

Cougar

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Frontispiece: "Lapping water from an ice-encrusted stream" (photo by Maurice Hornocker); "The Lion" (Poem by Virginia Bennett from *In the Company of Horses*).

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Chapter 14 People, Politics, and Cougar Management

David J. Mattson and Susan G. Clark

COUGAR (*Puma concolor*) MANAGEMENT PIVOTS upon two questions: “How will animals be used?” and “Who gets to decide?” At present, it is conflict-laden and controversial as people vie for influence in answering these two questions (e.g., Bates 1988; Mansfield and Weaver 1988; Rieck 1988, Baron 2004; Love 2005; Perry and DeVos 2005). Management can be understood as an ongoing process of people making decisions—not about cougar ecology, predation, or prey populations, but about our own actions. The questions multiply. Should we limit our killing of cougars? How should we go about setting goals? Who should be involved in deciding, and when, and how? In short, decision making in management is about who will be empowered, who will receive material benefits, and whose losses will be minimized. Another word for this is, of course, politics.

The processes we create for making decisions determine how we interact with one another and whether we serve the special interests of a few or the common interests of many. By most indications, participants in cougar management are having difficulty sorting through special interests to find, secure, and sustain common interests. In broadest terms, the widespread corrosive politics in cougar management today can be understood as a result of colliding participant demands and public processes insufficient to resolve differences democratically and fairly.

This observation forces us to look at our institutions of wildlife management and how they operate. Unresolved conflict in cougar management is evidence that the decision-making processes are not functioning as well as they might in the common interest (see Brunner 2002). In this chapter,

we describe the present participants in cougar management, describe and explain how the institutional and decision-making system functions, and review options for moving cougar management forward democratically and in the common interest. These are human-centered dynamics. We focus on people, not cougars, and on how we engage with one another over cougars, thus leaving matters such as cougar population trends to other authors of this book.

Learning about People and Decision Making

We took an interdisciplinary approach in examining people, decision making, and institutions. The humanities and social sciences are little used in wildlife management; the integrative policy sciences even less. Yet these human-focused sciences offer the best prospects for understanding current conflict so as to help build and sustain durable institutions of cougar management to undergird durable cougar conservation. We used the policy sciences as our primary integrating tool. The policy sciences employ a set of propositions, concepts, and analytic categories, using multiple methods, to clarify *context* as a practical means of solving problems (Lasswell 1971; Clark 2002). We organized our chapter around the concepts of “good governance” and “common interest,” which have been described in practical terms by McDougal and colleagues (1980, 1981).

We define successful cougar management as enduring public support for sustainable cougar populations and the habitat they need. Enduring support depends, in turn, on good governance that serves common, over special, interests.

The core challenge in our democratic society is to allow citizens freedom to pursue their own interests but with respect for rights of others (Dahl 1982; Shils 1997). Balancing of egoism (self-interest) and altruism (shared interest) depends on institutions that help citizens internalize democratic norms and show “democratic character” (Lasswell 1951). There is no single public or common interest (Ascher 2004), but interests qualifying as common fall within a range that arises from active involvement of everyone with a stake, that are supported by virtually all people who make nonexclusionary claims, that are evidence based, and that produce the desired outcomes (Brunner 2002). Common interests tend to coalesce around ideas about social and decision processes, including fairness, inclusiveness, transparency, civility, factuality, respectfulness, practicality, and amelioration (Lasswell 1971; Clark 2002; Mattson et al. 2006). By these standards, any official decision-making process that breeds conflict, incivility, and disrespect through clear service of a special interest does not qualify as good governance.

Our examination of cougar management included characteristics of participants. We identified generic participant groups from technical literature, management plans, online Web page searches, newspaper and popular journal articles, discussions, and our own observations. For each group we gathered information on perspectives (identities, nature-views, beliefs, and prioritized values), material and symbolic stakes, situations or arenas typifying interactions, characteristic strategies (including knowledge claims), and demands (Lasswell 1971). We employed the well-known “nature-views” system of Kellert (1985, 1989, 1996) and

two well-established classifications of values (Lasswell and Kaplan 1950; Schwartz 1994). Nature-views are shared narratives about what relations between people and nature are and should be (Table 14.1). We found the earliest version of Kellert’s evolving schematic (e.g., Kellert 1989) to be most descriptive of views expressed in cougar management, ranging from the negativistic, dominionistic, and utilitarian at one extreme to the humanistic and moralistic at the other. Naturalistic and ecologicistic/scientific views fell nearer the midrange. Schwartz’s (1994) value schematic is rooted in psychodynamics, grouping values under self-transcendence (universalism, benevolence), openness to change (self-direction, stimulation, hedonism), self-enhancement (achievement, power), and conservation or conservatism (tradition, conformity, and security). Lasswell and Kaplan’s (1950) value schematic for individuals (i.e., respect, affection, enlightenment, well-being, skill, power, wealth, and rectitude) can be directly linked to corresponding societal institutions.

Institution is a complex term that is often confused with *organization*. An institution is a set of rules in the game of society that comes about through decisions that constitute, or “institutionalize,” norms of behavior and interactions among people. Institutions thus reflect people’s perspectives and demands and set patterns of acceptable behavior (Lasswell and McDougal 1992; see citations in Clark and Rutherford 2005). By contrast, organizations are simply collections of people with a shared goal and working for desired outcomes. For example, the Wyoming Game and Fish Department, Fund for Animals, and Mule Deer Foundation are all

Table 14.1 Characteristics of participants in cougar management and policy.

Nature-View ^d	Associated Narrative and Attitude (Related Values)
Negativistic	Nature is a threatening and fearful place to be avoided or even eliminated (<i>security</i>)
Dominionistic	Nature is to be dominated or controlled as an expression of human will and centrality (<i>power, achievement, skill, stimulation, rectitude</i>)
Utilitarian	Nature is a source of commodities and material goods (<i>wealth, skill, achievement</i>)
Ecologicistic/Scientific	Nature, as ecosystems, is a source of knowledge and services (<i>enlightenment, well-being</i>)
Naturalistic	Nature is a source of solitude, communion, and naturalness (<i>well-being, universalism, stimulation</i>)
Aesthetic	Nature is a fount of and venue for experiencing beauty (<i>hedonism, well-being, stimulation</i>)
Humanistic	Animals, in particular, are a source of individual relations constructed around attributions of human characteristics (<i>affection, benevolence</i>)
Moralistic	Nature is to be protected for ethical reasons (<i>universalism, respect, rectitude</i>)
Symbolic	Nature is a source of metaphors, allegories, and other symbols for human communication

^dNature-views and associated narratives and attitudes used in this chapter to describe participant perspectives. Narratives and attitudes are based on our interpretation of Kellert (1985, 1989, 1996). We also relate nature-views to values, italicized in parentheses, defined by Schwartz (1994) and Lasswell and Kaplan (1950). Values are described more fully in the text.

organizations within the institution of wildlife management. The institution of wildlife management sets and enforces the rules for how we decide about the use of cougars and who gets to participate. Whether or not people engage in civil negotiation focused on outcomes of common interest is determined largely by institutions. At root, conflict in cougar management is better understood as disagreement over the *adequacy and nature of institutions* rather than as disagreement over disposition of cougars.

Our involvement in the institution of wildlife management has included ecological field work plus experience with and analysis of organizations. Our ecological work collectively spans twenty-one years in Idaho, Utah, and Arizona (e.g., Laundré and Clark 2003; Laundré et al. 2006; Mattson 2007b). Ameliorating corrosive conflict matters to us. Our goal is to provide practical insights that can help those involved in cougar management discover and secure their common interests in the form of durable, widely supported, and effective policies.

Participants

To understand human interactions in cougar management, we need a sense of who is actively involved in cougar politics. In Appendix 3, we describe eight participant groups in brief profiles intended to cut through otherwise overwhelming complexity, at the admitted cost of obscuring sometimes important diversity of perspectives. For each of these generic “stakeholders,” we present nature-views, favored sources of knowledge, stakes in cougar management, and demands for management outcomes, summarized in Table 14.2.

