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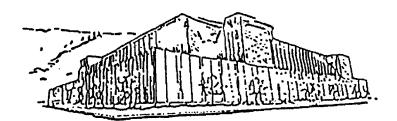
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TREADMARKS ON THE VIRGIN LAND The appropriate role of off-road vehicles in national forests

by

John C. Adams

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science The University of Montana

Spring, 1998

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Abstract

TREADMARKS ON THE VIRGIN LAND The appropriate role of off-road vehicles in national forests

© John C. Adams

Approved by

hairperson of the Supervisory Committee, Professor Henry Harrington Department of Environmental Studies

In recent years off-road vehicle (ORV) numbers have increased dramatically. Simultaneously, machine technology has improved radically. As a result, ORVs today are going new places in unprecedented numbers. Forest Service management plans in Montana and northern Idaho in large measure fail to rationally regulate ORV use, leaving an inappropriately high number of national forest trails open to motorized use. ORV advocates are taking advantage of this vacuum in trying to permanently entrench motorized use in these areas. National forests represent a unique opportunity to provide Americans invaluable opportunities to enjoy natural experiences. ORV use disrupts natural experiences, and undermines this valuable function of the national forests. Permitting ORV use to become entrenched in massive portions of our national forests, accordingly, runs contrary to wise policy and common sense and jeapordizes Americans' opportunity to enjoy natural experiences.

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Introduction

On May 17 and 19, 1997, U.S. Representative Rick Hill (R-MT) co-chaired field hearings of the House Subcommittee on Forests and Forest Health with Representative Helen Chenoweth (R-ID) in Wallace, Idaho, and Kalispell, Montana. The hearings were designed to promote maximum motorized use of national forests in the Northern Rockies, and particularly to promote the use of off-road vehicles.

To ensure unqualified support of expanded motorized use, Representatives Hill and Chenowet, the only committee members presen, handpicked the witnesses. A few federal land managers were invited to be cross-examined and intimidated, some local county officials were invited to tout the economic value of motorized forests, and the balance of witnesses were representatives of local off-road vehicle clubs. In Kalispell, three conservationists were permitted to testify at an all-day hearing only after a local grassroots environmental group had taken Representative Hill to task in the media. In Wallace, after six hours of testimony from a variety of motorized enthusiasts, two conservationists were permitted to testify for four minutes each.

The one-sided hearing is an old congressional trick popular with conservative, western members of Congress hoping to intimidate local officials or beat up on liberal, eastern, know-nothing politicians trying to tell people in the West how to live their lives. That such a hearing would be called for and controlled by off-road vehicle advocates,

however, indicates their ascendance in extreme-right, Wise Use politics, and of the coming battle over motorized use of public lands. In the Northern Rockies, Idaho and Montana, off-road vehicles have taken center stage next to the cattle, logging and mining industries that traditionally dominated conservative public land politics.

Off-road vehicles (snowmobiles, off-road motorcycles and all-terrain vehicles collectively, or ORVs) have long been used on public lands in small numbers. In recent years, however, ORV numbers have increased radically. Simultaneously, machine technology has improved dramatically. As a result that ORVs today are going new places in unprecedented numbers.

The increased numbers and range of ORVs are causing major management problems on national forests in the Northern Rockies. Forest Service management plans in Montana and northern Idaho in large measure fail to restrict ORV use, leaving numerous trails, and in some cases large off-trail area, open to motorized use. In Montana and northern Idaho, 58% of national forest trail miles permit some type of motorized use during the year (U.S. Forest Service 1996b). As one all-terrain vehicle (ATV) magazine puts it, "There's virtually no end to the ATVing opportunities in this huge state [Montana], making it a prime summer ride spot," (The rugged individualists of 4-Wheel ATV Action 1997). ORVers are taking advantage of this vacuum in policy by staking "claims" to vast areas, and, with the help of state subsidies, converting traditional foot and horse trails into motorized thruways and grooming thousands of miles of snowmobile trails.

Traditionally, Congress does not designate as wilderness areas that receive

significant ORV use. In Montana and Idaho, ORVs are permitted in consensus wilderness areas like the Badger-Two Medicine and the Sapphires, and even in areas recommended by the Forest Service itself for designation, such as Ten Lakes and the Great Burn. Permitting ORV use in these areas threatens their potential for wilderness designation.

