August 2011

TO: CALIFORNIA FISH & WILDLIFE STRATEGIC VISION - Members of the Executive Committee, Stockholder Advisory Group, and Blue Ribbon Citizen Commission

FROM: Eric Mills, coordinator, AFA

RE: A few random thoughts/suggestions for reform

Having dealt with the Department of Fish & Game, and attended numerous meetings of the Fish & Game Commission over the past 20 years, I have a few suggestions for consideration:

1. Why "Fish and Wildlife"? Fish ARE wildlife. Most people, indeed, most countries see fish as "seafood." We need to change that mindset. Now's the time. And all wildlife has INTRINSIC value, irrespective of our own desires. This should be reflected in the new STRATEGIC VISION.

2. Don't waste time reinventing the wheel. Take a hard look at the recommendations found in the 1990 Little Hoover Commission Report, and the 2009 Treanor Report, both regarding the machinations of the Department and the Commission, with suggestions for reform.

3. Expand the F&G Commission to seven or nine members (as proposed in Assemblyman Bob Campbell's 1988 ACA 44), with a broader and more fair representation of public interests.

4. Require that Commission members meet specific qualifications for the job--currently there are none. There should also be more diversity. All current members are either hunters, or fishers, or both--fewer than 5% of Californians either hunt or fish, and those numbers are steadily decreasing. In the Commission's 130 years, there have been only TWO women members. And zero minority representation (unless you count Mike Flores).

5. Commissioners are currently appointed by the Governor. Perhaps it might be better if they were elected, or appointed by a non-partisan committee. The Director is also appointed by the Governor, and the Commission receives its funding from the Department. This sets the stage for all sorts of conflicts of interest.

6. Commission should have the power to hire and/or fire the Director of the Department (as in Nevada and some other states). The public generally assumes that the Commission directs the Department, when in fact it's only an advisory body.

7. FUNDING IDEAS - See attached article from the Jan/Feb 2010 issue of AUDUBON MAGAZINE.


Attachments

EM
No Pay, No Say Even in the best of times, the funding system for state fish and wildlife management is grossly inadequate. But three states have implemented partial fixes, and Congress may soon offer federal relief.

Shortly after I signed on as a wildlife journalist with the Massachusetts Division of Fisheries and Game in 1970, we changed the “Game” part of our title to “Wildlife.” This, it was explained, would better define and expedite our legal mandate of tending all wild creatures, not just those that could legally be shot or caught or, as we preferred, “harvested.”

But there was little change because then, as now, almost all the division’s income came from sales of fishing and hunting licenses and federal excise taxes on guns, ammo, hunting equipment, fishing tackle, and motorboat fuel. It’s the same in most states. Therefore, with just a few exceptions, wildlife agencies pretty much do the bidding of sportmen—this to the detriment not just of wildlife but of the sportmen themselves, because they tend to confuse long-term best interests with immediate appetites. “Nongame,” by which managers refer to that 99.9999 percent of our biota that sportmen can’t “harvest,” gets much more attention these days than in the 1970s—but nothing close to what it needs. And the term itself says it all about priorities; it’s like flipping your cigar butt into Puget Sound and calling the Pacific “nontobacco.”

In the first half of the 20th century, sportmen had saved North American wildlife from unregulated take, deforestation, and Dust Bowl devastation. They did this by pushing through the Migratory Bird Treaty Act of 1918, by getting market hunting banned, by demanding to pay for hunting and fishing licenses to maintain state wildlife agencies that set seasons and bag limits, by demanding to tax themselves for their gear, and by demanding to pay for duck stamps, which facilitate the purchase and maintenance of national wildlife refuges.

But in the 1970s the sporting culture I found in Massachusetts and nationally had devolved. By and large, hunters and anglers were unengaged in environmental issues, insular, deeply suspicious of the Earth Day generation of which I was part. Their main issues were imaginary threats to gun ownership and what they invariably perceived as inadequate numbers of hatchery trout and game-farm pheasants, the mass production of which constituted the principal business of our agency. I learned much during my five years with the division—no lesson more important than this: Good management and genuine recovery of fish and wildlife can happen only with dedicated public funding. Hunting and fishing license revenue, even combined with federal aid, can’t do it.

