Mirror, Mirror, on the Wall: Reflections from a Non-hunter

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### Preface

In the fairy tale Snow White, the princess's stepmother, the Queen, was very beautiful but very vain. She had supernatural powers, and everyday asked her magic mirror, "Mirror, Mirror, on the wall, who's the fairest of us all?" to which the Magic Mirror replied, "Tis you." However, on the day that Princess Snow White turned seven years old, the Magic Mirror replied "Queen, you are full fair, 'tis true, But Snow White is fairer than you." The Queen was furious and ordered a huntsman to take Snow White into the woods and kill her, bringing back her heart as proof.

Lest we get hung up on this metaphor, we want to make one point: the huntsman was an ethical one, and spared Snow White!

We find this tale a useful metaphor for offering our observations on the relevance of hunting in the 21<sup>st</sup> century. Because we all know from personal experience, how one sees himself in the reflection most likely is very different than what another sees. And, we hope for a much less spiteful reaction than the Queen had!

# Introduction

According to the U.S. Fish and Wildlife Service and U.S. Census Bureau (2007), annual participation in hunting appears to have declined since 1975 (Figure 1). There has been much attention given to the declining participation in hunting—so much attention, that thus become a major strategic issue for most state wildlife agencies and has led to a plethora of recruitment and retention efforts. But recruitment and retention efforts will not compel the vast majority of citizens—non-hunters—to engage in hunting. What state wildlife agencies seem to keep missing is that most non-hunters already care deeply about their wildlife. In Idaho, for example, 91% of adult Idahoans said wildlife issues were important to them (McMullin 2003) yet only 11% hunted in 2006 (U.S. Fish and Wildlife Service 2007). Although there is much discussion within and among state wildlife agencies about broadening constituencies, our concern is that the attention on recruitment and retention may confuse the message and inadvertently repel the non-hunting citizenry.

In discussing hunter recruitment and retention, we believe it essential to revisit the North American Model of Wildlife Conservation (the Model) – to understand its origins, successes, and limitations and to then adapt the Model for wildlife conservation in 21<sup>st</sup> century society. We are concerned that dwelling on the past short-circuits the deeper meaning and value of the Model and keeps us from moving forward. We want to bolster efforts to move forward by offering reflections not necessarily as affirmation but as information. First, we describe four different images of the Model in the mirror. Second, we more deeply describe "declining participation" within four different contexts that we think can improve recruitment and retention efforts. Third, we present different perspectives on why recruitment and retention may actually be diverting attention from engaging the larger citizenry and thus broadening wildlife conservation. Finally, we suggest that reaffirming the "old" Model within the context of recruitment and retention may be undermining the Public Trust Doctrine and the relevance of state wildlife agencies in the 21<sup>st</sup> century.

## **Expanding the Conversation**

In the past few years, there has been a noticeable effort to publicize the Model and educate people about its successes. Concurrently, we have read many newspaper and magazine articles and watched television news and outdoors programs highlighting the decline in hunting. The two outreach efforts clearly are related, and we find it refreshing and exciting to watch our profession organize around a campaign. But, we also feel something is amiss: although the messages about the Model and declining participation in hunting are being broadcast, we suspect the messages do not resonate with the vast majority, and growing number, of citizens – the non-hunters (Figure 2). As with most stories, there usually is "more to it than meets the eye" and there usually is more than one side. To deepen the conversation about the Model and learn from its successes and failures, we present four reflections from the Magic Mirror.

## Four Reflections of the Model

The Handsome Prince. The Model is rightly touted as a success in resource management, both in terms of providing abundant game and drastically changing who had access to it. Without question, the Model has been very successful in recovering decimated populations of game animals, initiating habitat conservation efforts, and providing a harvestable surplus for hunters. Dikewise, ownership of wildlife successfully was taken from nobody and given to everybody, with management authority provided through a democratic government.

