Ensuring the Future of State Wildlife Management: Understanding Challenges for Institutional Change

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Abstract

The social and political dynamics of wildlife management have changed markedly since the emergence of the profession. Today much of the legal responsibility to manage wildlife rests with state agencies. These agencies essentially have institutionalized the discipline, providing the regulatory, normative, and cultural foundation for wildlife management within each state. Pressure for reform of the state wildlife management institution is increasing. These pressures include the need for consistent sources of funding for wildlife management to offset the revenue decline from historically reliable license sales as numbers of hunters and trappers decline; increased interest from nontraditional stakeholders for better access to and involvement in the decision-making process; and demands from society for expansion of services provided (e.g., wildlife damage mitigation, disease control). We believe that state wildlife agencies can play a crucial role in initiating and guiding constructive reforms. We argue that state wildlife agencies can become more effective and valued by society if they are seen as agents of change. State wildlife management agencies, particularly the professionals staffing such agencies, have the opportunity to manage and lead change in a way that benefits the agencies, the public, and wildlife. We identify what we believe are some opportunities for wildlife professionals to become change agents. (WILDLIFE SOCIETY BULLETIN 34(2):531–536; 2006)

Key words
change agents, leadership, reform, state wildlife management institution.

Procedural and administrative reforms of state wildlife management have been identified and are being discussed in the literature of public administration (e.g., Nie 2004), yet, considering the momentous consequences of the situation, little dialogue motivating widespread, proactive effort to manage change has emerged from within our profession.

In our opinion the wildlife profession should seek new opportunities to lead deliberations about the future of state wildlife management. We believe an analysis of factors commonly identified as reasons for the wildlife management profession to change can help guide reform activity.

Background

State wildlife management agencies emerged in the mid-to-late 1800s to address concerns regarding depleted game populations (Trefethen 1961) and to satisfy the needs and interests of rural agrarian communities, hunters, and trappers, the primary groups concerned with wildlife management at the time (Patterson et al. 2003). Because of concerns that commercialization of wildlife (e.g., market hunting) was having negative impacts on many wildlife species, early conservationists lobbied to make wildlife a common good. A primary purpose of the state agency was to manage wildlife for the benefit of all people (i.e., the public trust doctrine). Geist et al. (2001) argued that this trust doctrine was one of the key premises on which the North American Model of Wildlife Conservation was built.

Declining numbers of traditional stakeholders, coupled with an increasingly diverse, interconnected, and suburbanized society has created a need to better understand how state wildlife management agencies, policy-making bodies, and allied organizations are adapting to a changing social context (Peyton 2000). The impacts of some societal changes on the biological components of wildlife management are readily apparent. For example, urban sprawl and human population growth have clear and measurable consequences for wildlife (e.g., reduces or modifies habitat). The impacts of human cognitive (e.g., beliefs, attitudes, and values) changes on wildlife management are more difficult to discern. Although research suggests a shift in values in American society from a materialist (i.e., focused on basic needs, including food, shelter, security) to a postmaterialist (i.e., focused on quality of life, environmental protection, self-expression) orientation (Inglehart 1997), we contend that longitudinal data about American values regarding wildlife are lacking. Manfredo et al. (2003) suggest it is likely that societal values have shifted from predominantly utilitarian to a more protectionist orientation toward wildlife.

Regardless of the status of empirical evidence, numerous indications of a shift in public perception regarding wildlife management are evident: increasing numbers of wildlife-related ballot initiatives and popular referenda (Williamson 1998); growth of wildlife organizations with nonconsumptive orientations (e.g., environmental, humane; Manfredo et al. 2003); and efforts to change the composition of wildlife boards and commissions (e.g., via legislation; Nie 2004). These trends suggest the potential for tensions to exacerbate between society and the traditional state wildlife management system.

Further, as numbers of hunters and trappers, the principal source of support for state wildlife agencies (i.e., via hunting license sales and an excise tax on sporting equipment), continue to decline (Duda et al. 1998), the issue of funding state wildlife management is a growing concern. National campaigns to secure funding for wildlife management from alternative sources (i.e., funds not generated directly or indirectly by hunters or trappers) have been underway for over 25 years (Franklin and Reis 1996). The Teaming with Wildlife (TWW) campaign is an example of a proactive effort to expand conservation and management funding to include nongame wildlife and nontraditional programs (e.g.,
watchable wildlife). In addition, states have experimented with a variety of revenue-generating methods (e.g., tax checkoffs, license plates, proportions of sales tax) for wildlife conservation and management.

