contexts. This Review centers on the testimonials themselves, which all discuss the Model while highlighting the irreducibility of wildlife conservation to one single historical, cultural, legal, or ecological viewpoint. An Appendix- Recommendations for AFWA is included with specific recommendations for consideration by policy leaders within AFWA. These recommendations, if implemented, would best be addressed via the work of the various AFWA Committees.

Our goal is for readers of this Review to see a substantive effort to lend the Model with essential historical, cultural, legal, and ecological context that in some cases has been missing from arguments in support of the Model or direct use of the Model in professional contexts.
The first decades of the twentieth century saw important advances in the development of a robust legal framework for wildlife conservation. Typically this narrative is anchored around the Lacey Act of 1900, the first federal law to impose civil and criminal penalties on the unlawful taking of wildlife, the Migratory Bird Treaty Act of 1918, the first time that the federal government exercised its powers under the Supremacy Clause of the U.S. Constitution to secure authority over particular species of wildlife, and the Pittman-Robertson Act of 1937, which broke ground by providing permanent funding to state fish and wildlife agencies through a pre-existing excise tax on firearms, ammunition, and eventually handguns and archery equipment.

A great number of scientific, political, legal, and social currents guided these developments. These have been discussed in substantial detail elsewhere, but one that demands further attention is the interplay between the evolving jurisdictional landscape (the distribution of authorities between state, federal, and—more recently—Tribal governments) and the professionalization of wildlife management among state and federal agencies and through universities.

In those dynamic pre-World War II and midcentury years before the modern excise-tax funding structure was fully in place, wildlife managers reckoned with competing priorities, diverse constituencies, and philosophical questions along contours we would find uncannily familiar today. While shepherding the American Game Policy of 1930, Aldo Leopold’s collaborators “included almost as many diverse opinions as any other group of sportsmen” and had to place their confidence in “the idea of experimentation” as a means to test particular systems.[1] They further agreed that “things [were] not as they should be, and that radical changes [were] in order.”[2]

The authors of the Game Policy of 1930 ultimately encouraged conservationists to “[r]ecognize the non-shooting protectionist and the scientist as sharing with sportsmen and landowners the responsibility for conservation of wildlife as a whole[,]” based on a “joint conservation program, jointly formulated and jointly financed.”[3]
They also critiqued the tendency at the time for conservation periodicals and organizations to “cater to existing ideas rather than to stimulate thought on new ones.”[4]

But the evolving challenges to wildlife management, the quickening pace of urbanization, habitat loss, social change, and philosophical differences that persisted from the advent of Pittman-Robertson to the birth of the Endangered Species Act, encouraged sportsmen to remain keenly aware of how they and their interests were perceived in relation to those of other beneficiaries of the wildlife trust.[5]

By the time of the “environmental decade” and the formulation of the North American Wildlife Policy of 1973, a critical mass had begun to feel that “our program for wildlife is a holding action.”[6] The 1973 Policy is suffused with the myriad environmental concerns that had gained great purchase within society’s mainstream. These concerns had already begun to widen the mandates and programs of state wildlife agencies to address non-game species and habitats and kickstart the long and unfinished process of diversifying the sources of wildlife conservation funding.

Maximal calls for a “universal ecology” and recognition of the potential for “irreversible losses” characterized the 1973 Policy, whose proponents believed that the spate of environmental legislation from Congress, culminating in the ESA, meant that wildlife conservation had been “free[d]… from the blight of partisan politics” and debates over predator management and reintroduction were on a glidepath to resolution.[7] Certain expressions of value were especially striking, like the suggestion of a “right to exist [of other forms of life]” and “the esthetic, ‘nonconsumptive’ enjoyment of wildlife” as “by far the greatest value of this resource.”[8] But this 1973 Policy was a snapshot of its time, and the complex ecosystem of wildlife conservation refused to be reduced to assertions of “greatest value” or to be free from political intervention. Indeed the 1973 Policy’s admonition for state and federal agencies to “be less preoccupied with guarding their spheres of jurisdiction”[9] prematurely assumed that complex questions of administrative law, agencies’ use of science, the scope of the public trust doctrine, and ensuring sustainable mixed use of wildlife on federal lands would be trivially navigated.

Perhaps, then, it was a healthy development for the prescriptive and predictive nature of the 1973 Policy to be succeeded by a framework that, although incomplete, was not meant to be prescriptive or predictive, but instead retrospective.
As detailed further in Part V below, the North American Model, complete with seven tenets, was introduced by Valerius Geist, John Organ, and Shane Mahoney, with the seminal paper appearing in 2001.[10]

The Model includes seven principles, expressed as follows:
1. Wildlife resources are a public trust.
2. Markets for game, shorebirds, and songbirds are eliminated.
3. Allocation of wildlife is by law.
4. Wildlife can only be killed for a legitimate purpose.
5. Wildlife is considered an international resource.
6. Science is the proper tool to discharge wildlife policy.
7. Democracy of hunting.[11]

Geist et al.’s 2001 paper chronicles the restoration of many hunted and non-hunted species while acknowledging “dramatic changes in society and the landscape of North America” [12] The magnitude of those successful restoration efforts cannot be understated. Wild turkey populations, for example, were reduced by 1900 to small pockets of secluded, inaccessible habitats in the Appalachian Mountains and southern swamps. Through natural and planned reforestation, their habitat conditions improved at landscape scales, and intense scientifically-based management enabled their widespread restoration and population recovery. All seven principles incorporated in the Model contributed to this accomplishment. The successful restoration and management of white-tailed deer, elk, black bears, wood ducks, to name a few of North America’s iconic species, was made possible via implementation of most, if not all, of the Model’s seven principles. Conservationists should rightly celebrate these accomplishments.
Geist et al. (2001) further identify the European and colonial legal and historical roots of the seven tenets and how they emerge in North American judicial decisions, statutes, treaties, and ethical frameworks.[13] It also draws “democracy of hunting” from the contrast between European feudalism and aristocracy on one hand, and more egalitarian land ownership in North America on the other.[14]

This synthesis of historical developments and governance principles that characterized conservation in North America led Geist et al. to position hunters as “the force that ensures sustainable wildlife resources are a priority for society.”[15]

In the ensuing years the Model has become widely cited as a foundation for policies by both governmental (state and federal) and non-governmental organizations.[16] While it’s convenient to cite the Model in totality as the prescriptive basis for various wildlife conservation programs, it must be understood that it’s the seven principles of the Model individually that define modern wildlife conservation in North America. Those seven principles, considered individually, are prescriptive by virtue of arising from constitutions, laws, regulations, and treaties.
In 2012 The Wildlife Society (TWS) published a technical review of the North American Model in partnership with the Boone and Crockett Club ("Technical Review").

The Technical Review comprehensively “document[ed] the history and development of the principles [of the Model], and evaluate[d] current and potential future challenges to their application.” As the Review noted at the outset, the Model “is not a monolith carved in stone; it is a means for us to understand, evaluate, and celebrate how conservation has been achieved in the U.S. and Canada, and to assess whether we are prepared to address challenges that [lie] ahead.”[17]

Two key recommendations of the Technical Review were:

- “Initiate and expand efforts to inform North Americans about the Model and the importance of citizen engagement in sustaining the future of biodiversity.”[18]
- “Convene key administrators and stakeholders in wildlife conservation and management in the U.S., Canada, and Mexico every 10 years to revisit the key challenges facing wildlife conservation in North America, assess the Model’s principles and their application and adequacy, and develop joint strategies for consistent continental conservation delivery.”[19]

As the Technical Review explained:

Governance models that are not in concert with contemporary societal needs or address only limited special interests risk having the wildlife management enterprise lose relevance to society. The Model’s future will rest on its effectiveness within an institutional framework fostering greater participatory decision making.[20]

Therefore, AFWA’s Executive Committee lent its support in 2020 to its staff and project coordinator to take on the second recommendation of the Technical Review, and convene panels as appropriate to carry out a holistic assessment of the Model and report back its findings at the conclusion of this process.
Spokane (2022)

The 2022 Special Session included a review of the history of the North American Model’s formulation, acceptance, and application by conservation agencies and organizations. In addition, speakers discussed several frequent lines of critique of the Model and ongoing questions about its meaning and relationship to aspects of conservation not explicitly mentioned in its seven elements.

THE SPEAKERS FOR THIS SPECIAL SESSION WERE:

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<tr>
<td>Colleen Callahan</td>
<td>Director, Illinois Department of Natural Resources (introduction)</td>
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<td>John Organ</td>
<td>U.S. Geological Survey; Massachusetts Fisheries &amp; Wildlife Board</td>
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<td>Shane Mahoney</td>
<td>Conservation Visions</td>
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<td>Charlie Booher</td>
<td>University of Montana, Wildlife Biology Program</td>
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<tr>
<td>Joshua Millspaugh</td>
<td>University of Montana, Boone &amp; Crockett Professor of Wildlife Conservation</td>
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<td>Lane Kisonak</td>
<td>Association of Fish and Wildlife Agencies</td>
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<tr>
<td>Mateen Hessami</td>
<td>University of British Columbia, Alberta Biodiversity Monitoring Institute</td>
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TOPICS COVERED DURING THE 2022 SPECIAL SESSION INCLUDED:

- Clarification of the Model’s descriptive intent in contrast with its oft-prescriptive and selective use;
- Distinguishing the Model from the American System of Conservation Funding;
- Historical biases and limitations of the Model’s narrative;
- The import of the Model’s emphasis on hunting;
- Ambiguities surrounding the public trust as applied to wildlife;
- The modern roles of legislatures, commissions, and ballot initiatives in making policy;
- The magnitude and variety of modern conservation challenges relative to those facing the conservationists of the 19th and early 20th centuries.

The Special Session also addressed the potential avenues for synthesis of the Model with Indigenous knowledge, history, and representation.[21]

This was followed by a two-hour workshop at which dozens of participants discussed legal and policy barriers to achieving desired conservation outcomes, enhancing the inclusivity of conservation narratives, brainstorming new partners, and the interplay between professional management and public values.