A handful of overarching patterns stand out among participants in cougar management in the United States and Canada (Table 14.2; Appendix 3). Perhaps with the exception of some communities in the Southwest, participants are overwhelmingly Caucasians. Otherwise, the broad spectrum of expressed nature-views is closely identified not only with sometimes antithetical beliefs about cougars and cougar-human relations but also with aspects of identity, such as sex, residence, employment, education, and support for hunting—factors that allow ample opportunity for consolidation of self-identified groups. The groups we describe as participants have narratives asserting their demands regarding cougar management; their respective demands conflict, and participants are often derogatory of groups with opposing demands.

Another remarkable feature of cougar-centered human social dynamics is the comparatively minor material stakes of just about everyone involved. Few livestock producers lose enough stock to cougars to make or break them economically; cougars are not a key revenue generator for any

wildlife management agency; effects of cougar predation on big game populations are genuinely a matter of debate (Chapters 9, 10); the outfitters who make a living from hunting cougars probably only number in the hundreds; and a comparative handful of people have ever been attacked by cougars (Chapter 13). Yet a considerable number of people clearly feel strongly about cougars, cougar management, and others who are involved. This force of feeling is most plausibly understood as arising from symbolic attachments to cougars; beliefs about relations between people and nature; about people with potentially threatening nature-views; about access to power; and, in the case of hunters, about opportunities for enjoyment and exercise of skill through hunting and killing big game. Conflict is largely, although not wholly, about *symbolic* rather than material outcomes.

The Changing Climate of Decision Making

Decision-making processes tend to be relatively stable once they are institutionalized. Even so, the history of cougar management reveals significant changes, which led us to divide this section into discussions of long-term trends in wildlife decision making, current decision-making arrangements and their implications, and recent perturbations generating new kinds of arrangements for cougars and for wildlife management in general. We focus on how participants typically assemble to advance their interests, depending on their strategies, shared interests and worldviews, and access to power.

Overview from 1870 to the Present

Official goals for what to do about cougars have varied since overt management by European settlers began in the 1870s. Figure 14.1 shows the proportion of states and provinces in the United States and Canada managing cougars under different classifications from 1872 to 2005. Some interesting patterns emerge. Offerings of bounties increased in the wake of both world wars, a result of expressed concern about the waning of predator control efforts during the considerable distractions of both conflicts (Baron 2004). This was followed by a rapid series of transitions that occurred primarily between 1965 and 1980, entailing first the termination of bounties; then, designation as game animals; and then, implementation of regulations to offer some measure of protection to kittens (see Chapter 4). With the exception of Texas, which still classifies cougars as unprotected predators, and California, where cougars are a specially protected species, almost all states currently manage cougars as game animals, regulating harvest to protect kittens

Table 14.2 Synopsis of characteristics typifying participants in cougar management and policy in the western United States. All of these characteristics vary within the identified groups. (See Appendix 3 for more detailed discussion.)

Participant	Characteristics					
	Identities	Nature-views	Material Stakes	Value Stakes	Claims and Beliefs	Demands and Preferences
Livestock producers	Rural Politically conservative	Dominion- istic Utilitarian Negativistic	Depredation losses	Skill, achievement, security, tradition, wealth	Local knowledge and life- ways should have primacy Depredation losses are unacceptable	Compensate and prevent depredation Reduce or eliminate cougars
Ungulate hunters	Caucasian males Non-metropolitan Outdoor active Attracted to wildlife Knowledgeable of wildlife Politically conservative	Dominion- istic Utilitarian Naturalistic Ecologicistic	Hunttable ungulates	Skill, achievement, power	North American conservation ethic Scientific management Hunting is necessary and ethical Hunting instills fear, reduces conflict, and is good for cougars	Hunt cougars with hounds Resolve conflicts lethally Reduce cougar populations to benefit ungulates and increase hunting opportunities
Cougar hunters	Caucasian males Non-metropolitan Outdoor active Attracted to wildlife Knowledgeable of wildlife Politically conservative	Dominion- istic Utilitarian Naturalistic Ecologicistic	Hunttable cougars	Skill, achievement, power, wealth	Hunting cougars with hounds is logical and ethical Hound hunting instills fear, reduces conflicts, and removes large males to benefit other cougars	Hunt cougars with hounds Resolve conflicts lethally Maintain cougar hunting opportunities
Wildlife agency commissioners	Caucasian males Non-metropolitan Outdoor active Attracted to wildlife Knowledgeable of wildlife	Dominion- istic Utilitarian Naturalistic Ecologicistic	Hunttable ungulates Agency budgets	Power, skill, achievement, wealth	North American conservation ethic Scientific management Total quality management Hunting is necessary and ethical Hunting instills fear and reduces conflicts Conflict can be resolved through education	Hunt cougars with hounds Resolve conflicts lethally Reduce cougar popula- tions to benefit ungu- lates, increase hunting opportunities, and reduce depredation
Wildlife agency personnel	Caucasian males Non-metropolitan Outdoor active Attracted to wildlife Knowledgeable of wildlife	Naturalistic Ecologicistic Dominion- istic Utilitarian	Hunttable wildlife Agency budgets	Skill, achievement, power, wealth, enlightenment	North American conserva- tion ethic Scientific management Total quality management Hunting is necessary and ethical Hunting instills fear and reduces conflicts Conflict can be resolved through education	Hunt cougars with hounds Resolve conflicts lethally Reduce cougar popula- tions to benefit ungu- lates, increase hunting opportunities, and reduce depredation
"The public"	Caucasian male heads of households	Ecologicistic	—	—	Cougars have important ecological role Cougars are not a major threat Endangering kittens and hunting with hounds is unethical	Kill cougars that have injured or killed humans, to protect endangered and threatened species, and to protect children Do not kill cougars to increase hunting opportunities Prohibit hunting with hounds

(Continued)

Table 14.2 (Continued)

Participant	Identities	Characteristics				
		Nature-views	Material Stakes	Value Stakes	Claims and Beliefs	Demands and Preferences
Animal-focused activists	Caucasian females Urban Well educated Politically liberal	Humanistic Moralistic Naturalistic Ecologistic	Live cougars Ecologically functional cougar populations	Rectitude	Hunting is unethical. Endangering kittens and hunting with hounds is unethical. Cougars have important ecological role Hunting does not reduce conflicts. Humans responsible for living with cougars	Prohibit cougar hunting. Prohibit hunting females and hunting with hounds Maintain ecologically functional cougar populations.
Environmentalists	Caucasian Politically liberal	Ecologistic Naturalistic Moralistic Humanistic	Wilderness Ecologically functional cougar populations	Rectitude	Cougars have important ecological role. Endangering kittens and hunting with hounds is unethical Hunting does not reduce conflicts. Humans responsible for living with cougars.	Prohibit hunting females and hunting with hounds Maintain ecologically functional cougar populations.

(see Table 4.1). These comparatively abrupt changes followed a societal decline in utilitarian perspectives (Kellert 1996), coinciding with the broad-scale emergence of environmental awareness and reforming environmental movements (see Chapter 1; Dunlap 1992; Brulle 2000).

These rapid transitions in the status of cougars beg for an explanation beyond coincidence with broader societal shifts in nature-views. Numerous observers of cougar management have noted that the transitions of 1965–80 came at the same time as, the emergence of participants who promoted “nonconsumptive” wildlife interests and cougar protection (e.g., Brown 1984; Murphy 1984; Tsukamoto 1984; Herbert 1988). By contrast, the peak in the bounty-based approach during the 1940s and 1950s coincided with emergence of the “scientific era” of wildlife management (Graham 1997) and many current civic wildlife management organizations (Brulle 2000). Beyond these broader patterns, there are only a handful of historical observations that suggest exact mechanisms and agents of change. Most notable among these is David Brown’s account (Brown 1984) of how a small group of “dedicated” and “erudite” women were instrumental in changing the status of Arizona’s cougar from bountied predator to game animal. Morrison (1984) and Shaw (1994) make similar reference to the role of activist women and, more generally, to “public concern.” Baron (2004) suggested not only public pressure, for example in the form of editorials in the *Denver Post*, but

also wildlife agency support arising from interest in control to promote “rational” management. Taken together, these scant items of evidence do not provide a compellingly detailed explanation for how change happened from 1965 to 1980. But they do suggest that those with the primary role were nonagency activists, motivated by emerging ecologicistic, humanistic, and moralistic nature-views, and that hunters, agency personnel, and scientific motivations were secondary (for more discussion on the role of nonagency activists see Chapter 15).

