

Intangible Values of Protected Areas: What Are They? Why Do They Matter?

The creation and management of protected areas is now a global enterprise. From humble beginnings in a rather obscure corner of North America more than a century ago, protected areas now involve millions of hectares on every continent (including Antarctica) and probably well over 100,000 professional caretakers worldwide. Protected areas are the centerpiece of conservation, universally acknowledged as the indispensable core of any effort to preserve biodiversity and, more broadly, environmental quality. Economically, they are a dynamic component of the world's largest industry, tourism, and are the foundation of one of that industry's fastest-growing sectors, nature-based tourism (Eagles 2003). Together, the conservation and economic values of protected areas are undoubtedly immense, though they have never been completely quantified. Yet these values *are* capable of being measured. Conservation values can be expressed monetarily through models of the "ecosystem services" that protected areas provide (free of charge!) to the marketplace economy (see Daily 1997), while there are several economic formulas for estimating the revenue generated by tourism to protected areas (e.g., the U.S. National Park Service's Money Generation Model II; Stynes and Propst 2000).

Nevertheless, important as these tangible values are, the reasons why people care deeply about protected areas ultimately have little or nothing to do with them. There is another arena of values, values whose benefits are difficult or impossible to quantify, but which lie at the heart of the protective impulse that drives the modern conservation movement. These *intangible values* (also referred to as *nonmaterial values*) include the intrinsic value of nature as well as "that which enriches the intellectual, psychological, emotional, spiritual, cultural and/or creative aspects of human existence and well being" (WCPA 2000).

This issue of *The George Wright Forum* offers a look into the arena of intangible values. With the exception of this overview (a version of which was originally published in the IUCN journal *Policy Matters*), the material

presented here is drawn entirely from *The Full Value of Parks: From Economics to the Intangible*, which the author co-edited with Allen D. Putney, who leads the Task Force on Cultural and Spiritual Values of IUCN's World Commission on Protected Areas (Harmon and Putney 2003). The book—conceived for the Fifth World Parks Congress last September in South Africa—drew on a worldwide roster of authors to explore the topic. For the *Forum*, I have selected five chapters from the book to illustrate the range of intangible values.

What are these values? The WCPA task force has classified eleven major kinds, all of which spring from particular qualities of protected areas (list adapted from Putney 2003):

1. *Recreational values*, those qualities that interact with humans to

- restore, refresh, or create anew through stimulation and exercise of the mind, body, and soul (i.e., recreation).
2. *Therapeutic values*, those that create the potential for healing, and for enhancing physical and psychological well-being.
 3. *Spiritual values*, those that inspire humans to relate with reverence to the sacredness of nature.
 4. *Cultural values*, those that are ascribed to natural, cultural, and mixed sites by different social groups, traditions, beliefs, or value systems. These values, whether positive or negative, fulfill humankind's need to understand, and connect in meaningful ways, to the environment of its origin and the rest of nature.
 5. *Identity values*, those that link people to their landscape through myth, legend, or history.
 6. *Existence values*, those that embody the satisfaction, symbolic importance, and even willingness to pay, derived from knowing that outstanding natural and cultural landscapes have been protected so that they exist as physical and conceptual spaces where forms of life and culture are valued.
 7. *Artistic values*, those that inspire human imagination in creative expression.
 8. *Aesthetic values*, those that carry an appreciation of the beauty found in nature.
 9. *Educational values*, those that enlighten the careful observer with respect to humanity's relationships with the natural environment, and by extension, humanity's relationships with one another, thereby creating respect and understanding.
 10. *Scientific research and monitoring values*, those that contribute to the function of natural areas as refuges, benchmarks, and baselines that provide scientists and interested individuals with relatively natural sites less influenced by human-induced change or conversion.
 11. *Peace values*, those that contribute to the function of protected areas as a means of fostering regional peace and stability through cooperative management across international land or sea boundaries (transboundary protected areas), as "intercultural spaces" for the development of understanding between distinct cultures, or as places of "civic engagement" where difficult moral and political questions can be constructively addressed.