These proceedings built the foundation for months of outreach to prospective partners and efforts to raise awareness of this decadal review by AFWA, followed by the creation of 2023’s Special Session.

St. Louis (2023)

To build on the previous year’s Special Session, AFWA sought to convene a representative assembly of experts on wildlife conservation to share their views on the Model and how it is used (or not used) by their respective organizations, as well as their views on the usefulness and relevance of the Model going forward.
The following speakers took part in the 2023 special session in St. Louis, Missouri, and collectively lent their time and expertise in subsequent months to guide the production of this report:

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<td>John Organ</td>
<td>U.S. Geological Survey; Massachusetts Fisheries &amp; Wildlife Board</td>
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<td>Ed Arnett</td>
<td>The Wildlife Society</td>
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<td>Julie Thorstenson</td>
<td>Native American Fish and Wildlife Society</td>
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<td>Simon Roosevelt</td>
<td>Boone &amp; Crockett Club</td>
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<td>Lydia Parker</td>
<td>Hunters of Color</td>
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<td>Ted Koch</td>
<td>Backcountry Hunters and Anglers</td>
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<td>Phil T. Seng</td>
<td>Orion – The Hunters Institute</td>
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<td>Mike Leahy</td>
<td>National Wildlife Federation</td>
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<tr>
<td>Marshall Johnson</td>
<td>National Audubon Society</td>
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<td>Shane Mahoney</td>
<td>Conservation Visions</td>
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The panelists for the 2023 Special Session engaged in a vigorous and substantive discussion of the Model and its conceptual strengths and gaps.

As the resulting manuscripts (along with select material from 2022) will show, the field of wildlife conservation is driven by a great diversity of historical and cultural backgrounds, philosophies, needs, and priorities. Sharing these perspectives widely, and offering narrow recommendations for further study, are the sole objectives of this Report.
ORIGIN AND PURPOSE OF THE NORTH AMERICAN MODEL OF WILDLIFE CONSERVATION
John Organ & Shane Mahoney

The North American Model of Wildlife Conservation (Model) is a set of principles encoded in law and policy that collectively distinguish wildlife conservation in Canada and the United States from other forms worldwide. It is also one of the most misunderstood and misrepresented concepts in the wildlife conservation institution today. It too often has been transmogrified and even weaponized in popular discourse, policy debates, and published literature. The purpose of this presentation is to clarify for the record what the Model is and is not, although we harbor no delusions that inappropriate representations will cease.
The Model concept was created by Valerius Geist during his tenure as Chair of the Faculty of Environmental Design at the University of Calgary. Geist was born in Ukraine when it was part of the Soviet Union and emigrated to Austria when he was a young boy. He emigrated to Canada as a young man, eventually earning a Ph.D. from the University of British Columbia, publishing ground-breaking research on the evolution and behavior of mountain sheep, and joining the faculty at the University of Calgary. Geist’s extensive global experience as a wildlife scientist, combined with his Ukrainian, Austrian and Canadian upbringing and citizenship gave him first-hand knowledge of various continental and national conservation programs and policies. The Model concept evolved in Geist’s thinking and writing over many years as he pondered how the continental successes in restoring wildlife in North America differed from other forms, particularly those in Eurasia. An early iteration of the concept described public ownership of wildlife and three additional policies as the basis for the “North American system of wildlife management.” Geist stated:

The North American system of wildlife management is unique in that, with few exceptions, it makes the public both de jure and de facto owner of the wildlife resources...North America’s wildlife conservation is based on three primary policies that support the superstructure of laws, regulations, beliefs, and attitudes pertaining to conservation. These policies are 1) the absence of a market in the meat, parts, and products of game animals, shorebirds and song birds; 2) the allocation of the material benefits of wildlife by law rather than by the marketplace, birthright, land ownership, or social position; and 3) the prohibition on frivolous killing of wildlife. [22]
To public ownership and these three principles, Geist later added a fifth principle under the title “North American policies of wildlife conservation”—wildlife is an international resource to be managed cooperatively by sovereign states. [23] A sixth principle—“science is a proper tool for discharging management responsibilities”—was added by Geist in a subsequent paper on conservation successes.[24] In 1995 Geist named science and an integrated approach (foreshadowing ecosystem management) as important foundations for natural resource policies, but thought those conditions were only partially realized at that time. The first paper to formally refer to these principles as the North American model of wildlife conservation added as the seventh principle the “democracy of hunting” because both Leopold and Roosevelt identified “democracy of sport” as a factor that distinguished wildlife conservation in North America from Europe.[25] The term “model” was used to mean an example or representation, not in the sense of a predictor or formula.

The Model was never intended to capture the full suite of policies and practices that characterize conservation in Canada and the United States. Rather, it identifies those rooted in treaty, law, and broad-based policy that in combination represent a unique North American approach. For example, the Model has often been criticized for not having explicit reference to the establishment of parks and refuges—these are not unique to North America, and unfortunately, are not provided for in broad-based law that supersedes destructive uses of land. Indeed, Leopold’s admonishment in 1943 that we shall achieve conservation when and only when the destructive use of land becomes unethical—punished by social ostracism—is a harsh reminder today, 80 years later, that we have yet to elevate habitat conservation to a principle unique in the world in that it supersedes other uses.

The Model was never intended to capture the full suite of policies and practices that characterize conservation in Canada and the United States.
Quite often one hears reference to the Model as “archaic” while expressing sentiment that it must be revised or reinvented. Reinventing a history that is self-evident in law and policy is a dubious venture and serves no practical purpose in wildlife conservation. We cannot go back in history and relinquish treaty and law. What purpose would be achieved by removing wildlife from the trust of government for the benefit of citizens? What benefit would arise from removing legal protections for wildlife? Do we not want the best scientific information used in executing wildlife policy? Would we maintain popular support for wildlife conservation if only the privileged and elite had legal access to wildlife? Often we have seen the user-pay/public-benefit funding mechanism in the United States is erroneously equated with the Model; the seven principles do not pertain to funding, in part, because Canada and the United States have quite different funding approaches. Furthermore, funding, rather than representing a principle, is purely a means to implement policies. It is true that the narrower the funding base, the more limited the application of principles and policies, often directed disproportionately towards game species. This represents a cogent argument for more and broader-based funding, as the Model is not, as many allege, game-centric, and most principles have application to all taxa.

The absence of traditional ecological knowledge (TEK) in formulating the major laws and policies that grounded North American conservation in the late-19th and the 20th century represents a failure of our predecessors in recognizing, acknowledging, and incorporating the traditions, experiences, and knowledge of Native peoples, whose cultures have been intertwined with wildlife—the Others—for millennia on this continent. We encourage the Native American Fish and Wildlife Society and other indigenous-based organizations to document the principles that represent the conservation ethos of Native and First Nation peoples, and we encourage policy makers to heed them.
Modifying the Model to incorporate these and other principles serves no functional purpose, however. The Model is not in itself a legal maxim that directs the daily tasks of wildlife conservation authorities. As stated earlier, it is purely a concept identifying the key legal and broad-based policy initiatives that collectively were unique to Canada and the United States, that helps us understand how we on this continent achieved such success in conserving and restoring wildlife relative to other continent’s approaches. Each one of the principles is codified, but the collective body—the Model—is not.

What, then, is the purpose of the Model, and what benefit can it provide? First, it enables us to recognize and celebrate the great conservation achievements of the 20th century. Second, it offers focal points as dynamic social, economic, and environmental forces continue to present conservation challenges. Is there ongoing or punctuated erosion or threats to any of these laws and policies? Do we need to be diligent in shoring up fissures in these policies? Third, and most importantly, in the face of current and emerging challenges, it exposes gaps that enable us to identify new broad-based legal and policy initiatives that will be needed if we are to conserve our natural heritage for future generations on this continent. This does not mean “fixing” the Model—it means that we, the wildlife conservation institution, need to bear down as our ancestors did and face these emerging challenges head-on, incorporating diverse perspectives, incorporating traditional ecological knowledge and the great scientific advances we have developed, to introduce novel legal mechanisms and the public support necessary to enact them in order to achieve conservation. Wildlife professionals and policy makers need to understand such fundamentals as the Public Trust Doctrine and the critical role that eliminating wildlife markets served in the restoration of North American wildlife. Why? Because professionals and policy makers will be (and already are) confronted with initiatives to alter these policies. Most importantly, comparing the challenges of the past to those now emerging helps envision what bold new initiatives may be needed to ensure a continent rich in diversity of wild animals and wild places.

The Model, in enabling us to look back and celebrate our achievements formed during a time of seemingly insurmountable barriers, demonstrates that yes, we can go forward and secure wildlife for the future.
CRITIQUES AND COMMENTARIES

Critiques and commentaries on the Model have become more frequent in recent years. Statements about the Model tend to reflect current wildlife policy, and conversations surrounding the Model have the potential to impact wildlife policy. An analysis of 57 peer-reviewed publications pertaining to the Model suggests that critiques of the Model fall into three categories:

1. **The Model is missing critical components.**
   - a. The Model’s geographic scope is not appropriate.
   - b. The Model does not adequately synthesize salient laws and policies.
   - c. Some tenets of the Model are selectively implemented, or not universally applied.

2. **The narrative origin of the Model is biased.**
   - a. The origin story of the Model perpetuates a white, male, hunter-centered narrative in conservation.
   - b. The Model does not represent or acknowledge indigenous perspectives or systems of governance.
   - c. The Model perpetuates settler colonialism.

