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## Yellowstone National Park, Sustainable Tourism and 'Sense of Place'

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In the spring of 1872, the US Congress created the world's first national park by setting aside almost 880,000 ha (2.2 million acres) of wilderness along the headwaters of the Yellowstone River in what was then the territories of Montana, Wyoming and Idaho. Yosemite had already been established as a state park in California in 1864, but because the Yellowstone reserve was located in territories rather than states, it became the responsibility of the federal government. Probably without really understanding what it had done, Congress established Yellowstone National Park as the world's first federally owned and federally managed – and therefore truly 'national' – park. And, were it not for the support of the railroads and others hoping to profit from future tourism in the area, the move to establish Yellowstone as a national park would probably not have proceeded as quickly as it did (Haines, 1977; Majoc, 1999; Barringer, 2002). In the wording of Yellowstone's Enabling Act, legislators echoed sentiments codified earlier in Yosemite's enabling legislation and which appeared again in 1916 when the US National Park Service (NPS) was created: the park should be managed in such a way as to protect natural features while simultaneously making them accessible to the public. Yellowstone was to be a nature preserve as well as 'a public pleasuring ground for the benefit and enjoyment of the people'.

Today, over 135 years later, this grandfather of all national parks continues to maintain its appeal as an internationally renowned tourist destination despite major changes in administrative strategies, national crises such as the Great Depression and two World Wars, and large- and small-scale environmental changes. As a result, Yellowstone might serve as an effective model of the sort of 'sustainable tourism' many communities and countries are trying to develop in places where nature experiences or specific natural features and/or wildlife are the main tourist attractions. It is difficult to gauge the real, long-term sustainability of most sustainable tourism projects, because these projects – or experiments – are so young. Yellowstone National Park, in

contrast, is an intact ecosystem and successful tourist destination with a long history. The park, therefore, provides an opportunity to study one place where long-term sustainable tourism has been achieved.

In an earlier edition of this book (Meyer, 2001), using Yellowstone as a case study, I argued for the incorporation of the traditional tourist experience or the tourist's 'sense of place' into park management decisions. I pointed out that Yellowstone's ecological and economic sustainability as a nature-based tourist destination was secure, but I cautioned that without attention to the park's 'spirit of place' and standards of 'historical appropriateness' alongside science, politics and economics, park managers might inadvertently lose or dilute the traditional and unique 'Yellowstone experience'. In its place would be a less meaningful, less rewarding, perhaps 'generic' national park experience, something less able to withstand the test of time and administrative conflict. Since that earlier edition, however, it is obvious that the idea of 'sense of place' and 'historical appropriateness' have become institutionalized in most recent NPS management documents and are very much a part of management strategies and decisions. In reference to an ongoing debate over whether snowmobiles should be allowed in Yellowstone, Yellowstone's outdoor recreation planner cites the NPS's own *Management Policies* document when he writes: '[T]he NPS promotes activities that are "inspirational, educational, or healthful, and otherwise [are] appropriate to the park environment" and forbids uses that impair park resources or values, or that [a]re contrary to the purposes for which the park was established'. Park history and tradition provide the foundation for this policy (Yochim, 2003, p. 14; see also National Park Service, 1991, 2007a; ENSAR Group, 2001; US Department of the Interior, 2001; Yochim, 2005; Yellowstone Association, 2007). By including the concepts of 'sense of place' and 'historical appropriateness' alongside standards of ecological health and economic feasibility, managers have reinvigorated that which is unique about a visit to Yellowstone. And, a closer look at this form of management may provide lessons that are applicable to other sustainable tourism projects.

Granted, 'sustainable tourism' is an elusive goal. It is difficult to clearly define any of the terms associated with the concept of 'sustainability' as first introduced by the Brundtland Commission (Hall and Lew, 1998, p. 3). In fact, 'defining... sustainable development has become one of the major policy debates of our generation' (Hall and Lew, 1998, p. 1) and problems with definitions are equally difficult for the term 'sustainable tourism' (Stabler, 1997; Butler, 1998). Typically, the idea of 'sustainable tourism' focuses on achieving a hybrid of economic and environmental viability coupled with ethnic and ethical sensitivity and responsibility. That is, managers working towards 'sustainability' must ask themselves if tourism – as opposed to other economic activities such as agriculture or extractive industries – is truly viable as an economic strategy in that particular place. And, those same managers must ask themselves if encouraging tourism will also protect and maintain the area's environmental health (recognizing that 'environmental health' itself is a difficult concept to quantify), while also respecting local, often indigenous, ties to the land. In other words, will the ecosystem remain a

viable, functioning system that will draw tourist money to the area despite the environmental impact of tourism *over the long term?*