There are many other intangible values of protected areas, but the remainder of this overview will focus on these.

Recreational Values

It is intuitively obvious that the millions of people who visit protected areas each year derive benefits from the recreational activities they do there. The challenge for protected area researchers and managers has been to gain a more precise understanding of the types of benefits recreation provides, as well as their cumulative significance. A great deal of social science research has been conducted into all aspects of leisure in outdoor settings, and the results of that research are increasingly being used by park managers to guide their decisions.

"Recreation" is simply defined as

activities pursued while at leisure. "Recreational use of protected areas" is defined as visits by local and regional residents and by tourists. There are three distinct components of leisure benefits: (1) gains made by an individual, a group, or society at large (e.g., the realization of physiological benefits, skill improvements, the creation of jobs); (2) the avoidance of losses by maintaining a desired condition (e.g., using backpacking to promote family cohesion); and (3) the realization of specific satisfying psychological experiences, also termed "psychological outcomes," that accrue only to individuals (e.g., stress release; Driver and Bruns 1999).

In the beginning of park-based recreation research, benefits were largely assessed by the expedient of simply counting visitor numbers, even though they are notoriously difficult to collect and subject to managerial meddling (Hornback and Eagles 1999). More recently, emphasis has been put on the benefits (and possible disadvantages) accruing to individuals and society from park-based recreation.

The question of whether park-based recreation is associated with specific benefits is difficult to answer because the necessary research has not yet been undertaken (Roggenbuck and Driver 2000). However, as Shultis (2003) notes, "considerable research on the self-reported benefits of recreating in protected areas has identified a basic, relatively constant range of benefits, including enjoyment of the natural environment, escape from urban/home/built environments, rest and relaxation, achievement/challenge, and health/fitness." The problem is that "we still know frustratingly little about what ... these benefit categories truly mean" or what their signif-

icance is to individuals and society. Nevertheless, "it seems clear that in pursuing recreational activities in protected areas, park visitors obtain a prodigious range and depth of psychological and physiological benefits that manifest themselves throughout individuals and wider society." In this sense, "recreational values are not 'intangible' to park users: the benefits of using parks reverberate throughout their lives and have clear significance. However, these same benefits and values become intangible when park advocates attempt to bring them into the sociopolitical arena," precisely because they are difficult to quantify (Shultis 2003).

Therapeutic Values

Whereas recreation values of protected areas derive from non-facilitated leisure activities, therapeutic values result from intentional, structured activity designed to ameliorate a specific social or personal problem. People have repaired to natural areas to gain healing for thousands of years, but directed therapeutic programs aimed at producing clinical outcomes have been around for only about a century. The programs date back at least to 1901 and the "tent treatment" of psychiatric patients at Manhattan State Hospital East in New York City, and later (in the 1930s) expanded into camps addressing the psychological needs of individual adolescents. The use of wilderness therapy (which is considered a modified form of group psychotherapy) expanded greatly in the 1970s, while the 1980s and 1990s were growth periods for the utilization of wilderness therapy for youth with problem behaviors (Ewert et al. 2003). Today, in the United States alone it is estimated that there are over 500

organizations offering wilderness programs for personal growth and development (Friese 1996). Outward Bound, an international wilderness adventure program, serves about 40,000 people each year in its worldwide programs (Hattie et al. 1997).

As Ewert et al. (2003) point out, “there is considerable debate among practitioners and researchers as to what constitutes a ‘therapeutic’ use of natural areas,” yet “trends in programming reflect how the practice is evolving given the severity of problems these programs have begun to address in treatment.” In the United States, where the majority are found, the trend is toward “sophisticated therapeutic programs that are often state licensed and employ a medical model of treatment that includes clinical supervision by licensed therapists.” Numerous well-developed clinical models are now in use.