We believe that new funding sources are not a panacea, but rather they may present new challenges to traditional wildlife management. In addition to the creation or expansion of programs and subsequent hiring of staff with expertise in these new program areas, agencies relying on new funding sources need to be more accountable to a larger and more diverse constituency that contributes financially to wildlife management (Franklin and Reis 1996). An obvious challenge is overcoming a historical dependency on funds derived from hunting and trapping without alienating these traditional stakeholders. Less obvious, but possibly more difficult, is broadening the culture of the wildlife profession to embrace a more diverse array of stakeholders. It is likely that a transformation among agency staff is already occurring. In a survey of Wildlife Society members, researchers found that members who had been in the wildlife profession less than 5 years were less likely than those who had been in the profession more than 20 years to support consumptive use of wildlife (Organ and Fritzell 2000).

Changing public attitudes and interests also have an impact on university curricula in wildlife programs and subsequently on future agency employees. Organ and Fritzell (2000) found that university curricula and courses have changed to adapt to a new social context over the past 2 decades. For example, courses are now more likely to incorporate conservation biology principles and human dimensions. New wildlife professionals emerging from these universities will be filling the vacancies left by a significant number of retiring senior biologists and managers.

In light of these changes, we are interested in the following question: How are state wildlife management agencies and policy makers adapting to this contextual shift—is the pressure for change being embraced as an opportunity to sustain relevance for society, or is change perceived as a threat to be resisted? Evidence indicates existence of both perspectives among state wildlife agencies and policy makers (Nie 2004). We believe whichever viewpoint prevails will determine the strategy pursued by state agencies, which, in turn, has profound implications for the future of state wildlife management.

In our opinion the wildlife profession needs to embrace the opportunities presented by the pivotal period of change we are experiencing for state wildlife management. Depending on how they approach the situation, wildlife professionals can be impediments to change or key agents of change, directing the future of state wildlife management. Some will flounder. Some will flourish.

Resistance to change is understandable and common among staff in established organizations. But resisting societal pressure for change is futile in the long term and not a strategy for yielding a desirable outcome. We believe that organizational evolution is a natural process that can have beneficial outcomes if managed strategically. Thus, change can be an exciting opportunity for organizational revitalization as well as key to ensuring the future of state wildlife management.

We suggest that institutional theory provides a useful framework for understanding the relationship among society and the individuals and processes that comprise what we label the state wildlife management institution.

State Wildlife Management—An Institutional Perspective

Although the term institution is used inconsistently in the economics, sociology, and political science literatures, some key elements of this concept resonate throughout the 3 disciplines. Institutions shape human action, imposing constraints while also providing opportunities (Scott 2001). Institutions have formal (e.g., rules and laws) and informal (e.g., norms and customs) aspects. Institutions have legitimacy and show stability over time. Institutions are valued in themselves and not simply for their immediate purposes and outputs (DiMaggio and Powell 1991, Lowndes 1996, Scott 2001).

Three primary elements serve as the building blocks of institutions—regulative, normative, and cultural–cognitive elements (Scott 2001). The regulative component involves the rules—formal laws and policies—that shape institutions (e.g., hunting and trapping seasons, bag limits). The normative component includes both values and norms (e.g., the ethics that are the foundation of wildlife conservation, the belief that hunting and trapping are important wildlife management tools). The cultural–cognitive component refers to what people know or their social construction of reality, which is shaped, in large part, by their cultures (e.g., the traditional knowledge among hunters and trappers that is passed on as oral history). Thus, an institution is the enduring formal and informal rules, values, norms, cultural beliefs, and related behavioral patterns that sustain and constrain human activities. Based on this understanding of institutions, the state wildlife management institution can be thought of broadly as the people, processes, and rules as well as the norms, values, and behaviors associated with state wildlife management. The degree to which an institution is considered legitimate to society depends on its consonance with societal laws, norms, and cultures (Scott 2001). Legitimacy refers to the extent to which institutions are connected to a broad normative and cultural framework, and it is necessary for institutions to survive in the long term.