Similarly, once ORV use is well established on a trail or in an area, it is difficult to remove administratively. Thus the widespread use of ORVs on trails in roaded areas of our national forests is also of concern. Our national forests represent a unique opportunity to provide Americans invaluable opportunities to enjoy natural experiences. ORV use disrupts natural experiences, and undermines this valuable function of the national forests. Permitting ORV use to become entrenched in massive portions of our national forests, accordingly, runs contrary to wise policy and common sense.

With this paper I hope to bring attention to the scope of changes in experiential opportunities taking place in national forests in Montana and north Idaho, or Region One of the U.S. Forest Service. Further, I hope to provoke reconsideration of policies that permit ORVs in roadless areas of the national forests. Finally, I hope to initiate a reevaluation of the recreational purpose of the national forest system. I argue that the national forests should be used to provide ever more rare natural experiences, and that the presence of ORVs undermines this goal.

In Chapter One of the paper, I review the recent history of ORV use on public lands, as well as Forest Service management policies. In Chapter Two, I discuss the role of ORV advocates in the Wise Use movement, arguing that ORV advocates are both a driving force and a new tool of the Wise Use movement.

In Chapter Three, I define "natural experience," and argue that ORVs disrupt the natural experience for both drivers and nonmotorized observers. In Chapter Four, I review the considerable benefits of natural experiences. In Chapter Five I argue that the national forests represent a unique opportunity to provide this experience, and that there is a shared intuition that the national forests should be managed to protect natural experiences.

The national forests of the Northern Rockies are approaching a critical turning point with regard to motorized use. Commercial interests are promoting Idaho and Montana as a free-fire zone for ORVs. With powerful congressional allies and brazen organizations, ORV advocates are driving into the vacuum left by the lack of Forest Service leadership and the lack of unity among nonmotorized users. As motorized use increases, and technology improves, ORVs may soon be entrenched as a permanent occupying force and an accepted part of many "wild" Northern Rockies landscapes.

On the other hand, more than 90% of national forest trail use in Montana is nonmotorized (FWP1998). The public supports restrictions on ORV use. And Forest Service regulations provide land managers the tools they need to restrict ORV use where it is inappropriate. Motorized use is still slight enough to be effectively restricted to appropriate areas, if the public forces the Forest Service to narrowly define such areas. If we have the will, there is still time to protect the quietness, the stillness, the wildness of the Northern Rockies.

The national forests of the Northern Rockies, and in the country generally, have been roaded near unto death. In Montana alone, the Forest Service built 30,000 miles of roads between 1945 and 1997, meaning there is no shortage of motorized "access" to our

national forests (Gatchell 1998a). ORVs essentially create still more roads wherever they go. If we value wildlife habitat, if we value wilderness, if we value wildness, if we simply value "the hush of the land" and the smell of leaf and tree, we need to leave some places where one can still walk, or sit, or ski without confronting motorized vehicles. In general, those places are the trails of our national forests. Roads are vehicles; trails are for people and animals.

Chapter 1

A brief history of ORV use on national forest land

The use of off-road vehicles on public lands has grown and changed gradually with incremental changes in machine technology. As new vehicles have evolved, each barely different than those of the previous generation, they have been accepted by land managers as a natural extension of previous use. Thus, for example, three-wheelers were accepted as modified motorcycles, and four-wheelers as modified three-wheelers. As a result, the Forest Service has never stepped back and looked carefully at the increasing range and capabilities of off-road vehicles (ORVs–snowmobiles, motorcycles and all-terrain vehicles, collectively), or their appropriate role on national forests, and has only rarely looked at the impacts of motorized vehicles on wildlife, soil, water quality, riparian habitat and other users.

Congress has never given the national forests direction regarding the use of ORVs, except to provide for such use "where appropriate" (43 U.S.C.A. § 1781(a)(4)). For the last twenty-five years, policy has been governed by two executive orders issued by presidents Nixon and Carter, respectively, as codified in the Code of Federal Regulations. There is considerable leeway in how those regulations can be interpreted, however, and the Forest Service has rarely used them to limit ORV use. Instead, motorized use has been

accepted largely without restriction. The national forests in Montana and northern Idaho permit ORV use in vast areas largely as a result of historic accident rather than as a result of conscious policy.

Recent and cumulative increases in the number and capabilities of ORVs, and the ready availability of money to assist land managers in converting traditional pack and saddle trails into motorized thruways, have greatly altered the nature of ORV use in national forests. Vast portions of national forests in the Northern Rockies are being converted into motorized play areas.