What makes protected areas therapeutic? Research suggests answers that fall into two broad categories. First, parks and the activities that take place in them represent both a symbolic and an actual break with one’s “normal life.” Crossing that divide produces benefits. Going to parks can spur an increase in personal awareness, with the outdoor setting often causing individuals to change patterns of self-destructive behavior. This in turn can result in an increase in social awareness, and a concomitant decrease in anti-social behavior. Second, the activities one does in protected areas—hiking, camping, contemplating nature, etc.—demand initiative, action, and sustained attention on the part of the individual. This results in an immediacy of experience. For example, if one has hiked into a remote area and decides to lounge

around all afternoon rather than set up camp, the consequences are felt very soon thereafter, whereas “in town” (so to speak) the consequences of irresponsible behavior are often buffered and delayed. In addition, success in dealing with outdoor situations usually demands teamwork, which has its own rewards. Combine that with close contact with the primal forces of nature, and park visitors often take home with them a constructive—and therapeutic—sense of humility (Hendee and Brown 1987; West and Crompton 2001).

Spiritual Values

Protected areas often encompass specific sites, or even entire landscapes, that are considered sacred. In addition, many people regard certain protected areas themselves as quasi-sacred because they have been dedicated to high purposes in perpetuity—rather like the way consecrating a building makes it into a church. Thus, people may engage spiritual values in protected areas by encountering specific places of “ultimate meaning and transcendent power” (Chidester 1987; see Figure 1), or they may experience a spiritually transformative experience simply by encountering nature in a place that they know is protected in perpetuity (Taylor and Geffen 2003; cf. Harmon 2003).

It is another matter for a protected natural area to be created precisely because it *is* a sacred site. Pilgrimages to special natural places for personal reflection, rites of passage, and spiritual renewal are a feature of cultures around the world (Ewert et al. 2003). A pioneering effort in Mexico has resulted in one of the world’s first protected areas designated as a “sacred natural site,” a category of protected



Figure 1. The National Historic Sanctuary of Machu Picchu in Peru. Inscribed as a World Heritage site for both its cultural and natural values, Machu Picchu's history as an important Incan city, and the poignancy of its eventual abandonment, combine with a spectacular natural setting to make it a place of "transcendent power" that draws visitors from around the world. *Photo courtesy of Allen D. Putney.*

area that is beginning to receive attention (Lee and Schaaf 2003). The Wirikuta Sacred Natural Site in the state of San Luis Potosi protects areas of the Chihuahuan Desert that are revered by the Huichol (or Wixarika) people. Each year, a small number of chosen representatives make the trek to Wirikuta, where, after a series of offerings and rituals, the pilgrims ingest peyote, a cactus whose hallucinogenic effects are central to giving Huichols access to spiritual insights. In addition to the sacred sites themselves, over 135 kilometers of the traditional pilgrimage route the Huichols use to reach Wirikuta have now been protected by the San Luis Potosi government (Otegui 2003).

Of all the intangible values of protected areas, spiritual values are poten-

tially the most contentious. As more groups assert (or re-assert) their right to use sacred sites within protected areas, managers increasingly find themselves in the position of being asked to arbitrate between spiritual and religious values that conflict with each other or with other kinds of value. Much to the consternation of park managers, in such situations "there is no way for those vested with management responsibility to fully accommodate both points of view" (Taylor and Geffen 2003).

Cultural and Identity Values

In many indigenous societies there is no clear division between one's culture, one's personal identity, and one's spirituality. Moreover, these multifaceted cultural-identity values are

often inscribed (either figuratively or literally) into an ancestral landscape, many of which now fall within gazetted protected areas. How such landscapes are regarded by local communities is now acknowledged as an important factor that must be accounted for in protected area management strategies. Agencies are learning that “it is not possible ... to simply exclude or erase values from an area of land by classifying it in a particular way” for park management purposes (English and Lee 2003). Recent changes in the management of Australia’s protected areas in response to Aboriginal rights and concerns provide a case in point, with activities ranging from co-management through to the mapping of “wild resource use places” within protected areas (Weaver 1991; English 2002). More flexible protected area designations, such as IUCN Category V protected landscapes, are seen as one way to better accommodate landscape-based cultural values (Andrade 2003; Sarmiento 2003).