3. **The Model negatively affects the formulation or implementation of wildlife policy.**
   - a. The Model over-emphasizes hunting, giving these interest groups greater decision-making power.
   - b. Science does not always inform wildlife policy.
   - c. The Model only serves game species.
   - d. The implementation of the Model is exclusionary of certain stakeholders or creates conflict among stakeholders.
   - e. The Model hinders the advancement of novel systems of wildlife management.
GAPS AND VACANCIES
The problems addressed by the 19th/20th-century conservationists commemorated in the Model are now eclipsed by the problems of the 21st century—climate change, the biodiversity crisis, habitat loss, invasive species, zoonotic diseases, and others. The Model lacks interactivity with such problems, or discussion of federal statutory authorities, clean air and water frameworks, or the emerging focuses on agency relevancy and R3, or the role of legislatures, commissions and boards, and ballot initiatives relative to professional agencies. Major themes identified are:

1. The magnitude and variety of modern conservation and environmental challenges:
   a. Climate change. Extreme climate conditions are placing physiological stress on wildlife, along with changes in wildlife range, movements, and life history. Additionally, the prevalence of vector-borne diseases is increasing.
   b. Habitat loss. There are mismatches between conserved land and wildlife habitat, and limited pathways for long-term conservation of private lands at risk of development.
   c. Invasive species. Invasive species of fauna and flora pose a significant threat to our natural heritage.

2. Confusion between the Model and American System of Conservation Funding: Even though the Model is distinct from the “American System of Conservation Funding,” it is often treated as entwined with that System. The Model says nothing about funding because funding, in the context of the Model, is purely a means to implement conservation policies, and Canada and the United States have different funding mechanisms.

3. Emergence of contemporary markets for wildlife: The Model identifies the elimination of markets for game, shorebirds, and songbirds as a key principle in North American conservation. Markets for other taxa, such as herpetofauna, have emerged, along with high-fence hunting operations that promote a market for dead wildlife. Fee-based hunting promotes a market for access to wildlife. Land use decisions, mostly beyond the control of wildlife agencies, limit and eliminate access to wildlife.
4. **The role of legislatures, commissions, and ballot initiatives in making policy:** Trustees—legislatures, boards and commissions, and political appointees—are responsible for major wildlife policymaking. The dynamics between the trustees and the trust managers—the professionals who staff state and federal wildlife agencies—vary. Scientific expertise, both biological and social, is the domain of the trust managers. Trustees are often influenced by external pressures and interests and may not give science adequate weight in their decisions. Ballot initiatives, also termed “direct democracy” and “dangerous democracy”[27], circumvent the policymaking process and can result in what Tocqueville termed the “tyranny of the majority.”[28]

5. **Legal, procedural, and political aspects of science:** The Model principle stating that science is the proper tool to discharge wildlife policy stems directly from the Roosevelt Doctrine as articulated by Leopold (1933). In essence, this means that once policy is made, wildlife professionals will use the best science to implement it. Yet science has a role in policy formulation as well and is increasingly contested and litigated in the courts. Science, once the arbiter and honest broker, is increasingly politicized.[29]

6. **Inconsistencies and gaps in the Public Trust Doctrine:** The Public Trust Doctrine resides in common law with proximate roots in an 1842 U.S. Supreme Court decision, but every state has its own version in constitutional or enacted law. These vary greatly in scope and have not always held up when wildlife ownership has been contested in the courts.[30]

**THE MODEL’S FUTURE**
The Model lacks formal authority. It is not codified in law, it is not a policy, and it is not binding. At its core, the Model is a framework developed by and for wildlife scientists to articulate some of the fundamental principles underpinning wildlife policy in the United States and Canada. There will inevitably be friction between calls to modernize wildlife conservation and the policies governing the status quo, which the Model enumerates. Rather than debating a historical construct and seeking to modify what posterity has laid in law and policy, we will be better served by focusing on what laws and policies must evolve to address current and emerging threats. Unlike the Model, there are established mechanisms by which these rules may be changed. The Model can be a launching point to learn from our history, our successes and failures, and ensure we have the legal bedrock to safeguard the future of wildlife on this continent.
FUNDING, EXECUTION, & CONFLICT

Simon Roosevelt

In 2001 when Valerius Geist, Shane Mahoney, and John Organ published their paper coining “The North American Model”, they claimed that hunting led—and that hunters drove—the development of its seven components. The authors considered, briefly, whether the Model and its success would carry on without hunting.

Hunters rightly feel the pride of association with the success of American conservation to date, but the important questions about the future are who will carry it forward and how. It is already obvious that conservation’s future will not be determined by hunters and hunting. It may be that the future of hunting itself will not be guided by hunters, depending on whether hunting continues to be—and to be seen as—a driver and contributor.

Conservation is already bigger than wildlife and certainly bigger than game wildlife. This is not only because the meaning of “conservation” became fluid in the politics of environmentalism. It is because many more people are involved, want to be involved, and want to pursue a greater variety of wise uses of nature.

Our discussion today is about far more than “The North American Model of Wildlife Conservation”—or should be. It should be a reappraisal of conservation. The entire subject is different now than 20 years ago. It was different then from what it was in 1973 when this conference considered the “Report of the Committee on North American Wildlife Policy”. In that year conservation was different than what it was in 1930 when this conference considered “A Proposed American Game Policy”.

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Funding

Execution

Conflict
The evolution from “game policy” to “wildlife policy” to “wildlife conservation” must continue to all conservation. The need is obvious in the bastions of the original “game policy”: the state wildlife commissions. Our commissions represent the centrality of hunters, hunting, and game wildlife to what the entire continent has achieved in conservation. They embody the responsibilities of the public trust, the rule of law based on science, and the democracy of hunting. And that is no longer good enough for everyone. At least seven states—including Missouri—have or are considering changes to the composition and function of their state wildlife commissions. Others include Maryland, New Mexico, Washington, Georgia, Nebraska, and Michigan.

The common theme is that hunters alone are no longer the drivers of wildlife conservation. Hunters should not be surprised. We accomplished much for wildlife and the broader concerns for forests, waters, and unique and scenic places in America. But others preceded us and still more have engaged since. The entire community is concerned with the same fundamentals and in these basic pieces of conservation we find the specific ideas of a 2023 reconsideration. The conservation future depends on how we fund and execute the conservation discipline, and how we resolve conflicts along the way.

**FUNDING.** The 2001 paper does not address this explicitly, but wildlife held in public trust implies public funding and philanthropy, which is mainly what we have. But more money is available—and we need it. Markets driving ecological wealth have emerged since the markets were eliminated that were draining it of meat, parts, and products of game animals. Willingness to pay is a powerful force that can be directed at conservation.

The Pittman-Robertson and Dingell-Johnson excise taxes are a special case of a regulatory market. True regulatory markets, such as the wetland mitigation market, fund conservation. A new regulation like this for wildlife is being drafted by the U.S. Fish and Wildlife Service today. There are also true markets. Carbon markets in the U.S. are not means of complying with regulations—at least not yet. Fee-access for hunting, fishing, and other expeditions are markets. Markets pay for conservation when the proceeds reward productive habitats, populations, and the work they require. We can use more of them.
In our zeal to prohibit destructive activity, we have also restricted helpful activity. The price of precautious planning, analyzing, and disputing decisions is lost time and lost ability to measure results. We know less about what happens than what we think will happen. We move slowly to build a lower-carbon energy system.

Perhaps we are better off restricting the up-front “hard look” requirements of environmental policy to actions of high risk so we may move faster and learn more from the others. At least we must better understand the results.

CONFLICT. Conflict is inherent in the principles of public trust and allocation by law. But democracy—the most reliable means of resolving conflicts—operates at a far reach from most conservation conflicts. Our problems are differences in opinion, not science, and yet, in the name of science, we have made technical staff into decisionmakers. They preside over options that all have sound scientific bases, but are viewed differently by people who are risk averse or keen.

In most federal decisions, advocates must appeal to political appointees high above the decision-maker, or, even farther away to Congress. State wildlife agencies, by comparison, are governed more directly with policies decided by appointed commissions.

When we say “science” should be the “determining” factor, I think we mean that science should inform a democratic choice among qualified options. If people were more directly involved in decisions, we would have better decisions and less litigation.

Funding, execution, and conflicts form a basic structure of conservation. The entire conservation community can relate to these, whether or not they have heard of or care about the North American Model. Looking here for our needs for improvement, we can see to the heart of our common cause beneath the constructs of the past.
When I was posed the question “How do the North American Model’s principles guide or influence my organization's mission and actions?”, I thought, well, this will be really quick. I don’t think I’ve ever heard any real discussions about the use of the North American Model and tribal fish and wildlife management. Of course, I don’t speak for all 574 federally recognized tribes. So my comments are based on my own experiences serving as a wildlife biologist for my tribe and discussions with my staff.

My understanding is that the Model was a response to overuse and overhunting by non-Natives and based on concepts that were prevalent during an era that largely excluded Native Americans in conversations.

The early 1900s were the Assimilation and Allotment Era for Tribes: an effort to bring Native Americans into mainstream society by changing their customs, dress, occupations, language, religion and philosophy. During this time, we were fighting for existence as our entire way of life and ways of living were changing. Native Americans in the United States did not become U.S. citizens until 1924. The Meriam Report helped shed light on how terrible the U.S. “Indian Policy” was working and in 1934 the Indian Reorganization Act or the “Indian New Deal” was passed with the intent to help American Indians govern themselves, retain their tribal reservation lands, and become economically self-sufficient. That’s three years before the Pittman Robertson Act was passed and as we all know, Tribes were excluded.

Sport hunting is not a Native American concept. Unfortunately, we were negatively impacted by it, and there are countless examples of killing wildlife as a method to basically starve Native peoples into submission. I’m most familiar with the decimation of bison populations by overhunting/sport hunting. General William Sherman stated that bison hunters “did more to defeat the Indian nations in a few years than soldiers did in fifty years.” Colonel Richard Dodge, stationed in the Black Hills, wrote in 1867: “Every buffalo dead is an Indian gone.”
In general, Native American people do not view themselves as separate from the world around them; they are part of the ecosystem. From the world around them; they are part of the ecosystem.

The North American Model’s view is one of external managers. Many of our creation stories center on wildlife. For the Lakota the bison signifies abundance, and it is humans that are the weakest and most pitiful. The animals take pity and offer themselves to us.