Still, the two laws that levy excise taxes on hunting and fishing gear and motorboat fuel have been among the most efficient vehicles for keeping state wildlife agencies semi-so solvent. Federal Aid in Wildlife Restoration is appropriated to the
states via the Pitman-Robertson Act of 1937, Federal Aid in Sport Fish Restoration by the Dingell-Johnson Act of 1950. The genius of these statutes is that they deny funding to states in which politicians raid license revenue, as they are always tempted to do, especially during a recession. This doesn’t stop the raids, but it invariably makes the politicians return the revenue they’ve purloined. When I asked the Fish and Wildlife Service’s northeast federal-aid chief, John Organ, where the attempted diversions have taken place, he replied, "It would be easier to tell you where they haven’t taken place." He presides over 13 states, and politicians have tried to divert license revenue in eight in the last several months. But in every case it took only a stern letter from his agency and resultant invective from outraged sportsmen for the politicians to give back the money.

In 2003, when former Massachusetts governor Mitt Romney led one of the most brazen raids ever attempted, the Fish and Wildlife Service nudged him by giving him 30 days to return the money or forfeit $4.6 million. In March 2009 the service blocked a similar raid by the Massachusetts House. Two equally grotesque raids in California and Illinois were recently blocked by the service. Former Illinois governor Rod Blagojevich had actually succeeded in a diversion, but immediately after his ouster the legislature returned the money.

"Has a state ever decided just to steal license revenue and forget about federal aid?" I inquired of Organ.

"Not yet," he replied. "But I always wonder about that. In the grand scheme, a state might say, 'Six million bucks. So what? We're going to sell off these lands for development and get a billion dollars.'"

Modest improvements were under way even before I left the division. In 1974 The Nature Conservancy helped establish the Natural Heritage Program, a far-sighted and ambitious plan to inventory and restore native ecosystems by establishing partnerships between state wildlife agencies, museums, universities, and conservation groups. Perceiving the effort as a threat to their power base, sportsmen and managers fought it viciously. But environmentalists were gaining in political power, and as old-guard managers retired and died off, young, enlightened wildlife professionals were moving into leadership positions. By the late 1980s every state had a natural heritage program. Today the network includes 82 programs from Canada to the Amazon, almost 1,000 scientists, and a collective annual budget of about $45 million. Such reforms continue, but they don’t begin to keep pace with new threats to fish and wildlife such as global warming and an increasing human population.

Missouri is one state in which the sport hunting culture never devolved. Rather than puffing about the accomplishments of their dead ancestors while attempting to preserve their power base by fighting public funding, Missouri sportsmen built a management model for the nation. It wasn’t easy. The Conservation Federation of Missouri—which includes virtually all the states hunting and fishing outfits—started its campaign for increased revenue for the Missouri Department of Conservation in 1969, 32 years after it had shepherded through a constitutional amendment to establish the agency. The federation sponsored a ballot initiative that would have raised $20 million a year by levying a one-cent tax on each bottle of soda. But the drive withered under intense lobbying by the St. Louis-based Seven Up Inc.

Smarter and tougher from that defeat, the federation launched a campaign for

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another ballot initiative, this time for a one-eighth-of-one-percent state sales tax, with proceeds to be allocated to the Department of Conservation for fish, wildlife, and forestry. Resistance was formidable. The Farm Bureau ranted endlessly about what it called a "government land grab." And if there's one thing legislators hate, it's dedicated funding because it circumvents the appropriations process and makes them feel nonessential.

At the time Dave Murphy, who now directs the Conservation Federation, was an Earth Day-generation activist and an undergraduate in forestry, fisheries, and wildlife at the University of Missouri. He circulated petitions that helped get the sales tax initiative on the 1976 ballot, and he was the only person in his farm-dominated precinct to vote for it, including his farmer father. "The 10:30 p.m. news reported that the initiative would fail," Murphy recalls. "But when I got up in the morning the returns from St. Louis were in. The initiative had passed by 20,000 votes, and our world changed."