But in other societies, cultural and identity values of protected areas may be distinguished from spiritual values by virtue of their being *secular* markers of distinctiveness. The wilderness movement, which had its origins in the unique history of European colonization of North America, straddles the line between sacred and secular but now boasts a strong scientific justification. The existence of large areas of wilderness has been claimed as an essential part of the make-up of “American character.” Ironically, designated wilderness has itself become a cultural icon whose putative character rests at least in part on the dubious claim that these places were historically free of cultural content (for an overview, see Callicott and Nelson

1998). The construal of what—if anything—constitutes wilderness certainly varies from culture to culture, particularly when developed- and developing-country perspectives are compared (Barnes 2003).

A key issue here, as Hay-Edie (2003) has made clear, is the difficulty of transferring conservation techniques (which many conservationists take for granted as being universally applicable, rather than as products of a particular culture) from one social setting to another. In their eagerness to embrace cultural values, he writes, “conservationists are often at risk of picking and choosing taboos, sanctions, and other supposedly ecologically useful behaviors without meeting a complex culture on its own terms.” Yet Hay-Edie feels that a “more genuine interface of worldviews seems possible” through the mechanism of the World Heritage Convention (Hay-Edie 2003). In recent revisions of its criteria for inclusion on the World Heritage List, the convention has not only recognized intangible cultural and identity values as important contributors, but has inscribed “mixed sites” having both natural and cultural components (Rössler 2003). Similar inclusiveness can also be found in UNESCO’s biosphere reserve program (Schaaf 2003).

It is worth emphasizing that cultural and identity values are perhaps strongest in community-run protected areas: those protected by customary forms of recognition that are, in terms of effectiveness, equivalent to the force of state-sponsored civil law (Harmon 2003). Interestingly, these community-level cultural and identity values are by no means incompatible with the conservation of biodiversity; in South Asia (among other places), there are

many examples where biodiversity is part of the constellation of cultural values (Pathak and Kothari 2003). Similarly, in southwest Cameroon the Nyangkpe sacred forests not only serve as *de facto* protected areas important to biodiversity conservation, but also play an paramount role in solidifying cultural identity and regulating the general social order (Kamanda et al. 2003).

Existence Values

Existence values—the satisfaction derived from knowing that protected areas exist, that they safeguard outstanding natural and cultural landscapes, even though one might have no prospect whatsoever of actually visiting them—might seem, at first, to be a rather bloodless, abstract category of value, hardly comparable in visceral force to those that we have discussed so far. In a sense this is true enough. Yet existence values are widely held, adding a dimension of depth to other intangible values that, if missing, would render them far less effective. We can say that existence values are part of a moral foundation underlying all the other intangible values of protected areas.

Why do so many people derive satisfaction from simply knowing that protected areas exist? Fundamentally, they are reacting to a profound angst, a fear that modern civilization is progressively destroying the natural world and hence eroding the biophysical groundwork that underlies our cherished cultures and human identity. This feeling is complicated by the fact that most of us at the same time are grateful for whatever technological advantages we enjoy over our ancestors, advantages that we would not want to be without. The result is a cav-

ernous psychological rift within ourselves. Knowing that protected areas exist is, therefore, a salve to our conscience: we can take heart in knowing that perhaps not all of nature will be lost, that indeed enough will be preserved to enable ecosystems to continue to function.

This begs the question of whether such existence values are in fact not a salve at all, but rather a mere sop to our conscience. Here we are led to what is perhaps the largest, most difficult uncertainty facing the whole enterprise of protected area conservation: Are all our efforts *really* going to make a difference in the long run? If we are honest with ourselves, we have to admit that it is very much an open question. Currently, only a small fraction of the world's lands and waters have protected status under law or custom, and there is no account of how effective that status is. Still, from a practical standpoint, we must go forward in the belief that protected areas will make a difference. To do otherwise would be to admit certain defeat, and that would be far worse than quibbling about whether our hopes for success are misplaced or not.