Organizations.—Many scholars distinguish institutions from organizations but recognize the relationship between the two (Scott 2001). In most cases organizations emerge from and operate within institutional environments. Organizations breathe life into regulative, normative, and cultural–cognitive elements of institutions. North (1993) suggests that “if institutions are the rules of the game, organizations are the players.”

Organizations are “goal-directed, boundary-maintaining, and socially constructed systems of human activity” (Aldrich 1999). Examples of organizations are individual firms, interest groups, government agencies, and policy-making bodies. An organizational field is the collectivity of organizations that share a common understanding of meaning and whose actors freely interact. Although organizational fields vary somewhat by state, isomorphism at the organization and field levels is common within institutions (Milstein et al. 2002). In general, the organizational field for each state is comprised of some of the following: state wildlife agencies, hunting, trapping, and other interest groups, and policy makers. For the purposes of this paper, we refer generally to
the organizational field as the collectivity of all state wildlife management organizational fields. Organizations not typically part of the organizational field are those that do not share cultural–cognitive or normative beliefs with organizations in the field.

Institutional logics are the system of beliefs and processes that define an organizational field (Scott 2001). Institutional logics also are referred to as dominant paradigms (Brown and Harris 2000). The institutional logics embedded in state wildlife management organizational fields largely reflect those of the early conservationists. For example, a belief in hunting as a management tool is an example of an institutional logic that is understood and interpreted consistently, has penetrated deeply into the organizational culture, and is consistent—or is not antithetical—to the beliefs of society (e.g., in general, society does not oppose hunting). The consumptive viewpoint has been one of the dominant institutional logics of the wildlife management institution, and the terms management and hunting (or trapping) are often used interchangeably. Reiger (1975, p. 111) illustrates the prevalence of the consumptive logic within the wildlife management organizational field when he describes a perceived threat from those who have animal protection values:

“On the one side is a large group of self-styled ‘animal lovers’ who claim that the killing of wildlife is wrong and must be stopped. Against them is pitted the so-called ‘sportsman’ (and ‘sportswoman’), whose ranks include many of the 21 million hunters and their allies: biologists, wildlife-management experts, and conservation-department personnel at both state and federal levels.”

Antihunting viewpoints in this example conflict with the dominant institutional logics, so they are likely excluded from consideration by the organizational field (Gill 2004). According to institutional theorists, organizations are more receptive and responsive to those who are aligned with dominant institutional logics. For instance, most consumptive-use groups, state agencies, and policy makers have common institutional logics, so consumptive-oriented groups are likely to receive greater consideration regarding wildlife policy decisions. Individuals and groups who do not share these logics are purported to have less influence in wildlife decision making (Nie 2004).

The governance structures of organizational fields are arrangements by which power and authority are exercised. Such structures involve formal and informal components of decision-making processes (Scott et al. 2000). These processes perpetuate the dominant institutional logics and highlight differences between those who share these logics and those who do not. For state wildlife management organizational fields, the governance structure might include all components of decision making, including the legislative and wildlife commission or board processes, the statutory requirements for the makeup of regulative bodies (e.g., some states require that a specific number of commission members represent specific interests, are from a certain district, or are from a specified state agency), and informal networking.

Changes in the social context within which wildlife is managed or governed has and will continue to drive reform of the state wildlife management institution. In the next section, we draw from organizational theory to understand how change might occur in the context of the state wildlife management institution. The TWW effort is used as an example of how a diverse coalition of enterprising organizations has begun to transform the state wildlife management institution (Bies 2005).

**Dynamics of Organizational Transformation**

Small-scale change occurs frequently within organizations, but organizational reform or transformation is less common. Aldrich (1999) defines organizational transformation as a major change that occurs along 3 possible dimensions: goals, boundaries, and activities. According to Aldrich (1999), organizational research has identified 2 primary elements of goal transformations: 1) changes in the breadth of organizational goals, particularly evolution from specialization to generalization and 2) changes in the domain served by an organization. These elements often are correlated.