Indeed it did. In 2008 two-thirds of the Department of Conservation’s $172.5 million budget was generated by the sales tax. In addition to conducting all manner of progressive ecosystem management, the agency now owns 788,706 acres of prime habitat and leases 202,864 more. Most of this is in Conservation Areas Statewide. Therefore are now about 900, and virtually all Missourians are within a half-hour’s drive of at least one. A program run by the Audubon Society of Missouri records bird species seen on each area. Typical is the 4,318-acre Columbia Bottom Conservation Area near St. Louis, where, in just the past two years, 249 species of birds have been identified by Audubon members.

"We're trying to create a mosaic of habitats appropriate for floodplain propery," says Columbia Bottoms manager Tom Leifeld. "We have about 800 acres of intensively managed wetlands, elaborate pump-station systems and water-control structures, 300 acres of prairie in various stages of restoration, 140 acres of native hardwood plantings, and 250 acres of former ag land that we're letting go back to cottonwood-and-willow riverfront forest." This area alone gets something like 200,000 visitors a year.

Missouri’s Public Lands Program, also enabled by the sales tax, helps farmers manage their lands in wildlife-friendly ways and get paid by the U.S. Department of Agriculture to plant and encourage food and cover for wildlife. As a result the state is the first to report success under the Northern Bobwhite Conservation Initiative—a range-wide habitat-restoration effort by nongovernmental organizations and state and federal resource agencies.

In the boot heel’s Scott County, where agriculture is especially intense, the state’s goal was to create 4,500 acres of quail habitat. Already there is 7,000 acres, more is on the way, and the quail population is up 66 percent from 2008.

Only Minnesota has come close to Missouri. Even as the economy tanked in November 2008, voters approved a three-eighths-of-one-percent sales tax that will net about $270 million, a third of which will go to conservation programs for habitat, which, if approved by the legislature, could supplement the Division of Fish and
Some states don’t even have sales taxes. But there are other options. Florida and South Carolina dedicate a portion of real estate transfer fees to their wildlife agencies. And Florida augments this with revenue from speeding fines. Wildlife agencies in Alabama, California, and Texas get a share of the cigarette tax. Arizona and Colorado get $10 million and $8.75 million a year, respectively, from state lotteries. Bond issues have been used widely and effectively, mostly for habitat acquisition. Some states dedicate sales of specialized license plates to wildlife. Others receive major funds from oil and gas leasing and production on public lands. Many states have check-off boxes on their income tax forms by which citizens can make voluntary contributions to nongame wildlife.

Creative as they are, all these strategies—even Missouri’s—are band-aids on a ruptured aorta. The Conservation Federation’s Dave Murphy offers this: “In 1937, the first year of the Missouri Department of Conservation, the fish and wildlife budget was 0.8 percent of the state budget. This last year, with all our sales tax revenue, license fees, and federal aid, it was 0.7 percent. So the sales tax has allowed us only to stay about where we were, not get ahead.”

And for all the enlightenment in state wildlife agencies and all the evolution in America’s sporting culture, there is still no shortage of knuckle-draggers to preserve good-ol’-boy networks. Nowhere is this more apparent than in otherwise progressive Vermont, where, as in so many states, the Fish and Wildlife Department is nearly busted. Between 1987 and 2008 sales of hunting licenses declined from 111,542 to 80,831, sales of fishing licenses from 161,014 to 122,642. The agency has gone begging to the legislature for extra funds, never with good success, and it has been laying off staff and leaving positions open.

So the department’s former commissioner, Steve Wright (then National Wildlife Federation’s northeast representative), and Patrick Berry (then communications director for the Vermont Natural Resources Council) helped develop a legislative mandate for a study committee that would explore alternate funding. And they helped put together a support coalition called the Vermont Wildlife Partnership with a strong, diverse membership of 60 groups—from Wright’s and Berry’s outfits to Trout Unlimited to Audubon Vermont to the Vermont Federation of Sportsmen’s Clubs.

In due course the study committee hatched a proposal (Vermont has no ballot initiatives) to redistribute one-eighth-of-one percent of the existing sales tax to the Fish and Wildlife Department. Of every 48 cents collected, 31 would go to the general fund, 16 to the education fund, and 1 cent to the Fish and Wildlife Department. It wasn’t much, but it would boost the agency’s paltry budget from about $14 million to $20 million.