Aesthetic and Artistic Values

One reason why existence values are so deeply held is because they are rooted in a powerful human need for sensual engagement, and no one can deny that the world's protected natural areas contain many superlative places that delight the senses. One first thinks of stunning scenery: snowy mountains and surging waterfalls, immense tundra and teeming rainforests, sweeping grassland vistas and stark deserts. But other senses are involved too, particularly those of touch, smell, and hearing. Parks are

very tactile places, where one is encouraged to feel nature at an intimate scale, to thrust one's hand into a bed of moss, or let beach sand run through one's fingers at seaside, or feel the rocks beneath one's feet on a rugged trail. Odors and aromas—pine pitch, animal musk, wildflowers, campfires—add irreplaceable texture, and, when recollected, often set off a whole succession of memories that make a park experience unforgettable. Combine all this with the sounds of nature—birdsong, wind whistling down a canyon, lapping waves, the dripping of water from a desert seep, and, perhaps the rarest and most priceless of all, the perfection of silence, of total quiet—and one comes away with an aesthetic experience that far surpasses any human contrivance in terms of variety and complexity.

Historically, aesthetic or perception-based values played a key role in determining which natural landscapes received protection. They still do, despite the increasing emphasis on biodiversity protection and ecological representativeness as keystone criteria. The reason is deep-seated: over the course of evolutionary time, we developed an ineradicable complex of emotional responses to sensory stimulation. We use these responses to humanize elements of the environment and relations between them. Now, however, thanks to an expanded and enlightened sense of aesthetics informed by scientific understanding, even landscapes traditionally considered to be ugly and inhospitable (e.g., scrubland, steppes, bare dunes) can be drawn into the protective fold because “landscape perception parameters can be successfully used to contrast (and confirm) ecosystem evaluations based on ecological parameters” (Crespo

and Martínez 2003).

Although closely allied to aesthetic values, artistic values are distinguished by the presence of human intentions, the purposeful act of creating objects that have their own separate beauty and value. The link between natural beauty and artistic inspiration is so widespread that it hardly needs explanation. Suffice it to point out that artists had a central role in launching the modern protected areas movement. The scenic wonders of Yellowstone were first made known to the U.S. Congress and the general public through the efforts of artists, most notably the landscape painter Thomas Moran and the photographer William Henry Jackson (Silliman 2003). That link has never since been broken, and parks continue to fascinate visual artists, musicians, writers, dancers, and artisans, whether directly as subject matter or indirectly as inspiration for collateral ideas.

Educational Values

Every protected area contains things worth learning about. Not everyone who visits a protected area comes intent on gaining knowledge, but most do. At its best, this expectation translates into an openness to new ideas on the part of the visitor, an eagerness to expand one's worldview. It is a subtle but critically important value that protected areas provide to people, and is part of why protected areas are public institutions whose educational potential is on a par with the world's great museums and zoos.

Some of that potential is already being realized through guiding and interpretive services. Parks that are part of well-funded systems have professional educational staff that carry out these visitor service functions.

Staples of protected area education include guided walks, wildlife discovery caravans, formal presentations to visitors by park staff, programs aimed at schoolchildren and school groups, and many others. In addition, fixed media, such as interpretive signs and audiovisual presentations, are extensively used to inform visitors. Most protected areas have visitor contact centers, often housing a museum and auditorium, where basic orientation and more in-depth education about the park take place. Generally these programs are organized according to a parkwide interpretive plan.