Organizational transformation can involve the expansion or contraction of boundaries as well. Organizational boundaries are delineated by membership, both of individuals and organizations (Aldrich 1999). Corporate examples of expansion and contraction are mergers and downsizing, respectively.

The third dimension of transformation includes changes in activities that have a significant effect on organizational knowledge (Aldrich 1999). Transformation in activity systems might involve innovations due to the introduction of new technologies or management systems, as well as changes in the availability of resources.

**Organizational Transformation: TWW Example**

The TWW effort, initiated by a coalition that today comprises over 3,000 groups, began in 1996 to augment and extend to all wildlife the funding previously allocated to game species conservation and management (Franklin and Reis 1996). The original intent was to broaden the excise tax imposed by the 1937 Pittman–Robertson Wildlife Restoration Act and the 1950 Dingell-Johnson Sport Fish Restoration Act to include additional outdoor recreational products, such as binoculars and camping gear. Although this specific outcome was not achieved, the TWW coalition was successful at gaining $50 million in funding for conservation via State Wildlife Grants (SWG) in the 2001 Interior Appropriations Act (Franklin et al. 2003). In 2002, 2003, and 2004, SWG appropriations were $85, $65, and $70 million, respectively. These grants are allocated to states and territories using a formula based on the state’s size and population. Tribes are also eligible for a portion of SWG money. The federal government cost-shares these grants with the states and requires a 25% match for planning and a 50% match for implementation projects.

The TWW effort is a prime example of how entrepreneurs within the state wildlife management organizational field recognized the need to ensure adequate funding for a diversity of wildlife species and built a coalition to transform the institution by expanding 1) the breadth of its goals and domain to include all species of wildlife, particularly nongame and threatened species that were not specifically covered by the Pittman-Robertson or Dingell-Johnson acts; 2) the boundaries of its membership by including a wider diversity of stakeholders; and 3) the activities...
undertaken by state wildlife management agencies. By including partners with consumptive and nonconsumptive interests in the effort to find an alternative funding source for wildlife management, TWW represents an expansion of the organizational field to accomplish a goal valued by diverse stakeholders interested in wildlife conservation.

The changes occurring in state wildlife management due to the availability of nontraditional funding sources such as SWG have and likely will continue to result in changes in state agency staffs and programs (Organ and Fritzell 2000). For example, a requirement of receiving SWG money is that each state must produce a Comprehensive Wildlife Conservation Strategy (CWCS), including an extensive public involvement component. The purpose of the CWCS is to develop a plan to conserve all wildlife within a state, with a particular focus on “species in greatest need of conservation” (Burke et al. 2004). Comprehensive Wildlife Conservation Strategies will set new directions in many state wildlife agencies that likely include program and staff changes. Further, Burke et al. (2004, p. 576) note that the CWCS offers, “a significant opportunity for the state wildlife agencies to provide effective and visionary leadership in conservation. Engaging a diverse array of stakeholders to identify actions that will address wildlife needs and threats across the landscape, and developing plans to monitor and adapt the actions to ensure results, take us toward a holistic, nationwide approach to all-species conservation.”

It is too soon to know the long-term effects of the SWG program on the state wildlife management institution, but it is certain that the TWW effort was instrumental in initiating a transformation that will help shape the future of state wildlife management.

**Future Transformation**

The availability of alternative funding sources with new expectations for their use will drive transformation in goals, boundaries, and activities of the organizations involved in state wildlife management and the state wildlife management institution itself. What this change means for the existing institutional logics and governance structures should be of interest to our profession. Will the dominant logics of the state wildlife management institution facilitate or impede transformation? Do our governance structures need to be evaluated to ensure that they are appropriate to address the complexities of wildlife policy in contemporary society? An increasing number of challenges to wildlife policy suggest that the governance structures and institutional logics of the state wildlife management institution are topics in need of discussion and debate with respect to whether changes might benefit the institution.