In terms of environmental health, Yellowstone appears to meet the requirements of long-term sustainability. In fact, with the successful reintroduction of the grey wolf, a rebound in the grizzly bear population and amazing post-fire regrowth of Yellowstone's forests, it appears that Yellowstone's ecological complexity and health have never been better. The current NPS superintendent of Yellowstone proudly declares: 'Yellowstone National Park and the surrounding 20 million acre Greater Yellowstone Ecosystem comprise the largest intact wild ecosystem in the lower 48 states. All native vertebrates are present. Natural disturbances, native species, and ecological processes interact with relatively little human intervention' (Lewis, 2007, p. 5). Naturally, problems still exist. Whirling disease, brucellosis, pollution from oil and gas drilling operations just outside the park's southern border, encroaching urban sprawl, and questions surrounding bioprospecting and road building are just a few of the problems that continue to plague those who struggle to maintain Yellowstone's iconic status as 'pristine' and 'natural' (Whittelsey, 2007, personal communication). But, as vexing as these problems are, they have little or no impact on deterring visitors from travelling to the park.

[AU1]

In terms of economic sustainability, the park continues to serve as a nuclear core, fuelling economic development and maintaining economic stability in the surrounding region. 'In Greater Yellowstone, the economic contribution of the service-oriented sector of the economy, which includes tourism, has far surpassed that of the extractive industries' (Glick, 1991, p. 69). Glick, however, reminds us of the same 'devil's bargains' Rothman (1998) described as being struck in western towns that adopt tourism as the mainstay of their economies: 'There is growing concern that the rapid expansion of tourism could threaten the conservation gains associated with the curtailment of the more blatantly destructive land use practices' (Glick, 1991, p. 69). To that end, Yellowstone has also attracted a host of non-governmental and non-profit organizations which employ locals as well as outsiders and bring revenue into the park's gateway communities. The Yellowstone Association, Yellowstone Foundation, Greater Yellowstone Coalition, Teton Science School, Hopa Mountain, Big Sky Institute and the Yellowstone Institute are all situated in or around the greater Yellowstone area and contribute to the regional economy without requiring a large footprint within the park itself.

## Sense of Place

Any understanding of 'sense of place' must begin with an appreciation for the role of *place* as a geographic concept. *Place* and a person's *sense of place* are integral to the field of humanistic geography (Tuan, 1977), and Yi-Fu Tuan was the first to define them for the discipline. Tuan defined a *place* as 'not only a fact to be explained in the broader frame of space, but it is also a reality to be clarified and understood from the perspectives of the people who have given it meaning' (Tuan, 1979, p. 387). It has become commonplace to describe the social construction of place and the spaces or landscapes that surround them

[AU2] (Schama, 1995; Oakes, 1997; Olwig, 1997; Schein, 1997; Proctor, 1998). And, people as individuals and as nations identify themselves and their values with particular places as well (Greider and Garkovich, 1994).

Viewing Yellowstone as *place* – rather than as national park, tourist destination or nature preserve – reveals Yellowstone to be a deeply humanized landscape: the product of generations of people interacting with its landscape and assigning meanings to it beyond its physical setting. Two outcomes of my own work on the evolution of a sense of place for Yellowstone (Meyer, 1996) are especially relevant to the idea of sustainable tourism. First is the role of the tourist in contributing to, articulating, and sustaining, a sense of place. Earl Pomeroy (1957), historian of tourism in the American West, understood the importance of tourists to the establishment and continued success of western parks and resorts, because the tourist not only observed and recorded experiences but became an ingredient of the experience as well. By recounting tales of their travels, tourists create expectations for others. Second, sense of place is not wholly subjective and enigmatic, something easily dismissed as peripheral to the tourist experience. Instead, sense of place can be understood and quantified (Shamai, 1991). It is a shared image vital to the unique ‘Yellowstone experience’ that differentiates Yellowstone from other national park experiences. And, it can be used as a management tool.