The Myopic Ogre. Wildlife management has been practiced using a mechanistic and agrarian approach to provide an optimal yield of game for hunting. Ecological outcomes of this have included persecution, reduction, and extirpation of predators; introduction of non-native and invasive species; habitat damage from an overabundance of herbivores; artificial propagation of game animals; and several others. Socio-economic outcomes have included disenfranchised stakeholders such as non-hunters, landowners, and environmentalists; an iron triangle of state wildlife agencies, commissions, and hunters; self-limiting revenue streams to state wildlife agencies; and fragmented and polarized bio-politics and management. The False Hero. The Model matured as wildlife managers increasingly used science as the foundation for management. However, wildlife managers and researchers have used the scientific method to disassemble ecosystems and manage species-by-species. This mechanistic approach initially provided the understanding of basic life histories and ecology but neglected to consider the ecosystem as more than the sum of its parts. As a result, single species of game have been managed for optimum yield for hunters even when it has conflicted with the existence, sustainability, and conservation of other species and ecosystems as well as social values other than hunting (Botkin 1990).

The Bourgeois. The Model denounces commercial hunting, so by definition hunting became a "recreational" pursuit. Today, hunting is "recreation" in a social and economic sense (although not necessarily in a personal sense) and it arguably has become an expensive one at that. In 2006, a hunter in the U.S. spent an average of \$1,814 on hunting -3.2% of which (\$59) was for licenses, tags, and permits. The costs associated with participating not only are related to equipment, travel, fuel, etc. – but also include those associated with spending time in leisure and not working. A clear relationship exists between household income and hunting participation (Leonard 2007). Between 1990 and 2005, hunting initiation rates of children noticeably dropped in households with incomes of < \$40,000 whereas there was virtually no decline at all for children in households with incomes of  $\ge$ \$40,000 or more. Hunting retention rates declined sharply among households with incomes < \$40,000 while there was virtually no decline in retention among individuals from households with  $\ge$  \$100,000 or more. To put this in perspective, the median household income in Idaho is about \$42,865 (the national is about \$48,500) (U.S. Census Bureau 2008). That means that close to half of the households in Idaho fall below the \$40,000 threshold, for which the costs associated with hunting may be a significant factor in deciding whether or not they will participate.

These four reflections hopefully will help state wildlife agencies to adapt the Model so it resonates with the majority of citizens who do not hunt. We don't want the Handsome Prince to neglect

the vast majority of citizens, fail to garner their financial and political support, and fail to address more insidious threats to wildlife conservation such as increasing housing development (Figure 3) and nature-deficit disorder (Louv 2005). We don't want the Myopic Ogre to ostracize and exclude non-hunters as it argues for its own self interest. We don't want the False Hero to use science only as a tool to collect raw knowledge rather than a tool to form policy and management that addresses the 21<sup>st</sup> century threats to wildlife conservation (i.e., adaptive management). And, we don't want the Bourgeois to make wildlife conservation a members-only club and price the working class out of it.

# The Four Contexts of Declining Participation

Similar to our reflections on the Model, we think reflections of "declining participation" in the Magic Mirror would deepen the conversation, provide greater clarity, and help create more tailored and more durable solutions. We suggest that "declining participation" be described within four different contexts: 1) agency revenue, 2) wildlife management, 3) hunting legacy, and 4) political support. Agency Revenue. License revenues are the mainstay of most state wildlife agencies' annual budgets. For example, the Idaho Department of Fish and Game's (IDFG) license tevenue in FY2007 was \$33,859,277, accounting for 49.8% of the agency's direct receipts (Division of Financial Management 2007). Thus, state wildlife agencies most likely see "declining participation" in terms of revenue. Wildlife Management. Hunting is a management tool for reducing agricultural depredations, predation on livestock and game, habitat degradation, and urban wildlife problems. There is concern that wildlife management will get more difficult as game populations increase and hunters decrease (Barker 2007, Enck et al. 2000).

Hunting Legacy. Whether one calls it subsistence, recreation, or their passion – hunting has been a part of human culture since the beginning. Many hunters and state wildlife agencies are concerned about the right and access to hunting being chipped away. Some actually worry that hunting altogether could be outlawed.

Political Support. By this, we simply mean the degree to which citizens trust and support its state wildlife agency. State wildlife agencies are increasingly assessing the public's approval or satisfaction or support of the agency. Despite the scientific assessments, "support" often is still described in terms of license sales.