Decision Making before 1965

Wildlife management institutions constituted in the first half of the 1900s were deliberately designed to minimize politically expedient interventions by elected officials and to maximize the effects of hunters, then deemed the primary standard-bearers of wildlife conservation (Reiger 2001). This institutionalization of conservation was in reaction to a legacy of unsustainable commercial and other meat hunting, and it gave voice to an ethic organized around sport hunting (Shaw 1994; Reiger 2001; Dizard 2003). Important for cougar management, these ancestral institutions of wildlife management were built on deep positive ties to large ungulates and on beliefs that demonized predators as threats to the very survival of game populations (Reiger 2001; Baron 2004). More specific to the West, sportsmen

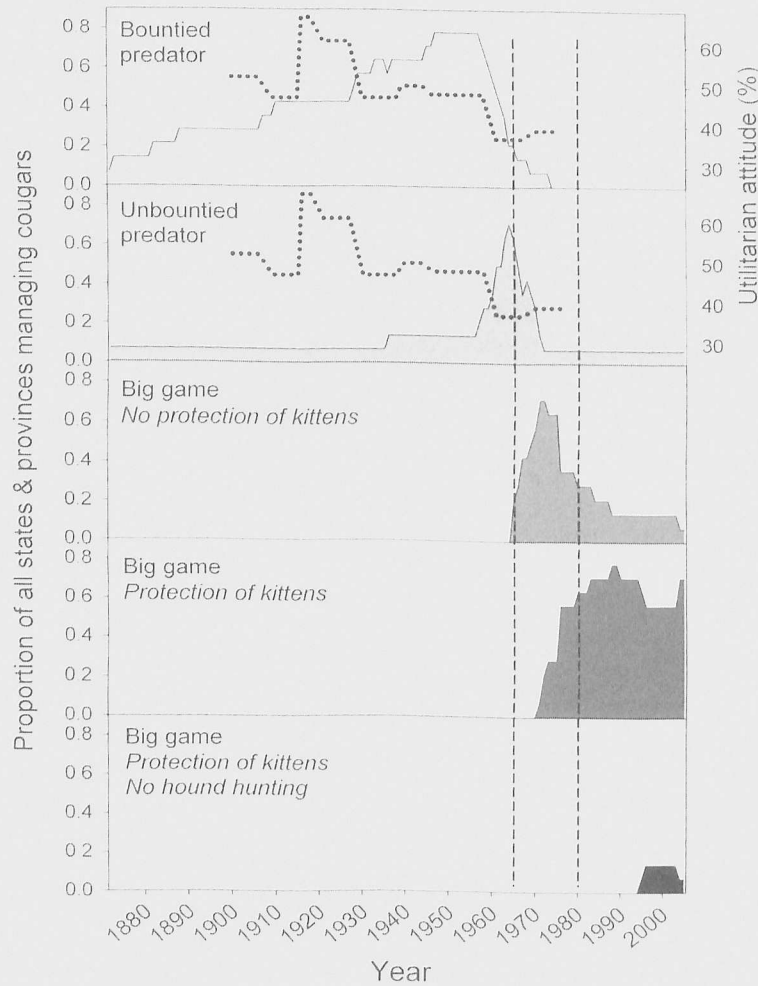


Figure 14.1 Proportions of twelve U.S. states and two Canadian provinces managing cougars under different classifications or management provisions, from 1877 to 2005. Dotted trend lines denote the proportional commonness of utilitarian statements in journalistic media, from Kellert (1996). Dashed vertical lines bound the period of rapid change in management provisions between 1965 and 1980.

expressed widespread antipathy toward cougars, rooted partly in beliefs that the killing or even complete eradication of cougars was necessary to increase mule deer herds (Brown 1984; Shaw 1994; Baron 2004). These antipredator beliefs were naturally aligned with those of ranchers, who had a shared interest in exterminating predators of all sorts. It should be no surprise that incentives to kill cougars were not only formally institutionalized but also acculturated early on in the history of wildlife management.

In practice, the commission structure limits authority of elected officials in wildlife management to the passage of laws that set broad-scale policy and to the appointment of commissioners, who are more or less autonomous thereafter (Nie 2004a, 2004b). Control by elected officials was and still is limited because wildlife agency revenues in almost all states are sequestered from normal budgetary processes,

with most revenue coming directly or indirectly from hunters and anglers, either through license fees and other charges for “service” or from taxes on sales of sporting goods through federal grants, such as under the Pittman-Robertson Act (e.g., Gill 1996a; Hagood 1997; Nie 2004b). We summarized revenues of ten state wildlife management agencies involved in cougar management and found that, on average, hunters and anglers continue to provide 80 percent of all revenues, directly or indirectly (49 percent licenses/related sales, 31 percent from sales tax via federal grants) and that appropriations from general state funds average only 6 percent (range 0–33 percent).

It is clear that authority and control over cougar management in virtually all states prior to 1960 was almost wholly governed by participants closely identified with hunting as a tradition and a management tool. Under

these arrangements, hunters, trappers, and fishermen were the almost exclusive constituency of wildlife management (Decker et al. 1996). The only proviso pertained to influences of livestock interests, which were and continue to be substantial. A notable number of wildlife commissioners were identified with livestock interests (Hagood 1997). Moreover, there is a long and often-observed history of livestock interests exercising controlling influences, either directly on wildlife agency commissioners and personnel or, more definitively, indirectly through elected officials with shared interests and worldviews (e.g., Robertson 1984; Thompson 1984; Weeks and Packard 1997; Nie 2004a; Clark and Munno 2005).

It remains unclear exactly what the mechanisms of agricultural influences were and are, but they are manifest in policies mandating measures to address depredation through control and compensation (e.g., Morrison 1984; Pall 1984; Anderson and Tully 1988; Robertson and Bell 1988; Sharma 1988; DeSimone and Jaffe 2003; Woolstenhulme 2003; Winslow 2005). Underlying these patterns before 1960, though, is the probable adherence of virtually all the people with control over cougar management to dominionistic and utilitarian nature-views unfriendly or ambivalent to conservation of large carnivores (Hook and Robinson 1982; Kellert 1985; Bjerke et al. 1998; Pate et al. 1996; Vittersø et al. 1988).

Polarization after 1970

Even with the widespread emergence of stakeholders in cougar management who adhere to ecocentric nature-views, patterns of decision making after 1970 have remained much like those before 1960. Numerous commentators have concluded that state-level cougar as well as other wildlife management primarily serves the special interests of hunters, anglers, trappers, and livestock producers, with little consideration of nonconsumptive stakeholders (Decker et al. 1996; Gill 1996a; Nie 2004a, 2004b; Clark and Munno 2005; Jacobson and Decker 2006). Rutberg (2001, 35) has even gone so far as to liken wildlife management agencies to the "private regulatory bodies that govern professional sports." Reasons for preferential serving of hunting and ranching interests are largely the same as before: the pro-hunting perspectives of commissioners and agency personnel, a hunting-focused culture shared with "customers," control of most revenues by hunters, the limited authority of elected officials, and models of management that appropriate power to agency technical experts and cause inattention to governance (Decker et al. 1996; Gill 1996a, 2001b; Byrd 2002; Nie 2004a; Clark and Rutherford 2005).