“Governor Jim Douglas has a mantra of ‘no new taxes,’” said Wright. “The word on the street was that just at the end of the 2007 legislative session, his office found out about the study committee and sent over one of its heads to proclaim that the governor wouldn’t sign the bill unless he could appoint committee members.”

Co-chairing the committee was Douglas appointee James Ehlers, who had gained public attention by whipping sportsmen to a froth of paranoia with hook-and-bullet rants about alleged plots by greenies who, he charged, are “equating the constitutional rights of humans with the supposed rights of bugs.”

Current Fish and Wildlife Commissioner Wayne Laroche—an Ehlers acolyte who once wrote that wilderness sacrifices “tangible values to achieve the ‘spiritual’ values of the so-called environmentalists at the expense of traditional users”—had been propelled to office by the anti-wilderness, pro-clearcutting, pro-mechanized-access-at-any-cost Hunters, Anglers, and Trappers of Vermont (HAT), which Laroche used to serve as a director. HAT perceives alternate funding as a plot to keep its members out of the woods and turn over wildlife management to anti-hunters.
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On November 5, 2009, the Senate version passed the Committee on Environment and Public Works on a vote of 11 to 1, with all seven Republican members voting no. The allocation for natural resources was reduced to $1.4 billion, both state and federal funds would be automatically appropriated. In the House bill, the federal portion would be a gamble.

Another badly needed and popular bill, the Teaming with Wildlife Act of 2009, has been introduced by Senators Tim Johnson (D-SD), Debbie Stabenow (D-MI), Jon Tester (D-MT), and John Thune (R-SD). By tapping federal royalties from the mining of energy-related minerals and offshore oil and gas development, it would annually dedicate $350 million to states for the management of at-risk species. This would last for seven years and be administered through the state wildlife grants program (replacement for the Wildlife Conservation and Restoration Program), which has been providing about $75 million a year at the pleasure of appropriators. (For 2010 the Obama administration was able to get this increased to $90 million.)

The Teaming with Wildlife Act has risen from the rubble of the most tragic blunder in the history of fish and wildlife legislation. In May 2000 the House overwhelmingly passed the Conservation and Reinvestment Act (CARA), which would have annually allocated $350 million for fish and wildlife restoration, $900 million for habitat acquisition, $1 billion for coastal states, $125 million for urban parks and recreation, $100 million for historic preservation, $200 million for restoration of Indian and public lands, $150 million for conservation easements and the recovery of vanishing species, and $200 million for payments to replace lost tax revenue.

CARA was supported by a diverse, 5,000-group coalition. An element of the environmental community wrongly supposed that the bill would somehow encourage offshore oil development and therefore lobbied against it, but most environmental groups, including Audubon, passionately supported it. With sufficient votes in the Senate, CARA looked like a done deal.

Then the Clinton administration got cold feet, and the White House Council on Environmental Quality (CEQ) offered a compromise designed to appease vested appropriators. “CARA Light,” it was called, supposedly was going to do everything CARA would have done. The appropriators would start at a third of the original appropriation—$450 million—then ratchet up the money each year. With few exceptions, most notably the National Wildlife Federation (NWF) and the Association of Fish and Wildlife Agencies, the environmental community swallowed it hook, line, boat, and motor.

“We thought this compromise was very good,” declares Naoma Edelson, then in charge of wildlife funding strategies for the association, now in charge of state wildlife programs for the NWF. “The deal we got was very good. CARA Light was an improvement over the original CARA, which was a great bill.”

“CARA Light” originally had nine programs, most of which were no longer funded after year three or four. Even the $50 million it provided through the Wildlife Conservation and Restoration Program soon dried up (although the NWF and the association eventually got it restored and increased). So furious was Representative John Dingell (D-MI) that he introduced a bill to abolish the CEQ.

If the Teaming with Wildlife Act, which now has the support of about 6,000 organizations and businesses, passes, it will demonstrate that the environment community has learned something from the CARA debacle and from the successes in Missouri, Arkansas, and Minnesota.

