

# **Fish and Wildlife Management in the New Millennium: Perspective from The Wildlife Society**

**Harry H. Hodgdon, *The Wildlife Society, 5410 Grosenuor Lane,  
Bethesda, MD 20814***

Proc. Annu. Conf. Southeast. Assoc. Fish and Wildl. Agencies 53:8-14

---

I am honored by the opportunity to be part of this conference and to participate with such a distinguished panel this morning. Today I have been asked to address Fish and Wildlife Management in the New Millennium from the perspective of wildlife resources and professional societies.

I want to acknowledge that today I am drawing freely from the thoughts, ideas, and comments of some of the best thinkers of the wildlife profession. I am deeply indebted to them for their assistance because my predictive powers often have been suspect—I never dreamed that a peanut farmer or an actor would ever occupy the White House or a professional wrestler would be a state governor! However, my real incentive came after reading the New York State penal code that contains the following statute: “Persons pretending to forecast the future shall be considered disorderly and liable for a fine of \$250 and/or 6 months in prison.” Somehow the advice attributed to Calvin Coolidge always seemed safer—if you wait long enough, the future will be here!

I would guess that most of us in the fish and wildlife professions would agree with this presidential advice. Or maybe Yogi Berra’s guidance—“the future ain’t what it used to be”—more appropriately captures our outlook.

I’m not sure why we tend to feel that way because, overall, things are going pretty well for biologists and managers and our conservation efforts. Fish and wildlife management has come a long way in the last few decades. Fisheries and wildlife are recognized professions. Salaries, while not up to that of some professions, are better than they were. There are more jobs in wildlife and fisheries than at any time in history. Populations of many species are higher now. More universities are providing much more intense curricula. Overall funding for natural resources is at an all-time high. And new tools and technologies have appeared at a rate faster than many of us have been able to use them.

I believe that the future of renewable natural resource management and the wildlife profession is both bright and up to us to shape. People always will want to enjoy wildlife. Recent public polls and surveys indicate that this is true. More and

more people rank wildlife and natural resources as important—90% of Americans seek enjoyment out-of-doors—and the environmental ethic is gaining strength. By a margin of 2 to 1, the public is prepared to choose conservation and the environment over uncontrolled development and by a margin of nearly 3 to 1, they believe government should keep environmental protection a high priority, even if it means slower economic growth.

Further, I believe the future of fish and wildlife will continue to depend upon professional, scientific management.

So why is it that we sometimes feel uneasy about the future of what we do? One of the real challenges to fish and wildlife management in the new millennium will be dealing with uncertainty. We have a comfort level dealing with the familiar that is replaced with an elevated anxiety level when we envision many of the challenges that must be addressed.

My task today is to identify some of those future challenges and offer some reassurance that together we not only can meet them, but thrive in the process.

First we need to look at the big picture. As you have already heard this morning, big changes in demographics are coming:

- The U.S. population continues to grow and our longevity is increasing.
- The U.S. population is redistributing itself from northeast and midwest to south and west.
- The U.S. population is becoming more suburbanized and urbanized.
- Hispanic, Asian American, and African American minorities are increasing and will become the majority in some states by 2020.
- Hispanics, Asian Americans, African Americans, urbanites, and older individuals, in general, have historically not participated in wildlife-related outdoor recreation to the same degree as other segments of the population.

These changes, and their associated subsets, will drive much of what fish and wildlife and our managers must face in the new millennium. With these changing demographics come at least 3 types of challenges:

- Impacts to fish and wildlife habitat through fragmentation, degradation, and loss.
- People's changing perceptions of fish and wildlife and management.
- Shifting cultural values involving wildlife.

As professionals, we have been fairly effective in dealing with fragmentation and degradation of habitats for many species and this will continue. But changing perceptions and cultural values will bring us the most severe challenges.

Voters of the future will be less connected to the land and know less about (and probably be less supportive of) wildlife conservation and management efforts. We'll need to further educate the public about how to keep a "place" for wildlife in our lives.

We must find ways to convince the general public that there is a need for professionally-based management programs because there is a growing and vocal

point of view (including voter initiatives, referenda, etc.), that all we need to do is protect open space and all will be well forever. We need to do a better job of educating the public in the future so that they understand the complexity of human-wildlife conflicts and support wildlife management. We must learn to better communicate with and involve a diversity of people in wildlife conservation. Our efforts will need to be targeted to specific subsets of the public—our audience is diverse and one message won't reach everyone.

As for cultural diversity, in many areas of the country there will be no cultural majority in another 20–30 years. People like many of us, derived from western European cultures, will no longer be in the majority. Rather, we will be one of several minorities in a multi-cultural society. And each of these cultural groups embodies values concerning wildlife that are not necessarily similar. Assumptions about appropriate or acceptable uses of wildlife that have worked in the past will not serve us well in the future. To respond to the concerns of these many cultures, our decisions about policy and management objectives must address and accommodate a variety of values.