Using this sort of holistic and site-specific management perspective frees park managers from considering only the negative environmental impacts of tourism. When the tourist experience itself is the central concern, managers may take on a more proactive rather than reactive role. Beginning with a solid understanding of the park’s sense of place, management decisions may be weighed against whether or not they enhance this site-specific experience. Another benefit is that it recognizes and incorporates the interests of the area surrounding the park into the ‘totality of the park experience’ (Sax, 1980). In many instances, the tourist experience for a particular place actually begins well outside its borders. Few tourists arrive in Yellowstone without having driven across the western plains or mountains *en route* to the park. Their Yellowstone experience begins somewhere along the way, somewhere beyond the park’s actual administrative border (Meyer, 1996, 2003). Despite justifiable claims of ‘visual blight’ when describing the hundreds of miles of billboards and signs announcing the approach of Wall Drug Store, these markers often serve as ‘anticipation-builders’ for Yellowstone-bound tourists making their first trip across the western plains. National park managers should be both willing and eager to elicit advice, ideas and support from surrounding communities, since it is often there that tourists’ actual park experience begins (Walsh *et al.*, 2001).

## US National Parks: Early Experiments in Sustainable Tourism

Yellowstone is one of the ‘crown jewels’ of the US national park system, an honour it shares with other old, large nature parks such as Yosemite, Glacier, Grand Canyon and Mount Rainier. These parks enjoy a privilege not afforded most new national parks. That is, these crown jewels were created at a time

when both nature protection enthusiasts and the touring public saw no contradiction in the idea that a place could remain natural, untouched by human hands and at the same cater to mass tourism. Even today, people easily accept the idea of Yellowstone as both 'natural' and filled with roads, bridges, dining rooms, hotels and gift shops. Yellowstone exists simultaneously as an internationally revered icon of nature preservation and as an international tourist destination that comfortably accommodates approximately 3 million visitors each year.

Today, it is nearly impossible to imagine any national park without tourists, even in the most distant and rugged locations. The NPS web site even allows web surfers to locate specific national parks by name, location or major tourist activities such as hiking, biking, auto touring, camping or horseback riding (National Park Service, 2007b). Hence, 'national parks, often the most recognisable form of protected environments, have a well-established connection with tourism. From early days, tourism has been encouraged in park systems worldwide as it helped to fulfil the "enjoyment" mandate of many national parks agencies' (Boyd, 2000, pp. 161–162; see also Butler and Boyd, 2000; Nelson, 2000). US national park history is very much a constant give and take between proponents of wilderness protection and those favouring increased tourism development. Nowadays, 'conflict over park mandates is avoided on the basis that the type of tourism being encouraged is that classed under the broad labels of "sustainable", "responsible" and "environmentally conscious"' (Boyd, 2000, p. 162). An understanding of a park's sense of place and standards of historical appropriateness is especially helpful when trying to meet the often conflicting requirements of the NPS's dual mandate.

## A Longitudinal Study

As mentioned above, Yellowstone's primary usefulness as a model for sustainable tourism is its longevity. The park's popular image as an important tourist 'must see' has survived natural disasters and times of incredibly bad media attention partly as a result of its clear and resilient image as *place*. Repeatedly over the park's 135 year history, the NPS has erred in making decisions balancing preservation with use. In the 1970s and early 1980s, Yellowstone's managers were criticized for precipitating what the public press considered 'avoidable' grizzly bear attacks on tourists. The 1988 summer of wildfires was a media disaster as all major news stations aired footage of the nation's beloved Yellowstone enveloped in flames (Pyne, 1997; Rothman, 2007). A decade later, the NPS allowed park bison to be hunted when they crossed over the park's northern boundary on to lands not protected by the federal government in search of grass at lower, less snowy elevations. The Yellowstone 'bison slaughter' of 1997 made international news (Leakey, 2004). Then came the wolf reintroduction of the 1990s, a move praised by environmentalists and cursed by local wool growers. Finally, the snowmobile ban of 2001 angered snowmobilers and snowmobile manufac-

turers to the point that their powerful public relations campaign caused the White House to overturn the ban the following year.