The lessons are as simple as this: First, all Americans (and especially habitat destroyers such as mountaintop removers and oil and gas companies) need to help conservators of fish and wildlife undertake management and recovery. And second, fish and wildlife has no future without dedicated funding. Asking state or federal legislators to appropriate adequate funding every year produces what the Girl Scouts could expect if they assigned Lorna Doone delivery to Cookie Monster—crumbs.

WHAT YOU CAN DO: Urge your legislators to support the Teaming with Wildlife Act of 2009 (S. 655) and the Clean Energy Jobs and American Power Act (S. 173). To learn more about what states are doing and need to do to attain adequate funding for fish and wildlife, go to www.teaming.


PROSPECTS FOR BIG INCREASES IN FISH AND WILDLIFE REVENUE ARE SUDDENLY BRIGHTER. ON JUNE 26, 2009, THE HOUSE PASSED THE AMERICAN CLEAN ENERGY AND SECURITY ACT, WHICH, IN ADDITION TO DIRECTLY BENEFITTING THE BIOTA BY CUTTING GREENHOUSE-GAS EMISSIONS AND PROVIDING CLEAN ENERGY JOBS, WOULD SECURE MAJOR FUNDING FOR FISH AND WILDLIFE. FUNDS WOULD BE GENERATED FROM POLLUTER PAYMENTS FOR CARBON RELEASED INTO THE ATMOSPHERE. BETWEEN 2012 AND 2030 ROUGHLY $1.7 BILLION A YEAR WOULD BE AVAILABLE FOR NATURAL RESOURCES DAMAGED BY GLOBAL WARMING. STATE WILDLIFE AGENCIES WOULD GET ABOUT $500 MILLION OF THIS. THEN,
An Inadequate Construct?

By Michael P. Nelson, Ph.D., John A. Vucetich, Ph.D., Paul C. Paquet, Ph.D., and Joseph K. Bump, Ph.D.

The North American Model of Wildlife Conservation has seen a meteoric rise in acceptance and influence among wildlife professionals in the past decade. Since the first articulation of the Model appeared in 2001 (Geist et al. 2001), literature about it has grown, professional organizations have endorsed it, institutions have developed curricula to teach it, state agencies have built it into their strategic plans, sessions at professional meetings have focused on explaining it, and an entire issue of The Wildlife Professional was devoted to it (TWP 2010).

But what exactly have so many been writing about, endorsing, teaching, explaining, and celebrating? The North American Model is expressed as two related (sometimes conflated) endeavors: a description of the history of conservation in North America, and an ethical prescription for how conservation should proceed. That is, the word “model” is sometimes employed to describe the way wildlife was or is managed in North America, and sometimes the word “model” is used in a congratulatory sense to praise the past and to prescribe how future wildlife conservation ought to be conducted in North America and elsewhere. Yet the rise in the Model’s popularity is worrisome in both its descriptive and prescriptive modes: One rests upon an inadequate account of history and the other on an inadequate ethic.

Inadequate History

When “Model” is used descriptively, it presents a narrative explaining how North Americans came to embrace wildlife conservation. According to this narrative, market or commercial hunting villainously ravaged North American wildlife populations until the late 1800s. The rise of sport or recreational hunting, however, acted as the salve to wildlife exploitation, eventually saving wildlife populations. Recreational hunting was the critical means by which we grew to care for wildlife, and the fundamental motivation to lobby and pay for conservation.

Yet a broader interpretation of history indicates that recreational hunting was only one of several important factors that led to improved conservation in North America. Beginning in the 1900s, for example, conservation was dominated by non-hunters whose legacy includes key legislation such as the U.S. Wilderness Act, Endangered Species Act, Clean Air and Water Acts, and similar acts in Canada. In addition, what are commonly referred to as “non-consumptive” uses of nature—such as national park visitation and bird watching—have also been important for motivating conservation action (Duffus and Dearden 1990, Balmford et al. 2009). These perspectives on the history of conservation do not stand in opposition to hunting, yet they show how other forces also shaped North American wildlife conservation, and how hunting is not necessary for conservation.

