CULTURAL CONFLICT AND THE ENDANGERED FLORIDA KEY DEER

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Abstract: Conflict regarding the conservation and preservation of natural resources is among the greatest challenges of the 21st century. Given that management of natural resources increasingly depends on securing cooperation of culturally diverse groups of people, it is important to understand how to secure that cooperation. Endangered species management on private lands both epitomizes and magnifies the environmental conflicts encountered by natural resource policy makers and managers. Using an ethnographic approach, we analyzed the conflict surrounding management of the endangered Florida Key deer (*Odocoileus virginianus clavium*) to explore how conflict and moral culture apply to natural resource policy formation and implementation. We found disputants on Big Pine Key divided into two moral cultures—1 grounded in stewardship and the other in private property rights. These moral cultures augmented the conflict by perpetuating divergent ethical perspectives and aspirations. The conflict then escalated through de-individualization, dehumanization, and demonization of those informed by the opposing moral culture. Finally, as typically occurs with serious conflicts, incompatible frames of reference created by the cultural divide not only prevented rapid de-escalation but promoted conflict-reinforcing mechanisms such as selective perception and judgment, moral exclusion, and rationalization, which led to communication breakdown and antipathic hostility. Temporary solutions to superficial problems that were maladapted to conflicts involving moral culture did not ameliorate conditions and often exacerbated them. In emotionally charged decision-making venues, wildlife managers should take a proactive approach designed to encourage collaborative development of common ground among disputants. When conflicts reach a highly escalated state, as many inevitably will, their resolution will require meeting appropriate pre-negotiation conditions, then applying strategies that respond to both the level of escalation and the moral cultures involved in the particular conflict.

Key words: activism, communication, conflict, culture, endangered species, ethnography, Florida, Key deer, management, morality, *Odocoileus virginianus clavium*, public participation.

Conflict, or expressed disagreements among people who see incompatible goals and potential interference in achieving these goals, regarding the conservation and/or preservation of natural resources is 1 of the greatest challenges of the 21st century (Lee 1993, Peterson 1997, Daniels and Walker 2001). Conservation involves deciding which ecosystems, landscapes, habitats, and species deserve protection or other forms of management. It also involves determining the level of resource allocation appropriate for each objective. Increasing human populations and demands for improved standards of living, combined with limited natural resources, lead to conflict over economic, political, and social costs associated with use, wise or otherwise, and/or preservation of the natural environment. Many disagreements over management of natural resources are amenable to straightforward resolution strategies. Examples might include disagreements over allocation of irrigation water, the minimum size required for a building lot, or strategies that a municipality should use to achieve compliance with federal air-quality requirements. Although most of those involved in such disagreements may not be pleased with the outcomes, neither will they continue to brood over them. More serious conflicts occur when people fail to agree on whether water should be used for irrigation, whether building of any kind should be allowed in a certain location, or whether it is appropriate for the federal government to set air-quality requirements for individual municipalities.

One characteristic of serious environmental conflict is that it is firmly rooted in moral authority, or the basis people use to determine whether something is good or bad, right or wrong, acceptable or unacceptable. Moral authority regarding the environment is inextricably intertwined in culture, or “the basic premises of belief and value that people share in public life in order to recognize who they are and of what they are a part” (Carbaugh and Wolf 2000:24). The ethical grounding of any culture enables it to define all human actions believed to be significant as either

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moral or immoral. It is only a small step from identifying all actions in this way to identifying people themselves as moral or immoral, based on cultural norms. Accordingly, environmental conflict often becomes cultural conflict, or political and social hostility rooted in different systems of moral understanding. Although the cultures involved in environmental conflict often include ethnic, religious, and socioeconomic dimensions, they are more consistently moral cultures. We use the term moral culture to describe the process whereby moral authority unifies people with diverse educational, ethnic, or religious backgrounds to achieve a shared group identity. Opponents in a clash between moral cultures differ in wants, beliefs, and needs and lack shared methods for arguing claims and judging the validity of those arguments.

Environmental conflicts tend to be difficult to manage, in large part, because moral culture rarely is factored into decision-making models. Even if one were to accept the unrealistic assumption that it is possible to make management decisions in a political and social vacuum (e.g., based solely on natural science), there is no reason to presume that this would be desirable. Application of the scientific method often fuels rather than mitigates environmental conflict, because cultural values, more than scientific discoveries, motivate society (Botkin 1990:3–8, Peterson 1997:34–53). Participants in environmental disputes often find themselves involved in holy wars over the proper relationship between humans and other species. Specific policies are forgotten as participants polarize into opposing camps, each justified by bedrock values. In this study, we analyze the Florida Key deer management controversy surrounding land use in the lower Florida Keys to clarify the cultural dimensions involved in many environmental disputes.

Regarding environmental disputes, at least 2 opposing moral cultures have developed in the United States, both rooted in the nation’s origin myth. Good government and laws were assumed to derive from a higher source, either God or nature (Bellah 1992:27). Thomas Jefferson combined these ideas in the beginning of the Declaration of Independence, referring to “laws of nature and of nature’s God” (Bellah 1992:27). One perspective, grounded in John Locke’s work, argued that good government was derived out of a contract for mutual defense of private property (Bellah 1992:30). Thus, property ownership was proposed as a prerequisite for voting. A second view, based in Calvinist theology, assumed that good government was rooted in social responsibility and individuals should be willing to deny themselves for the greater good of the community (Bellah 1992:30–31).

The moral culture rooted in the Calvinist interpretation was modified and popularized by Theodore Roosevelt and John Muir (Ornace 1981, 1984; Dorsey 2003), who argued that nature was a catalyst for lifting humanity intellectually and spiritually. Further, Roosevelt expanded the U.S. frontier myth (Peterson 1990, 1991; Slotkin 1998) to include yeomen farmers who conserved finite resources for others to use, as well as the traditional conqueror heroes (Dorsey 2003). Although this new perspective took decades to find broad acceptance among the U.S. public, it is prevalent today. The Christian stewardship interpretation of the book of Genesis also played an important role in preservationist ideology (Cox 1992). This interpretation assumes that a sacred stewardship was passed to humankind with the command to subdue the earth and have dominion over every living thing upon it (Genesis 1:28). So, within Calvinistic moral culture, stewardship is mandated as both a social and spiritual responsibility. One effect of this idea can be seen when persons espousing preservationist ideals characterize those without such ideals as intellectually and morally deficient. Because participants in the Florida Key deer management controversy who identified stewardship as their core value tended to support preserving natural habitat, we subsequently refer to adherents of this moral culture as preservationists (Table 1).

Alternately, moral culture grounded in the sanctity of individual freedom, rather than in responsibility to the group, often translates into an emphasis on private property rights. Locke’s conception of the role of private property in modern society forms the theoretical justification for most private property rights advocacy (Bellah 1992:30). This moral culture derives from the U.S. tendency to equate property rights with democracy (Peterson and Horton 1995). Private property is thus seen as an inalienable human right on par with “life, liberty, and the pursuit of happiness.” Contemporary proponents of property rights typically base their claims on the Fourth Amendment to the Constitution, which reads:

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no
Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

Just as Roosevelt's reinterpretation of the frontier myth opened new possibilities for the concept of stewardship, the Federalist principles espoused by Chief Justice John Marshall's Supreme Court provided a foundation for the sanctity of private property. Marshall's decisions, beginning with *Fletcher v. Peck* in 1810, were the first to proclaim Constitutional protection for private property interests (Kraus 1959:308-311; Morison and Comagger 1962:350-450). Because participants in the Key deer controversy who identify individual rights as their core value tend to support the rights of individual property owners, we subsequently refer to adherents of this moral culture as private property rights advocates (PPRAs; Table 1).

Both the perspectives of PPRAs and preservationists are distinct moral cultures drawn from texts that, while subject to various interpretations, pervade U.S. politics, law, and society in general. Belief in the literal sanction of the Bible or the Bill of Rights is peripheral to their cultural power, for moral culture only requires that its adherents espouse the moral imperative derived from these foundational texts. Endangered species management provides a microcosm of the conflicting moral cultures faced by natural resource managers in the United States. As it has been interpreted and implemented, the Endangered Species Act (ESA) magnifies environmental conflict (Yallec 1982:149-162, 1994; Peterson and Horton 1995). The discourse of the U.S. Fish and Wildlife Service (USFWS), which is legally mandated to manage endangered species, typically ignores cultural practices (Peterson and Horton 1995), and not surprisingly fails to consider their implications for management decisions. Because this aspect of ESA enactment has been ignored, antagonists in conflicts ranging from the northern spotted owl (*Strix occidentalis caurina*) to the Florida Key deer have become so deeply entrenched in positions espoused by their moral culture that negotiation becomes ineffective at best. This phenomenon is further magnified and complicated when agencies faced with insufficient funds to procure suitable habitat attempt to preserve private property for endangered species habitat (Peterson and Horton 1995). The long-standing conflict regarding Florida Key deer management on Big Pine Key exemplifies moral conflict inspired, and exacerbated, by endangered species management on private lands.