Recruitment and retention is only one of many possible alternatives within each of the revenue, wildlife management, hunting legacy, and political support contexts (Vigure 4). And, not only is increasing hunters just one of many possibilities, but also consideration must be given where it might directly conflict with other alternatives. For example, allowing technologies that improve harvest odds conflicts with the idea of restricting technologies under hunting legacy. Likewise, simplifying hunter education as a recruitment tactic (not shown in Figure 4) probably conflicts with alternatives under the contexts of hunting legacy and political support.

# Reassessing Recruitment and Retention

We think that some degree of recruiting citizens into hunting is good business. However, we also feel that it has become misdirected and overemphasized. As a result, recruitment and retention efforts may be ineffective and may be distracting state wildlife agencies from engaging non-hunters and broadening wildlife conservation. Below, we give several reasons why we think state wildlife agencies should modulate recruitment and retention efforts.

First, recruitment efforts cannot address many of the main barriers to hunting by youth. For example, in a 2001 analysis of IDFG's license database, McArthur (T. J. McArthur, personal communication 2001) discovered that only 57% of hunter education graduates in Idaho bought hunting licenses their first year after graduating and that the percentage of graduates buying licenses appeared to decline each year after receiving their certification. Subsequently, McArthur and Beucler (T. J. McArthur and M. Beucler, unpublished data 2001) interviewed hunter education graduates who had not purchased a hunting license and their parents. Eighty-three youth and 82 parents completed the

questionnaire/interview. Both youth and parents gave a broad array of reasons for not getting a hunting license and going hunting and most respondents gave more than one reason (Figure 5a). The two most common reasons given by youth for not getting their hunting license and going hunting were that they did not want to hunt and that they were busy with other activities. Parents most frequently cited that their child was not ready to hunt and that they themselves (the parents) did not hunt. Several parents and youth said that lack of opportunity and lack of time were reasons they did not go hunting. When asked what IDFG could do to help make it easier or more likely to go hunting, by far the most common response – from both children and parents – was that there was nothing IDFG could do (Figure 5b). Reducing costs was a distant second-most common suggestion by both graduates and their parents. Several youth and parents suggested specific modifications in season structures. And, there were several references to existing seasons and structures as being intimidating to children.

Second, recruitment and retention efforts treat symptoms but neglect the causes, or even worse, foster denial of the need to adapt! For instance, wildlife values are shifting away from wildlife use/utilitarian towards wildlife protection/mutualism (Teel et al. 2005, Teel et al. 2003). These shifts are due to large social forces, such as urbanization, industrialization, and growing economies (Manfredo et al. 2003), forces over which no government agency has control. State wildlife agencies must accept that values are changing and adapt to them rather than fight against them. Indeed, we continue to hear colleagues say that we (i.e., state wildlife agencies) need to "change people's values"!

Third, is it even appropriate for a government agency to advertise, market, and/or recruit particularly when it focuses on such a narrow segment of the citizenty? For example, in an evaluation of IDFG's Take Me Fishing<sup>TM</sup> in Idaho program Fedler (2007) conducted a mail survey to determine the effectiveness of "advertising" (print, radio, television) and direct mail campaigns. Based on the results, he noted that respondents apparently do not consider direct mail postcards sent by IDFG as "advertising". This raised some intriguing questions for us: Should government agencies "advertise," or is it more appropriate to remind, or simply just be available? Does "advertising" a license – required formal permission from the legal authority – to hunt or fish even make sense? In terms of marketing, several state wildlife agencies have purchased professional marketing software to focus recruitment and retention efforts. Although the sophistication is exciting and impressive it hovers around the fine line between being smart about how we provide opportunities to cifizens who want to participate and venturing too far into a capitalist approach/of managing a public resource. Finally, in terms of actively recruiting hunters, there are data to suggest not all citizens think that's the role of state wildlife agencies. For example, Gigliotti (2006) noted that although 54% of Idaho residents supported the statement "IDFG should encourage more young people to hunt and fish," one in five (19%) opposed the statement. When the data were analyzed based on attitudinal models, traditional agency stakeholders (hunters) were more supportive of recruiting than were the non-traditional stakeholders (non-hunters).

Fourth, we are concerned that the industry foundations that promote and often fund recruitment efforts are setting the priority for state wildlife agencies. These foundations are excellent partners with state wildlife agencies, and by no means are we suggesting these partnerships end. What we are suggesting is that state wildlife agencies must be very cognizant about setting priorities based on more than just having available funding. Rather, state wildlife agencies should first set priorities and then seek funding to address those priorities.