As one outcome, animal-focused activists and their allies perceive themselves to be disenfranchised in the normal pro-

cess of cougar management decision making (e.g., Hagood 1997; Pacelle 1998; Papouchis et al. 2005; Blessley-Lowe 2006). Moreover, the latent constituency for "mutualist" (humanistic and moralistic) management outcomes is large and likely growing (Teel et al. 2005), at the same time that already comparatively small numbers of hunters are proportionately declining (U.S. Fish and Wildlife Service and U.S. Bureau of the Census 1993, 1997, 2003, 2008). All this sets the stage for conflict, primarily between those holding dominionistic and utilitarian nature-views, avowing primacy for hunting, and those holding humanistic and moralistic nature-views, extolling intrinsic or nonconsumptive "values."

Conflict indeed surrounds cougar management. What to do about cougars is one of the most controversial of wildlife management issues (e.g., Mansfield and Weaver 1988; Rieck 1988; Baron 2004; Perry and DeVos 2005). Conflict and controversy are expressed not only in litigation and ballot initiatives, which we cover later (and see Chapter 15), but also as public incivility among participants. Baron (2004), Clark and Munno (2005), and Perry and DeVos (2005) describe meetings in which accusations were freely exchanged and participants otherwise treated with disrespect. In print, animal-focused activists have claimed that agency personnel are "manufacturing paper lions," "purposefully altering numbers," and playing "games of statistical chicanery" to justify policies (Schubert 2002, 2, 11); conversely, hunters have claimed that agency personnel are "conspiring to shut down local guides" (Lermayer 2006, 6) and that animal-focused activists are "emotional," "nuts," "warped," and "cast an almost worthless image [*sic*] on human life" (Howard 1991, 96; Einwohner 1999A, 66; Arizona Game and Fish Department 2004, B-2).

Although some of this incivility can be explained simply by conflicting demands arising from divergent nature-views, we and Kellert (1996) suspect that identities and personalities of participants have an inflaming effect. Animal activists often pursue their ends with righteous fervor (Appendix 3). We speculate that in response, hunters and agency personnel often show limited empathy and openness because of their orientation toward self-enhancing power and achievement and political or other conservatism, as described in our profiles of participants (Appendix 3). Self-enhancing and conservative values have been closely identified with prejudice, unwillingness to engage constructively with unlike others, and a preference for power arrangements that perpetuate inequity (e.g., Heaven and Bucci 2001; Jost et al. 2003; Sidanius et al. 2004). Moreover, the fact that almost all hunters and agency personnel are men, often with non-metropolitan upbringings, and that a large majority of animal-focused activists are well-educated urban women, probably aggravates conflict by providing a ready basis for stereotyping and intensification of group boundaries

(e.g., Einwohner 1999a; Nie 2003; Skogan and Krange 2003). The ingredients for conflict in cougar management seem to run a full gamut, with the agency personnel who hold primary authority feeling beset in the middle.

Much of the fabric of this conflict is woven around claims and counterclaims about science and the authority of scientific managers. Consistent with their identities and with allocations of power prescribed by scientific management, hunters and agency personnel often invoke technical expertise grounded in scientific knowledge as the authoritative basis for identifying and solving the physical problems they claim typify cougar management (e.g., Howard 1988; Nie 2004a; Beausoleil et al. 2005). This perspective is found in the following quotes: "Let [the agency] manage wildlife, using scientific and statistical methods, rather than having to be concerned about public, political, and media reaction"; and "No commissioner should ever bow to the wishes of the emotional masses when science proves them wrong . . . politics should never interfere in their decisions" (Arizona Game and Fish Department 2004, A-1, B-4). The second quote highlights a common way that hunters and agency personnel delegitimize animal-focused activists—by ascribing their perspectives and demands to illogical emotion, rooted in "Disney-driven" media and other urban-fostered romantic notions of nature (e.g., Ingram 1984; Howard 1991; Einwohner 1999a; Minitier 2004; Perry and DeVos 2005). Such ascription of emotional motivations to mostly female activists by mostly male hunters and agency personnel is highly suggestive of sex-based stereotyping (Einwohner 1999a). Whatever the basis, animal activists are deprived of legitimate standing in the eyes of those making such claims (Einwohner 1999a).

Assertions of science-based authority by hunters and agency personnel are intriguing given broader patterns of behavior in management of cougars and other wildlife. In other contexts, typically involving management of mule deer, hunters *contest* the validity of agency perspectives and information, usually when agencies are forwarding policies counter to their demands (Zumbo 2002; Freddy et al. 2004; Lermayer 2006). This opposition is suggestive of situational rather than principled support by hunters for scientific management. More to the point here, agency biologists have indeed invoked "feelings" or "beliefs" (e.g., Austin 2003; Apker 2005; Whittaker 2005) and have employed subjective assessments, uncertain area-extrapolated population estimates, and ambiguous harvest and depredation trend data as a common basis for cougar management. As we describe in Appendix 3, agencies also at times base management on assumptions about benefits of hunting that have little or no grounding in scientific studies.

At a more nuanced level, case studies reveal a pattern of agencies allocating burden of proof (Clark and Munno

2005) or overstating certainty of information (Shaw 1994) in ways consistent with agency interests. One example of the former can be found in a report from South Dakota (Gigliotti 2005) in which agency specialists invoked uncertainty about efficacy of nonlethal control methods to justify nonadoption, while in the same document asserting a direct beneficial link between hunting, reduction of human-cougar conflicts, and acceptance of cougars by humans, without any supporting scientific evidence. An example of overstated certainty can be found in the testimony of an agency specialist before a state legislature (Montana Senate, 58th Legislature, Committee on Fish and Game 2003), where, in response to questions about impacts of recreational hound pursuit on cougars, the specialist stated that "mountain lions and bobcats evolved in the presence of wolves, so running from dogs was not much different for the lions" and that a chase season "would not" have unintended consequences on cougar reproduction.

We are not implying here that there is or has been no place for anecdote and subjective judgment in cougar management. Logistics alone preclude certain kinds of scientific or other real-time information about cougars, as is evident from almost every chapter in this book. What we have observed, instead, is a pattern of behavior suggesting that science and expert standing are being used for power purposes and for advancing special interests, rather than for enlightenment or for fostering common ground; this is consistent with "blurring science and values" (Decker et al. 1996; Pacelle 1998; Jones 2002). Animal-focused activists give evidence of the same motivations in their use of information and invocations of science (e.g., Perry and DeVos 2005). However, the focus here is legitimately on agency personnel and their use of authority invested partly on the basis of technical expertise, because this investiture is contingent on fulfilling the public trust, which requires that agency personnel be truthful, just, equitable, and ameliorative (Gill 2001b; Clark and Rutherford 2005; Jacobson and Decker 2006).

State-Level Variation since 1970

Levels of conflict and incivility surrounding cougar management have not been uniform among states. We developed an index for potential conflict based on state-level information given in Teel et al. (2005) by correlating percentages of respondents who were "mutualists," who felt their interests were served by state wildlife management agencies, who trusted the agencies, and who saw discrepancies between current and ideal management arrangements—that is, between funding and constituencies. By this index, potential for conflict was highest in California, Washington, Oregon, Arizona, Colorado, and New Mexico, and lowest in South

and North Dakota, Montana, and Wyoming (Figure 14.2). All of the eight successful ballot initiatives or lawsuits we identified, brought by animal-focused activists (see later discussion), occurred in the six states with the highest potential for conflict, suggestive that the index does capture some of the drivers of widespread discontent or ambivalence about state-level cougar management. Successful litigation is relevant here because of its documented dependence on favorable public opinion (Ingram and Mann 1989). In this context, two recent cases of controversy warrant mention, being in states with ostensibly low potential for conflict: in Wyoming, centered on Jackson Hole (Clark and Munno 2005), and in South Dakota, centered on the Black Hills (Love 2005). We ascribe this discrepancy to cultural heterogeneity. Inhabitants of the Jackson Hole region, as a group, are quite different from other inhabitants of Wyoming in their greater adherence to ecocentric nature-views (Clark and Munno 2005); possibly the same applies for enclaves of Black Hills residents in contrast to other South Dakotans.