The Lakota have seven common values:
1. Humility
2. Generosity
3. Respect
4. Honesty
5. Prayer
6. Wisdom
7. Compassion

It is this value system that is more at the heart of tribal management. It is these concepts and these values that influence my way of managing my time as a wildlife biologist.

However, we are also influenced by the North American Model. Mr. Robert Romero, a citizen of Pueblo of Laguna and the Native American Fish and Wildlife Society’s Deputy Executive Director and retired special agent for Fish and Wildlife, summed it up well for us. He noted that Tribes were forced into using regulatory natural resource management practices due to overexploitation by other non-Natives. Whether this currently reflects the North American Model is up to interpretation. But all natural resource laws or regulations, no matter when enacted, are a direct effect of taking more than what is needed. I think we can all agree that imbalances that have been created and will be created have to be addressed collectively through co-management. Is the North American Model the best way to do this?
Finally I will offer a very basic review of the Model’s seven tenets from my perspective as a Native person.

- **Wildlife resources as a public trust**: The indigenous view sees wildlife more as relatives, not resources. Just the wording alone changes how you view wildlife.

- **Elimination of markets for game**: Marketing is bartering and that is part of our traditional economy. We traded and that’s how we interacted with each other.

- **Allocation of wildlife by law**: Unfortunately, these are laws that typically didn’t include tribes.

- **Wildlife can be killed only for a legitimate purpose**: I agree with this concept 100 percent; this concept has existed in Native American cultures for time immemorial. I’ll give you a couple examples based on the Lakota for one. Eagles are seen as very sacred, and they are the messengers of our prayers. They take our prayers to God, Tunkasila. And so, we are not to kill eagles and neither do we kill porcupines. We only killed porcupines during very, very hard times because they’re easy to kill, and they’re slow. So that’s when they give themselves up. But we don’t take advantage of that otherwise.

- **Wildlife as an international resource**: Again, resource versus relatives.

- **Science as the proper tool to discharge wildlife policy**: I think we agree on that, but it must include all types of science and ways of knowing, such as traditional ecological knowledge. Our Alaska Board member Orville Huntington often says, “science is science.” Western science and traditional ways of knowing are simply just a way of looking at things differently.

- **Democracy of hunting is standard**: We must include Tribes in these conversations.
THE MODEL AND THE FUTURE OF HUNTING

Phil T. Seng

For those not familiar with Orion, The Hunters’ Institute, we have two primary goals:

1. Improving the image of hunting with an emphasis on fair chase; and
2. Putting hunters at the forefront of our nation’s conservation ethic.

Orion exists to protect the future of hunting by promoting fair chase and responsible hunting, and by providing leadership on ethical and philosophical issues that pertain to hunting.

We call ourselves The Hunters’ Institute because our mission is to be thought leaders and facilitators in the pursuit of open and honest discussion, debate, and consensus-building for the benefit of hunting. We strive to provide a forum for this discussion, and we often ask difficult questions to encourage hunters to reflect deeply on the “why” of hunting in their own experience.

Within our own Board, we often have differences of opinion—indeed, sometimes deep divisions—regarding the “why” of hunting and/or the best path forward, reflecting quite well the monumental complexity of hunting across the continent and the diversity of viewpoints surrounding it.

The North American Model falls squarely in the center of our work, and one or more of its principles nearly always come up at our meetings and discussions. The Model is much broader than just hunting, of course, although there have been many efforts to try to constrain it or co-opt it to support a variety of specific purposes—including hunting. Orion rejects those attempts in favor of the broad, original intent of the model, but—fair warning—we are a fair-chase hunting organization, so our perspective is clearly biased in that direction.

Each of us was asked to address how the North American Model guides or impacts our respective missions. While Orion embraces all of the Model’s principles, three are central to Orion’s mission:

1. Wildlife is a Public Trust Resource,
2. Wildlife Can only Be Killed for a Legitimate Purpose, and
3. The Democracy of Hunting.
HERE’S A QUICK LOOK AT THESE PRINCIPLES THROUGH ORION’S EYES.

**Wildlife is a Public Trust Resource.** Public ownership of wildlife is one of the truly great legacies of the “North American Experiment.” It has brought about a variety of benefits, but chief among these is that it has fostered a vested interest among the public for the conservation of wildlife as assets to be held in trust for and on behalf of everyone, to be managed unimpaired in perpetuity. Hunters historically have had a prominent role in conservation advocacy precisely because of their vested interest in sustaining healthy and productive wildlife populations. This common ownership and the resulting vested interest stemming from it has fostered the principles of fair chase and other responsible hunting practices to guard against abuse of the public trust resources—to safeguard against the tragedy of the commons. With precious few exceptions, it has been a rousing success for decades. Across the continent, hunters harvest large numbers of animals without depleting the resource—a great success of the commons, rather than a tragedy.

However, there is an ongoing—and we believe accelerating—erosion of this public trust principle. In some places, it’s outright open war, in the form of policies and legal challenges by private and commercial interests who seek a privileged status in the allocation and access to wildlife such as license set-asides. But in other situations, it wears camouflage and lurks largely outside the public discourse. For instance, in Eastern states where the vast majority of the landscape is privately held, what would happen if all of the landowners put up fencing and restricted or prohibited access—to people and to many wildlife—across their borders? How would wildlife remain a public trust resource? Relatively few people across this continent deny or even begrudge landowners their private property rights, but taken to its logical conclusion, the ultimate end of this “straw dog” argument is still the “locking out” of people who do not have access—the reduction of the resource to a private trust, not a public one. Should society intervene in this circumstance? Across the continent, we bear witness to how common interests are colliding with private interests.

How do the values and benefits accrued by public trust resources compare to the values and benefits accrued by personal property rights? This is sacred ground, to be sure, on both sides of the proverbial fence.
Wildlife Can only Be Killed for a Legitimate Purpose. Social science research has shown over and over that a healthy majority of North Americans accept taking the lives of animals as long as it is for legitimate purposes. This is paramount for responsible hunting, which is the cornerstone of Orion’s mission. We celebrate the experience and the chase of the hunt more than the kill itself, but we also celebrate the special meals, garments, trophies, memories, and other benefits that bring value to humanity and bonds among people. So what constitutes a legitimate purpose? “Aye, there’s the rub!”, as Shakespeare’s Prince Hamlet would warn. I suspect that like me, most hunters in the crowd would quickly point to hunting’s benefits to conservation—population control, disease management, and the like. And they wouldn’t be wrong. But what happens when society finds other, more efficient and effective, ways to achieve these benefits? If our case for perpetuating hunting to the broader public is based solely or even mostly on its conservation benefits to society, then we will have no hoof to stand on if/when that reason goes away. It may be wiser to expound on hunting’s inherent values, and use the conservation benefits it provides as supporting messages when specific situations dictate.

Discussions about what constitutes a legitimate purpose often require hunters to draw lines between what constitutes hunting and, say, what constitutes killing or culling. A person may use hunting gear and hunting techniques and there may be modified regulations in place to reduce the local deer herd at a park, where hunting was otherwise not allowed. Is that hunting? Where does hunting end and culling begin? And what about killing contests? Is that hunting? Do such events even constitute a legitimate purpose for killing wildlife? The list goes on: Pen-raised birds, hounds for hunting bears, use of bait, to name just a few. Moreover, a method that is time-honored and revered by people in one part of the country is scorned and avoided by people in another. So who gets to
decide what constitutes a legitimate purpose for killing wildlife? In the end, and it’s one thing we know for sure, society will decide—not only questions about hunting, but about the whole of wildlife management and the institutions and people that do it. Thus, it is critically important for hunters and all other conservationists alike to carefully consider the optics of our activities to the uninvolved and often disinterested publics who currently tolerate them. Much more than hunting is at stake.

At Orion, we believe that open, honest discussion of these prickly issues is the first, best step toward finding the path that leads to the third principle of the North American Model that guides Orion’s mission: The democracy of hunting.

The Democracy of Hunting. As Theodore Roosevelt and Aldo Leopold pointed out, democracy of hunting distinguished wildlife conservation in North America from anywhere else in the world. The privilege of every citizen in good standing to legally hunt fosters a vested interest in conserving wildlife and wild lands that is essential to biodiversity conservation. Without it, market and societal forces inevitably drive the system toward a fee-based hunting model that excludes all but the privileged few. And, if market forces favor a few types of wildlife to the exclusion of others (ungulates with large antlers being the obvious, but not only example), biodiversity suffers. Most hunters cringe at the notion of shifting to this more European approach here in North America—an approach that was detested by Roosevelt and Grinnell, by the way—and yet the perception among hunters is that the amount of land that is posted “No Hunting,” land locked up in hunting leases, and membership in private hunt clubs is higher than it’s ever been (note: I don’t have any quantitative data on whether those things are true or not, but I have lots of data showing hunters perceive it that way). So, whether it’s an intentional shift or simply a byproduct of circumstances doesn’t really matter. If it looks like a duck and quacks like a duck, it’s probably a duck.

So where do we go from here? For Orion, the privatization and commercialization of public trust resources is the biggest threat—both to the North American Model as well as to the fair chase hunting ideal. We also have concerns about staking the value of hunting only or even mostly on the conservation benefits it provides to society. Finally—and this may be the most insidious challenge to the viability of the Model and what all of us in this room care deeply about—there is the growing apathy and
disconnect of people from wildlife, wild lands, and our wild North American heritage. None of the rest of this stuff matters if the populace simply doesn’t care about the fact that the greatest gift we can pass on to our children is a continent enriched with wild animals and the opportunity they afford us to find meaningful and rewarding engagement—whether as a hunter or angler, a bird watcher, or someone just out for a stroll.

We call on everyone who works or plays in the conservation arena to fight for keeping wildlife in the public trust, and we encourage an honest and robust discussion of all of these critically important issues among hunting interests and the wildlife conservation community at large.