Increasingly, protected areas are forming partnerships with museums and universities as a way to reach out to new audiences within the general public and among academics. This is an important step because it integrates parks with society at large. Part of every protected area's mission must be to address people's needs and issues rather than simply attempting to preserve nature in isolation from the larger social context. Consciously framing an educational mission as part of a protected area's management scheme does this in a positive way. There are always social and economic costs imposed on local communities whenever a new protected area is established. Some of those costs can be offset by employing local people who have an intimate and long-standing knowledge of the park's "educational resources" as educators on the park staff.

Scientific Research and Monitoring Values

Science itself is connected directly with educational values because it is a way of knowing, a process for learning (Moore 1993). It has been justly said

that "parks provide places to learn from personal experience," and "personal experience is among the most powerful and enduring ways for most people to learn.... By giving multiple examples of reality, parks connect people to abstract concepts emotionally. Such place-based learning offers multiple stimuli that enhance opportunities for diverse learners, clarifies new insights, and strengthens retention. Parks generate passion for learning, with deep, personal, emotional connections born out of experience, and stimulate curiosity that is the bedrock foundation of science" (Davis et al. 2003).

Knowledge of nature begins with exploration, and exploration leads to inventories of the world around us that are the hallmarks of any science, whether it be an orally transmitted system of traditional environmental knowledge or the classical hypothesis-driven reasoning of Western scientific inquiry. Inventories inevitably lead to monitoring, the systematic recording of how nature changes over time. In a system of traditional environmental knowledge, monitoring knowledge is transmitted in narratives that describe how things used to be compared with the present. In Western science, monitoring is carried out according to written protocols tracking a set of environmental conditions carefully chosen because they are thought to signal larger changes in ecosystems. These conditions can be thought of as "environmental vital signs" (Davis et al. 2003). Monitoring them within protected areas helps makes those areas into bellwethers for entire ecosystems.

Current scientific research in parks has contributed many insights into today's environmental problems, none more important than the realization

that local actions are enmeshed in global systems of almost staggering complexity:

The contemporary conservation movement and scientific ecology have interacted in the past two decades to develop a better understanding of and concern for ecosystem-level properties that often function at scales far greater than park or preserve boundaries. The consequence of this has been that even in the largest and oldest national parks, we now understand that most often the serious ecosystem stressors—the anthropogenic forces that lead to a loss of an untrammelled ecosystem retaining all of its parts—are not so much from tourism and the interaction of park visitors with nature, but represent forces operating at regional to global scales (Davis et al. 2003, citing Graber 1983 and Graber 1995).

One could argue that the principal value of scientific research and monitoring in protected areas is to promote this more far-reaching view of environmental challenges.

Peace Values

Under “peace values” fall three distinct functions of protected areas: fostering regional peace and stability through cooperative management of transboundary protected areas, providing “intercultural spaces” for the development of understanding between distinct cultures, and acting as places of “civic engagement” where difficult moral and political questions can be constructively addressed.

The number of transboundary protected areas has increased rapidly over the past decade. As of 2001, there were 169 transboundary complexes containing 650 individual protected areas involving 113 countries (Zbicz 2001). Case studies of transboundary

protected areas show that there are many benefits to be gained, including increased coordination between park authorities, thus eliminating needless duplication of tasks; a greater tendency to manage on an ecosystem scale rather than being constrained by artificial boundaries; and decreased political tensions among countries. Symbolically, too, transboundary protected areas are important as concrete expressions of good will between countries (Hamilton et al. 1996; Sandwith et al. 2001).

Less formalized but no less important is the idea of protected areas as intercultural spaces. This does not mean that people are unwelcome to bring distinct values and worldviews to parks. Quite the opposite: where parks are conceived of as intercultural spaces, the authorities strive to make the park a place where people can, if they wish, express their views and have access to other views in a productive and respectful manner. This can be accomplished through sensitive and nuanced interpretive treatments of controversial or conflicting subjects that are associated with the park, and by creating an atmosphere of openness and transparency within the park authority itself.