In examining conflict, we also found that states differed in how much attention they gave nature-views and process questions in their state-level goals for cougar management. To gauge this, we summarized goals for 1984 to 2005 from reports in the *Proceedings* of Mountain Lion Workshops and, more recently, from state-level cougar management plans. We categorized one hundred recorded goals according to whether they advanced interests that were (1) utilitarian or dominionistic, (2) ecologicistic or scientific, (3) naturalistic or moralistic, or (4) focused on process itself. We found utilitarian-dominionistic emphasis for 38–50 percent of goals, clearly the dominant category; ecologicistic-scientific emphasis for 19–31 percent; naturalistic or moralistic (“natural heritage”) emphasis for 17–31 percent; and process emphasis for only 4–6 percent of goals. The range depended on the time period, but we found no major trends in frequencies among types of goal statements for the 1980s, 1990s, and 2000s.

We developed a score for each state based on weighting the respective categories with values of 1, 2, 3, or 4—not ascribing moral valuation but rather attempting to capture the degrees of expressed attentiveness to values and to process considerations that have emerged during the last thirty-five years. Washington, Oregon, and South Dakota expressed high levels of attentiveness, and British Columbia, Idaho, Nevada, New Mexico, and Texas expressed low levels (Figure 14.3). For the United States, we found a remarkably high positive correlation ($r = 0.69$) between our score for expressed goal-attentiveness to emerging nature-views and Putnam’s state-level index of social capital or public trust (Putnam 2000). By contrast, we did not find noteworthy correlations with measures such as percentage of “utilitarians” or “mutualists” in any state (Teel et al. 2005).

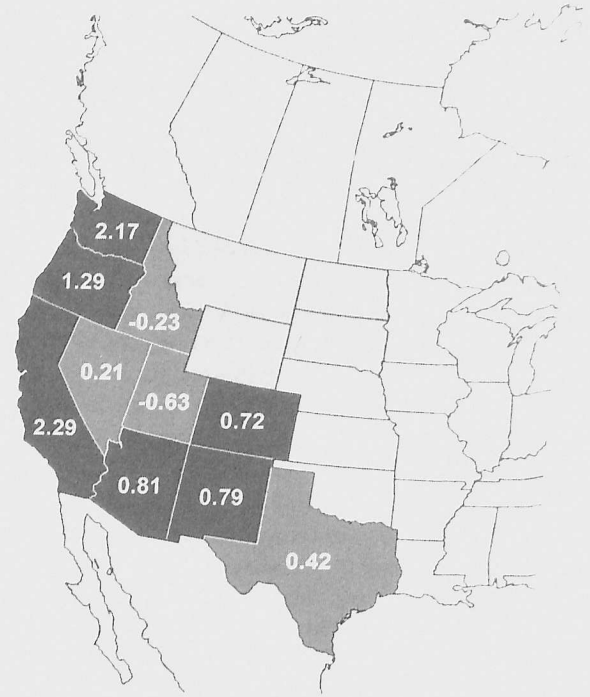


Figure 14.2 Index of potential for conflict associated with state-level wildlife management. Higher positive values denote higher potential for conflict based on percentages of respondents in Teel et al. (2005) who expressed a “mutualist” perspective, distrust in state wildlife agencies, lack of confidence that their interests were considered in wildlife management, and consonant perceptions of ideal and existing funding and constituencies. (The index was the reversed sign weights for each state derived from the first principal component of correlations among percentages of respondents, mutualists, PC1 loading = -0.61; interests served, loading = 0.56; trusted agencies, loading = 0.49; discrepancies, loading = 0.29.)

This intriguing correlation with social capital suggests that broad-scale levels of public trust and empathy are perhaps key drivers of attention by wildlife management agencies to state-level diversity of interests and nature-views.

Perturbations

In this final section on institutional arrangements, we examine events that have perturbed the decision making in cougar management since roughly 1970 in such a way as to challenge longstanding norms. Three types of perturbations stand out: litigation, ballot initiatives, and “incidents.” Each is distinct because of the social process entailed and the aspects of decision making highlighted. In almost all instances animal-focused activists have used these perturbations to advance their interests, although in the face of their considerable successes, hunters and others with related interests are increasingly using similar strategies to try to reinstate traditional norms favoring utilitarian

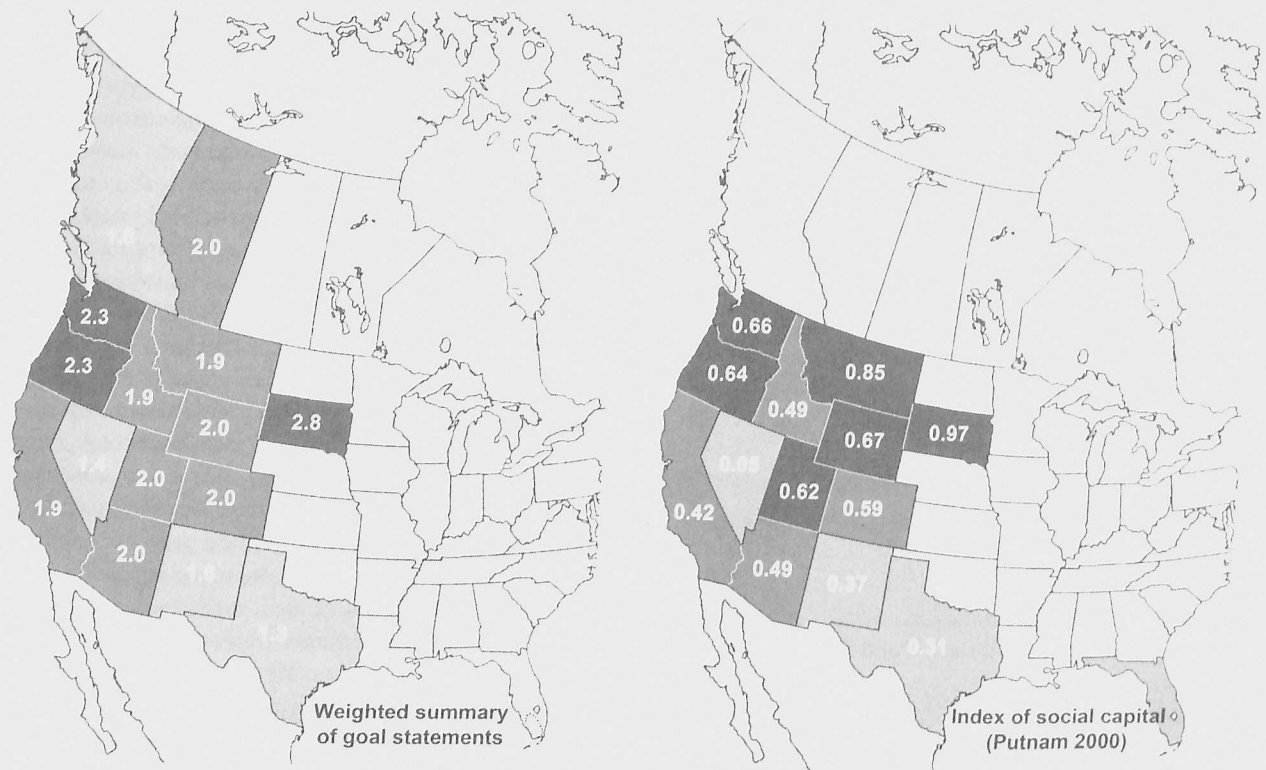


Figure 14.3 Weighted summary of goal statements for cougar management expressed by state wildlife agencies between 1984 and 2005 (left), with progressively higher weights attached to goals expressing greater attention to process or emerging nature-views (see text). The darkest shading denotes a high weighted summary, medium shading indicates medium, and pale shading reflects a low weighted summary. For social capital (right), darker and paler shading similarly correspond to levels of social capital indexed for each U.S. state by Putnam (2000).

and dominionistic preferences. In many instances, animal activists have resorted to perturbations only after repeated unsuccessful efforts to work through routine wildlife commission and legislative processes (DeVos et al. 1998; Pacelle 1998; Einwohner 1999a; Peña 2002). One of the few successful legislative strategies by animal-focused activists occurred in California, in the form of renewed moratoria on cougar hunting lasting from 1972 to 1986 (see Chapter 15; Mansfield and Weaver 1988; Wolch et al. 1997).