INDIGENOUS PEOPLES AND A MODEL FOR THE FUTURE
Lydia Parker

I am a member of the Walker Mohawk Band of Six Nations of the Grand River. I’m also on the Department of the Interior and Department of Agriculture’s Hunting and Wildlife Conservation Council. I was honored to be asked to speak at the 2023 Special Session, but to be honest, I was a little confused as well. You see, whenever I get asked to speak or share insight, I always hope to bring something new or enlightening. But I was also in Spokane in 2022 at the 87th North American Conference, and I believe that my esteemed colleagues Charlie Booher and Mateen Hessami and others did an excellent job outlining issues and shortcomings surrounding the North American Model, and I don’t feel that any of the critiques or suggestions brought up last year have been implemented or even fully explored.

So, I asked myself, what are we doing here, talking about the same subject one year later? What’s the point? And I decided that the point of any speech should be either to get something important across or to get something done—or better yet, a combination of the two.

Though the critiques of the Model or critiques of the application of the Model are vast and different, there are three themes that can be used to categorize them all. The first critique revolves around what is missing from
the Model, or what is overlooked. Sins of omission if you will. And no, it's not a stab at the creative geniuses behind the Model. We’re all sinners. We all fall short. And the fact of the matter is, we don’t know what we don’t know. We're all blinded by our own worldviews and axioms, no matter how learned we are, which is why diversity is so important. If we're going to have a well-rounded, inclusive thought or model, we need to ensure that it’s been put through rigorous testing and questioning, like with anything in the scientific realm, chipping away at biases, conscious or subconscious.

The second set of critiques has to do with restrictions and limitations due to the application of the Model and the way it is upheld as if it was law. John Organ and Shane Mahoney will be the first to tell you that the Model is nothing more than that—a model. But it has been applied as if it is the only model, as if it is the only way, when it was simply a set of tenets put together on a bar napkin at one of these conferences years ago. I don't say that to demean the Model, nor the brilliant minds behind it, but to point out that when we treat it as law rather than a model, we are restricted from implementing innovative policies that are necessary for our changing planet. If they happen to stray from the limited overview of the Model, we’re restricted in how we approach conservation as a whole. For example, when we use language from the sixth tenet, science as the appropriate tool for wildlife policy, we ignore the obvious bias that precludes us from viewing traditional ecological knowledge in the same light.

Last is the category of critiques involving the Model’s narrative. It is simply not the full picture of conservation. Conservation didn’t start with Roosevelt or Grinnell, or the first North American Conservation Congress. Conservation did not begin with the English and French expanding across a vast, unpopulated wilderness, as postured by the historical overview from the 2012 Technical Review published by The Wildlife Society.

The act of conservation, managing ecosystems, protecting biodiversity, and preserving natural resources for posterity has been going on since time immemorial. On this land, I always like to quote the late, great Oneida comedian Charlie Hill, who said that whenever there's a problem on this land that needs fixing, ask the Indians because we have the owner’s manual. Traditional ecological knowledge isn't folklore. Indigenous peoples have been practicing science long before that word entered our vocabularies. We've been instituting practices that have undergone generation upon generation of rigorous testing to find what works and what doesn't. Dare I say, we've been using the scientific method and testing our hypotheses over millennia.
And yet indigenous peoples aren’t even mentioned once in the United States section of the North American Model historical overview in that 2012 review, and only briefly in the Canada and Mexico sections. The U.S. section does mention the plight of the bison, but conveniently fails to mention the genocidal intentions behind their near eradication, as Julie Thorstenson mentioned earlier. And indigenous science and the history of indigenous management of the land aren’t the only things that have been left out by the North American narrative. If you take a closer look at this, actual citations used when discussing the historical overview, much of what is cited is touted as a history of conservation when it is more accurately, a history of the Boone and Crockett Club and other white-led conservation organizations. Therefore, it’s no wonder that indigenous science or the contributions of Black Americans, women and other groups have not been included in the Model itself.

Now you might be saying to yourself that it’s not as though Mahoney and Organ and their colleagues set out to write a diverse history of the United States. So why is this important? It is important because we need people of color and women to see ourselves represented in conservation because we are going to be the next generation of conservation torchbearers, and this is where I believe we can start with a novel solution.

Earlier this year, I was asked to join a working group to discuss the Model's future. I'm super grateful for this opportunity. However, when I joined the group, I was surprised to see that the group looked rather homogeneous. Without diverse voices, how do we come to scientific truth and challenge our own biases? Further, if we don't tell the truth about the history of conservation—the whole truth—why should groups other than white men see themselves as stakeholders or leaders in conservation? If we don't show the impacts made by communities of color and women on this on conversation, and if we don't work towards equity in this space, we will fail ourselves, our posterity, and the planet. Therefore, my suggestion is action from people in positions of power who are willing to delegate and share that power with those who haven't historically been at the table.
HERE'S WHAT THAT MIGHT LOOK LIKE:

1. Let's prioritize hiring people who have been historically excluded from this discussion. As our nation becomes more diverse, conservation demands equity and hiring practices. I promise you that there are diverse qualified candidates out there.
2. Let's do a study to reach out to the communities who aren't in this room to learn what the North American Model means to them, what it doesn't mean to them, and how it affects their communities, for better or for worse.
3. Let's reinforce the current coalition of people working on the Model's future by creating a stronger, more inclusive coalition of diverse people who are willing to share diverse and adverse opinions so that we can ensure that the Model serves all people going forward.

Before I conclude, I want to let you all into my biggest fear. My biggest fear isn't public speaking, and it obviously isn't ruffling feathers. My biggest fear is that we will be in this exact same position at the 89th North American Conference and the 90th and the 91st. We could come back next year repeating the same cycle of talking about what we should do, but instead I hope that we come back next year with a list of accomplishments and actions that we've taken to address the issues myself and others have outlined.

THAT NORTHERN STAR

Marshall Johnson

When we talk about the North American Model, we must remember that the terminology of success is narrowly defined. But that is not going to be what helps us rise to the challenges and the opportunities of creating a truly inclusive model moving forward.
Being who I am, having the identity that I do through all my work, it’s managing complexities and complications and we do that through our science, but as an African American in conservation, you manage tension. If you’ve read the newspapers, you know that the National Audubon Society has been doing a lot of soul searching, with much work ahead of us. In many ways this is analogous to the challenges of moving the North American Model forward as we know it because it’s building off of incredible successes. But just that terminology of building “off of” really excludes people that weren’t there at the founding and, as you’ve heard weren’t even considered citizens.

I’ll share a quick story. We’ve been going through strategic planning, and I’ve been asked to be part of this effort for the National Audubon Society, and I’m proud of what the organization and the people that make the organization have pulled together. It’s all about birds and I’ve wanted Audubon to refocus on birds since I started there 13 years ago. What do we want to accomplish 25 years from now? It’s all about having a truly hemispheric vision and a long vision for our work, and in thinking about that and meeting with literally hundreds of staff members, we often referred to our “Northern Star,” as a guiding principle—a guide star.

One of our Audubon staff members from Colombia pulled me aside one day and she said (very nicely), “Marshall, that Northern Star, we can't see it down there.”

So think about what you do in your work. Please embrace the discomfort. I know you feel the discomfort. Forge a new understanding of each other, a new understanding of what must be done, and the values and tenets that we will use moving forward again. There’s so much to be learned from the North American Model, but we must create something new for the future that includes all our people and our communities.

Today, we may feel uncomfortable, and troubled. Congressman and civil rights leader John Lewis created tension and trouble, but that was good. Trouble can be good. Embrace that tension and that discomfort that I’m sure you feel. What will we each do to make sure that the rooms that we work in look like the communities that we need to work in?
Since I was young, I was catching frogs in my backyard and riding my bike three miles in the dark to go fishing.

I am a self-taught hunter, and an avid angler. I studied biology in college, and somewhere along the way, I was exposed to the ideas best captured in the later writings of Valerius Geist, Shane Mahoney, and John Organ. I became a true believer in the North American Model for Wildlife Conservation. I lived it, I respected it. I was grateful for it. But along the way I saw things that I wasn’t sure reconciled, like duck for sale in restaurants, or deer antlers for sale. Just last week I saw venison jerky for sale and at each of these instances I wondered, does the Model still apply?

But then a buddy and I fly-fished for salmon one fine summer day in the 2000s on the South Fork of the Salmon River in Idaho and I had my world rocked. We each caught a couple of fish and had a great time. I kept my fish because my wife loves it when I bring home wild food. We took a break in midafternoon and went upstream to the weir where the Idaho Department of Fish and Game was catching adult salmon to take to the hatcheries. We watched hundreds of salmon piled up below the weir. In that quarter-mile there were “No Fishing” signs for reasons that seemed obvious to me.

As we stood and watched all those salmon, a white pickup truck drove up and parked, and a man jumped out, who I presumed to be a member of the Nez Perce Tribe based on his appearance. He grabbed a fishing rod the size of a pool cue from the back of his truck with a giant weighted treble hook on the end, and he went down to the water’s edge, threw it out and in about 10 minutes snagged two large fish. He threw them in the back of his pickup truck and left.

I felt two emotions. I felt sad. And I felt sadder. Sad that he did what he did because of his heritage, and I was not of that history, so we lived under two different sets of laws. I thought about some of the components of the North American Model, like democratic allocation and equal access to resources.
But then I felt sadder because of the circumstance that both he and I were in. Salmon runs are down by more than 90 percent because people who are my ancestors built four dams on the Lower Snake River. The pie that he and I had to share was dramatically smaller for both of us, and he didn’t take any more fish than I did. He just did it in a different place, using different means. And frankly, when I reflected on the bigger picture, I was glad for him to have the opportunity to do that.

Thinking back even farther, I never forget that the Wampanoag Tribe saved my family’s life. My family came over on the Mayflower in 1620, and if it wasn’t for the presence of the Wampanoag Tribe and the skills they had in accessing food, my family probably would have starved to death. Of course, we repaid the Wampanoag Tribe and tribes across North America over the next many generations by reaping genocide. And the Nez Perce Tribe suffered, along with all the rest.