Each of these events and their policy shifts caused public outcry that focused attention on NPS management policies in Yellowstone and beyond. Criticism was levelled not only at the management decisions but at individual managers and administrators living in Yellowstone all the way up to high-ranking officials in Washington, DC. Criticism from Yellowstone's bordering states and gateway communities was especially loud and sharp. Some communities or enterprises assume they cannot adjust quickly or cannot easily absorb the impact of change, so any policy changes that deviate from the way it has always been done 'round here' are followed by a fear that tourists will stay away, sales of rooms, meals, gasoline and other necessities purchased in and outside the park will plummet, jobs will be lost and tax revenues will dry up. However, these predicted losses never materialized. Yellowstone's draw as a tourist attraction – its sense of place – has staying power.

[AU3]

A closer look at the public's response to the 1988 wildfires is revealing. Since the early 1970s, in response to American society's growing environmental awareness and concern that began a decade earlier, the NPS has used ecosystem-based management as a guideline for achieving and maintaining some illusion, if not actual state, of wildness in the nature parks of the national park system (Houston, 1971; Despain *et al.*, 1986; Schullery, 1997; Pritchard, 1999). And, in celebration of Yellowstone's centennial in 1972, the NPS introduced a new management strategy based on letting nature run its course. This new policy meant that naturally occurring fires would be allowed to burn as long as fires did not threaten human lives or major structures. In the summer of 1988, several small, natural, backcountry fires burned out of control. Eventually, the decision was made to fight the fires, and in an effort to save lives and speed up firefighting efforts, the NPS closed the park to the public at the height of the tourist season. Almost immediately, local and regional residents and business owners in the park's gateway communities felt betrayed by administrators who appeared to place more value on scientific principles and ecological processes than on their needs and interests. 'The fires generated more emotion than inquiry, and more heat than light' remarked then-NPS Superintendent for Yellowstone, Robert Barbee (quoted in Carrier, 1989, p. i). The public's critical response – fuelled by emotional hyperbole and exaggeration by the mass media – to the 'ecologically correct' wildfires made park managers realize that Yellowstone was more than a representative bit of wild nature.

The ecological value of wildfire may have been acceptable in *theory* but not in *reality*, not in Yellowstone National Park. Managers quickly realized that for many of Yellowstone's supporters, the park is not a natural laboratory, it is a cherished *place*. The NPS's ecosystem-based management programme is only an 'uneasy truce between what science tells us is possible and what our value system tells us is appropriate' (Barbee and Schullery, 1989, p. 18). As the smoke cleared, it was obvious that the worst fears of the regional tourist industry had not occurred. The economic impact of the fire was minimal. Park visitation did decrease by 400,000 people (about 16% of expected totals for the year) in 1988 when park gates were closed to all but

firefighters and their equipment. But, when the park reopened in October, visitation was up 39% over previous years (Wuerthner, 1988):

Despite these losses, some establishments did a brisk business in supplying the army of firefighters with everything from motel space to food. For many establishments, the summer fires were a gold mine that provided an unexpected boom, helping to mitigate the loss of tourist dollars.

(Wuerthner, 1988, p. 55)

And, if visitation figures from Yellowstone entrance gates are considered, the minor drop in visitation during the fires did not, as fears suggested, continue into later years. Tourist numbers are measured at entrance gates in persons per vehicle (PPV), and PPV figures for 1988, 1989 and 1990 were 2.2 million, 2.7 million and 2.8 million, respectively. Throughout the 1990s through 2006, Yellowstone's total summer visitation rate has hovered right around 3 million PPV, with a low of 2.7 million in 2001 and a high of 3.1 in 1992, 1998 and 1999 (National Park Service, 2007c). High fuel prices and a weak US dollar contributed to near record-setting visitation totals for 2007 as well (Yochim, 2007, personal communication).

[AU4]

Yellowstone National Park would seem to provide fertile ground as a model of sustainability, whether the focus is on sustaining an ecosystem, one element of the ecosystem, or the local and regional tourist economy over the long term. After one-and-a-quarter centuries, Yellowstone's popularity remains high, and, except for the years during the World Wars, visitation rates never went through the typical resort cycle of initial boom and eventual stagnation or bust. Yellowstone's image as *place* has been strong enough to weather firestorms, ageing infrastructure, political scandals and policy shifts, making it an excellent model for long-term sustainable tourism and environmental protection practices.