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Given that management of natural resources, particularly those associated with private property, increasingly depends on securing cooperation of culturally diverse groups of people, those attempting to secure that cooperation should understand how moral authority enables a culture to iteratively make and justify decisions regarding how to interact with each other, as well as with nonhuman species. In this study, we use the controversy surrounding management of the Florida Key deer as a case study to improve our ability to reach this goal. Within the previously defined framework of conflict and moral culture, we describe an ethnographic research approach directed toward determining how the conflict occurred and was reinforced—rather than simply identifying conflict components—in an attempt to broaden our understanding of the social dimensions of wildlife management. We then outline how framing and escalation of conflict on Big Pine Key followed a predictable pattern for conflicts attenuated by moral and cultural differences. By discussing how decisions made without knowledge of this pattern limited past attempts to ameliorate the conflict, we illuminate the value of such knowledge. Finally, we describe conflict resolution strategies based on an awareness of conflict and moral culture and suggest implications for enabling land managers to integrate social systems and ecosystems within natural resource management plans.

**STUDY AREA AND CONTEXT**

The Florida Keys, within Monroe County, Florida, are environmentally and demographically unique. They stretch southwest from the southeastern tip of the Florida mainland for >350 km. There are more than 1,500 islands, but humans
inhabit only 30. Among these is Big Pine Key, the largest of the lower Keys at 2,428 ha (Klimstra et al. 1974). Tourism, retail services, commercial fishing, and government employ most of Monroe County’s residents. This county has the highest cost of living and the fifth highest per capita income in Florida.

The growth of the tourism industry, along with a reliable supply of fresh water and electricity, contributed to dramatic human population growth in the Keys between 1950 and 1980. This led the state of Florida to declare the Keys an “Area of Critical State Concern” in 1975, and Monroe County to adopt a land-use plan and policy of preservation and reduced growth (Anonymous 2000). At the same time, both an improved highway and larger water pipeline were completed through the Keys, further stimulating growth. This schizophrenic pattern of creating laws and policies, with attendant oversight agencies intended to slow human population growth, while at the same time catering to the desires of a massive influx of new residents, has continued unabated. Recently, these 2 ultimately incompatible goals collided in Big Pine Key, where neighborhoods and even individual dwellings stand half built, epitomizing the conflict.

Big Pine Key is home to 4,206 humans (Anonymous 2000) and a formidable array of endangered or threatened species including the Key deer, rice rat (Oryzomys palustris natator), Lower Keys marsh rabbit (Sylvilagus palustris heferus), eastern indigo snake (Drymarchon corais couperi), Key tree-cactus (Phoecenurus rubinus), and the green (Chelonia mydas), hawksbill (Eretmochelys imbricata), Kemp’s ridley (Lepidochelys kempi), leatherback ( Dermochelys coriacea), and loggerhead (Caretta caretta) sea turtles. At the local level, the Key deer has drawn more attention than any of the island’s other species and inspired the most conflict. The USFWS listed it as endangered in 1967 (Folk 1991).

Key deer range extends from Big Johnson Key to Sugarloaf Key, although approximately 65–75% reside on Big Pine and No Name keys (Silvy 1975, Lopez 2001). Approximately 192–210 (201 ± 9 [1 SE]) deer resided on Big Pine and No Name keys, 1969–1972, when the first extensive survey was conducted (Silvy 1975, Lopez 2001:83–109). A 1998–2000 survey indicated that the Key deer population was 466–498 (482 ± 16 [1 SE]) individuals on these 2 keys (Lopez 2001:83–109). Folk and Klimstra (1991) argued that the sociology of Key deer changed from the early 1970s to the early 1990s as a result of increasing contact with humans, as evidenced by increased group size, reduction in movements, and changes in behavior (e.g., loss of alarm and flight responses). They also hypothesized that domestication and resulting urbanization of deer greatly increased the probability of road kills. This could be important, because road kills were the greatest single cause of deer mortality (50%; Lopez 2001:40). Further, habitat fragmentation caused by real-estate development could result in greater movements to meet life-history requirements that, in turn, could result in highway-associated mortality (Folk 1991). The increased numbers of road kills, however, might simply result from higher deer densities (P. A. Frank, USFWS, personal communication).

Traditionally, human development was considered the primary threat to Key deer recovery (Klimstra et al. 1974). Humans inhabit approximately half the islands in the deer’s range, and 8 islands have large subdivisions and considerable commercial development (Folk 1991). During the 1980s, the human population of Big Pine Key increased 77% (Monroe County Growth Management Division 1992). Folk (1991) hypothesized that this increased development would inevitably lead to fewer deer. Current estimates for Big Pine and No Name Keys, however, indicated that Key deer numbers increased by approximately 240% during this period (Lopez 2001:88).

**METHODS**

**Perspective**

This project is an attempt to understand and explain how human communication influences group formation and activities pertaining to environmental conflict. Accordingly, it is grounded in social construction theory, which explains how experience shapes people’s perception of reality and how language is used to construct that reality (Gergen 1985, Lincoln and Guba 1985, LeFevre 1987). Social constructionism argues that knowledge is not acquired free of culture, history, and social context. Rather, linguistic interactions among individuals produce reflexive understanding (Lincoln and Guba 1985, Lange 1990, Ray 1996). Similarly, negotiated understanding among groups and cultures develops through the medium of language (Gergen 1985, 1994b; LeFevre 1987; Peterson and Horton 1995). Social constructionism confronts the idea that language represents objective truth with the claim that words acquire meanings in contexts...
created by historical patterns, as well as current interactions among individuals; they are used to reward, blame, censure, and assign responsibility. Finally, the conventions of discourse within a society shape how language is understood and how it affects human action (LeFevre 1987, Gerget 1994a, Peterson and Horton 1995). Although different theorists emphasize different aspects of the social construction process, all converge around the claim that language is constitutive rather than simply reflective of social reality.

Any conflict is attenuated and complicated by the moral dimension of cultural differences (Rubin et al. 1994:11–26). Culture affects all stages in conflict development. It encourages the development of incompatible aspirations that define the conflict, influences the surfacing of conflict because some individuals avoid it while others embrace it, and also influences which potential strategies parties use to address the conflict (e.g., avoidance, contentiousness, yielding, or problem solving) by influencing rigidity of aspirations and perception of common ground. Disputants from different cultures typically lack common rhetorical systems, traditions, stories, and symbols. The frustration and aggression that develop from the resultant communication failure promote rapid escalation of the conflict (Pearce and Littlejohn 1997:111). Escalation begins with fear, anger, and blame being directed at the other party, which then foment negative images and attitudes (Rubin et al. 1994:68–97). Parties then de-individualize, dehumanize, and even demonize each other. These negative images in turn create reinforcing mechanisms that serve to perpetuate the conflict (Rubin et al. 1994:98–116). We label these mechanisms: (1) selective perception and judgment, (2) moral exclusion and rationalization, and (3) a breakdown of communication and autistic hostility.

Ethnographic Approach

Because the conflict we examined was so dependent on collaboration among area residents, we used an ethnographic approach for our analysis. Ethnography, which draws its strategies for analyzing linguistic codes and social performance from folklore and sociolinguistics, is broadly concerned with how communication practices relate to social structures (Anderson 1987, Ray 1996, Downes 1998, Yarbrough 1999). It provides a direct means for examining interactions among and within social groups (Lindlof 1995, Ray 1996). The ethnographer immerses him- or herself thoroughly in the social context, taking on the role of student, to request that participants teach the researcher how to interpret the situation. Ethnographic regard for context enables the researcher to discover the importance of moral authority, culture, and ultimately the moral culture as they pertain to group identity performance. Clearly understanding the practices of group identity and performance should enable natural resource managers to minimize the negative aspects of environmental conflict while developing more effective strategies for involving human communities in natural resource management policy formation and implementation. M. Nils Peterson conducted all field research for this project. First-name pseudonyms were used for all informants other than governmental officials or members of the media, as a means of complying with Institutional Review Board confidentiality requirements at Texas A&M University and standard reporting procedures for qualitative research (Anderson 1987, Morse 1994). We used the following system to identify quotations from interview transcripts: Pseudonym, Interview number, Utterance. For example, a quotation identified as (Scott, U5, U4) came from the fourth utterance within interview number 5 and was spoken by the informant identified as Scott.

Ethnographic researchers rely on a variety of techniques to manage issues of accuracy (bias and precision). Freedom from bias, or the extent claims conform to actual features of group action and interaction can be improved through triangulation in data collection and informant validation (Anderson 1987, Silverman 1993). Informant validation can take several forms, including designing clarification questions into the interview protocol, conducting multiple interviews with the same informant, and asking informants to critique conclusions from past and current analyses of the situation. The quality of contacts with informants, number of informants, and time in the field also decrease bias. In this case, we achieved triangulation by combining individual interview transcripts, field notes taken while living within the social situation, and summaries of historical accounts. Informants participated in multiple interviews and critiqued tentative conclusions. The interview protocol also included clarification questions. Documenting informants’ stories in their own words further limited the potential for bias.

Precision, or the consistency of the methodological instrument in recording data, is a more complex challenge (Lincoln and Guba 1985,
Ethnographic researchers recognize that, as socially situated humans studying other socially situated humans, they are neither value-neutral nor unresponsive to contextual sites. This means that the ethnographic researcher is the principal methodological instrument, and her or his interactions with informants becomes part of the research (Lincoln and Guba 1985, Lange 1990, Ray 1996). Continual movement between data collection and analysis allows researchers to evaluate the precision of recorded explanations (Lincoln and Guba 1985, Ray 1996). This repeated interface encourages the reflexivity so essential to any explanation of situated social action (Luhmann 1989:15–31, Gergen 1994b, Peterson 1997:34–53). Preparation for this analysis included studying previously compiled reports, news coverage, and transcripts of public meetings. Reflexivity was further heightened by reexamination of ongoing news coverage, public meetings, and transcripts of previous interviews, as well as constant comparisons between field notes and interview responses. This enabled informants to guide the interview protocol into issues that the original interview questions had not considered, as well as to clarify previously vague concepts, and to verify or refute researcher interpretations of events. It also provided a point of comparison for examining the nuances of the practices in which informants engaged when negotiating and performing their group identities.