The two main sources that advocates of the Model cite to support their historical hunter-conservationist narrative include John F. Reiger’s American Sportsmen and the Origin of Conservation (Reiger 2000) and James B. Trefethan’s An American Crusade for Wildlife (Trefethan 1975, published by the Boone and Crockett Club). Yet other wildlife histories suggest a dramatically different narrative.

According to Thomas R. Dunlap’s Saving America’s Wildlife: Ecology and the American Mind, 1850-1990 (Dunlap 1990), a variety of nature enthusiasts strove to save North American wildlife and support conservation. Dunlap also shows that while recreational hunters worked to save wildlife deemed “game species,” some actively worked against the conservation of non-game species under the guise of eradicating “varmints and vermin”—and some still do. Moreover, the historical narrative dominating current literature on the Model...
focuses almost exclusively on the ideas and actions of Theodore Roosevelt, Gifford Pinchot, and others with a narrowly utilitarian focus, while downplaying the contributions of individuals such as John Muir and Aldo Leopold, who motivated broad-based conservation without focusing on hunting as its primary tool.

While the Model's selective historical narrative serves the conclusion that recreational hunting is (or at least was) necessary for conservation, a more complete historical narrative does not support that conclusion. Developing a historical narrative to serve the justification of a specific ethical prescription is not uncommon. It is troublesome, however, if that history is so selective that it ignores historical elements contradicting the ethical prescription. Because the Model ignores historical evidence contrary to its ethical prescription, it is based on an inadequate accounting of history.

**Inadequate Ethics**

The North American Model also represents inadequate ethical reasoning and a misguided prescription for the future of conservation for three main reasons. First, it relies too heavily on the principle that past behavior is an appropriate justification for future behavior. To suggest that a historical episode can justify an ethical prescription is to commit a logical fallacy known as *argumentum ad antiquatem* (the argument from antiquity or from tradition). One would not argue that society should perpetuate child slave labor or gender discrimination simply because such practices were part of our history. Likewise, it is wrong to conclude that hunting should play a central role in future conservation simply because it had in the past.

Second, if conservation is best served by a multi-pronged approach, then why do advocates of the Model focus almost exclusively on the role of hunting, especially since participation in hunting is on the decline? If one's primary concern were conservation in general, then to focus on hunting as the means to conservation would seem an obviously inadequate strategy. This raises the concern that advocates of the Model are not primarily motivated by conservation, but rather by defending hunting. We do not object to advocating for either. However, these concerns make us wonder if Model advocates have obfuscated motivations, a hallmark of inadequate ethical reasoning.

A third reason to wonder whether the Model's primary interest is hunting rather than conservation is its neglect to address important contemporary instances where the interests of recreational hunters conflict with conservation. For example, hunter interest is often an important influence behind management leading to overabundance of ungulates and the diminution of ecosystem services provided by predators, both of which compromise ecosystem health. Indeed, some important Model advocates are not allies in efforts to restore and maintain the ecosystem services that predators provide (e.g., Geist 2008).

**The “Seven Sisters” of the Model**

The seven basic tenets of the North American Model help illustrate its inadequate historical and ethical reasoning. While each tenet may capture a fine principle, it is far from obvious why together these principles represent an adequate or insightful basis for conservation in general, or for wildlife conservation in particular. A great deal of scholarship (Callicott 2005, Jamieson 2008, Speth 2005, Meine 2004) suggests that the future of conservation will depend much more on principles that address complex questions such as: Are non-human creatures and ecological collectives valuable for their own sake or only for their value to humans? Do people living in developed countries have an obligation to reduce resource consumption? How do we define ecosystem health, and how can it be maintained while, at the same time, maximizing values such as human liberty and social justice? The seven tenets of the Model do not reflect these important issues.

Even if the seven tenets represent appropriate principles in and of themselves, several of them seem characterized more by the questions they raise than by the conservation insight they provide. For example, one tenet asserts that *Wildlife Can Only Be Killed for a Legitimate Purpose*. This principle is as basic and appropriate as it is void of useful insight about defining a legitimate purpose.