In my career as a federal biologist, I was exposed to the idea of traditional ecological knowledge (TEK) long ago, and I resisted it at first because it didn’t feel like the science I’d been trained in. When I realized that my science and TEK are both simply different forms of ritualized story-telling, I was able to open my heart and my mind and listen and I appreciated more what TEK can represent. Today, the Nez Perce are fighting more effectively than anyone else to save Snake River salmon and steelhead, and they do it from the basis of TEK. This is very important to me. The people of my heritage took most of our salmon away, and I support the Nez Perce Tribe’s efforts and I’m grateful for their leadership to restore them.

In a future wildlife management paradigm, I see traditional ecological knowledge as a legitimate component of how we manage fish and wildlife and how we talk about science. And I am still a true believer in the North American Model and Western scientific ways. And I’m not really sure how to fully reconcile the two, but perhaps that’s for the next generation to decipher.

Aldo Leopold said: “When we see land as a community to which we belong, we may begin to use it with love and respect.” And increasingly, that is how I see all of us who love wildlife and the natural world. Backcountry Hunters and Anglers and I will align with those who put the interests of wildlife and wild places first, no matter where they come from.
A WORLD OF WOUNDS
Mike Leahy

The breadth of the National Wildlife Federation (NWF) provides a good lens for considering the North American Model of Wildlife Conservation.

NWF is a federation of state and territorial affiliate organizations, collectively representing nearly seven million members and supporters from practically the full spectrum of conservation perspectives. Affiliates gather annually and establish the official positions of the Federation by debating and passing resolutions. Affiliates have passed multiple resolutions supporting the North American Model and the public trust doctrine. They have also passed resolutions supporting federal wildlife laws including the Endangered Species Act, Migratory Bird Treaty Act, and Marine Mammal Protection Act; supporting tribal wildlife management; addressing threats like pesticides and pollution, and promoting vigorous enforcement of wildlife laws, among many others.

Do all these and other wildlife conservation strategies fit within the Model? Should they? When I think of the future of the Model, I think of what combination of core conservation tools could not only garner the support of all NWF affiliates, but galvanize their collective enthusiasm, and address all the challenges to wildlife and biodiversity they and other conservationists are trying to resolve. Conservation is experiencing the most success where it has the most support, as evidenced by recent successes in the policy sphere: establishing the first national wildlife crossings program with support from hunting to animal welfare organizations; passing multiple bipartisan “sportsmen” bills that were inclusive and unobjectionable; and nearly passing the Recovering America’s Wildlife Act after broadening its base of support.
HOW CAN THE MODEL CAPITALIZE ON THE MOMENTUM GENERATED BY THE BROAD INTEREST IN WILDLIFE?

Go Big or Go Home. The Model could be a broadly unifying set of solutions. It already is for many, and many supporters seem to want the Model to be all-encompassing. However, it would have to be significantly broadened, in understanding if not scope, if it is supposed to be the tool that is universally recognized as how all species are recovered and sustained across North America—pollinators, predators, pigtoe mussels, right whales. It would presumably have to explicitly incorporate federal wildlife and at least some environmental laws. This risks, however, stretching the Model beyond the breaking point by tackling challenges its principles were not created for.

Go Small or Go Home. An alternative path could focus the Model’s principles on what they were primarily developed for, and what they do best—recover and maintain wildlife that people hunt and fish. This approach would intentionally position the Model within a broader universe of wildlife conservation strategies, rather than have it try to encompass all of those strategies. This would situate the Model in a position of strength, able to be easily articulated, understood, and defended in a wide range of relevant contexts, such as promoting the continued hunting, fishing, or management of a wide range of species without bearing the burden of trying to recover and sustain all species.

This would also allow energy currently invested in debating the Model to be invested in applying the Model. There are charismatic ungulates that still need recovering—woodland caribou were recently extirpated from the United States; bighorn sheep are under-recovered; wild bison barely recovered. Sportfish including shad and salmon need undiluted attention. And some Model successes are regressing, such as turkey and striped bass populations. Further, threats to the Model need to be addressed—privatization, unregulated commerce, and others.

Provide a Purpose. The Model was written as a retrospective summary. A forward-looking, solution-oriented Model would need a purpose. People can be forgiven for thinking that the purpose of the Model’s principles is to recover all of North America’s wildlife populations, but the Model is not consistently applied to benefit all wildlife, calling its efficacy and integrity into question. Clarifying a purpose would resolve this.
More Biologists is More Better. The Model is too often associated with jurisdictional preferences. Yet important wildlife work is done by professionals at institutions of all types and levels—state and federal wildlife agencies, and land, agriculture, transportation, and research agencies; tribes; nonprofits; businesses. Redundancy in coverage insulates wildlife from the vicissitudes of democracy and funding at the state, federal, and other levels. If this coverage and redundancy is not explicit in the Model, it should at least be celebrated in its application.

Wildlife-Centric & Taxon-Neutral. All strategies that benefit wildlife, and are generally acceptable to wildlife supporters and society, deserve a place in the Model, or alongside it, particularly given the scale of threats now facing wildlife. Every species to which the Model is applied deserves the best the Model has to offer. Each principle should be applied with equal vigor to each species, to the extent relevant. Disparities in how the Model is applied to different taxa create disillusionment with the Model, which leads to divisiveness when Model proponents oppose well-intentioned efforts to make the Model work for non-game species, predators, herps.

Coarse & Fine Policy Filters. The Model provides powerful, cross-cutting principles for conserving wildlife—a coarse policy filter. The Model is undermined when those principles are not effectively applied as a fine policy filter that actually maintains the wildlife they are supposed to benefit. The decline of individual species calls into question the efficacy of the Model and proponents should invest energy in ensuring all species covered by the Model are recovered.

North American Model, Canadian-American Model, or...? The name “North American Model” is unintentionally divisive, in part because it is not comprehensive or inclusive of legitimate wildlife strategies in Canada and the United States, much less countries south of the United States. The name could be narrowed to reflect the subset of conservation on which the wildlife community focuses going forward. Alternatively, the Model could be broadened to encompass the full suite of legitimate conservation approaches employed throughout the continent. The broader the Model is, however, the greater the differences among countries will be, which is an argument for narrowness, or identifying sub-models representing individual country’s unique strategies.
**A World of Policy Wounds.** Aldo Leopold famously said: “One of the penalties of an ecological education is that one lives alone in a world of wounds.” The same is true of a legal or policy education in ecology. The Model is regularly ignored, undermined, or worse—including by Model adherents with regard to personally disfavored species. Yet what is done to the red wolf can be done to the elk. Model supporters could do a much better job defending the Model, and insisting on its impartial application.

**Crowdsourced Conservation.** Wherever the professional wildlife community takes the Model, conservation is crowdsourced. Any action taken on behalf of wildlife throughout Canada and the United States may or may not be under the Model, but is part of wildlife management. The extent to which this community can guide this constant evolution will depend in part on how inclusive and successful the Model is. The more wildlife supporters see their interests and needs reflected in the Model, the more likely they are to support it. The more successful the Model is at restoring all of America’s wildlife, and biodiversity, and addressing threats to both, the more likely it is to be supported. Alternatively, if the Model is refocused on its original purposes, it has great potential to continue to contribute heavily to conservation, while shepherding its core principles in a broader conservation context.

**“I DON’T LIKE CHANGE, BUT I DO LIKE TRANSFORMATION”**

*Ed Arnett*

The Wildlife Society has been deeply engaged in publishing and discussion about the North American Model of Wildlife Conservation. Our members were part of the Model’s development, and we published Technical Reviews of both the public trust doctrine and the Model.

When Valerius Geist, Shane Mahoney, John Organ, and many others were envisioning this, they may have thought of a theme song, and a fitting one might have been “Don’t Let Me Be Misunderstood!”

The intent of the Model has been well described by John Organ. The needs for the future have been well described by our panelists, but I do want to cover a couple of points in our current Wildlife Society position statement that came out of those Technical Reviews.
The core tenets of the Model are sound, and it’s important to understand those principles and their importance to wildlife conservation. It’s also important to foster educational opportunities to increase societal awareness of the Model and the importance of its components, especially among wildlife professionals.

Now, as a scientist, I’m embarrassed to say that I’m about to share a very biased, very small sample relevant to our discussion about the Model. I teach a course on wildlife policy at Colorado State University. Over four years of teaching this online course, I have a sample size of 68 students. Only eleven of those students had even heard of the Model. Expanding the experiment, I asked 20 people who were fellow airline passengers about the North American Model, and no one had heard of it. So, we have a lot of work to do independent of changes of the original nature of the Model or future articulations of those seven key concepts.

We’ve got a lot to work on, not only within the wildlife profession and with wildlife students, but also with the public at large. The Wildlife Society supports a critical review of the Model and its application under current and future conditions. It is very important to recognize the distinctions and similarities across the North American continent.

The Model’s future rests to a high degree on its adaptability and application of its principles to contemporary wildlife conservation needs if it is to remain viable in the future. It must remain relevant and to that extent the Model must be viewed as a dynamic set of principles that can grow and evolve, and to that end The Wildlife Society most assuredly supports the identification of threats and challenges to the viability and application of the Model and as appropriate, the use of scientific and educational resources to deter those threats.

As we stand at the proverbial crossroads of conservation, now is the time to move forward. And what does that look like and how does that become manifest? A key theme in the 2023 North American Conference’s Plenary Session came from Dave Tenny, and that was cooperation. There’s no doubt we hear that word a lot, but we need to truly cooperate on this endeavor. We also need flexibility and creativity. And Steve Williams said something maybe more profound than most thought on embracing change. Recently I learned something from our new Director of Finance who flatly stated, “I don’t like change, but I do like transformation.” This resonated enough with me to share that change can be scary, but it doesn’t have to be.
We need to be united now more than ever before because we have never faced more serious conservation challenges than we do today. We have plenty of successes to celebrate, but we have too many challenges not to be more united and take a stand for wildlife. The Wildlife Society stands ready to help with that unification to keep us moving forward.