After establishing the research question and site, we located and contacted influential members of local interest groups. Because his research was directed toward providing a more reliable ecological basis for a Habitat Conservation Plan on Big Pine Key, R. R. Lopez was able to provide a list of active and informed members of the local community. Notes taken while attending meetings of local groups involved in the conflict supplemented both individual and group interviews with conflict participants. Gaining access to those informed by preservationist cultural values proved easy—they went out of their way to facilitate the interview process. Negotiating access to those grounded in PPRA perspectives was more difficult. Telephone calls requesting interviews went unanswered until Scott, an influential member of the business community, broke the impasse. After hearing that R. R. Lopez was affiliated with the project, Scott agreed to participate. During his initial interview, Scott took the role of teacher, explaining his perspective regarding how the conflict began, the motives behind various interest groups, and why it had become so difficult for people to consider crossing the boundaries to work with those who had become enemies.

Scott was pleased with the experience and spread the word among his colleagues and associates. A few days later, Scott reported that when Wayne, 1 of his colleagues, had mentioned receiving a telephone message requesting an interview, Scott had enthusiastically described his own interview experience. Scott’s assurances that the researchers actually wanted to understand the situation from his perspective overcame Wayne’s earlier reservations. He eagerly agreed to a second request and scheduled an appointment for the next morning. Wayne gave an hour-long interview and got angry when his secretary interrupted him for a previously scheduled meeting. After this point, the PPRA community welcomed the opportunity to share their perspective. The project included formal interviews with 20 informants, roughly half from each moral culture, and informal interactions with many more.

Ethnographic research protocol requires that conclusions drawn from structured interviews such as those conducted for this project must be verified through repeated and informal interactions between researcher and informants (Lincoln and Guba 1985, Lange 1990). Although some informants were ecstatic about the chance to speak openly about the conflict, many were hesitant to be candid, even within the constraints of a confidential interview. Others indicated that although the interviews were designated as confidential, they could not speak forthrightly because of their positions. Outside of the formal interview setting, however, these community members often used more explicit language, even contradicting statements they had made during their original interview. Detailed field notes of interactions with local conflict participants enabled constant comparison between statements informants made in various settings. In the case of direct contradictions, informants were asked for clarification. Interviews evolved into conversations as the conflict participants began to accept interviewer curiosity as nothing more than a desire for understanding. Over time, our relationship changed in 2 ways. Most pertinent to this research was their increased trust and willingness to explain the internal logic, as well as the strategic components of their cultural perspective and public statements. Secondarily, because they saw the interviewer as a reasonable person, they
attempted to use the interview setting to persuasively present the inherent validity of their perspective. Thus, field notes and interview transcripts provided the core ethnographic data. Radio and newspaper accounts, unpublished state and federal agency reports, and personal correspondence supplemented the field notes and interview transcripts. Although we evaluated media dating back to the creation of the National Key Deer Refuge (USFWS) in 1957, most information related to events since 1985. Radio accounts were transcribed from tape-recorded broadcasts obtained from William Becker, news anchor for 104.7 FM, WWUS. The National Key Deer Refuge kept files of local, state, and national newspaper articles pertaining to the refuge. We evaluated all articles pertaining directly to the conflict. We also obtained and evaluated Bidol-Pavla’s (1992) conflict assessment.

ETHNOGRAPHIC ANALYSIS

Typically, cultures create a system of morals that defines right and wrong. Thus, people with diverse educational, ethnic, or religious backgrounds come to share beliefs and values in public life that create both individual and group identities. As is often the case in environmental conflict, the moral cultures of those living on Big Pine Key extended this process into a spiral of escalation. Once cultures create a system of morals, those morals begin to mandate cultural practices.

Cultural Divide

Every PPRA informant interviewed expressed concern that the Key deer were being elevated to a moral status superior to humans (Table 1). The PPRAs also expressed this sentiment in the records of every public meeting reviewed. Comments such as “when the deer are more important than the people there is something out of whack” (Scott, 14, U11) were common. Residents repeatedly claimed that their concerns regarding how their property rights were being violated went much deeper than economics. One woman, speaking in the 1992 Big Pine Focal Point hearings, chronicled her happy life on Big Pine Key, then pointed out that fair market value could never pay for her home because it was part of who she was and could not be found elsewhere. This perspective was dramatically illustrated in a public meeting convened by the USFWS at the Big Pine Christian Center on 23 August 1989. Only 2 speakers caused the moderator to lose control of the meeting. When a representative of the Wilderness Society stated that a public opinion survey indicated that Big Pine Key residents wanted accelerated land acquisition by the refuge, a disturbance ensued as audience members yelled out accusations of lying. Later, a participant challenged panel members to support the Assistant Refuge Manager’s claim that “owning property is not a right in this country, it’s a privilege, just like owning a driver’s license.” After a slight commotion, the Assistant Manager for Florida Refuges responded that it must have been a “misrepresentation as to his comment.” An audience member interrupted the Assistant Manager, shouting, “The statement was made to me.” The moderator called for order, pleaded for the audience to follow the meeting format, and attempted to call the next speaker. The commotion did not subside, however, until the offended citizen obligingly offered to wait for his turn. This sentiment, that property rights transcended economics, was widely shared. An informant said, “I don’t think there is anyone on Big Pine who does not love the Key deer ... I wouldn’t want to see rampant development ... but I’m also for property rights” (Ruth, 110, U36).

Alternately, preservationist informants viewed any freedom, including the freedom to manage one’s private property, as meaningless without responsibility (Table 1). They appealed to “higher” motivations, such as unselfishly working toward the greater good of the nation and ideals that were larger than the individual. One couple told me, “It’s not just an indebtedness to a stewardship [of nature], it’s indebtedness to other Americans.” They extended this contention by claiming that those who fought preservation were “anti-American” (Celman, 11, U17). For them, those who failed to protect the Key deer, which many equated with nature (Lopez et al. 2002), failed as American citizens. Other preservationists were less explicit, but still made the point that their primary responsibility was to keep Big Pine Key in its natural state “with its woods, and with its pine uplands” (Lauren, 112, U16).

Employees of the USFWS tended to share the preservationist focus on social responsibility, even at the expense of individual freedoms (Table 1). One biologist stated, “We’ve probably passed the point where we can really manage deer; they do what they wanna do, and they leave the refuge. But that does not mean we shouldn’t try to get a hold of every possible piece of land that we have” (John, 12, U6). Another biologist evinced a less rigid view toward specific policies by saying that,
historically, an extreme situation required an extreme stance, but now that the refuge had acquired most of the “good” habitat, they could “lower their guard” (Tevis, 117, R25). Despite the variation in views regarding specific policies, however, the emphasis on social responsibility never wavered.

Although the Key deer themselves were often blamed by the media for the conflict, all informants indicated that either property rights or stewardship for nature was at the crux of the conflict (Table 1). Preservationists stated that the PPRAs were fighting to destroy nature, and cited greed (e.g., the desire to make as much financial profit from nature as possible) as the true motivation rather than reverence for property rights. Conversely, PPRAs argued that preservationists were fighting to destory human development, and they maintained that greed (e.g., the desire to have the federal government purchase and control property for preservationists’ personal benefit), as opposed to the responsibility of living in harmony with nature, was the true motivation for preservationists. In addition to accusing each other of misusing individual rights, each culture saw the other as an arrogant proponent of a distorted sense of social responsibility. Preservationists claimed that PPRAs ignored their responsibility to humans who lived outside of the temporal and spatial confines of Big Pine Key, and PPRAs claimed that preservationists ignored their responsibility to fellow residents of the Key. Both sides saw the deer as merely a pawn of the opposition.

On Big Pine Key, moral cultures that defined right and wrong enabled exemplars of the 2 distinct moral cultures that typify environmental conflict in the United States, PPRAs and preservationists, to evolve. From the perspective of PPRAs, environmental policies that enhance individuals’ abilities to maintain private property are right, while those that limit private property rights are wrong (Table 1). For preservationists, environmental policies that encourage socially responsible behaviors are right, while those that privilege individuals over society are wrong. As discussed in the introduction, both perspectives toward the environment are quintessentially American in their political activism, and both claim that our very humanity requires holding firmly to the values they espouse.

Opposing Aspirations

Cultural differences between PPRAs and preservationists promoted incompatible aspirations. Those informed by PPRAs perspectives wanted all property owners free to build, remodel, or otherwise alter their property unhindered by regulatory restrictions. They also advocated development, growth, and respect for individuals’ property rights. Various informants described parks, a new elementary school, new housing in existing subdivisions, infrastructure including expansion or paving of roads, and remodeling and/or expansion of existing businesses as illustrations of the development they sought. They also aspired to unfettered use of private houses and their grounds, including no interference from the community when they chose to remodel a building or build a fence. For example, in an April 1992 Key deer news broadcast, a citizen said, “Fencing should be allowed anywhere a man owns a piece of property to protect his property and his children and his home.” Another couple stated, “To grow anything around here, we have to fence it all in, and yet they won’t let us fence our yard, not that I would.” They added that even with the new regulations allowing fencing, you must leave “5 feet on the side and 10 or 15 on the road. When you have a 60 by 80 lot, you’re losing an awful lot” (Scott, 14, U4). Whether or not individuals were allowed to do as they wished with their property was not the fundamental problem. Rather, the very idea that they were required to ask permission was wrong. Another informant said, “I want to put a storage shed on my [commercial] property” and “I shouldn’t have to go begging hat in hand to Fish and Wildlife every time I need to do something on my property” (Shayve, 13, U19). Although several PPRA informants claimed to oppose unfettered development, particularly commercialization, they indicated that because of their reverence for private property, they had to allow all property owners the freedom to do as they wished with their property (Table 1).