Litigation

Litigation is a new arena in cougar management, a ritualized process where formal policy is challenged and a judge evaluates wildlife managers' implementation of the policy. The judge then issues a ruling, applying authority over the policy at issue (cf. Lasswell and McDougal 1992). Although litigation is often accompanied by flurries of media and promotional activity, the real focal point is the formalized communications among judges, lawyers, and clients, usually involving a wildlife agency and groups with an animal or environmentalist focus. Several cases in which litigants were successful, most notably in Oregon (2003 and 2006;

Findholt and Johnson 2005) and New Mexico (1998), have involved claims under the National Environmental Policy Act (NEPA) applied to either the U.S. Fish and Wildlife Service or U.S. Department of Agriculture, Wildlife Services, regarding the administrative processes for decisions setting the stage for killing substantial numbers of cougars as part of either research or depredation control. Animal activists and environmentalists have made other claims under similar state-level policies, such as the California Environmental Quality Act, most of them successful and, again, pertaining to planned or ongoing killing of cougars for research or depredation control. Such claims have been made in New Mexico (see list of litigation summaries, Appendix 4 1986; Robertson and Bell 1988) and California (1986–1989; Mansfield and Weaver 1988; Wolch et al. 1997).

Under current arrangements, litigation affords animal-focused activists one of very few opportunities to employ authoritative control, but it is entirely contingent on persuading a judge and is constrained by how laws read and thus what can be challenged. Not all litigants are successful at persuading judges, and almost all legal claims are made under policies that merely govern *procedure* rather than substantive outcomes (e.g., NEPA), unlike options available

to litigants who invoke the U.S. Endangered Species Act. All in all, litigation provides limited opportunities for animal activists to revise management norms by intervening in cougar-related decision processes, and at the risk of turning disregard from agency personnel and commissioners into hostility (as evidenced by the tone of Findholt and Johnson 2005). Successful litigation can nevertheless set the stage for prescriptive measures such as ballot initiatives, as in California during the late 1980s (Wolch et al. 1997), and can publicly elevate issues or create space for discussion of alternatives (Ingram and Mann 1989; Parker 1995).

Ballot Initiatives

Ballot initiatives place policy prescription in the hands of registered voters. However, a prescriptive verdict is the culmination of a long initiation period, involving the collection of signatures sufficient to place the initiative on a regularly scheduled ballot and a long and intense period of promotional activity by all who are motivated and have a perceived stake in the outcome. Ballot initiatives are unique among options available to animal-focused activists in affording them the possibility of substantively reconfiguring the authority framework of cougar management. However, the outcome of ballot initiatives is contingent upon a successful promotional campaign, which predictably depends on a favorably disposed electorate, successful control of media framing, and monetary resources (Pacelle 1998). For this reason, animal-focused activists have been strategic in their employment of ballot initiatives. Even though some animal rights groups advocate the end of all sport hunting of cougars (e.g., Schubert 2002), they forwarded such a measure only in California (in 1990), where a long history of legislative and other public support signaled likely success (see Chapter 15; Wolch et al. 1997), which was indeed the outcome. In Oregon and Washington, ballot initiatives sponsored by animal-focused groups called only for prohibiting the use of hounds (Appendix 5). This successful focus on banning hounds rather than banning cougar hunting outright was pragmatic because most surveys have shown much greater public disapproval of hound-assisted hunting than of other hunting methods. Hunters have framed these and similar initiatives as an assault on hunting, but surveys of voters have shown that the issue for most is not hunting but, rather, “fair chase” and sportsmanship (e.g., Loker and Decker 1995; Kellert 1996).

Hunter reactions to ballot initiatives that limit hunting have included attempts at reversal through state legislatures, efforts to mount countering ballot initiatives, and dismissive publicity claiming failed democracy and corrupted motives among voters and animal activists. To date, almost all of the many legislative attempts and the ballot initiatives in California and Oregon designed to overturn prior ballot

victories have failed (Pozzanghera 1996; Wolch et al. 1997; Kertson 2005). To our knowledge, the only exceptions have been in Washington, where six rural counties got legislative authorization for hound-assisted hunts (Kertson 2005; see later discussion), and in Oregon, where the state fish and wildlife department was given authority in 2007 to employ nonagency persons for management-related hunts.

California’s ban on cougar sport hunting has been invoked as an instructive parable for hunters and agency personnel in which “irrational” and “urban” voters have banished “responsible” and “scientific” management (e.g., Minter 2004; Perry and DeVos 2005). A “rising tide of conflicts” between humans and cougars is attributed directly to the ending of hunting or banning of hounds (e.g., Howard 1988; Portland Chapter of Safari Club International 2003; Hoffman 2004; Minter 2004). Implicit in this narrative are the ideas that hunting with hounds prevents conflict and is required to keep cougar populations in check; hunting, with or without hounds, reduces conflict; and hunting, especially with hounds, prevents cougar attacks. Evidence for this argument is scant or contradictory. For example, with liberalized regulations, cougar harvest in Oregon and Washington soon recovered to levels higher than before bans on hound-assisted hunting, and at the same time as reported cougar-human conflicts were increasing (Beausoleil et al. 2003; Whittaker 2005). Similarly, on a per capita or unit area basis, people in California have experienced fewer or similar numbers of conflicts with cougars compared to people in states with cougar hunting (Papouchis 2006a).

Incidents

Incidents include more than just cougar attacks on humans. When routine agency implementation of policy triggers short-term and localized intensification of focus to the point of becoming inflammatory, and provokes appraisal of norms and promotion of alternatives, we call it an incident. During incidents the public becomes more attentive and engaged, largely as a function of a perceived rise in the stakes and often under circumstances involving urban dwellers. Most incidents have been triggered by public safety concerns, although others have arisen with agency plans to kill greater numbers of cougars, usually to increase production of hunt-able mule deer (*Odocoileus hemionus*) and elk (*Cervus elaphus*) or to protect vulnerable bighorn (*Cervis canadensis*) sheep populations (e.g., Clark and Munno 2005).

Perry and DeVos (2005) and Mattson and Clark (in prep.) describe incidents in Arizona in which agency personnel killed cougars to resolve perceived threats to human safety, in both cases on the borders of urban areas. These moves triggered animal-focused activists, who critiqued the lethal

approach that was adopted, promoted nonlethal resolution, and framed "the problem" as urban encroachment, lack of responsible human behavior, and lack of inclusive process. By contrast, agency personnel framed the problem as one of dangerous cougars, one best solved by killing them. A key feature of these cases was how differently participants described the problem and hence the solution (cf. Mattson et al. 2006). Civil venues for finding common ground were consistently missing (Baron 2004; Clark and Munno 2005; Perry and DeVos 2005). Different ways of perceiving the problem, lack of ameliorative processes, and heightened incivility are consistent features of incidents.

Incidents can serve multiple purposes for animal activists otherwise faced with exclusion from decision making. First, incidents offer a way to engage not only sympathetic publics and political elites but also naturally allied environmentalists, all of whom are often latent rather than active supporters of reforming cougar management (cf. Birkland 1998). Incidents allow much greater media access, a key to reaching the public and elected officials. Journalists and the media are important gatekeepers during incidents, framing much of the public discourse and regulating the overall level of intensity.