## Grizzly Bears and Snowmobiles

Tourist appeal for Yellowstone's grizzlies and the contentious battle over whether or not snowmobiles belong in Yellowstone are two topics that illuminate the resilience, strength and importance of the park's sense of place. Equally revealing is how seriously the NPS takes its mandate to protect and promote what is best about the park and how adaptable the public's affection is for this place. Although the Yellowstone grizzly bear saga is long, complicated and fascinating, the most recent chapter has a happy ending. Early on, there was a period when Yellowstone was the model for Jellystone National Park and picnic-basket-stealing Yogi Bear – a time when bears lined the roadways begging for handouts from passing tourists. Then came a drastic change in park policy which was part and parcel of the same 'let nature run its course' philosophy instituted in the early 1970s. Roadside feeding of bears was outlawed and backcountry garbage dumps where bears had fed for generations were closed in the hope of forcing the bears to make the transition back to more natural hunting and foraging behaviours.

Dump closings were followed by a transition period during which 'bear incidents' occurred, resulting in the injury or death of both tourists and bears. This was a difficult time for the bears, the public, and the NPS. Some bears simply would not 'return to the wild' and had to be removed. Experts still disagree on how many bears were lost in the policy change. Some believe grizzly populations were reduced to near-extinction levels in a misguided attempt to force bears to return to more 'natural' diets and foraging behaviours (Craighead, 1979). Others argued that the NPS's removal programme merely restored a more natural balance between the grizzly bear population and available habitat (Schullery, 1980; Pritchard, 1999). Nevertheless, regardless of finger-pointing and name-calling of the past, grizzlies have apparently returned to their natural, wild ways, and bear sightings along Yellowstone roads are increasingly frequent.

For several years, especially during the 1980s when the grizzly population was very low, park visitors expressed disappointment at not being able to see bears. Some felt cheated or disappointed, others were angry. However, during this time, the NPS put forward an excellent public relations and public education campaign that explained the relationship between 'wild' grizzlies and a 'healthy' Yellowstone ecosystem (Biel, 2006). The public's strong desire to believe Yellowstone to be a wilderness helped people overcome disappointment at not seeing and feeding beggar bears. It was not long before the 'new and improved' Yellowstone grizzly was part of the park experience again, and the traditional Yellowstone experience remained intact. A slow but steady increase in the grizzly population has also helped tourists accept the grizzly's new role in Yellowstone's sense of place.

Unlike the grizzly bear issue, Yellowstone's snowmobile controversy has yet to be resolved. Until the availability of privately owned, affordable snowmobiles, winter was typically Yellowstone's off season. It was a time for the park to rest, recuperate and rejuvenate from the short but intense summer tourist season (Bartlett, 1985). Those who visited the park in winter found travel slow, deliberate and quiet. They had to travel on skis or snowshoes and make camp in the snow. Over the past two decades, however, Yellowstone's winter visitation numbers have soared, mostly as a result of increased snowmobile use. Now, only the naive still come to park assuming they will find solitude and silence. An increase in the number of winter tourists led to an increase in services and facilities available to them, and modern winter tourists truly need these services. Due to Yellowstone's incredibly cold temperatures and deep snow-imposed isolation, winter tourists simply are not and cannot be as self-sufficient as their summer counterparts. They arrive on snowmobiles, sleep in hotels, eat in restaurants, and warm themselves and fuel their machines at warming huts and gas stations. Yellowstone is not alone. 'Many wildlands have thus experienced a progressive shift from values focused on a natural environment to more socially-oriented, facility dependent values' (Knopf, 1988, p. 6).

In the case of grizzly bears and Yellowstone's sense of place, public perception of the bear evolved from beggar bear to wild bear, from bear as entertainment to bear as proof of Yellowstone's wildness. In the case of the snowmobile,



it has been more difficult to reconcile past experiences with modern conditions. Yellowstone's traditional transportation experience went through a change once before, beginning in 1915 when automobiles began replacing horse-drawn carriages as the main form of park transportation. At that time, many tourists and travel writers decried the eventual ruination of the then traditional 'Yellowstone experience' as stagecoaches disappeared and were replaced by park's famous yellow touring cars and private automobiles.