Not surprisingly, preservationists felt directly responsible for ensuring that all remaining undeveloped land was purchased and preserved in its natural state in perpetuity. The Key Deer Protection Alliance, the Big Pine Key Civic Association, and sometimes the National Key Deer Refuge (depending on perspectives of managers at the time) supported this stance. Representatives of the Key Deer Protection Alliance, the local watchdog group for the deer, indicated that their primary concerns were preservation of land and reclamation of natural habitat—not preservation of deer (Celina, 11, U17). Representatives of the
Big Pine Key Civic Association flatly stated that their primary goal was “no more development on Big Pine Key” (Robert, I15, U10).

Discussions with refuge employees, as well as their public statements, indicated that—at least historically—the refuge personnel’s primary aspiration was to acquire and preserve more land rather than use other management options, such as habitat reclamation or captive breeding. A previous refuge manager said, “If we don’t have habitat, nothing else matters. We need more land. The deer are using everything that’s left” (Straw 1998:28). This attitude began changing as new population estimates indicated the deer were thriving, but it was pervasive in refuge history and is still advocated by refuge personnel.

The differing aspirations of PPRAs and preservationists regarding land use were rigidly tied to their respective moral cultures—essentially ruling out compromise. Informants indicated that yielding on even 1 issue was unacceptable because it would represent conceding the moral ground underpinning their stance. This phenomenon typically was perceived through the opening-the-floodgates metaphor. Many PPRAs indicated via interviews, newspaper articles, and personal correspondence that allowing preservationists to prevent a single person from exercising his/her constitutional right to unfettered use of property would eventually allow the USFWS to seize all personal freedoms. Further, Overbeck (1999:3), writing for the Lower Keys Barometer, argued that “Everyone understands when your neighbor loses a right you also lose that right. It may take a little while for you to feel it, but feel it you shall!” Similarly, preservationists felt that their failure to oppose PPRRA attempts to build anything would open the door to full-scale development on Big Pine Key (Cegina, I, U30; John, I2, U10; Robert, I15, U8).

Moral culture predisposed the community to address this conflict in particular ways. Although both cultures commonly used avoidance strategies, occasionally avoidance magnified the perceived problem until the avoiding party engaged in contention. Neither PPRAs nor preservationists saw any possibility for common ground, so collaboration was not an option. When asked whether any common ground existed between the factions, a preservationist informant responded that he could not think of any because the other faction denigrated his group in the newspapers and they were “fighting it out” over incorporation (Trenton, I16, U20). A refuge biologist stated that parties rarely sought out the middle ground because they have “that gang mentality, almost” (John, I2, U15). When asked whether various interest groups on Big Pine Key shared any goals, a preservationist representing the Big Pine Key Civic Association said, “At the present time, I don’t see any common ground” (Robert, I15, U12). The cultural component exacerbated this conflict in its initial stages because culture influenced both the rigidity of aspirations and perceived common ground, which in turn influenced how disputants chose to address the conflict.

In sum, a review of all available data—including interviews, field notes, public meetings, personal communications, media, and technical reports—indicated that this dispute centered in land use as opposed to the Key deer. Both cultures repeatedly accused the opposition of using the Key deer as a pawn in their schemes to control land use. Additionally, participants from both cultures admitted to doing the same, although they explained that their own strategic use of the deer was necessitated by the opposing culture’s behaviors. Lastly, proponents of both perspectives felt that yielding on a single point, however trivial, was contra-indicated because it represented conceding moral ground.

Escalation

The opposing aspirations of PPRAs and preservationists led to escalation, which functioned both as an unwitting response and as a political strategy. Political activism, or the belief that individuals are responsible for participating in their own governance, contributed to further escalation of this conflict. Positive attitudes toward political activism in the United States date at least to the Declaration of Independence (Kraus 1959), which states that when faced with “abuses and usurpations, pursuing ... a design to reduce them under absolute Despotism, it is their [the people’s] right, it is their duty, to throw off such Government, and to provide new Guards for their future security.” Although residents of Big Pine Key were no more likely than other Americans to be able to quote this precise language, they respected those who dutifully attempted to influence governance. Although preservationists and PPRAs were focused on social responsibility and individual freedom, respectively, both believed in political activism. Therefore, both factions created or co-opted formal organizations as mouthpieces. The Key Deer Protection Alliance and Big Pine Key Civic Association spoke for preservationists, while the Chamber of Commerce and Lower Keys Barometer represented PPRAs. Because both cultures in
conflict were morally grounded, even the earliest stages of escalation closed off possibilities for negotiation and resolution and at the same time mitigated against the possibility that conflict might subside relatively quickly. Instead, value differences led to structural changes that perpetuated and further escalated the conflict.

Mystification.—The first step toward these structural changes was the development of fear and confusion by mystifying the competing moral cultures. Both moral cultures identified those informed by the opposing culture as enigmas, maintaining that the opposing culture’s rationale was unknowable by reasonable humans. One informant explained that it was impossible to cooperate with members of the opposing culture because “there is no shared value system in this community” (Celina, II, U23). The human tendency to fear the unknown thrives in such situations. Further, because neither party could be expected to understand the values espoused by the other, any attempt to do so was deemed irrational. Any engagement between the 2 led to anger, because ignorance of the other’s cultural norms led members of both groups to say and do things that aroused hostility from the opposition. Thus, the moral authority of each culture was simultaneously the norm most flagrantly violated by members of the other culture and the norm most invisible to its adherents, because it provided adherents with their ideological foundation, which could not be challenged without endangering fundamental cultural tenets.

Organizations that disseminated the PPRAs message repeatedly blamed preservationists for giving deer more rights than humans, and “making the children feel that the deer are more important than they are” (Ed, II9, U41). They failed to consider that a basic cultural norm within preservationist culture was that an action was wrong if it either violated the stewardship responsibility humans have for nature or limited opportunities for society, including posterity, to experience nature. Conversely, preservationists expressed anger and frustration regarding PPRAs support for a chain restaurant on Big Pine Key, because “We all moved here for the rural atmosphere” (Trenton, I16, U13). The preservationists were unaware that for PPRAs, denying current landowners the right to sell their property to the restaurant chain was akin to denying democracy, freedom, and even humanity. Because fear and anger exacer bated negative images and attitudes between the groups, members began to de-individualize, dehumanize, and even demonize the opposition.

De-individualization.—Individually, most residents of Big Pine Key held relatively moderate views. Most wanted the island to retain its rural character and be “spruced up a bit” (Field Notes). The latter notion referred to some combination of repairing worn-down businesses and signs, eliminating unsightly exotic vegetation, alleviating traffic problems through some type of road alterations, and allowing some number of new houses to be built on gravel lots in existing subdivisions. For example, several members of the Chamber of Commerce stated they did not want new commercial development or housing built on lots covered with native vegetation and claimed to value the land on Big Pine Key for its aesthetic beauty. Similarly, several members of the Key Deer Protection Alliance and the Big Pine Key Civic Association supported improving roads, regretted blocking an elementary school on Big Pine Key, and voiced no disapproval of homes being built on scarified lots within existing subdivisions.

Although values certainly were instantiated in individual people, they developed within social and cultural contexts. So, although many individuals held more moderate views than either moral culture, they sought a voice and identity within existing cultural groups. Those with the most extreme incompatibilities tended to both recognize and address conflicts first, thereby framing the situation for other participants. For example, a recent dispute addressed incorporation of Big Pine Key. Those who first addressed this issue held extreme viewpoints even within their own moral cultures. The PPRAs extremists likened themselves to the American colonists under British control because they lacked representation. They claimed that under the current regime, a corrupt government was denying them the free exercise of their rights. Preservationist extremists described the proposed incorporation as a scheme for the Chamber of Commerce to control the island (Joseph, I8, U31). Initially, more moderate adherents of each cultural perspective failed to see incorporation as either a panacea or a bane for the community. By the end of the study, however, these informants were so infuriated by the tactics and statements of the opposition that their initially moderate stances were forgotten. One preservationist stated that he could not think of any possible common ground with PPRAs because he was so involved in fighting incorporation and the opposition was
“calling us liars and everything in the papers” (Trenton, 116, U20).

This highly polarized environment allowed no voice or group identity for those who felt strongly about the conflict but held more moderate views. They were either forced into silence or into 1 of the polarized moral cultures. Those who were unwilling to embrace an existing moral culture and its attendant social norms felt their participation only added to the problem and were resigned to nonparticipation. Conversely, if they felt strongly enough about the issue to forgo silence, they were forced to join 1 of the existing moral cultures. Further, those who did participate became resigned to the degraded forms of communication typically used by the culture with which they aligned themselves. One couple stated that when they moved to the community they felt the County was bent on developing Big Pine Key to the maximum limit, which would hurt the community. Initially, they were not against siting the elementary school on Big Pine Key. They fought it, however, because they learned from other participants that “schools are always a magnet for growth” (Robert, 115, U23). So, they “more or less joined the environmental group in fighting any development here.” Similarly, an influential community member told the story of his forced entry into the developer faction (Ed, 119, U48). When he moved to the community he tried to promote a local elementary school. He stated that the minute he opened his mouth he made instant enemies and was labeled a pawn of developers and contractors. He summed up his interview by saying, “When I first came here I thought I could help. I jumped into the water and made a big splash, but I got out fast.” Thus, the more moderate voices were either forcibly assimilated into the existing moral cultures or silenced.