Another tenet asserts that *Science is the Proper Tool for Discharge of Wildlife Policy*. This is mistaken for equating a desire for policies informed by science with science discharging or determining, by itself, what policies ought to be adopted—a serious, but very common, error in ethical reasoning. Scientific facts about nature cannot, by themselves, determine how we ought to relate to nature or which policies are most appropriate (Moore and Nelson 2010). This tenet is also inadequate because, while
it notes the relationship between science and policy, it fails to recognize the most important obstacle in understanding that relationship. Specifically, understanding how ecological, sociological, economic, political, and ethical knowledge should be synthesized for the purpose of policy development, especially when scientific knowledge is often characterized by an inability to make precise predictions about how policies will affect natural systems.

Several of the seven tenets touch on how natural resource management is related to social justice and human liberty (i.e., Wildlife are Considered an International Resource, Allocation of Wildlife by Law, Democracy of Hunting, and Wildlife as a Public Trust Resource). However, these principles are not useful without also acknowledging questions like: In practice, when is it wrong to prevent the over-exploitation of a resource by local people who have no other means to satisfy their short-term needs? And, is it wrong to preclude a rural population from hunting a wildlife population because urban citizens think that is an inappropriate use of the resource? The challenge in a democracy is to know when the interests of the majority are relevant or trivial and whether they should be honored if they represent a serious infringement on the interests of the minority.

Another problematic tenet asserts that the Elimination of Markets for Wildlife is necessary for conservation. Yet wildlife resources are commercialized and privatized in many parts of the world, including Europe, where conservation seems as well developed as in North America. In addition, "wildlife" such as aquatic organisms, marine organisms, and plants are often commercially harvested. In many of these cases, the concern is for developing a sustainable commercial harvest, not elimination of the market. The Model fails to explain why conserving terrestrial vertebrates in North America ought to be so exceptional to conservation elsewhere.

Moreover, to believe that North American hunting no longer remains a highly commercial and market-driven activity is to fail to recognize the commercial interests at stake. Many companies, like hunters themselves, profit from overabundant game populations and wildlife consumption. Consider catalogs from companies like Cabela's or Bass Pro Shops. The consumption that such "wildlife" markets promote represents a threat to wildlife and conservation. Finally, forms of wildlife management such as the harvest of furbearers perpetuate markets for wildlife. Perhaps Elimination of Markets for Wildlife should be replaced with Eliminate or Transform Markets that Threaten Conservation. This would make it clear that the goal is not merely the elimination of markets that threaten recreational hunting.

Even if the North American Model's primary motivation was to promote hunting, and even if it did so transparently, the Model would still fall short. The problem is that hunting is an unworthy or indefensible activity, but rather that the Model gives an inadequate defense of hunting; misapprehends the relationships among hunting, conservation, and the seven tenets; and ignores the most potent criticism against hunting (i.e., that some hunts are inconsistent with the tenet that Wildlife Can Only Be Killed for a Legitimate Purpose).

A More-Inclusive Construct

The ethics of hunting is a complex and easily misunderstood topic requiring far more attention than can be offered here. Ultimately, we doubt the claims of proponents that the North American Model is "probably the greatest environmental achievement of the 20th century ... [and] may be one of the greatest achievements of North American culture" (Geist 2006). Further, it is unclear how the Model is useful for understanding or evaluating what the role of recreational hunting should be in developed countries of the 21st century.

Perhaps the greatest value of the Model, however, is that it highlights the need to confront a more basic question: What is conservation? All of us should explore whether wildlife management and conservation are the same, as implied by Model advocates, or whether the two disciplines represent different, occasionally conflicting, ambitions. The latter view led to the founding of the Society for Conservation Biology, which views wildlife management and conservation as different ambitions (Soule 1985, Aplet et al. 1992).

The future of conservation will require an adequate understanding of these and other issues that are both essential and under-treated (Vucetich and Nelson 2010, Vucetich and Nelson in press). We need to ask: What does it mean for a population or ecosystem to be healthy? Do populations and ecosystems deserve direct moral consideration? How does conservation relate to or conflict with other legitimate values in life, such as social justice, human liberty, and concern for the welfare of individuals? Resolving these and other questions and conflicts could provide a truly meaningful conservation model worth celebrating.