Increasing numbers

Motorized vehicles have been driven on public lands almost since their invention. According to Eric Lundquist, with the American Motorcyclist Association, "three weeks after the first motorcycles reached California they raced on public land in the California Desert," (Lundquist 1997). Hunters, anglers, hikers, rock hounds, ranchers, prospectors and others have long used high clearance vehicles, oversnow vehicles and motorcycles to access parts of the backcountry, generally on two-tracks or other primitive roads.

Off-road motorcycles as we know them today began to appear in the 1960s. In the early 1960s, two-stroke motorcycles from Japan and muscle-machines from Great Britain galvanized the motorcycle industry (Lundquist 1997). Two-stroke motorcycles (sometimes called "tote-goats"), with their high power-to-weight ratios, and quick acceleration, catalyzed an increase in off-road cycling. Still largely unadapted to off-road use, though, most off-road motorcycles were essentially heavy, stripped down street bikes

(Lundquist 1997). In the 1970s a dual purpose, street legal off-road bike became popular, giving way in the 1980s to ever lighter, more specialized dirt bikes.

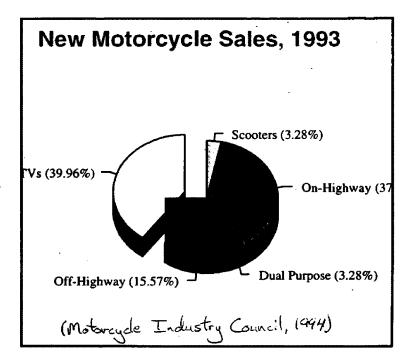
All-terrain vehicles (ATVs) have been manufactured since at least 1961 (Changing Times 1970), but little resembled the machines of today until mass-marketing began in the late 1970s. Previously, many ATVs had joysticks instead of steering wheels and a combination of wheels and tracks, and some came with balloon tires and outboard engines for crossing swamps and lakes. Lumped in the same vehicle category with hovercraft and manufactured by specialty companies, ATVs were essentially novelties that looked like "old-fashioned claw-footed bathtubs that have been fitted with wheels, seats and an engine," (Changing Times 1970).

In the late 1970s, Honda introduced its three-wheeled All-terrain Cycle, prompting an explosion in the popularity of three-wheel ATVs manufactured by mainstream Japanese motorcycle and automobile manufacturers. Sales of these machines–crosses between a motorcycle and a jeep–reached about 500,000 units annually (Brown 1995) when, in 1988, the Justice Department took the unprecedented step of outlawing new sales of three-wheelers based on the number of injuries the unstable trikes had caused (Time 1988).¹ Sales rebounded, however, with the popularization of similar, more stable fourwheelers, first introduced in 1982 when "Suzuki successfully launched a new generation of

¹The Consumer Product Safety Commission sponsored a voluntary Consent Decree ending the manufacturing of three-wheelers for the American market in 1986.

vehicles" with their "Quad," (Jardine 1996). In 1994 AApril 29, 1998TVs captured 42 percent of new motorcycle sales, outselling even street motorcycles (Brown 1995).² In 1996, nearly 300,000 sold and nearly 2 million were in use (Jardine 1996).

The use of public lands for ORV recreation has seeminglyApril



30, 1998 increased in proportion to the growth in ATV sales. In 1979, the Forest Service estimated that all off-road wheeled vehicle use accounted for only 5.3 million visitor days (Feuchter 1980). The Forest Service estimated that there were 80 million ORV visitor days in 1987, and guesses that there will be 118 million in 2020 (Cordell et al. 1990, 44). In other words, off-road vehicle use on national forests increased 1,500 percent between 1979 and 1987, and almost undoubtedly increased thereafter.

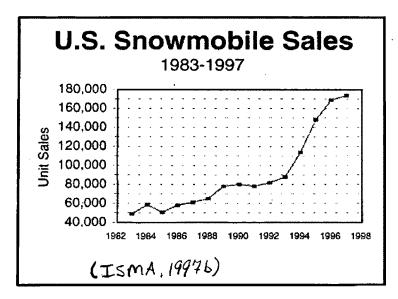
Snowmobiles

Snowmobiles have a longer and more volatile history than ATVs and motorcycles. First mass-marketed in 1959 by the Canadian Bombardier Corporation (makers of Ski-

²More than 75% were sold for recreational purposes (Jardine 1996).