The process of moving toward extremes was facilitated as each group de-individualized members of the opposition by giving them denigrating labels. The PPRAs shared a common idea that the preservationists consisted of hypocritical “got-miners,” people who “came here from somewhere else, who have decided, you know, ‘I’ve got mine and nobody else can have any more’” (Wayne, 16, U5). They shared the common story that the opposition was composed of outsiders who made their fortune exploiting nature in other places, and then came to Big Pine Key, where they tried to prevent locals from reaping the same benefits from their property that got-miners had elsewhere. The PPRAs maintained that preservationists had houses, canals, and fences, but lobbied the refuge to take the right to have these same things away from everyone else. In sum, PPRAs believed the opposition was hypocritical and that it refused to discuss issues in public meetings and forums—preferring to secretly pressure government organizations to carry out their nefarious schemes to defraud private property owners.

The PPRAs also designated a group identity, formed through shared stories, for “The Refuge,” which includes past, present, and even future employees. Ruth, a PPRA informant, clarified the temporal stability of this identity. After blaming a past refuge manager for current problems, she said, “I like him [the current refuge manager], but I won’t trust him because The Refuge just cannot be trusted” (Field Notes). A favorite PPRA tale is the story of The Refuge forcing the owners of the Coconut Farm Nursery to move because they could not remove their fence without allowing the deer to ravage their plants. The Refuge’s “evil intent” was substantiated by claims that it had then attempted to prevent the nursery from relocating on U.S. Highway 1, until the ensuing “public uproar” forced The Refuge to back down. Finally, although The Refuge used the fence as an “excuse” to destroy the value of someone’s private property, refuge employees left their own fence in place until >5 years of “whacking” by the community finally pressured them to pull it down (Dave, 114, U22). The Coconut Farm story spawned several other tales, including those of unpermitted housing proliferating on USFWS property at the same time private owners had to go through an onerous permitting process before being allowed to make even the slightest change on their own property (Dave, 114, U22; Tiffany, 14, U28). Other stories vilifying The Refuge proliferated. According to the reality constructed within this moral culture, evil biologists prevented grandmothers from fixing treacherous driveways because a single rabbit pellet was found near the property (Field Notes). In this story, the grandmother kept domestic rabbits, but biologists automatically assumed the pellet came from an endangered Lower Keys marsh rabbit. In other stories, The Refuge engaged in conspiracies with preservationists to force honest, hard-working families out of business and into bankruptcy (Wayne, 16, U3; Dave 114, U22). One informant reported that a refuge employee had attempted to persuade an unwilling seller by threatening that, “When we do our controlled fires, if your house gets on fire, there won’t be anybody to put it out” (Ruth, 110, U38).
Preservationists held a no less demeaning view of refuge personnel. They shared the PPRAs proclivity to refer to USFWS personnel as The Refuge. For example, one said “The Refuge” had failed to fulfill its mandate to protect endangered species habitat adding, “I see them signing off on stuff they shouldn’t be signing off on” (Cilina, N. U33). She further opined, “I have found them to be quite castrated in their decision making.” The preservationists also shared a set of stories that de-individualized the PPRAs. Preservationist stories tended to characterize PPRAs as foolish at best and criminal at worst. Attempting to work with such people was useless, or at least extremely difficult, due to their lack of education and ignorance. One informant explained PPRAs as people with “blighted aspirations,” “narrow information sources,” and limited experiential and educational backgrounds (Eric, N. U22). Another described PPRAs as having “less money, living from day to day, and with lesser education levels.” She went on to say, “Few of them have bachelor’s degrees. I don’t see there is any way to get through to them” (Lauren, N. U15).

One story of erratic behavior attributed to PPRAs tells of a Methodist minister who, after kicking the Big Pine Key Civic Association out of the church’s meeting hall for an ostensible schism in basic beliefs, “started a commune in Tennessee, believe it or not, and took 15 or 16 people from Big Pine with him” (Trenton, N. U34). Not only were PPRAs labeled as ignorant and eccentric, but also as dangerous. When explaining why reasonable people would choose to avoid interacting with PPRAs, a member of the Big Pine Key Civic Association compared realtors and the Chamber of Commerce—surrogates for individual PPRAs—to drug-dealing fishermen who exploited the environment and the law to get rich, saying “It’s like that with vacation rentals. We got an ordinance passed to prevent them, but they just do it illegally—they have no respect for the law” (Erin, N. U37). Preservationists commonly used the label “concrete coalition” to denigrate PPRAs. One informant claimed that, “The concrete coalition would like to see the Keys become the ultimate tourist attraction and everything here paved and Disneyfied” (Josh, N. U17).

Demonization.—Because humans tend to empathize with other individuals (Rubin et al. 1994:82-97), de-individualization clears a path toward demonizing the opposition. The nature of each group’s moral culture also encouraged this transformation. Preservationists saw those who ignored their stewardship and social responsibili-

by harming the environment as degraded and arguably less than human, while PPRAs saw in the same light those who relinquished or attempted to take property rights. Both groups were fully aware that they had been christened with pejorative labels. One PPRA couple explained that, according to preservationists, “We’re the Darth Vader, we’re the evil, they call us the greed-masters” (Tiffany, N. U45). A preservationist informant said simply, “They call us the got-miners” (Trenton, N. U7). Because individuals had lost their identities and been dehumanized through group labeling, opportunities for conflict escalation proliferated, and possibilities for cooperative relationships between the moral cultures were precluded. Further, once the opposition lost its human identity, only a small transformation was needed to perceive them as evil incarnate.

Demonization of the opposition, the most extreme stage of conflict escalation, was evident in local churches, schools, and civic organizations. When attending a church service in the area, the research team’s ethnographer was asked his vocation. The fact that he was a wildlife ecology student interested in Key deer evinced 2 equally strong but disparate responses—1 of approval and the other of immediate distrust. Soon after moving to the area, a woman affiliated with the refuge attended a local church and was transfixed by a congregation of cold stares after announcing her affiliation. She asked, “What?” and an elderly woman beside her whispered, “People here don’t like The Refuge” (Field Notes). Other refuge employees cautioned their spouses and children not to indicate affiliation with the refuge in school or civic groups. Others sent their children to private schools on other islands.

Several informants compared The Refuge to the Third Reich. One, describing a refuge manager’s entrance into a meeting, said, “He marched into our meeting like Hitler” (Scott, N. U136). Another said, “He came here and turned it into Nazi Germany—it was a war between The Refuge and the people” (Dave, N. U28). An article in the Lower Keys Burner tells of a woman whom USFWS officials drove from her home while her daughter was dying of cancer (Anonymous 1995). Similarly, a PPRA described past attempts to communicate with the preservationists in these words: “It’s like those religious wars—I understand you don’t believe in what I believe, so you’re a piece of shit and I’m going to have to kill you” (Wayne, N. U6).

Although both sides demonized the other, the language of demonization was most prevalent in
PPRA discourse. This may have occurred because of the current legal climate, in which court interpretations of the ESA appeared to favor the preservationist agenda. Clearly, the PPRA felt their moral authority had been constantly violated during the last decade, and they held preservationists responsible. Conversely, preservationists feared that since their moral authority had been violated previously, they had to maintain constant vigilance to prevent a recurrence of past evils. They viewed strict implementation of current development restrictions on Big Pine Key as the primary means of ensuring appropriate stewardship of nature. Accordingly, preservationists typically held local PPRA responsible for attempted evil. If, however, the situation reversed (e.g., the Key deer were down-listed or the building moratorium was lifted), this dynamic easily could reverse. Interestingly, as unlikely as this seemed during the study, the Key deer is now under consideration for down-listing (E. Hoyle, National Key Deer Refuge, personal communication).

Reinforcing Mechanisms

Selective Perception and Judgment.—Negative images of the opposition produced by de-individualization and demonization promoted several mechanisms that reinforced hostilities. One of these was selective perception and judgment. Combatants typically observed only those facts that confirmed their negative image of the opposition and were suspicious of anything the other party did regardless of its innocence. For example, recently revised estimates of Key deer numbers were supported by the PPRA. Conversely, preservationists automatically assumed that PPRA supported the new estimates only because they were much higher than previously and might allow down-listing of the deer, or at least increased development (Robert, 115, U2). The preservationists rationalized away increased Key deer abundance by assuming that the new estimate was “just a cyclic boom-and-bust situation” (Eric, II, U3; Robert, 115, U2). Further, they worried that PPRA and refuge personnel would collude to allow destruction of deer habitat based on “just a snapshot” in time (Celina, 11, U7). The PPRA, on the other hand, believed that the preservationists concocted this supposition to hide their true motive—“locking up other people’s property on the island”—when faced with a higher estimate than previously used to deny individuals their property rights (Field Notes). Both groups indicated that the refuge was buying into the opposition’s view—point. In sum, neither group saw even an inkling of sincerity in the opposition’s perspective.