Fifth, "God forbid 20% of the public decides to hunt!" (S. Mahoney, conference presentation 2005). Twenty-five years ago, IDFG staff was concerned about having too many hunters (T. T. Trent, personal communication 2007). Now, staff is concerned about having too few despite the fact that there are more hunters now than 25 years ago! There is a social carrying capacity of hunters (as well as a biological carrying capacity) that needs to be researched and considered in setting goals for recruitment and retention programs.

Restoring the Public Trust

We have indicated that recruitment and retention efforts, no matter how large or sophisticated, will fail to engage the non-hunting citizenry to the extent needed for addressing contemporary wildlife conservation issues. Worse yet, we wonder if recruitment and retention efforts actually are causing state wildlife agencies to fall further out of phase with non-hunting citizens, further alienating themselves from the vast majority of citizens, and inadvertently undermining the Public Trust Doctrine. How can state wildlife agencies connect with and engage non-hunters? How can the Model be adapted to broaden wildlife conservation beyond creating a harvestable surplus for hunting?

## Adopt a Citizen-Based Business Model

The Model is a governance model; it is not a business model. At various points in time, the mechanisms to pay for wildlife management have evolved. The primary mechanisms, as we all know, essentially are user-fees: hunters pay directly through purchasing licenses and indirectly through paying excise taxes on hunting equipment. Through time, the state wildlife agency-hunter relationship morphed into a business-customer relationship and is, to a great extent, why the Model has been and remains a Handsome Prince. But, look again, and we also see the image of the Myopic Ogre: a customer-based approach of managing a public resource to the exclusion of the significant majority of citizens (again, Figure 2).

The customer stance is very different than the citizen stance. The customer says, "It's my money; I paid for it; serve me" whereas the citizen stance is a much more complicated dialogue of give-and-take (Klein 2004). Thus, state wildlife agencies (the business) have become very good at tailoring experiences for hunters (customers), and game animals and hunting experiences have become a sort of Bourgeois commodity that is being produced, sold, and purchased. And somewhere along the way the agency/commission/hunter iron triangle decided that license revenues will be used primarily for managing game species, further fostering the notion that wildlife is "owned" by those who purchase hunting licenses. So, it becomes this vortex of hunters pay  $\rightarrow$  hunters benefit  $\rightarrow$  hunters pay  $\rightarrow$  hunters benefit  $\rightarrow$  ad infinitum. This undermines the Public Trust Doctrine, and leaves no room for breaking out to engage the non-hunting citizenry and broader wildlife conservation!

State wildlife agencies have taken the customer stance to heart in large part because hunting has been a significant part of state wildlife agencies' organizational culture. For example, although the culture within IDFG has shifted over the years, we continue to observe both IDFG staff and the public interpret IDFG's legal mission (Idaho Code Section 36-103) in two divergent ways. One interpretation lends itself more towards the citizen stance: 'All wildlife, including all wild animals, wild birds, and fish, within the state of Idaho, is hereby declared to be the property of the state of Idaho. It shall be preserved, protected, perpetuated, and managed. It shall only be captured or taken at such times or places, under such conditions, or by such means, or in such manner, as will preserve, protect, and perpetuate such wildlife, and provide for the citizens of this state, and, as by law permitted to others, continued supplies of such wildlife for hunting, fishing, and trapping."

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In the long-run, we think having a customer-based business model is the Achilles Heel of the Model as it is now being used – not only is a small minority paying for managing the public's wildlife, but also a large and increasing majority is becoming ever more disenfranchised. We suggest an evolution of the Model and its seven tenets to fully embrace the Public Trust Doctrine, to encompass the 21<sup>st</sup> century conservation challenges, and to expand recruitment and retention beyond hunting and into broader outdoor experiences (Table 1).