Closely related is the idea of civic engagement, a term borrowed from the museum profession. Civic engagement refers to a public institution, such as a museum or a protected area, actively seeking out a role in elucidating controversial issues rather than simply waiting to be caught up in them. It does not mean that the institution tries to set itself up as a self-appointed arbiter of controversy, nor does it simply offer itself as an intercultural space for exchanges of differing viewpoints. Instead, it makes a

conscious and sustained effort to seek out “an active, intentional role in public dialogue around the kinds of contemporary issues that provoke multiple viewpoints” (Bacon et al. 1999). It is a proactive rather than reactive stance. Civic engagement tries to shape the process of achieving agreement on controversial issues, although not the outcome itself (Sevcenko 2002). The U.S. National Park Service has embarked on a series of workshops to see how civic engagement can be applied to sites in the American national park system (USNPS 2002).

These sketches of the major intangible values of protected areas by no means exhaust the topic. We have left aside consideration of the distinction between intrinsic and instrumental values and its ramifications for protected area management (Harmon 2003), the value of authenticity in nature (Gobster and Hull 2001), the cultural and spiritual values of biodiversity (Hamilton 1993; Ramakrishnan et al. 1998; Posey 1999), gender-related issues on the use and perception of public space (e.g., Day 2000)—the list goes on. But what has been said is enough to give an idea of the breadth of intangible values and how they are often connected with one another.

Why Do Intangible Values Matter?

Tourism to parks is a huge industry, and the economics of protected area systems has rightly become a critical consideration for governments, policymakers, and park managers at all levels. But the very success of parks as tourist destinations obscures the real reasons why people choose to go to them. In fact, they are popular precisely because they offer a clear-cut con-

trast to the getting and spending that drives so much of modern life. They offer harried people a place to reflect and reinvigorate themselves. In this sense parks are a counterweight to what might be called “everyday” values. But more than this, the places and things in parks carry intrinsic natural values that exist without regard to any form of human usefulness or purpose. There is evidently a connection of some kind between many of the values we as humans generate within our various cultures, and the natural values “out there” in the environment, existing apart from us. To judge from the ever-increasing popularity of parks, this connection resonates in millions of people. Here, then, is the ultimate source of what we might call the “protective impulse”: the motivated desire to safeguard special places. Since parks and other protected areas are universally recognized as critical components of conservation, the importance of intangible values is clear: they are at the heart of the protective impulse that drives the modern conservation movement.

The Papers in This Issue

Let me conclude by summarizing the papers that follow. “Managing the Intangible” is a manager’s-eye view of the practical challenges involved. Drawing on their experiences in Australia and Canada, respectively, Anthony J. English (New South Wales National Parks & Wildlife Service) and Ellen Lee (Parks Canada) provide some practical guidance on establishing management regimes for protected areas that deal with intangible values. Next, three scientist-managers with the U.S. National Park Service, Gary E. Davis, David M. Graber, and Steven A. Acker, lay out the case for parks as

indispensable places where the vital signs of the planet can be monitored in their paper “National Parks as Scientific Benchmark Standards for the Biosphere; Or, How Are You Going to Tell How It Used to Be, When There’s Nothing Left to See?” This is followed by “Aesthetic Values and Protected Areas: A Story of Symbol Preservation,” in which Eduardo Crespo de Nogueira (of the Organismo Autónomo Parques Nacionales, Spain’s national park agency) and Consuelo Martínez Flores (an artist) recount the ups and downs (and ups again) of aesthetics as a force behind the creation and development of protected areas. Then Bron Taylor

and Joel Geffen, both scholars of religion with a special interest in its relationship to environmentalism and science, offer several accounts of what happens “when worlds collide” in protected areas in a paper titled “Battling Religions in Parks and Forest Reserves: Facing Religion in Conflicts over Protected Places.” Finally, in “Life and the Nature of Life—in Parks,” one of the world’s leading environmental philosophers, Holmes Rolston III, shows how the human experience of parks, though it often begins in recreation, culminates with a “re-creating, deepening experience of the human spirit.”

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