Actions were taken, however, for which neither group wanted to publicly accept responsibility. Several preservationists indicated that the recent decapitation of a Key deer (31 Mar 2000) was the result of angry PPRA (Field Notes). The Key Deer Protection Alliance offered a $1,000 reward for information leading to the arrest of the person responsible for beheading the young buck. Conversely, the PPRA downplayed the incident. They claimed that it “was probably a prank; whether it was done by juvenile kids or adult kids, it was kids’ stuff” (Wayne, 16, U4). Mutual suspicion ran rampant. A preservationist summed up the situation in these words: “There is no time for the positive stuff—you have to spend all of your time catching them in their tricks” (Celina, 11, U28). A PPRA described it this way: “Even when it would behoove them to tell the truth they don’t” (Jared, 19, U5).

Moral Exclusion and Rationalization.—Another reinforcing mechanism at work in the conflict was moral exclusion and rationalization. This process permitted combatants to deny the protection of their own ethical system to others and, in its extreme, allowed them to commit emotional and even physical violence without considering it morally wrong. In fact, violence seemed to be the morally favored action. Emotional violence was common. One preservationist told about staffing a booth for his organization at Key West and having a PPRA scream obscenities at him and his wife while the PPRA’s children looked on (Trenton, 116, U21). “Animal Sacrifices,” an article in the 30 April 1988 Keynoter, blamed animosity toward the deer on “ignorance and neglect” (Harder 1988:6). The PPRA who participated in our study expressed considerable anger, frustration, and resentment when they were labeled “ignorant and uneducated” (Field Notes).

On occasion, emotional violence flared into threats and even physical violence. Someone decapitated a buck and then threw the head over the refuge maintenance facility fence (14 Apr 2000). A checker at the local grocery store told me she hoped the person responsible for beheading the deer would be caught, because “that person should be taken out and shot” (Field Notes). Although PPRA were quick to distance themselves from this act, an informant explained that the decapitation incident indicated how volatile the relationship between the 2 cultures was, stating that threats of physical violence, toward either humans or deer, were “idle talk 99.99% of
the time except that someday people are going to piss off the wrong person” (Wayne, I6, U4). When a local reporter from the PPRA perspective attended a Big Pine Key Civic Association meeting with a microphone and preceded to ask questions, a member spotted the device and yelled, “He's got a microphone and a tape recorder!” (Jared, I9, U6). The president of the Big Pine Key Civic Association reportedly grabbed the device, broke it, and told the reporter, “Get out of here. This is a private meeting.”

Both sides used these flare-ups to rationalize further demonization of the opposition. For example, preservationists emphasized the violent behaviors of PPRA members, who accused of bludgeoning a doe to death with a club (12 Aug 1990). Although those convicted of the crime were not from Big Pine Key, on the anniversary of the bludgeoning someone hung a dead doe from a road sign that listed the number of deer killed on the highway (12 Aug 1991). The sign, intended to slow traffic through Big Pine Key, became a focal point for violence fostered by the mechanisms of moral exclusion and rationalization.

Communication Breakdown and Autistic Hostility.—The anger and hurt resulting from these emotionally and physically violent episodes led to a reinforcing mechanism that virtually ensured perpetuation of the conflict and more violence—the breakdown of communication into autistic hostility. Numerous informants from both sides of the conflict told of failed attempts to communicate with the opposition. A PPRA from the Chamber of Commerce described his attempt in these words: “You walk out of there so angry, so frustrated. Your blood pressure is sky high because you'd like to strangle them. They're so stupid and pig-headed” (Tiffany, I4, U119). A past president of the Chamber of Commerce told of an attempt to bring the opposing factions and the refuge personnel together to work on a common project. He had hoped to find “something, anything, just something where we could put our differences aside and work together” (Wayne, I6, U3). His peers perceived his behavior as a breach of trust or “getting in bed with the enemy.” Nothing came from the project, and he was left with the impression that attempting to work together was futile. A preservationist from the Key Deer Protection Alliance described a protracted series of conversations she had with a PPRA. She had believed that they were beginning to understand each other’s perspectives. She was disillusioned, however, when her PPRA acquaintance reverted to form by becoming enraged at “The Refuge” for buying “prime real estate” for parkland (Celina, I1, U30). A Big Pine Key Civic Association informant described the school-siting mediation process as a “battle” in which there was never a “meeting of the minds,” so “the process just fell apart” (Robert, I15, U26). He learned from the Big Pine Focal Point Plan that regardless of the amount of discussion, no one changed theories or ideas, so he quit wasting his time trying to work with the opposing faction. Another preservationist informant used the attempt to site a school on Big Pine Key to illustrate the total futility of attempting to build a shared vision between the opposing cultures (Trenton, I16, U15). “We couldn't cooperate on the children,” he explained. “They wanted to build a school on Big Pine, and we had to fight over that.” Moderation was either attenuated or lost as individuals engaged the opposition within the organizational framework of their moral culture.

All of our informants’ efforts to work with the opposition ended in frustration and anger at the opposition's intractability or in confusion regarding their values. Similarly, a refuge employee told of how he once attempted to work with both sides but saw people “sugarcoating” issues and telling him 1 thing on the spot and then reverting back to their original views right after the meeting (John, I2, U15). For example, he said that the only benefit of making presentations to PPRA was getting “warm fuzzy feelings, but ... was it worth the controversy?” This breakdown in communication also was evident in public venues. For example, public meetings regarding the Big Pine Focal Point Plan, siting an elementary school on Big Pine Key, and a USFWS question-and-answer session all turned into a series of inflammatory stump speeches where speakers relinquished the microphone to applause and yells of approval or boos and accusations of lying (WWUS 1989, 1992).

There can be no doubt that this communication breakdown led to autistic hostility. For example, although those who were actively involved in the conflict indicated several means used to achieve their goals, none of these included attempts to communicate with the opposition. A PPRA informant indicated that working together on anything was like “designing a horse by committee” and “the best you can hope for is a plan that everybody is aggravated about” (Shawne, I3, U24). Another PPRA said, “Now my basic approach is to stay out of the politics of the Keys” (Ed, I19, U41). When asked how best to manage
the conflict, a preservationist said, “The classic answer is to work together, but it’s better to let TNC [The Nature Conservancy] and USFWS buy up all the land” (Josh, 113, U18). A refuge biologist indicated that bringing people together to work on a solution would only lead to compromise and loss of more habitat, whereas “Combat biology” has saved what little is left” (John, 12, U14). Although several informants indicated that some kind of public forum to facilitate communication and understanding between groups might be a good idea, none saw it as even a remote possibility in the current circumstances.

Many participants moved beyond viewing communication across opposing cultures as futile by endeavoring to guard against any possibility of information exchange. In the Lower Keys Barometer, Howe (1997:12) stated that he would not share information with the refuge manager, Barry Stiegitz, because of his “anger at the sickening mix of arrogance and ignorance during the Stuart Marcus, John Andrew regime.” Another PPRRA said, referring to Jim Halpin, the new refuge manager, “I don’t know the fellow and I don’t even care to meet him” (Dave, 114, U19). A previous refuge manager made his awareness of this problem known in an interview, stating, “Our staff doesn’t even like to go to the grocery store. People see the uniform and they give us dirty looks” (Straw 1998:29). Halpin, the refuge manager during data collection for this project, faced the same problem. The practices associated with escalation had contributed to structural changes that further validated disputants’ negative perceptions of each other. Clearly, finding an amicable solution to a long-term conflict such as this is unlikely when the parties have demonized one another, communication has broken down, and their only interactions are grounded in autocratic hostility.

DISCUSSION

Moral Culture as Grounding for Environmental Conflict

The days of broad public acceptance of management decisions made by a small technical elite are gone, if they ever existed (Daniels and Walker 2001). Despite claims that Americans have become politically apathetic, U.S. citizens are increasingly demanding an opportunity to participate in decisions regarding the management of the natural environment. Hiding impenetrable jargon and regulations only exacerbates the traditional American distrust of and alienation toward government—it does not make the public go away. We recommend that applied ecologists take a proactive approach when faced with an activist public that draws much of its cultural identity from the natural resource in question. There are several approaches that could facilitate public participation in such emotionally charged decision-making venues, including, but not limited to, those that attempt to assist disputants through a focus on community-based collaboration (Dukes et al. 2000, Wondolleck and Yaffee 2000, Daniels and Walker 2001) and sustainability (Maser 1996, Peterson 1997). Increasingly, dispute resolution specialists are recognizing the importance of integrating the strategies and tactics they offer into systematic representations that explicitly recognize the significance of cultural identity (Ashmore et al. 2001, Littejohn and Domenici 2001, Senebah 2001).

Although determination of the appropriateness of individual approaches and their application often includes traditional information-gathering techniques such as orientationnaires, these techniques are insufficient when faced with conflicts rooted in moral cultures. Although orientationnaires are an effective means for identifying public opinion, they are not as well suited for collecting information on public judgment or motivation to act. Ethnographic methods are more relevant to understanding public judgment and motivation to act. For example, if a manager is interested in identifying the reaction of various publics to a certain policy, an appropriately designed survey instrument will provide excellent information. If, however, one is interested in understanding why competing moral cultures developed, what current differences exist, and how to establish meaningful dialogue and collaboration across cultures, ethnography is a more appropriate tool.