The introduction of snowmobiles on the Yellowstone scene is different, however. One difference is that the exhaust fumes and sound of snowmobiles precludes others from experiencing the traditional quiet of a Yellowstone winter. Recently, two organizations who oversee national parks in general and Yellowstone in particular, the National Parks and Conservation Association and the Greater Yellowstone Coalition, reported that over the course of a day, the drone of snowmobiles in Yellowstone is now nearly constant, especially at popular places like Old Faithful geyser. Hence, the use of snowmobiles is 'locking out other users' (Milstein, 2000). Others have pointed out that silence or at least an environment 'uncorrupted by the beeping, pounding, whining, roaring, growling, and screaming of civilization' may be a valid reason for preserving natural places (Watkins, 1999, p. 41; see also Coates, 2005).

Originally, scientists argued that snowmobiles were a benign presence in the park, because their ecological impact was minimal. It was assumed that because bears hibernate, many of the park's elk herds move to lower elevations outside the park, and much of the park lies hidden and protected under many feet of snow in the winter; winter tourism would have little impact on the environment. More recently, however, attention has focused not only on the noise but also on air pollution. The two-cycle engine on a snowmobile produces exhaust containing a thousand times more hydrocarbon and nitrous oxide pollutants than a car (Greater Yellowstone Coalition, 1996). Further, snowmobilers do not necessarily stay on groomed roads and have been found chasing bison and other wildlife as well as competing with cross-country skiers on backcountry ski-only trails. The rub lies in the fact, however, that snowmobilers spend more money in local and regional communities than do cross-country skiers, so concessionaires do not want snowmobile numbers reduced or their access restricted.

As the NPS continued to study the snowmobile situation, managers extended their investigation to include 'visitors' qualitative experiences' alongside quantitative data. These studies revealed that

snowmobile noise disturbed the aesthetic experience of the snowshoer or skier. For these visitors, solitude and quiet were valuable resources. Moreover, snowmobile air emissions lingered on still days and were offensive to people and wildlife. Finally, although snowmobiles made the park accessible to the old, very young, and physically handicapped, their use conflicted with that of other, more numerous park users.

(Yochim, 2003, p. 7)

The final Environmental Impact Statement (EIS) and Winter Use Plan for Yellowstone was just released late in 2007, so it is still too early to guess what the future of snowmobiles in Yellowstone will be. However, it is interesting

to note that the Plan relies heavily on arguments protecting not only traditional (non-snowmobile) use but also arguments for maintaining the traditional winter experience by focusing on the 'character of historical winter access and recreation' (US Department of the Interior, 2007, p. 1).

## Yellowstone as Model

The most important lesson other sustainable tourism projects might learn from Yellowstone's success is that whenever possible, new nature parks or preserves should be as big as is economically and politically possible. There are several reasons for doing so, and five are explained below. First, if the park is to serve as a nature park, the larger a park's geographic extent, the easier it is to maintain at least a semblance of wildness – if only in the interior, at its highest elevations or in its densest jungles – while still providing for some level of modern tourist amenities to sustain the park economically.

Second, the larger the park, the better is the chance for more biological diversity within its borders. And, the more diversity or variation in wildlife or landforms, the broader is the park's appeal among different interest groups. For example, a single park can attract anglers, photographers, bird-watchers, wildflower enthusiasts and rock climbers only if it has something to offer each of those groups. In Yellowstone, when the wolf was removed as a predator, the grizzly bear took over as the park's main carnivore as evidence of the park's naturalness *perceptually* if not ecologically. Certainly, the bear did not fill the same ecological niche as the wolf, but in terms of sustaining the tourists' perception of the park as a place where there are natural predators and prey, the wolf was not really missed.

Today, tourists come to Yellowstone to see and hear wolves not so much because they are an integral part of predation cycles, but the reintroduced wolf is an attraction itself. In the mid-1990s, 31 wolves were reintroduced to the greater Yellowstone area and are now second only to bears as the park's main wildlife attraction (Duffield *et al.*, 2006; Yellowstone Park Foundation, 2007). More interesting to sustainable tourism studies is the economic impact of wolf. 'Visitors who come to see wolves in Yellowstone contribute roughly \$35.5 million annually to the regional economy' (Yellowstone Park Foundation, 2007, p. 1) and '3.7% of Park visitation, or approximately 100,000 visitors annually, is due solely to the presence of wolves' (p. 2). 'In this case, a fractional increase in visitors to one of the most popular parks in the world generates millions of dollars for gateway communities' (Duffield quoted in Yellowstone Park Foundation, 2007, p. 2).