We also need to welcome cultural diversity within our profession. We need to find ways to recruit young people into our professions who represent the increasing diversity of cultures in our society. Colleges and universities and employers have important roles to play here, but so do professional societies. We need to have these people among us so we will be prepared to deal with the human aspects of management that will require knowledge of and empathy with a variety of wildlife values. So as we look to the future, we see a clientele base that does not look or think alike. And as more and more people become distanced from natural resources, disinterest, intolerance, and ignorance regarding wildlife will be mounting obstacles we must overcome. Their ignorance may be bliss for them, but it won't be for wildlife professionals. Unless we all do a much better job of educating and responding to these publics, the old adage of a democracy being where everyone gets what the majority deserves will become more and more true.

From this “big” picture, I want to look at challenges ahead of us in universities, agencies, on the land, and in our professions.

## **Universities**

One the education front, there is a growing disconnect between the needs of employing agencies and university graduates. Wildlife management is a lot more than biology, theory, and research. While biology and research are absolutely necessary to management, they are not enough. Discussions with employers and recent graduates indicate that universities do not adequately fill the needs of young professionals or the agencies that hire them. Why? Because the vast majority of graduates are employed by state and federal agencies and the private sector to manage land and wildlife; not just conduct research. What seems to have been de-emphasized in many university programs is preparation in the skills, outlook, and attitudes needed by managers of natural resources and people—the application

side of wildlife management. Universities and employing agencies share the responsibilities of restoring management activities for both wildlife and humans to the curricula. It's a 2-way street and partnerships are needed to help ensure that the types of new skills needed by tomorrow's managers are being addressed as part of university curricula today.

Here are some examples of this disconnect:

Many recent graduates entering the profession have no experience with or understanding of hunting, fishing, trapping, or management. How can we expect these individuals to help make management decisions affecting hunting or fishing or interact as agency representatives with these groups that pay most of their salaries?

Many employers cherish consistent messages to explain fish and wildlife concepts/rules/regulations. Recent graduates bring a variety of outlooks and differences of opinions that at times are counter to an agency's values and culture. Agencies are thus challenged to continually teach consistent themes or incorporate new values into their existing system.

There is a changing philosophy (and background) among undergraduates and graduates coming into the profession. We are seeing those with strong utilitarian philosophies who retire being replaced by those with a more protectionist approach. How do we balance those different philosophies and turn out students prepared to work with both hunters and anglers and the bird and butterfly watchers?

Human dimensions aspects of wildlife conservation are becoming increasingly important, but universities are not devoting any significant effort to preparing graduates for the changing world of increasingly politicized and unfriendly environments.

More and more management (and research) in wildlife and natural resources will be interdisciplinary and collaborative. Recent graduates agree that they are poorly prepared for this type of workplace, and they will often become disillusioned and quit or just do a poor job.

## **Agencies**

There is a growing, public distrust of government that is becoming a real barrier to agency progress. We must work together with existing and new constituents to regain their trust for our agencies. Far too often agency proposals are viewed by many of the publics as something to be against.

The growing trend of "politicizing" our state wildlife agencies must be addressed. These agencies were built in the 1920s through the 1940s to get sound biology and management out of the hands of politicians. State directors were to be hired on their expertise, not their politics. This is rapidly changing, and increasingly governors, state legislators, and other state politicians are getting into the act of making key employment and resource decisions based on politics rather than stewardship.

Many state agencies are primarily dependent on license fees and PR funds for their major funding—20 states receive no funds from their state treasuries and another 22 receive less than 20% of their overall budgets from their state's general fund

or a dedicated tax source. With the percentage of hunters declining, many agencies are experiencing real difficulty. Unless CARA and/or other legislation at both the state and federal level can provide sufficient funding for fish and wildlife conservation, state wildlife management will decline in effectiveness. I think it also is important to remember that while funding has always been identified as a barrier, in reality it is a symptom of larger problems facing wildlife conservation. If most Americans believe that wildlife conservation is necessary to maintaining their quality of life, funding will materialize. We need to reach out to all Americans with a persuasive message that relates wildlife health to their personal quality of life. In other words, we must find ways for all society to support wildlife management and conservation, not just limited segments of society.

Along with the declining percentage of hunters, we are seeing the existing hunter population becoming more and more disenfranchised on several fronts. Increasingly, access to hunting areas is becoming a problem—on both public and private lands; agency regulations are becoming more complex, limited entry draws are increasing for the privilege of hunting some native species, lack of agency commitment to recruiting new hunters, increased influence of animal rights, and so forth. The challenge is for more innovative approaches to working with private landowners and more responsive and user-friendly approaches to serve existing clientele.