Doo and Sea-Doo machines), only 8,000 sold in 1964 (Baldwin 1970), and the machines went only about 30 miles-per-hour. By the early 1970s more than 300,000 snowmobiles were sold per year in the U.S. Sales dropped off to a low of 49,000 units in 1983 due to low snowfall and high gasoline prices (Oakes 1997b). With increasingly capable machines, a better economy and aging baby boomers, sales have risen steadily every year since, reaching 173,624 in 1997 (International Snowmobile Manufacturers Association 1997b; Oakes 1997b).

Reliable data on the popularity of snowmobiling in Montana is difficult to find. One study claimed that there are 54,000 snowmobiles in Montana, and that one in ten Montana household owns a snowmobile (Sylvester and Nesary 1994). In 1994, however, the year the study was published, only 18,572 snowmobiles were registered in the state of Montana (Ibid.); registration is a prerequisite for driving on public lands. The Lolo



National Forest claimed in 1996, without citing a source, that snowmobile use in the state increased by 73 percent in the decade ending in 1993 (Lolo National Forest 1996).

One way to estimate changes in snowmobile use in the

state is to consider use in Yellowstone National Park, which has uniquely reliable figures. Yellowstone estimates receiving 10,000 snowmobile (and snowcoach) visitors in 1968-69, 43,000 a decade later, and 79,000 in 1989-90 (National Park Service 1990). Snowmobile use in the Cooke City area jumped from 10,000 visitors in 1989-90 to 38,000 in 1995-96 (Greater Yellowstone Winter Visitor Use Management Working Group 1997).³ Snowmobile use in the Yellowstone area, in other words, may have increased as much as 400% in the last decade.

Another way to guage growing snowmobile popularity, or at least acess, is trail miles. There were approximately 90,000 miles of marked and maintained public snowmobile trails in North America in 1980 (Jobe 1980); currently there are over 220,000 miles (International Snowmobile Manufacturers Association 1997a). There were very few groomed trails in Montana in 1977 when the legislature first funded the state snowmobile program. Today there are more than 4,000 miles of groomed trails in the state (Walker 1996b).

ORV use in Montana and northern Idaho is growing almost exponentially. Snowmobiling, motorcycling and ATVing are becoming more popular on Montana trails. Vehicle sales and visitor days to public lands are up. The sheer number of new users has the potential to change impacts on forest resources and other users.

³While these numbers may give an indication in the change in snowmobile use in Montana, they are an aberration in terms of absolute numbers. More than three-quarters of nonresident visitors who come to Montana to snowmobile spend time in or near West Yellowstone and Yellowstone Park (Sylvester and Nesary 1994). Numbers for this area, then, indicate what may happen to other parts of Montana, and probably reflect percentage changes in use in other areas, but do not indicate current use levels.

Improving technology

The impact of increased numbers of off-road vehicles is exaggerated by improved technology. In the 1970s, for example, trail bikes were difficult to ride, physically challenging, precariously balanced and uncomfortable. Today, ATVs are stable, comfortable and easy to drive.

To take just one Montana example, motorcyclists ignored a trail in the roadless Middle Fork Judith in 1977, "because they can't get the speed they want because of the switchbacks," (Kotynski 1977). Cyclists today, with more powerful and agile machines, commonly use the trail today (Good 1997). Power-to-weight ratios, rate of acceleration and suspensions have been improved dramatically in the past two decades, and the result is that bikes (and ATVs) can go places they could never reach before. Similarly, where much terrain, such as river crossings, once demanded a certain level of expertise, the wide, stable ATVs with four-wheel drive can be driven virtually anywhere by virtually anyone.⁴

Snowmobile technology has advanced even more precipitously. Once confined to groomed trails, the machines now go virtually anywhere. As one snowmobile commentator wrote, "It wasn't so long ago that even the 500s [500 cc engines] were underpowered for western riding. They did okay on trail, but that was about it. With new advances in technology, however, that have juiced up the 500s and 600s, you wouldn't hesitate to blast off trail, regardless of snow conditions," (Lindstrom 1997a). Instead of

⁴One hiker reported encountering a party of six to ten ATVers in the Tenderfoot-Deep Creek roadless area of the Little Belt Mountains in1997. The party proudly announced that it had crossed Tenderfoot Creek, along which a trail runs, 33 times. The hiker was able to locate 23 crossings just by the signs of their passing (Bradley 1997).

trails, promoters now boast of winter "play areas," open bowls and valleys where snowmobiles can ride without restriction and make their own trails.⁵ These days, "trails are the means by which we get to the off-trail places where we really want to ride," (Lindstrom 1997b). The machines are much more reliable today than in the past, and can go from zero to 60 miles per hour in less than 4 seconds (Oakes 1997a).⁶ Indicative of the growing problem, the Lolo National Forest in Montana was recently forced to reevaluate its twelve year old travel plan because "slopes that used to be inaccessible except to the most powerfully modified machines are now routinely climbed," (Lolo National Forest 1996).