Some observers (e.g., Loker et al. 1994, Beck 1998, Nie 2004) have noted that wildlife management, specifically the board or commission system, appears to be “captured” by consumptive interest groups. The relationship between bureaucrats, policy makers, and interest groups has been referred to as an iron triangle (Kingdon 1984, Clark 1996) because it is thought to be an enduring network of like-minded interests impenetrable by outsiders. Gill (2004) notes that the iron triangle relationship between resource management agencies, traditional commodity users, and policy makers “limits access to resource management decision processes to those outside the triangles and creates still more social tension and conflict.” Although the iron triangle concept may be an overly simplistic analogy to describe the complexities of contemporary state wildlife management, wildlife board and commission processes used in many states have been identified in the literature as a governance structure in need of reform (Beck 1998, Gill 2004). Similarly, institutional culture or logics of the organizational field are considered exclusionary by some individuals and groups (Beck 1998, Pacelle 1998, Butler et al. 2003, Nie 2004). Stakeholders who feel disenfranchised will continue to seek a stronger voice in wildlife decision making. If transformation of the state wildlife management institution is needed, what might that transformation look like? Management and conservation goals and objectives of the state agency might be modified to better reflect the interests of contemporary society. In addition, the organizational field may expand its boundaries, more actively including or recruiting nontraditional stakeholders. To address concerns about exclusivity in decision-making bodies, the organizational field might support, for example, greater diversity of interest on boards and commissions. Waage (2003) notes that structural obstacles such as board or commission processes can be barriers to change in the distribution of resources.

Transformation of the governance structures of the state wildlife management institution should not diminish the importance of traditional stakeholders and their essential role in wildlife management. In fact, the future of state wildlife management depends in large part on a continued involvement of hunters and trappers. However, we believe that the boundaries delineated by the existing organizational fields can be expanded to include nontraditional stakeholders more effectively. Although such an expansion might at first increase the potential for conflict as a diversity of values and beliefs are brought into the policy debate, it may also increase the opportunity for constructive dialogue, leading to understanding of a variety of perspectives and the potential for win-win outcomes. This is not the case when decision-making occurs via ballot initiatives and lawsuits, for which the only outcomes are win–lose.

**Concluding Remarks**

Patterson et al. (2003) contend that the wildlife management institution emerged in a social context that has changed over time. The institution, agencies and policies, they argue, must evolve as well. According to institutional theory, if institutions are not able to connect to broad societal norms and values, it is likely that their legitimacy will be questioned by society, and their long-term viability will be uncertain. This is particularly true for institutions and organizations whose focus is management of public resources (Scott 2001). Organizations face strong internal and external pressures to resist change because organizational transformation involves the breakdown of traditional structures and beliefs that have become institutionalized over decades and the unlearning of what has been ingrained over the organization’s history” (Hoffman 2001). Subsequently, resistance is a common organizational response to institutional pressures for change. The degree of
resistance to change within the state wildlife management institution has not been measured, but evidence suggests its existence.

Fifteen years ago, Heberlein (1991) described a changing social environment (e.g., lack of public support for recreational hunting, animal rights, and welfare philosophies becoming mainstream) that had significant implications for the future of hunting and traditional wildlife management. Building on Heberlein’s contentions, Peyton (2000) asked, “How will the historic partnership between hunting (and trapping) and wildlife management fare in the face of irrefutable social change?” These observers and others (Beck 1998, Patterson et al. 2003, Gill 2004), both within and outside the traditional wildlife management organizational field, have called for reform of the wildlife management institution to better reflect the values, norms, and cultural beliefs of contemporary society. Traditional stakeholders need to understand the reasons for and benefits of change so that transformation will be met by them with acceptance and not resistance. Although this may be a daunting task, the TWW effort is an example of traditional and nontraditional interests working together to help ensure the future of state wildlife management.

Policy makers are powerful influences on agencies, but they are ephemeral. State agency staff, on the other hand, are career professionals who are in a position to pursue a strategy of resistance or strategic change for their agency’s future. If state wildlife organizations are to be proactive at addressing and benefiting from institutional transformation, the wildlife professionals who populate those organizations will need to supply the necessary leadership toward that end. Styhre (2002) contends that “organizational change is possible to plan, control and manage like any other organizational process.” Although enlightened change may not occur at the level of political interests with a stake in maintaining the status quo, we believe that reform has and will continue to emerge from the ranks of the professional staff of wildlife management agencies. These are the individuals who will be most affected by and aware of the growing gap between the state wildlife management institution and the norms, values, and cultural beliefs of society, whose wildlife resource they manage in trust.

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