THE NORTH AMERICAN MODEL IN THE CONTEXT OF A FIRST CONSERVATION POLICY FOR THE UNITED STATES, CANADA AND MEXICO

Shane Mahoney

As we look back on the history of this idea of a North American Model of Wildlife Conservation, it is important to reflect not only upon the dire ecological context that prevailed, but also upon the social environment in which the narrative was developed. We must also remember that this narrative is just that—a compilation of guiding principles that a conservation thought leader, Dr. Valerius Geist, articulated a quarter century ago, and which he perceived as essentially self-evident truths. It is important to recognize that Dr. Geist did not think his way to this compilation because he was tasked by a government authority to write a policy document or to draft a piece of legislation, nor did it arise simply because of academic fervor or reflection. He developed this description because he was challenged by conflicting philosophies to prove that we actually had some kind of system in North America to actively, and purposefully, conserve and manage our wildlife resources.

At that time, there was a rising movement of individuals and agencies aggressively advocating for private ownership of wildlife across this...
continent. While this advocacy occurred along many dimensions, what became most identifiable for the general public was the concept of game ranching. This movement, in favor of essentially private capture of public wildlife for profit, was strong enough that Dr. Geist’s opposition to it spurred numerous threats on his life. Under police surveillance and protection, he continued to advocate for public wildlife ownership and against privatization, which he saw as leading inevitably to a host of maladies for wildlife, including a near-certain emergence of novel diseases. (Was he ever right in that prediction, as we recognize now in the world of chronic wasting disease!)

And that is the historical backdrop for the set of principles that we discuss as the Model. I raise this history to illustrate that there are many things about how this all came about that perhaps only a few of us really know in any level of detail. And therefore, outcomes, strengths, or weaknesses of the Model must be understood within the greater context of serendipity, of human frailty in general, of the limitations to knowledge and the nearly inevitable confusion over historical origins of all kinds, and the fog of reality in the context of understanding the true circumstances that were occurring at a particular point in time.

But, please understand, I am not here in any way, shape, or form—nor have I ever been—to “defend the Model.”

Thinking of our conservation efforts in North America, I view the Model’s principles and their articulation as milestones along a continuum of circumstance and endeavor. While the Model—namely, the system of policy, laws and institutions that gradually emerged and coalesced into a recognizable order for conservation—has proven capable of delivering enormous successes, and over long periods of time, it has not been effective across the board. There is evidence to support both the Model’s triumphs and weaknesses. It is not perfect, but what is? The truth of the matter is, though, that we have to have “something” concrete in this regard, and critics and proponents alike agree that we do have a system, for better or worse. And we must have some set of ideas, some set of ideals, some set of principles to guide our conservation imperative. In developing its recognizable system, North America has been a leading global conservation influence; and the United States, in particular, an innovator of almost untouchable status.
I think we can all agree that the conservation ideals we seek to enshrine and pursue must represent the best that we can bring forward as human beings. And certainly not, any longer, as human beings who view themselves as having dominion over nature; nor, I would argue, even as shepherds of nature. We need a transformational change in the way we approach natural things; we must see ourselves as simply a part of the natural world and part of natural landscapes, just one more species with a specific ecology to pursue.

I am personally convinced—after a lifetime in this business and with opportunities to witness the state of our natural world around the globe—that we had better get on with that job real damn fast.

I am not really interested in whose ego was, or is, tied up in the idea of an unchanging and unfailing Model, or any other construct that we have come up with over time. Nor am I overwhelmed by the logic of critics, who, when pressed, cannot decide which, if any, of the Model’s principles they wish to change. I’m also not particularly interested in who is offended by this position or how they might be connected to any of the many fabulous conservation institutions or organizations, old or new, that we have in North America. What I am interested in and ready to defend are the successes the Model has achieved, just as I am interested in exposing its weaknesses, like the need for recognition of Indigenous knowledge and the inclusion of all citizens in a truly representative Public Trust ideal for wildlife and its contributions to human ecology in its widest form.
What we require, I firmly believe, is to commit ourselves to disallowing our discussions of the Model to be constrained by a narrow bandwidth of thinking that enables us to talk only about tinkering here and tinkering there with a particular principle or a specific aspect of the Model. That is not enough for the conservation crises we are facing in this country, and in Canada, and around the world—with respect to wildlife diversity, to the integrity and connectedness of natural systems, and to the ecological fabric of this planet. This burden is a shared inheritance of all humanity. In this context I must ask: Have people, Indigenous or otherwise, ever engaged with nature without impact of some kind? Of course not; and, naturally, this has always been the case. We are but one species, and share in a single ecology despite our enormous cultural diversity. Indigenous and non-Indigenous, we are all human. And we all can make significant mistakes in our engagements with nature or enjoy tremendous successes in our contemplations of a better way forward.

In this context, we should remember that the Model has never been just about hunted species. The conservation fight for songbirds was led by early founders of the Model who, as we know, were among the first to speak about these species in terms of conservation and loss. These early conservation leaders did not see nature only as something to harvest, but saw it also as something to be loved and enjoyed, inherently, and for its own sake. It was Boone and Crockett co-founder George Bird Grinnell who, ultimately, founded (also) the National Audubon Society. Such broad-minded and inclusive views were desperately needed then; and are desperately needed now.

Furthermore, there have been many, many arguments in support of the management of nongame species by state agencies over the years, despite what some may suggest. Indeed, today, nongame management programs are over half a century old in the United States, and were long advocated from within by the very agencies now frequently maligned for a singular focus on hunted species. These are realities we need to think about and acknowledge. Just as with the Model’s principles, we need to ask ourselves: What do we as citizens interested in conservation really disagree on? Is it really the Model and its principles, or in the way we perceive these are being applied and delivered?
Furthermore, there have been many, many arguments in support of the management of nongame species by state agencies over the years, despite what some may suggest. Indeed, today, nongame management programs are over half a century old in the United States, and were long advocated from within by the very agencies now frequently maligned for a singular focus on hunted species. These are realities we need to think about and acknowledge. Just as with the Model’s principles, we need to ask ourselves: What do we as citizens interested in conservation really disagree on? Is it really the Model and its principles, or in the way we perceive these are being applied and delivered?

Again, many people with whom I discuss and debate this Model say, “I don’t like the principles; they are no longer relevant, or representative.” Yet, once we review the individual components, many of these detractors come around to say, “Well, I’m not really quite sure what principle I want to throw out, or I want to change.” Similarly, Model proponents may trot out the argument of who really funds conservation programs, but may then be willing to agree that wildlife is owned by us all, and that recreational shooters (not hunters per se) fund a very significant portion of state conservation programs today. We should remember that the Model is not an Abrams tank, something designed to defend or be attacked in the name of conservation ideology; it is, rather, a living tapestry of human thought and concern for nature’s future.

Vacancies do exist in the Model, of course, and are critical to identify. There is no doubt in my mind that the fundamental vacancy in the development of the North American Model as we know and understand it—and as Dr. Geist and I articulated in our book (Mahoney and Geist 2019)—was not just the lack of Indigenous engagement in the development process, but the complete and utter failure to integrate indigenous traditional ecological knowledge into our conservation approaches. Yet, how we solve it may be as important as invoking the solution itself. The tortured history that envelops this issue presents a wicked dilemma for us all.

Having said all of that, it strikes me that we are off the mark slightly in these discussions of the Model, discussions that have now coursed over a two-year period. I think we’ve come through a long and dedicated process, yes; and I thank Gordon Batcheller and everyone else who has made all of
this happen. Furthermore, the panel of the 2023 Special Session gave a credible and impactful representation of the topic’s complexity and importance. As far as I’m concerned, it was one of the best things to have happened during this process so far. However, I remain troubled by a repetitive theme that runs through and almost certainly constrains our thinking; and that is a focus on wildlife species per se as the undeniable center of our endeavor. I propose that there is something more at stake.

I wish not to propose that we think about a new wildlife policy. Instead,

I propose we broaden our horizons and discuss wildlife conservation, and the North American Model, in a larger conceptual framework. I believe what we need to think about, and get to work on immediately is the first North American Conservation Policy. Within that framework, a broader wildlife policy for North America—one that includes Canada, the United States, and Mexico—from inception, may be articulated and understood.

In this way, as we rethink some of the dimensions of the Model and/or its application that we want to improve, we can also reflect on them in a different light, with more air and more clarity and an enhanced modern relevance.

This does not mean—especially for those of us in the room who believe in the North American Model and its successes—that we need to discard or diminish any of the high points of its progress. We can indeed measure those successes, and should do so on a continuous basis. They are not fictional; nor outdated or irrelevant to future conservation efforts. But they do not reflect the upper limits of our needs for conservation, or exclusively define the horizons of our aspirations for a new global ecological framework. I suggest we view the Model as a springboard for something larger, something even more nature-centered and more defining for a humanity-within-nature approach. We can no longer constrain our focus to North America and our discussions of the Model and its relevance could not have come at a better time. We must address biodiversity conservation as a global community, as a global humanity, and as a shared global challenge, considering our species within the context of all others.
There are many paradigms at work in international conservation that are of immediate relevance to our efforts here. One Health offers a great example: The ideas of understanding landscapes, species and human communities as a continuum of ecological visioning, and of examining human ecology and human progress as a construct of what emerges from taking care of nature and the landscapes on which we all depend, are powerful ideas whose time has come. So, too, is the recognition that we must finally deal with, not just talk about, the hard realities of climate change, of floods and droughts, and about the critical issues of human access to nature and a human-rights-based approach to ecological practice. Note, however, that all of these challenges may be freely discussed without disparaging the Model or excluding the components of it that are clearly aligned in aspiration and practice. It is true that we can simultaneously seek to improve our future efforts while continuing to celebrate our past successes; indeed, the reality is, that we must. In this context, let us also recognize that we are seeing a major emphasis around the world, not just in North America, on the role of Indigenous peoples and local communities in any improved conservation ideal.