The increasing capabilities of ORVs also means they demand disproportionately more territory, and have disproportionate impacts on other users. That is, as the distance that machines can cover increases, each ORV has the potential to impact more territory and more nonmotorized users in a single outing. One snowmobiler says, "What used to take us all day, we can now be in and out in 15 minutes," (Backus 1995). According to another, "The Powder Special will ride the trails at 80 mph with no noticeable vibration," (Janes 1997b). The result is an exponential increase in demand for areas to ride. Where

⁵"Remember those cold winter days after a big snow storm when the sun was shining and you found yourself stuck in endless depths of white fluff? It wasn't long before you resolved to stay on the groomed trails because there was literally too much snow and you were tired of wrestling the mass of metal. Well, for the new generation of mountain snowmobiles, those days are gone. Bring on deep, bottomless powder. The more the better. Leave the trails for the weak-of-heart and flatlanders. There're tracks to be made and slopes to be marked... and not a better time to do the job," (Janes 1997b).

⁶According to Minnesota snowmobiler Jay Pederson: "With the suspensions they have now, you can do 80, 90 miles an hour, and it feels like 45, and 45 feels like walking," (Oakes 1997a).

ORVs used to travel 15 miles a day and encounter, say, one nonmotorized recreationist per mile, they now travel 60 miles a day and encounter 60 nonmotorized recreationists. In addition, they potentially impact four times as much wildlife, and spread weed-seeds over four times the area. The impact of each motorized recreationist grows with each technological innovation the industry contrives.

Increased ORV numbers, then, are exaggerated by increased capabilities. Not only are ORVs entering the backcountry in unprecedented numbers, they are penetrating areas long thought invulnerable to ORVs due to terrain or trail design. With the ORV market growing increasingly competitive and lucrative, machines are going to become ever more capable. Machines are increasingly built to be "user friendly," with easy shifting and wide floorboards (Brown 1995), so beginning riders are able to use them. At the same time, they are being built to go new places. A specialty manufacturing company being developed in Wilsall, Montana, for example, called GOAT (Go Over Any Terrain) plans to build goanywhere snowmobiles that cost \$15,000-\$20,000 (Murphy 1997). New machines are eclipsing old limitations far more quickly than management can adapt. As a Forest Service law enforcement report noted in regard to massive wilderness trespass in 1996, "As can be seen from the violations confirmed compared to the violation notices issued our patrols were not to (sic) effective. This is one area I feel we could improve on next year. But the new snowmobiles with 180 hp engines and 2 inch lug tracks will probably open up a lot of wilderness access points that were not available before. Problems will most likely get worse. . . ." (Gardiner Ranger District 1996).

Public land management

Changes in machine numbers and capabilities have not been reflected in public land management plans. In fact, the land management agencies have generally been reluctant to address motorized use at all. This is partly a failure of the agencies to react to changes, and partly a legacy of decisions made when motorized use was infrequent and impacts negligible.

Reflecting the historic lack of importance of motorized use on public lands, until recently agency recreation planning reports generally did not even consider motorized use. A Bureau of Outdoor Recreation report from 1971 planning to meet recreational demand through the year 2000 did not include ORVs, while that bureau's nationwide 1973 outdoor recreation plan "barely mentions motorized recreation," (Kockelman 1983).

The Bureau of Land Management (BLM) first recognized ORVs as a legitimate use of public lands in 1969, and issued guidelines for their management, driven by impacts to the California Desert by motorbikes and dune buggies (California State Director 1970). The Forest Service, with fewer areas as vegetatively and topographically accessible as the BLM, successfully ignored ORVs until 1972. In 1972, President Richard Nixon issued Executive Order 11644 (February 8, 1972) to address increasing ORV impacts to public lands. EO 11644 stated that

The widespread use of [off-road vehicles] on the public lands-often for legitimate purposes but also in frequent conflict with wise land and resource management practices, environmental values, and other types of activities-has demonstrated the need for a unified Federal policy toward the use of such vehicles on public lands... Areas and trails shall be

located to minimize damage to soil, watershed, vegetation, or other resources of the public lands. . . . Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habits. . . . Areas and trails shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands. . . .