[AU5]

A third reason for creating as large a park as possible is that it can physically and economically accommodate large numbers of tourists, support staff and provide gateway facilities and attractions. Their size allows them to absorb large numbers of visitors without appearing crowded and without straining infrastructure, because there is an opportunity to disperse visitors throughout the park rather than concentrating them in one small area.

Fourth is that larger areas have a better chance of recovering from macro-scale natural processes such as volcanic eruptions, wildfire and floods,

whereas smaller reserves cannot. Typically, the aftermath of these major, landscape-altering events acts as a tourist draw as curious tourists and scientists rush in to assess the situation. Also, when natural disasters do strike, a large park most likely has other attractions upon which to fall back, whereas a smaller park might not. When floods, volcanic eruptions, wildfire, epidemics or other natural (or human-caused) disasters devastate one wildlife population, for example, tourists may be re-routed to viewing another, different species. Or, the park's 're-birth' may be touted as a new attraction as was the case with Yellowstone's post-wildfire regrowth and wolf reintroduction. The more opportunities are encompassed in a single destination, the greater is its ability to weather natural cycles.

[AU6]

Fifth and finally, the larger the park, the larger is the region dependent on, and responsible for, its success. Communities geographically distant from the actual border of the park will not be as likely to act as park advocates. Yellowstone is literally the 'heart' – geographically, biologically, geologically, economically and politically – of a greater Yellowstone area (Vale and Vale, 1989; Glick *et al.*, 1991; Schullery, 1997; Pritchard, 1999) composed of publicly and privately owned land surrounding the park. Greater Yellowstone is home to movie stars, mining and logging camps, new ranchettes and suburban sprawl, working farms and ranches that have been owned by the same family for generations, national parks, national forests, national wildlife refuges, state parks, city parks, new and historic resorts, checkerboard acreage owned by railroad corporations and gateway communities hoping to continue to 'cash in' on Yellowstone's name and reputation. Hence, the park's gateway communities include those immediately adjoining the park – such as West Yellowstone and Gardiner, Montana – as well as those cities as far away as Bozeman and Livingston, Montana, to the north; Cody, Wyoming, to the east; Jackson, Wyoming, to the south; and Big Sky, Montana, to the north and west. Some of these towns were established well before Yellowstone became a national park, but none would attract the number of tourists they do today were it not for their relationship and proximity to the park.

In marketing themselves, different gateway communities emphasize different aspects of their association with the park. Jackson, Wyoming, for example, promotes itself as a part of the 'Wild West' and the 'cowboy era' with nightly shoot-outs and 'saloons' instead of bars. Virginia City, Montana, is a restored mining town and hopes to draw in visitors interested in the Rockies' gold rush and the settlement of the 'frontier'. Both towns are hours' drive from Yellowstone National Park, and both draw on, and profit from, their association with the greater Yellowstone-generated tourist region.

Most recently, many of Yellowstone's gateway communities are experiencing renewed vigour as retired and/or wealthy urban dwellers rediscover the American West and buy up ranches to build second homes or retirement homes in the Greater Yellowstone area.

For most nature parks, therefore, size does matter. If a destination hopes to attract both wilderness enthusiasts and mainstream tourists, the larger the park, the more confidently managers can speak of its wilderness characteristics, its ecological complexity and ability to withstand major natural processes.

Perhaps Yellowstone, Yosemite, and the other large national parks have been successful *because* of their size and biological and geographic diversity. But, it is also the parks' rich layering of meanings and their enduring allure – each park's sense of place – that draw visitors in and keep them coming back.