State fish and wildlife agencies have focused on marketing techniques for recruiting and retaining traditional customers. Marketing analyses are conducted to create homogenous groups for which advertising and sales can be targeted. Swire (2004) calls this "narrowcasting," where people are pigeon-holed into smaller and smaller groups. We think hunters and hunting have been subjected to narrowcasting: big game hunter, waterfowl hunter, upland game hunter, trophy hunter, youth hunter, senior hunter, pheasant hunter, elk hunter, mule deer hunter, slob hunter, subsistence hunter, meat hunter, varmint hunter, hound hunter, motorized hunter, wilderness hunter, outfitted and guided hunter, etc. As we earlier indicated with recruitment and retention, we feel uncomfortable about some marketing practices and think they may be inappropriate for governments. As Swire (2004) noted, marketing is "...using hard data to pigeonhole consumers...but the hope is that real customers out there, real people out there, won't really know how they're being pigeonholed." The upside of marketing is that customers more specifically get what they want. The downside, however, is that aside from being manipulative, it breaks down solidarity. The lack of solidarity in the hunting community alone has been evident, let alone the non-hunting citizenry who also cares about wildlife!

The Many Faces of 'Hunter'

We think one of the biggest mistakes state wildlife agencies make is defining 'hunters' and 'hunting' as purchasing a license and harvesting an animal. This administrative definition is narrow, selflimiting, and exclusionary. First, we know that many hunters don't hunt every year yet we continue to observe license sales being used as indicators of participation. Certainly, a relationship exists but using annual license sales and annual participation underestimates the actual number of hunters (U.S. Fish and Wildlife Service and U.S. Census Bureau 2007, Enck et al. 2000). Second, Enck et al. (2000) noted that the best indicator of whether or not somebody is a hunter is their own recognition as one. In the IDFG study of hunter education graduates, a slight majority of the youth already considered themselves "hunters" whether or not they have had their own hunting license, and hunting appeared to be "on the radar screen" for most of the families that were contacted (T.J. McArthur and M. Beucler, unpublished data 2001). Third, because non-hunters don't buy licenses they frequently are viewed as freeloaders by those within the agency/commission/hunter iron triangle. Not only is it not their fault that only a customer-based model exists in most states, but also many non-hunters want to and do contribute to wildlife conservation either directly to state wildlife agencies (e.g., tax check offs, wildlife license plates) or to non-governmental organizations that provide viable alternatives to protecting species, habitats, and ecosystems they care about.

Therefore, we suggest the definition of both 'hunter' and 'hunting' be expanded to include what

Therefore, we suggest the definition of both 'hunter' and 'hunting' be expanded to include what Stedman et al. (1993) called "hunter associates." The term 'hunting' needs to represent all of the roles involved in the experience regardless of who has the hunting license. This could include people doing pre-season scouting, caring for and training hunting dogs, understanding the biology and habits of the prey, flushing and retrieving, killing the animal, field-dressing, processing the meat, cooking and eating the meat, processing hides, using bones and feathers for art, and even holding down the fort while the 'hunters' are out hunting. By broadening what is called the experience of hunting, the face of the hunter expands from the typical guy in camouflage with his bagged animal to a spectrum of ages, gender, and ethnicities that are scouting, training, cooking, eating, or making art (Figure 6). We think this would be a powerful move towards engaging the non-hunting majority of citizens in wildlife conservation within the existing context of hunting. We truly believe that if they can get beyond the narrow context of hunting, state wildlife agencies could be the champions of addressing nature-deficit disorder (Louv 2005) – which we guess resonates with the significant majority of citizens, hunters and non-hunters alike. Thus, the broader citizenry would have a compelling reason to engage with their state wildlife agency, and perhaps actively promote the adoption of a citizen-based business model.

### Conclusion

We believe hunting will remain an important thread of the North American tapestry regardless of how many people participate. However, state wildlife agencies have focused too much on a small minority of the citizenry (hunters) to the exclusion of a growing majority (non-hunters). Despite all of its successes in the past, the Model needs to be adapted for successful wildlife conservation in the 21<sup>st</sup> century. As a way to move towards engaging the larger citizenry in wildlife conservation, we suggest that state wildlife agencies discuss "declining participation" in hunting within the contexts of agency revenue, wildlife management, hunting legacy, and political support. Doing so can help modulate recruitment and retention efforts within state agencies while providing an environment more conducive to a citizen-based business model. And, by expanding the definition of hunters and hunting beyond purchasing a license and harvesting an animal, we believe agencies can begin to resonate with the vast majority of citizens – the non-hunters – who care deeply about their wildlife.

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