Because many environmental conflicts have cultural dimensions, environmental policy makers and managers should familiarize themselves with the literature on cultural conflict. Although most research on this topic focuses on disputes among nations or ethnic groups, concepts drawn from this arena could enhance the management of many environmental conflicts, especially those associated with endangered species. As illustrated in this case study, the concept of endangerment, as opposed to extinction, is a social and political construct. Although biological information may be used by all conflict participants, simply ensuring that all parties have access to the same information does not ensure that they will necessarily
come to the same conclusions. In disputes over endangered species management, the idea of limits comes into play, and with it, fundamental questions of cultural identity. Participants find themselves making decisions with consequences that extend beyond the individual’s space and time. In such a social environment, members of any society turn to cultural norms for answers. Thus, in a society where public participation and technical expertise vie for precedence, cultural conflicts such as that developing on Big Pine Key should be expected to occur more, rather than less, often.

Conflict Development on Big Pine Key

Moral cultures on Big Pine Key developed from a multidimensional matrix of values, within which individual values had different saliency for different individuals and in different situations. Despite individual differences, however, participants derived guidance for action from their moral culture. They often joined groups that promoted extreme stances, then turned over responsibility for individual knowledge, beliefs, and actions to the group. Regardless of its veracity, the saliency of any information was determined by its acceptance within their moral culture. Although informants did not question the veracity of their own cultural premises, most rejected that of the opposing culture’s premises. While no informants indicated that their individual participation in the conflict was based on selfish motives, most believed that participation by members of the opposing culture was. From an observer’s perspective, there is no question that certain community members simply used the conflict to further personal interests. Some fought to preserve habitat for the sole purpose of preserving empty lots that enabled a sunset view from their homes. Others fought to protect individual freedoms only to further their individual business interests. These motivations did not, however, deflect the power of the competing moral cultures on Big Pine Key. The moral authority behind these cultures justified participants’ hostility toward those who stood in their way, whether or not individual actors accepted that moral authority. It provided an entire system of shared beliefs, stories, and actions that led to a political impasse.

The Big Pine Key land-use conflict has moved through the same general phases as have most other cultural conflicts. Initially, the conflict was grounded in a deeply ingrained cultural divide between those who believed in the sanctity of individual freedoms and those who believed in the sanctity of community responsibility. With no management attention focused on these fundamental beliefs, the cultural divide expanded, furthering the division between the aspirations of both groups. Those whose moral culture focused on protecting individual freedom became advocates of private property rights at all costs, while those whose moral culture focused on the responsibility of public stewardship became advocates of preserving natural habitat at all costs. Not surprisingly, these conflicting aspirations led to conflict escalation. We traced the conflict’s escalation through the stages of mystification, de-individuation, and demonization of the opposition. Once the conflict had escalated, participants reinforced its intractability by engaging in selective perception and judgment, moral exclusion and rationalization, and finally communication broke down completely, leading to autistic hostility. Further, those who disagreed with the extreme stands of the 2 opposing moral cultures were either forcibly assimilated or silenced.

Appropriate Role of Resource Management Agencies

Following repeated negative experiences with the public, local USFWS personnel commonly have offered passive neutrality as a management option (Field Notes). This term suggests managing the conflict by staying out of it and simply going about federally mandated business in a neutral fashion. Again, this is not an option when conflicts are rooted in moral cultures, such as those surrounding Key deer. First, it blinds refuge personnel to both the escalation of the conflict and its causes. One refuge manager told us, “This is national; it’s more than local. The rules that are in place fit everyone—the guys that live in Oklahoma City has as big a stake in this refuge as the people down here” (Rick, 17, U19). This one-size-fits-all view ignores the moral and cultural roots of the conflict and prevents their remediation. It follows that little can be done to resolve a conflict if its fundamental cause is not addressed or even acknowledged. The passive neutrality approach also assumes that refuge managers and employees can maintain a neutral stance amid a barrage of criticism in perpetuity. Whether such neutrality on the part of any human is theoretically possible is a philosophical question that is beyond the scope of this study. Practically speaking, however, it has not occurred. Finally, this approach ignores the fact that moral cultures create unwill-
ing bedfellows. A refuge manager stated, "As far as getting into the community and affecting the life of the community while sitting in this chair, I don't have friends and enemies in different groups" (Rick, 17, U14). His belief in the veracity of his statement, however, was not shared by community members. Nearly everyone else described the refuge manager either as a "friend" saving a rural way of life and protecting nature, or as an "enemy" forcefully denying property rights (Field Notes). The closest any came to describing the manager as neutral was a small number who described him as a foolish pawn of the opposing cultural group. Despite claims to the contrary, agencies tend to exhibit both a generalizable bureaucratic perspective as well as a perspective tied to their own mandates. Researchers have identified strong cultures within agencies charged with management of natural resources (Bullis and Tompkins 1989, Shebloumi et al. 2002). Although our data are insufficient to support a claim that the USFWS represents a third moral culture in conflict on Big Pine Key, they do suggest that management by passive neutrality is a dysfunctional myth.

**Limitations of Past Interventions.**—The Key deer section of the 1999 South Florida Multi-species Recovery Plan concluded with the following objective: "Increase public awareness of Key deer habitat and instill stewardship" (USFWS 1999:4-24). The report suggested 3 means for achieving the plan's objectives. The USFWS was to conduct educational workshops, encourage specific behaviors among private landowners, and prepare informative literature. Similar suggestions were voiced in a 1992 USFWS upper-level management training report (Faunes 1992). Faunes (1992) suggested joining community-service organizations, conducting town hall meetings on the role of the USFWS and national wildlife refuges in the Keys, submitting regular newspaper columns, and creating priorities and direction for refuge biology.

Although all of these recommendations could be helpful if implemented as part of a systematically designed conflict-management strategy, they are unlikely to significantly reduce current problems because they do not address the cultural nature of the conflict. For example, in response to these recommendations, between 1992 and 1997 refuge employees attempted to join community-service organizations. Given no establishment of negotiation preconditions, it should have surprised no one that refuge employees were refused membership in the Rotary Club or that their presence at a Chamber of Commerce meeting led to a dramatic split, with several past members leaving the Chamber and the president accused of "getting in bed with the enemy" (Wavne, 16, U3). One informant told us that when the refuge manager introduced himself and his organization, "He looked like he was wearing a Nazi uniform" and he "made it plain that his only concern was the deer" (Tillman, 14, R136). The escalated condition of the conflict precluded a more moderate response to anyone affiliated with the refuge.

Acknowledging the escalated condition of the conflict and attempting to remove the reinforcing mechanisms prior to this action could have prevented such a setback in community relations.

Refuge personnel also attempted to use newspaper columns to defend themselves against accusations of lying, deception, and corruption made in the _Lower Keys Barometer_. Unfortunately, these articles further escalated the conflict. A 6 March 1996 refuge article in the _Florida Keys Keynote_ accused critics of holding erroneous beliefs based on a dearth of factual material (Stieglitz 1996). Rather than defusing the conflict, this article elicited further angry responses in the _Barometer_. In the 28 March 1996 issue, 1 resident called the refuge manager the "new boy," accused him of dishonesty, and challenged him to a public debate (Hunt 1996:15). In the same issue, another resident wrote, "It is about time that we get something for our money, other than being told to stay the hell out" (Monti 1996:7). On 4 April 1996, Overbeck (1996:13) wrote an article accusing "greenie vikas, teamed with the great and wonderful USFWS" of preventing road improvements and indirectly of causing the conflict within the community. Eventually (23 Jan 1997), the refuge manager wrote an article for the _Barometer_ entitled "From the Other Side," in which he attempted to "set the record straight" and suggested that "armchair wildlife managers" allow "trained experts to do their job" (Stieglitz 1997:6). He concluded with an ultimatum: "Our future relations will weigh heavily upon your willingness to rectify these deficiencies" (Stieglitz 1997:6).

As one might imagine, these uses of the media did not successfully ameliorate the conflict. In fact, they simply provided a reinforcing mechanism for further alienation across the existing cultural divide. Residents responded to the manager's attempt to "set the record straight" by demonizing him and by association, all USFWS personnel. One wrote, in reference to the USFWS manager, "His daddy is sure to be especially proud
of his son for following in his footsteps as a game manager/bureaucrat. (You know... as opposed to being a real ‘game manager’ who actually manages wild game.)” (Hunt 1997:3). He also accused the management of dishonesty and asked him to “stop pandering to environmental extremists” (Hunt 1997:3). Another claimed that USFWS personnel were “all potential Oliver North types if we let them” (Howe 1997:13).

Admittedly, the USFWS could have used the news media more effectively, merely by demonstrating a more respectful attitude toward residents of Big Pine Key. But using the media to best advantage would have required a knowledge, and an acknowledgement, of the moral cultures involved in the dispute. Sensitivity to symbols and values within the targeted moral culture at very least could have helped avoid hostile responses and allowed refuge critics to read the material in a less defensive manner.

In 1997, the USFWS commissioned another public relations study to evaluate and improve upon the suggestions of the 1992 effort. The final report suggested that public meetings be limited in size, even to the extent of being one-on-one encounters, because large meetings could “easily be hijacked by opponents” (Community Strategies 1997:2). It also suggested that attacks on the refuge be rapidly responded to by the USFWS national office because refuge personnel appeared to be overly defensive in the face of such attacks. Part of this strategy was to hold a “big wigs” meeting between high-level USFWS personnel and the community that was carefully structured to reinforce support for the refuge manager (Community Strategies 1997:21). The report suggested a “barrage” of positive outreach to prevent the need for defensive tactics (Community Strategies 1997:18). It also suggested conducting a new census of the deer herd, creating a wildlife management strategy, creating a land-acquisition strategy, and training staff in a new attitude and better communication skills. Although these suggestions certainly were positive and in some cases necessary, they were insufficient. The Key deer conflict was rooted in moral cultures, so management agencies must do more than apply generic image-management techniques if they hope to find solutions. In fact, they cannot correctly interpret the public image they have generated, or decide how to change it, unless they participate in activities that provide them with a means for learning about the relevant moral cultures.