I encourage us, therefore, to form a commitment to develop, for the first time, a Continental Conservation Policy—one that is inclusive, embracing, and cognizant of the widest range of applicable values. Every human being is a part of the natural world. None of us can stand apart. We are, therefore, an inseparable component of the ecology of life and death and exist wholly dependent upon the biological systems that have developed across the evolutionary timeframes that gave rise to the only planet we can, undeniably, rely upon. No matter how far we wish to push any conceptual framework, we will never be able to escape the reality that we are immersed in nature. We will, of course, access nature. We will utilize nature: the only question is how? With common purpose and with a sense of justice we can advance towards a better place, rescuing the damaged and marginalized, safeguarding the ecological processes of the earth. And we can do so with every good chance of preserving the natural world and our place within it.

Whatever we take away from this process, let us please remember this: We can have a world with all kinds of fancy models, with every kind of wondrous institution and a limitless number of scientific papers being published; but we are living in a world where wildlife is disappearing at an
absolutely fearsome rate. And, if there is one thing we can safely say about humanity, it is that we’ve been a big part of the problem. Moving forward, we need to be a bigger part of the solution.

We must take care, however, to weave ourselves within nature’s fabric and not treat ourselves as governors or gods. We are as much a part of what we aim to conserve as the wilderness that fascinates and continues to motivate us. A little humility can carry us a long way in our discussions of the North American Model and in finding our way to an expanded vision for nature, on this continent, and beyond.
Once more in this Decadal Review we take care to observe that the viewpoints expressed in the testimonials above do not represent the collective opinion of the individual speakers or the position of AFWA as an organization that led in convening the Special Sessions or producing this Review. They solely represent the individual opinions of the speakers. Regarding how we approach the North American Model going forward, this Review offers a few narrow and targeted conclusions for consideration by the broad conservation community:

1. The Model should be considered part of a long and storied lineage of conservation frameworks including the Game Policy of 1930 and the North American Wildlife Policy of 1973. Its underlying principles (the seven tenets) remain both viable and important. Indeed, as noted earlier, North American wildlife conservation has had many successes that should be celebrated. In large part, those successes stem from one or more (often all) elements of the Model.

2. The Model should be referred to, studied, used, or applied in tandem with diverse Indigenous worldviews and sources of ecological knowledge that have shaped the North American landscape.

3. The Model should be understood to reflect across its seven core components a uniquely North American discipline of collaboration across jurisdictional and ownership domains, including private lands.

4. The Model should not be understood as rigorously prescriptive toward a certain form of management action or prescriptive of another. That said, it is also evident that the seven components carry prescriptive weight via constitutions, laws, regulations, or treaties from which they arise.
The Association maintains its 2002 endorsement of the North American Model[31], and adopted a resolution in 2023 (Resolution 2023-06-07).

“RECOGNIZING THE VALUE OF THE NORTH AMERICAN MODEL OF WILDLIFE CONSERVATION AND SUPPORTING EFFORTS TO ADDRESS CONTEMPORARY NEEDS AND CHALLENGES.”

During the 2023 panel discussion, Shane Mahoney advocated for “…a commitment to develop, for the first time, a Continental Conservation Policy—one that is inclusive, embracing, and cognizant of the widest range of applicable values.” The Association’s 2023 resolution endorses this principle stating “that the Association supports ongoing work by its partners including a collaborative initiative with the Wildlife Management Institute that will explore and potentially issue a continental conservation framework that sustains the conceptual value of the Model, continues the visionary lineage of the 1930 and 1973 policies, and facilitates the development and communication of policies and programs in response to contemporary challenges and in pursuit of greater unity within the field of wildlife conservation.”

This initiative will be strengthened by:

- Heeding the call of the AFWA Relevancy Roadmap to develop agency and organizational hiring practices that lead to greater representation of people whose histories have to date remained outside the Model’s field of view.[32]

- Fully realizing the potential of our diverse community of agencies, organizations, academic institutions, and individual hunters, anglers, trappers, wildlife watchers, and enjoyers of nature, by encouraging the sharing of critical and rigorous opinions across disciplines and values frameworks.

Perhaps at the turn of the next century another scholar of history and ecology will turn their eye to the past and search for seven principles. The totality of our successes and failures, recoveries and extinctions, and connections of people forged with wildlife, will reveal what values have guided us.
APPENDIX—RECOMMENDATIONS FOR AFWA

This project was conducted between 2020 and 2023 with guidance from the Association of Fish and Wildlife Agencies’ (Association) Executive Committee. The Association recognizes its role and commitments associated with the seven principles that constitute the North American Model of Wildlife Conservation (Model). This role stems from the fact that the Association’s membership is drawn from public stewards of fish and wildlife resources in provincial and state fish and wildlife agencies. The Association celebrates the accomplishments of wildlife professionals during the 1900s as iconic wildlife species were restored to abundance, while recognizing that much work remains to address contemporary management challenges, including securing populations of rare species of all taxa.

Regardless of future work associated with the potential development of a “Continental Conservation Policy,” the seven elements of the North American Model require on-going discussion and strengthening. In some cases, this may inform policy changes including the strengthening of the legal institutions that enable wildlife conservation.

Within the Association, this is best accomplished via the work of its committees. To that end, the following recommendations and focal areas are offered for consideration by the Association’s leaders:

1. The public trust doctrine is a central underpinning of state and provincial fish and wildlife agency authorities and mandates. What actions need to be taken to strengthen those authorities and mandates? What threats must be addressed?

2. While markets for game species, shorebirds, and songbirds have been eliminated, other markets continue, some unlawfully. For example, there is a worldwide market for reptiles leading to population-level declines in several species, notably turtles. Existing lawful markets often serve important conservation purposes, such as the management of furbearers. New markets might help to meet contemporary challenges associated with wildlife population
overabundance. A comprehensive assessment of existing wildlife markets should be completed to identify: (a) conditions when such markets serve a conservation purpose versus conditions that harm wildlife populations and habitat, and (b) when establishing new markets can meet contemporary management needs.

3. The use and enjoyment of wildlife is governed by laws and regulations. The authority and influence of state and provincial fish and wildlife agencies needs to be protected, if not strengthened, to ensure that those laws and regulations meet contemporary needs. To that end, the Association should lead efforts to identify threats to state and provincial authorities, and to develop strategies to ameliorate those threats.

4. Among the most persistent debates in contemporary society is when it is appropriate, and under what conditions, to allow the lawful killing of wildlife via hunting and trapping. The principle of “legitimate purpose” is not defined because it is plastic, based on time and place, and changes in societal values. Yet, conversations about the ethics of take—the ethics of fair chase—must be prominent since such ethical matters animate and mobilize a wide divergency of viewpoints. Moreover, technological advances threaten to diminish the notion of fair chase for some, thereby undermining public support for regulated take. The Association should enable ongoing discussions about these matters.

5. The Migratory Bird Treaty, the Convention on the International Trade in Endangered Species of Wild Fauna and Flora, and other international arrangements strengthen worldwide conservation programs. The Association must continue active engagement at the international level to ensure that the interests of North American fish and wildlife agencies are met.
6. Science underpins the work of state and provincial fish and wildlife agencies. As we learned through this comprehensive examination of the Model, a compelling case has been made to enable the inclusion of indigenous knowledge as a form of science (albeit not Western science) in decision-making concerning the use of fish and wildlife. The Association should facilitate an ongoing conversation about “traditional ecological knowledge” (TEK). Specifically, the Association should partner with The Wildlife Society and the American Fisheries Society to establish sensible policies regarding the publication of journal articles that use TEK as a basis for research. Additionally, the Association’s Knowledge Hub should serve as a resource to showcase how state and provincial agencies use TEK in decision-making that enables collaborative management with indigenous authorities.

7. The conventional language used for the seventh principle of the North American Model is “Democracy of hunting is standard.” This principle should be expanded to include all uses of fish and wildlife, regardless of whether hunting or trapping is involved. This is consistent with the Association’s Relevancy Roadmap, and strongly aligns with the mission, purpose, and authorities of state and provincial fish and wildlife agencies.

The authors of this report recommend that these seven action items, aligned with the Model’s seven principles, form the basis for robust discussions within AFWA and amongst AFWA’s partners. Because of the importance of the North American Model of Wildlife Conservation to state and provincial fish and wildlife agencies and their partners, these discussions should be on-going and continuous, not cycled every ten years.
1. Aldo Leopold, *Game Policy in a Nutshell*, 19 American Game 8 (Nov.-Dec. 1930) (hereinafter “In a Nutshell”). Leopold further wrote: Game conservation is at this moment in a particularly difficult stage of its development. The set of ideas which served to string out the remnants of the virgin game supply, and to which many of us feel an intense personal loyalty, seem to have reached the limit of their effectiveness. Something new must be done. Nearly all of us are agreed what it is, but there are differences of opinion about who should do it, what methods should be used, and who should pay for it, and how. The differences of opinion are not so numerous, however, as to render it at all impracticable to try all of them. This game policy simply enumerates some of these differences, and urges that they be subjected to the test of experience.

2. Id.

3. Leopold et al., American Game Policy (1930).

4. Id.

5. Leopold, *In a Nutshell*, supra note 1. Leopold cautioned his fellow sportsmen as follows: We sportsmen are on the carpet. Many other groups are watching us, some with interest, others with something nearing exasperation. I am afraid the farmers, without whom we can do nothing, are among them. Our present position is a defensive one. Our critics are no more reasonable than we are, but they tend to have the public ear. Our whole situation demands a positive program: an offensive strategy. Shouting outworn formulas only makes matters worse.


   Id.

7. Id. at 75.

8. Id. at 90.


12. Geist et al. 2001 at 175-76.

13. Id. at 176-79.

14. Id. at 179.

15. Id. at 181-82.


17. Technical review at viii.


19. Id.

20. Id.