During incidents, journalistic references to cougars can increase to levels five to ten times higher than the rest of the time (Mattson and Clark, in prep). Moreover, content shifts from informational reports on natural history and benign human-cougar encounters to pointed appraisals of agency policies and discussion of participants' motivation, responsibility, and blame (Baron 2004; Clark and Munno 2005; Mattson and Clark, in prep). As in many other natural resources cases (Schlechtweg 1996), media framing has commonly been described as adversarial and inflammatory, which predictably heightens overall incivility and complicates efforts to find common ground (e.g., Nie 2003; Baron 2004; Perry and DeVos 2005). Elected officials sometimes further inflame incidents by issuing public statements condemning various participants (Morton 2003; Baron 2004; Perry and DeVos 2005). In one case, county commissioners, with the apparent intent of promoting a political agenda, declared a state of public emergency after a young boy was attacked (Kertson 2005). Overall, incidents become public phenomena that participants can manipulate to critique routine cougar management and to use as a means for airing alternatives.

Effects of Perturbations

Wildlife management agency personnel and commissioners have responded in various ways to the focusing and perturbing effects of litigation, ballot initiatives, and incidents. Consistent with institutionalized norms, by far the most common response has been a call for more education

of the public (e.g., Shroufe 1988; Clark and Munno 2005; Perry and DeVos 2005; South Dakota Department of Game, Fish and Parks 2005). The voiced or implicit rationale is that if only people were better informed, then the public would fall in line behind agency policy and support agency solutions to physical problems by virtue of technical merit. This approach fails to recognize that there are multiple definitions of "the problem" arising from participants' different value-based aspirations for cougars and the world (e.g., Healey and Ascher 1995; Forsyth 2003; Brunner and Steelman 2005).

As a means of public involvement, Pimbert and Pretty (1995) and Decker and Chase (1997) rank education of stakeholders among the lowest in terms of realism, efficacy, long-term sustainability, and democratic character. Some agency personnel and commissioners have recognized that a broader cross section of stakeholder values needs to be accounted for, at least in process, if not in outcomes (Graham 1997; Clark and Munno 2005; South Dakota Department of Game, Fish and Parks 2005). For example, consultative workshops or advisory groups have been convened in Arizona, South Dakota, and Utah to ensure a broad spectrum of stakeholder input on management plans or protocols (Utah Division of Wildlife Resources 1999; Arizona Game and Fish Department 2004; Gigliotti 2005). This kind of midrange public involvement (Pimbert and Pretty 1995; Decker and Chase 1997) constitutes a comfortable fit for most agency personnel, consistent with preferences expressed by employees of the Utah Division of Wildlife Resources (Mortenson and Krannich 2001). Overall, public involvement has increased with the proliferation of cougar-specific management plans since the early and mid-1990s, which at the very least offered stakeholders greater insight into agency goals, strategies, and justifications (Clark and Munno 2005).

Public process and a broader spectrum of nature-views are beginning to appear in wildlife agency plans for cougar management. Idaho and Arizona both recognize "recreational, ecological, intrinsic, scientific, and educational values" in introductory material of their predator management policies (Idaho Fish and Game Department 2000; Arizona Game and Fish Department 2000). Arizona's strategic plan for the years 2001–2006 (Arizona Game and Fish Department 2001) states the need to "work with partners to find common ground" and be "collaborative." However, such language consistently contrasts with the more specific goals that guide cougar management, either within the same documents or as an outcome of policies—goals that invariably emphasize hunting and the primacy of hunting opportunities to the exclusion of other matters. For example, the three primary objectives for Arizona's 2001–2006 cougar management were to "maintain annual harvest at 250 to

300 mountain lions,” “provide recreational opportunity for 3000 to 6000 hunters per year,” and “maintain existing occupied habitat and maintain the present range” (Arizona Game and Fish Department 2001, 37). Likewise, under terms of its predator management policy, plans by Arizona Game and Fish Department to reduce cougar populations in eleven game management units offered no indication that values other than hunting were considered or that a collaborative process was employed to foster common ground (Arizona Game and Fish Department 2000, 2006). Such divergence between actual practice and verbalized commitments to conciliatory processes may arise from lag effects in cultural change within agencies, but agencies may also be more deliberately restricting the diffusion of nontraditional considerations by incorporating them only partially, at a symbolic rather than substantive level (Brunner and Steelman 2005).

Beyond the content of planning documents, agencies have taken tentative steps toward accounting for a broader spectrum of constituents in decision making by giving serious consideration to structural changes such as diversification of funding and overt embrace of nonconsumptive stakeholders. This agenda was evidenced in a public survey sponsored by the Western Association of Fish and Wildlife Agencies (Teel et al. 2005) in which solicited respondents were asked their preferred structure for wildlife management funding and clientele. Of relevance here, by far the most popular selected alternative called for major funding from nonhunter sources and a clientele that included nonconsumptive users. However, in virtually every written instance of agency personnel describing efforts to broaden constituencies and diversify funding, the ultimate professed goal was to *increase agency legitimacy* or public support for its policies, not to identify and promote common interest solutions (e.g., Shroufe 1988; DeVos et al. 1998; Freddy et al. 2004; Lafon et al. 2004; Perry and DeVos 2005; South Dakota Department of Game, Fish and Parks 2005).

Common Interest Remains Elusive

The conflicts that typify cougar management are frustrating to nearly all participants. Ideally, decision-making systems should allow all valid participants to engage spontaneously, efficiently, fairly, constructively, and civilly, in order to discover, secure, and sustain their common interests (Lasswell 1971, 86–93; Clark 2002, 60). Apparently, much of cougar management does not work that way. The common interest is a powerful democratic concept central to the ideal functioning of our society (McDougal et al. 1980; Dahl 2006) and subject to evaluative standards (Lasswell and McDougal 1992). We have emphasized the role of social

processes—interactions among people making decisions within the institution of wildlife management—in determining whether cougar management proceeds in the common interest. A key question now is whether recent developments move us closer to or farther away from this goal.

Based on evidence presented in this chapter, and referenced to standards of democratic process and human dignity outcomes (Lasswell 1971; McDougal et al. 1980), the institutional arrangements of cougar management have often not functioned well during the last thirty years. As others have noted before, the causes of this suboptimal performance are not difficult to identify and are largely attributable to the structure and function of official decision-making processes (Decker et al. 1996; Gill 1996a, 2001b; Nie 2004a, 2004b; Clark and Munno 2005; Jacobson and Decker 2006). Wildlife management agencies favor the special interests of hunters while too often discounting the interests of virtually all others. The identity and culture of agency commissioners and personnel foster deference to hunting and reflect values of power and achievement rather than values of universalism or benevolence. Agency reliance on hunter funding and the comparative isolation of normal decision making from intervention by elected officials exacerbates these trends. This focus on agencies follows from the fact that, under the commission structure, and as trustees for the public interest, wildlife managers hold not only primary authority but also primary responsibility and accountability (Nie 2004a, 2004b; Clark and Munno 2005).

Scientific and business models of management have compounded difficulties, ultimately justifying concentration of power in the hands of agency personnel and commissioners on the basis of expertise (cf. Brunner and Steelman 2005). Moreover, neither science nor Total Quality Management offers a language to help agencies engage fruitfully with issues related to common ground and common interests (Brunner and Steelman 2005). Governance is not particularly relevant if “problems” are seen not as human but as objectively biophysical, people are seen not as diverse interests but as “customers” for technical services, and the “product” is not inclusive decision making but hunting opportunity. Cougar management today thus suffers from a suite of problems rooted in institutional arrangements that fail to acknowledge the shifts in public perspective away from traditional wildlife management. Current patterns erode trust, diminish social capital, and harden political positions—usually without these effects being intended. Common ground in cougar management remains an elusive and sometimes neglected goal.

What is to be done? One option is to maintain the status quo, perhaps with small changes primarily in the form of symbolic uses of new language. “Dynamic conservatism” is a common strategy for organizations to create the

appearance of modernization while preserving basic institutional and decision-making arrangements (Schön 1973). Here, changes occur at the margin, if they occur at all, and consist largely of symbolic adjustments to deflect criticism and enhance public relations. Many recent changes in the institution of cougar management appear to be of this nature. Continuation of this approach will likely perpetuate conflict in yet more ballot initiatives, lawsuits, incidents, and negative press.