Opportunities for Future Interventions.—None of the recommendations discussed above were wrong. In fact, some undoubtedly could improve the situation. Better biological data and enhanced availability, for example, are good things, but while they are essential to effective deer management, they do not respond to related social (human) concerns. They are necessary but not sufficient parts of an effective conflict management strategy. As a case in point, the recently completed Key deer census (Lopez 2001:83–109) alleviated some claims that refuge personnel are lying about population numbers to obtain more funding. The president of the Key Deer Protection Alliance, however, responded to these data by explaining to members in the Alligator News that, “Historically the deer population seems to have boomed and crashed cyclically... the planning process for Big Pine and No Name keys must not reflect a complacent attitude toward any of our endangered species” (Putney 2000:3). Biological data do not support this claim. Clearly, ecological research had surprisingly little bearing on what information was accepted within either the preservationist or the PPRl moral culture.

Further, there is little doubt that using a barrage of positive media, instead of waiting for attacks, could make defensive lashing out by refuge employees less likely. Creating a wildlife management strategy and informing the public about it could alleviate some confusion. Similarly, joining community-service organizations could promote trust and friendship between the refuge and the community. These suggestions, however, fail to address the crux of the problem—they do not consider the moral cultures of conflicting groups. That is precisely why collaborative decision making further polarized the participants in the school-siting mediation process. While such actions might be necessary to deal with a crisis, they cannot move a cultural conflict beyond the reactive model. Further, because these strategies have legitimized the moral stances of both cultures, the dispute has become increasingly intractable as managers attempt to implement each new strategy.

In sum, natural resource managers must understand and acknowledge the moral cultures of those engaged in conflicts surrounding endangered species management if they hope to help resolve these conflicts. Yaffe (1997:329) argued that much of the failure to resolve natural resource conflicts can be traced to the human preference for addressing superficial problems while ignoring their “psychological or sociological dynamics.” We suggest that modified ethno-
graphic approaches, such as those described in this study, could assist managers in developing this understanding and eventually the process skills necessary to help individuals de-demonize, re-humanize, and re-individualize people from the conflicting moral cultures. To achieve a meaningful resolution to the conflict, the silenced voices must be excavated, which will require the guidance of a skilled facilitator or mediator. Additionally, that person will need to assist disputants in their attempts to begin communicating across the cultural divide. Particularly in the case of long-running conflicts, such as that surrounding the Florida Key deer, we cannot recommend attempting conflict resolution without the guidance of a neutral facilitator or mediator because all residents—whether actively involved in the conflict or not—were conflict to some degree in its evolution. Until this is accomplished, there is little hope of an amicable solution to long-standing environmental controversies such as that surrounding the Florida Key deer.

MANAGEMENT IMPLICATIONS

Given the social context of a pluralistic democracy, agencies responsible for managing natural resources should assist their managers in identifying social practices that typically lead to de-individualization, dehumanization, and demonization. Upon identification of such practices, managers should either intervene directly or seek outside assistance before conflicts escalate. In many cases, early intervention could prevent, or at least minimize, the hostility and violence that have come to characterize endangered species management on Big Pine Key and many other locations across the United States (Lange 1993, Moore 1993, Yafle 1994, Peterson and Horton 1995). Ideally, the process of preparing natural resource managers to respond more effectively to cultural conflict would include systemic changes ranging from broad education in cultural and conflict theory to workshops designed to develop process skills needed for conflict assessment and intervention. In the short term, agencies might choose to target concepts drawn from the cultural and conflict theory literature that seem particularly appropriate to environmental conflict, some of which were identified in this study. In the longer term, we suggest that agencies actively support research designed to develop theory and practice specifically directed toward addressing cultural conflicts associated with natural resource policy formation and implementation. Either way, these concepts could then be used to guide the development of skills training for managers.

Successful management of conflicts generally requires that facilitators and mediators have (1) a high level of process skills, (2) an ability to maintain confidentiality, and can (3) demonstrate neutrality regarding the issue under conflict (Purdy and Grov 1994, Daniels and Walker 2001). Managers also must ensure that appropriate conditions exist before attempting to resolve conflicts (Susskind and Cruickshank 1987, Gray 1989, Kolb and Rubin 1989, Senecah 2001). Saunders (1995) recommended that, when working with culturally rooted conflicts, managers must achieve 3 pre-negotiation conditions within all participating moral cultures before attempting to implement mediation or other conflict resolution activities. They must ensure (1) the existence of at least a minimal level of group organization aimed toward negotiation among all potential disputants, (2) a common definition of the problem, and (3) a shared commitment to resolution. Until these conditions are met, there is little point in investing resources in resolution attempts.

Natural resource managers faced with the cultural conflict surrounding Florida Key deer management could begin the process of developing these conditions, even—and perhaps especially—given the escalated status of the dispute. They should attempt to encourage and facilitate the organization of groups that seek less-confrontational approaches by providing easy access to accurate data including biological, sociological, economic, and political aspects of refuge and Key deer habitat management. In many situations, the first step toward this goal is recognizing that natural resource management has more than biological effects. The second condition, a shared definition of the problem related to land management on Big Pine Key, is the one most tied to moral culture and the most difficult to achieve. To achieve this goal, the escalation process must be reversed by developing non-threatening environments within which all parties are encouraged to re-apply their aspirations and even to re-examine their moral authority. The security of these environments must be achieved within each moral culture before attempting to bring the 2 groups together.

Productive interactions between opposing groups are unlikely to occur until the reinforcing mechanisms of selective perception and judgment, moral exclusion and rationalization, and breakdown of communication and autistic hostili-
ty are replaced by communication practices that remove barriers. As is typical in cultural conflict, the conflicting parties on Big Pine Key previously had little interaction except as they formed their opposing identities through language and story-building. This enabled negative reinforcing mechanisms to take effect. To replace these mechanisms, parties must begin interacting in an environment where joint story-building and shared language development are not only protected but encouraged. This can occur through carefully facilitated informal social interactions that help individuals de-demonize, re-humanize, and re-individualize people from the opposing moral culture. A forum for informal social interaction could be facilitated through interactive problem-solving workshops (Kelman 1986). These efforts should not attempt to solve the problem of land management on Big Pine Key. In fact, the topic should not even be discussed. The only topics available for discussion in initial workshops should be those in which parties meet the pre-negotiation conditions listed above. Such workshops will require facilitation by third-party interveners. Refuge personnel who are embroiled in the conflict cannot play the role of neutral facilitator. Providing opportunities for positive social interaction among the cultures of Big Pine Key may be the only initial option available to refuge personnel. After the 3 pre-negotiation conditions are achieved, then the task of finding solutions to the land-management issues of Big Pine Key could be addressed using approaches that facilitate public participation in such emotionally charged situations. These include, but are not limited to, those that attempt to assist disputants through a focus on community-based collaboration (Dukes et al. 2000, Wondoloscki and Yaffee 2000, Daniels and Walker 2001), sustainability (Maser 1996, Peterson 1997), and other integrated strategies (Ashmore et al. 2001, Littlejohn and Doncici 2001).

Providing a forum for communication that differs from the degraded rhetoric discussed throughout this analysis is 1 way that agency personnel could help all parties meet pre-negotiation conditions. Those individuals who chose silence—because they were unwilling to participate in the degraded rhetorical process—are a primary audience for this forum, although others should not be excluded. For example, an Internet site where accurate biological, sociological, economic, and political data were available and, more importantly, respectful information could be exchanged among publics could initially serve this purpose. More formal forums, however, should be emphasized only after pre-negotiation conditions are at least approximated because premature implementation could push the silenced audience into the cultural divide, thus reinforcing the conflict spiral.

Conflicts such as the dispute over land use on Big Pine Key are difficult but not impossible to remediate. Texts gathered throughout this study indicated that both cultures shared a commitment to resolution; even the most extreme informants lamented the days when Big Pine Key was a happy, peaceful community. Granting the possibility that some informants were engaging in unrealistic nostalgia while others fed on conflict continuation, this generally shared vision offers an opening for agency personnel charged with managing natural resources in the Florida Keys. Further, both federal and state agencies faced with cultural conflicts can take advantage of the commitment to political activism integral in American society. Both the PPRAs and the preservationists shared this moral value and a commitment to conflict resolution. Those who tend to accept the status quo in the name of conservation should consider Yaffee’s warning that “As the Reagan and Bush years suggest, it is also important that long-term conservation direction be able to weather shifts of the political winds” (Yaffee 1994:360). These winds are shifting. Due to the current political climate and increased Key deer numbers, it now is likely that the Key deer will be down-listed to threatened. This change is certain to shake up the reinforced structure of the conflict. U.S. Fish and Wildlife Service personnel should take advantage of these changes to initiate positive contacts and encourage re-humanization of all participants in this cultural conflict. Implementation of these strategies could produce a plan capable of weathering shifts in political power and preserving the community as well as the species.

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