### Shortcomings: Cultural Sustainability

For all their success, however, Yellowstone and other US crown jewel parks never faced one of the most difficult problems faced by most national parks now being established in developing countries as sustainable tourism projects. These parks must include policies that are respectful of the ethical and cultural rights of the local population. The third leg supporting sustainable activities – that of respect for human rights – was simply not an issue for early US national park managers. Native Americans were systematically removed from their ancestral lands within newly created parks (Spence, 1999). This absolved the NPS from asking questions regarding ethnic and moral responsibilities to the indigenous population and allowed them to avoid dealing with all but a narrow field competing stakeholders and public interests. Since most new national parks just recently established in Africa and South America have long been home to native people, protecting wildlife or outlawing grazing, dam building or timber cutting often means forcing local populations off ancestral lands or to completely change their ways of life (Naughton-Treves, 1997; De Boer and Baquete, 1998; Ferreira and Harmse, 1999; Gillingham and Lee, 1999; Hudson, 1999).

In an effort to repair its image with tribal people and communities in the lands surrounding Yellowstone today, the NPS has made very real efforts to involve Native Americans with the park, from educational programmes for tribal youth ('No Child Left Inside' programme), hiring incentives and including information about Yellowstone's Native American presence, heritage and evidence on the landscape in its interpretive programmes. But, the fact remains that the NPS is only now, in the 21st century, dealing with incorporating the Native American presence into the Yellowstone tourist experience.

### National Parks and the Goal of Sustainability

Attention to a park's sense of place and traditions – as well as attention to preserving, restoring and maintaining its natural ecosystem – provides managers an additional tool for building a sustainable tourist destination. Only by truly understanding the sense of a place, of a park, can managers intelligently, comprehensively and appropriately manage for the long-term tourist experience. And, it is comforting to know that unlike managing for scientific or economic goals alone, managing for sense of place allows flexibility. As long as the public understands that his and her expectations are included in the decision-making process, it is easier to accept minor changes that do not destroy what the park has come to represent.

In conclusion, Yellowstone National Park is an excellent place to examine long-term regional sustainability issues that include attention to environmental, economic and sense-of-place needs. Increasingly, Yellowstone's managers are taking the traditional tourist experience into consideration when making policy decisions as they realize the tourist is both the source and the vector for the park's enduring popularity and sense of place. This return to the heart of the Yellowstone experience is evident not only in the reintroduction of wolves and natural fire regimes to the park's ecosystem, but in the restoration of the park's famous yellow, canvas-topped touring cars that are now used alongside modern motor coaches for park tours. Throughout the park and gateway communities, new attention is being paid to the value of Yellowstone traditions and how best to meet tourist expectations without endangering the park's natural resources.

In terms of economic sustainability, the NPS is not mandated to manage its parks to be self-funding, unlike most nature parks established in developing countries today. US national parks have always been funded by the federal government rather than gate receipts and park concessions. However, the economic health of Yellowstone's gateway communities depend on the environmental health of the Yellowstone ecosystem, so it is in the best interest of both parties to work together to maintain the park's integrity. As in most nature-based parks, 'it is protected area managers and conservationists, working with local communities and the tourism industry, who are generally best placed to manage nature tourism, to ensure that it is low impact, and that both local people and parks benefit significantly from it' (Goodwin, 2000, p. 246).

In recent years, Yellowstone's NPS managers have worked with the park's concessioners and gateway communities to build LEED certified buildings, recycling centres and promote alternative fuels, ride share programmes and carbon neutral activities. In this way, Yellowstone continues to serve as a leader, paving the way for other national parks while still maintaining ties to its past. In making management decisions, however, the NPS has become very much aware of the boundaries set by sense-of-place standards, so that the 'Yellowstone experience' of the next century may be firmly grounded in what was best about the park's first 125 years.

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### Author Queries:

- [AU1] Kindly provide place for Whittelsey, 2007, personal communication.
- [AU2] Olwig, 1997 is not included in the references.
- [AU3] Kindly confirm change of Despain, 1986 to Despain *et al.*, 1986 in accordance with the references.
- [AU4] Kindly provide place for Yochim, 2007, personal communication.
- [AU5] Kindly confirm change of Yellowstone Foundation, 2007 to Yellowstone Park Foundation, 2007.
- [AU6] Kindly confirm change of Vale, 1989 to Vale and Vale, 1989 in accordance with the references.
- [AU7] Kindly provide year for McCool and Moisey and it is also not cited.
- [AU8] Olwig, K.R. (1996) is not cited.
- [AU9] Whelan, 1991 is not cited.