Another option is to employ techniques that can influence institutionalized patterns to improve both process and outcomes (Brunner 2002; Brunner and Steelman 2005). Among these are integrative interdisciplinary appraisal (Clark et al. 2001; this chapter), institutional analysis (Clark and Rutherford 2005), social methods such as Q-assessments for clarifying perspectives (Mattson et al. 2006), problem solving and skill-building workshops (Clark et al. 2002), leadership improvements (Clark 2007), participatory or community-based projects (McLaughlin et al. 2005), and prototyping (Wilson and Clark 2007). All these methods can provide insight for upgrading the full spectrum of policy-related decision making.

More fundamentally, institutional change is grounded in a paradigmatic shift from focusing on expert-based authority to focusing on common ground. Current stakeholders do share considerable common ground. In principle, most would probably support civil, open, fair, and participatory decision making (Mattson et al. 2006). There is even common ground regarding physical outcomes (Figure 14.4), most clearly among three participant groups: agency personnel, those belonging to environmental organizations, and those focused on the conservation of predators. Participants currently in conflict could potentially agree on aspects of process, constructive roles for biological and social science, habitat protection, the value of outdoor experiences, and the merits of long-term conservation. If participants choose to focus on their common interests, they have five areas of opportunity to change institutions: (1) changing who participates, (2) affecting the perspectives of those who do, (3) changing strategies that are used, (4) altering the situations within which participants interact, and (5) reconfiguring structural incentives such as revenue streams (Clark 2002, 2007).

Changing Participants, Perspectives, and Strategies

There are probably limited prospects for improvement by focusing overtly on participants, especially without changing situations and revenue incentives. In fact, changed situations are often a prime reason people modify perspectives and adopt different strategies (Lasswell and McDougal 1992). In principle, those who make demands

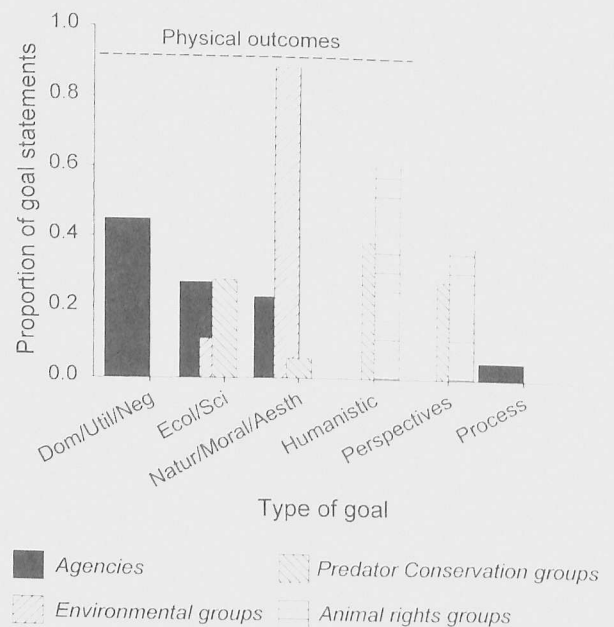


Figure 14.4 Proportion of goal statements for cougar management in documents created by state wildlife management agencies, environmental groups, predator conservation groups, and animal rights groups. Goals are differentiated by which of four kinds of worldviews they reflect – Dom/Util/Neg = dominionistic, utilitarian, or negativistic, Ecol/Sci = ecologicistic or scientific, Natur/Moral/Aesth = naturalistic, moralistic, or aesthetic, or Humanistic – or whether they focus on changing perspectives of participants in cougar management, or on the quality of decision-making processes. Goals pertaining to Kellert's (1996) worldview categories focus on achieving physical outcomes.

that categorically exclude other participants' interests do not have legitimate standing (Brunner 2002). Examples of such demands include advocating extirpation of cougars or complete bans on hunting. However, in practice, participants involve themselves on the basis of existing access to power or the media, regardless of the legitimacy of their claims, and with the risk of marginalizing themselves if their demands are deemed patently unreasonable by politicians or the public.

Once established, and especially when rooted in fundamental worldviews, perspectives tend to resist change, even in the face of new information (Kellert 1994, 1996). In the longer term, changes in perspectives, especially among agency personnel and commissioners and about the structure of decision-making processes, could dovetail with changes in incentives to upgrade the quality of governance in cougar management significantly. How can those interested in change catalyze such transformations in perspective? Educational institutions are one logical source of leadership. "Human dimensions" have received increasing attention in wildlife management curricula during the last decade, providing grounds for optimism. But effectively promoting the kind of changes described here would require curricula to move beyond topics such as social surveys and education

methods and to deal meaningfully with policy- and governance-oriented professionalism (Clark 2001).

Changing Situations and Incentives

The greatest near-term prospects for improving governance in cougar management lie in changing situations and incentives. In recent years most who have examined cougar or other wildlife management have advocated the creation of processes that engage stakeholders meaningfully in gathering information and in selecting, appraising, and even implementing policy (Gill 2001b; Nie 2002, 2004b; Durant et al. 2004; Clark and Munno 2005; Mattson et al. 2006). Ideally, such processes would be designed to foster common interest outcomes (Clark and Rutherford 2005), employing principles of adaptive governance (Brunner and Steelman 2005) and operating at local scales that capitalize on a place-based sense of community (McLaughlin et al. 2005; Cherney et al. 2008). Local and regional watershed councils are perhaps the best example of this kind of innovation in natural resources management (Wondolleck and Yaffee 2000). To be meaningful, reformation requires that agency personnel and commissioners divest some power. In instances where those in power are reluctant to participate, how can participants innovate with authoritative, collaborative, localized processes? Well-placed agency innovators and legislative interventions may be necessary.

Superseding all, it is difficult to imagine substantive change in cougar management without changes in revenue sources and the commission structure of wildlife management agencies. Numerous observers have concluded that for equitable decision making to happen, revenues must be diversified to reflect the standing of all stakeholders in wildlife management (Decker et al. 1996; Gill 1996a; Hagood 1997; Beck 1998; Pacelle 1998; Rutberg 2001; Nie 2004b; Jacobson and Decker 2006). Moreover, the commission structure is likely to perpetuate divisive and inequitable decision processes. Created specifically to "minimize the intrusion of politics" (Reiger 2001), the commission structure is counterproductive when politics are central and diverse legitimate

interests need venues to work out differences and achieve common interest policies (Brunner 2002; Brunner and Steelman 2005)—and doubly so when current arrangements merely institutionalize bias in favor of one set of special interests while marginalizing all others. Invoking the public trust, one alternative would be to retain the commission structure but distribute commission memberships among stakeholder groups proportional to their public numbers. Invoking democratic principles, another alternative would be to elect commissioners directly or make wildlife agencies directly accountable to elected officials. Whatever the alternative adopted, equitable and ameliorative decision-making processes have been recommended by many as a means of achieving good governance (McDougal et al. 1981; Dahl 1982, 2006; Lasswell and McDougal 1992; Clark 2002).

Conclusion

Cougar management today is problematic for numerous reasons. Officials and citizens alike are commonly thwarted by unappreciated, unacknowledged, and unaddressed problems in processes and outcomes. Current institutional arrangements often do not address the valid interests of a diverse public and at times do not produce decision making that is respectful, factual, and fair. Conflict and incivility deplete social capital as participants turn to the media, courts, and other divisive venues to advance their interests. The common interest remains elusive. We have attempted to provide a realistic problem definition focused on patterns of social interaction and decision making to highlight opportunities for constructive change. Our analysis suggests that institutions affecting cougar management need to be changed if participants are to find common ground and clarify shared interests. Opportunities for meaningful change exist, both in how participants interact and in how decisions are made. Of central importance, citizens who are knowledgeable and civic-minded need to be meaningfully involved in all aspects of making decisions if cougar management is to be adaptive, democratic, and in the common interest.