### **Action on the Land**

I could spend lots of time on the foreseeable resource challenges we face; some you have heard already this morning and others are fresh in your minds from your own jobs and discussion. But I just want to highlight a couple:

Water shortages—as humans take more and more water for agricultural and municipal purposes, we can expect huge conflicts for fish and wildlife in the future.

Eco-tourism and wildlife viewing will continue to increase. The public wants to experience nature recreation.

Endangered species management must change. We cannot continue to pay the large costs that these species are taking. We must do our work to prevent these species from becoming endangered. We must move beyond individual endangered species to conserving endangered habitats. We must find ways to make endangered species laws work better for landowners. The view by many private landowners of this act is that it could be the most difficult regulatory enemy they face. We have to find ways that private landowners can remain conservationists.

As more people urbanize the landscape and desire fish and wildlife around, there will be an increasing number of direct human-wildlife conflicts. Wildlife damage management will continue to increase in importance as suburban sprawl encroaches into wildlife habitat. But the real issue will be whether or not we are able to effectively manage wildlife damage *and* maintain the status of those offending species as “resources” in the face of changing demographics and shifting public values.

## **Profession**

Within our profession, we are seeing a widening gap between our research scientists and our practicing biologists and managers on the land. This is coming about because much of the “cutting edge” science is now pretty high tech (computer models, many mathematical and statistical approaches, high tech GIS, GPS systems, etc.) Many of our field biologists are not prepared to use this new information effectively. We have to find ways to improve our continuing education programs to keep professionals current. Professional societies and universities must take the lead in getting this done.

Examples of other continuing education needs, identified by wildlife managers, include an array of management-type courses—habitat assessment, riparian habitat management, fire management, deer management, waterfowl management, rangeland management, etc. In addition, nearly all of us need help in the areas of conflict resolution, human dimensions, marketing, interpersonal communication, policy, and public relations.

We have made great strides in developing and applying technology to determine what the landscape needs of many species are for long-term conservation. But how do we implement this new mode of conservation? How can we achieve habitat protection without acquiring or unduly regulating private lands? We will need to train professionals to take landscape-level conservation strategies and apply them to local community planning levels.

There is an opportunity for the wildlife and fisheries professions to work together with other natural resource professions to rebuild public confidence in the scientific knowledge and abilities of natural resource professionals. We cannot do it without credible partners and a strong commitment.

Our profession, which is still young and evolving, has made some tremendous strides in population and habitat restorations for some key species. With responsible management and landowner interest, we can expand on this success. However, for other species we have not yet learned how to manipulate and use a shrinking habitat base to sustain them at viable levels. With sufficient resources and good science it will be possible to turn these situations around for some species, but given the other biological, economic, and social constraints that we must deal with, it is obvious that some species cannot be recovered. To gain public acceptance for this will also take a major educational effort.

In conclusion, we have a tremendous opportunity before us to broaden the base of public support. We live in a political system of government in which the public has a variety of rights and is increasingly exercising the right to be involved in the decision-making process, rather than depending on professionals to decide. There is no question that the strongest and most successful programs are those understood and supported by the public. It is imperative that we determine what values people place on these resources and how as many of these values as possible can be accommodated in our management programs. Budgets and personnel and green lights to go ahead with habitat protection and enhancement programs are not our automatic

inheritance. Without a vigorous, supportive public and political constituency, our programs—just like other public programs—will be dead.

The new millennium presents a tremendous opportunity for us all. Tradition has served us well. But we cannot be constrained by tradition. We must expand out of our traditional box and embrace a broader constituency, but we must not abandon our heritage in the process. We must increase our consciousness to the full variety of ways people enjoy natural resources as a basis for adjusting our management program goals. Innovative approaches to obtaining the needed support must be tried, even though they represent major departures for us in adapting to evolving public interests and needs and being involved in helping to shape those needs. We must remember that we are serving human objectives and that we work for the public. However, we also must remember that there is a line beyond which social issues must not dictate resource decisions. We remain obligated to stand firm in the face of pressures that would significantly degrade resource values. And we must fulfill the role of expert and guide public thinking and decision makers toward conservation programs that are ecologically sound, sustainable, and in the best interests of the majority of the people and wildlife.

I challenge each of you, individually and collectively, to develop a vision for fish and wildlife conservation in the future and develop strategies to achieve that vision. We must participate actively and fully in designing those future wildlife management programs and uses that will provide both the desired public benefits and the long-term protection and sustainability of the resource base. Hopefully, what you have heard this morning will help that process.

These are interesting times, exciting times, critical times. But like white water canoeists and rafters know, the river behind always looks calmer than it was, and the white water ahead looks wilder than it will be. When we find ourselves in the white water getting tossed around a bit, always remember that we can make the fastest progress in the rapids if we have a clear direction to our efforts.