In essence, Nixon's order directed land management agencies in the Department of the Interior and Department of Agriculture to establish zones where ORV use would be acceptable, and eliminate them elsewhere. In 1977, President Carter strengthened EO 11644 with Executive Order 11989 (May 24, 1977), directing the land management agencies to suspend immediately any ORV activities that "will cause or is causing considerable adverse effects on the soil, vegetation, wildlife, wildlife habitat or cultural or historic resources of particular areas or trails of the public lands." These two executive orders were incorporated into the Code of Federal Regulations and remain the foundation of ORV regulation on public lands.⁷

The intent of the two executive orders was, for a time, hotly contested. In 1974, the BLM attempted to implement EO 11644 by declaring all BLM land open to ORV use unless specifically closed. The National Wildlife Federation promptly sued, and won, forcing the BLM to evaluate individually each area⁸ for appropriate zones of ORV use and prohibition. As the court wrote, the BLM proposal to leave areas open unless closed

⁸The scale of the areas to be examined was unclear.

⁷The Multiple-Use and Sustained-Yield Act of 196 does not address off-road vehicle use, simply identifying "outdoor recreation" as one of the purposes of the national forests. The Federal Land Policy and Management Act of 1976 (PL 94-579) does not address off-road vehicle use on national forests, but authorizes the Secretary of the Interior to restrict the use of ORVs to protect natural resources (Title III, Sec. 302(d)).

changes the character of land use policy, tilting it in favor of ORV use. Future designations will not be made in the context of applying the required criteria to decide whether specific areas and trails should be opened or closed to ORV use. Instead, authorized officers will be required to employ the criteria in determining whether a specific area or trail's existing 'open' status should be *changed* to closed or 'restricted.' This distinction creates a subtle, but nevertheless real, inertial presumption in favor of ORV use (*National Wildlife Federation v. Morton*, 393 F. Supp. 1286 (1975)).

The BLM went back to the drawing board, and drafted a set of regulations that almost exactly copied the language of the two executive orders. The American Motorcyclist Association objected to the language, to no avail, arguing that "the unwritten intent of this policy is to eliminate ORV use whenever conflict occurs. . . . This section not only does away with ORV use when there is a conflict with an established use, it goes so far as to do away with ORV use if there 'might' someday be a conflict," (American Motorcyclist Association 1978, 252). In fact, this appears exactly to be the intent of the executive orders. In 1976, John Busterud, Acting Chairman of the President's Council on Environmental Quality, suggested a blanket closure of BLM land to ORVs, and wrote that "The Department appears to be unduly influenced by an interest in protecting certain ORV user rights on BLM lands. Such protection is not, however, the goal of the Executive Order; the Executive Order makes it clear that protection of the public land resources should be the primary consideration in developing specific regulatory practices," (Busterud 1976).

The Forest Service followed the BLM's lead, writing into the Code of Federal Regulations rules that almost exactly copy the language of the executive orders. Thus,

national forests should use forest planning processes to

analyze and evaluate current and potential impacts arising from operation of specific vehicle types on soil, water, vegetation, fish and wildlife, forest visitors and cultural and historic resources. . . . Management plans shall provide vehicle management direction aimed at resource protection, public safety of all users, minimizing conflicts among users, and provide for diverse use and benefits of the National Forests. (36 CFR § 295.2)

The Forest Service regulations include a requirement that Forest Supervisors annually review ORV use and restrict it if it is causing considerable adverse effects. Adverse effects was defined strictly, including, for instance, anything that interferes with standards for the "maintenance of other existing and proposed uses of the Forest," (36 CFR § 295).

Using these regulations, in 1985, the Sierra Club sued the BLM to halt ORV use that was resulting in clear damage to resources and impacts on other users (*Sierra Club v*. *Clark*, 774 F.2d 1406). The court ruled against the Sierra Club, granting the agency considerable discretion in implementing the executive orders, holding that strict interpretation of the orders would result in the elimination of ORV use on public lands "because it is doubtful that any discrete area could withstand unrestricted ORV use without considerable adverse effects." The few ORV cases heard since then have tended to confirm only that the Forest Service has broad discretion, both to permit and to limit ORV use according to the executive orders.⁹

⁹See, for example, Northwest Motorcycle Association v. USDA (18 F.3d 1468) March 17, 1994, where the court admitted letters that did not articulate a history of directs encounters with ORVs on a given trail, but generally decried their presence, as evidence of user conflict.

Executive orders ignored

Although the executive orders and their implementing regulations legally still govern ORV use on public lands, they appear to have been largely forgotten. Land managers in Montana have only recently begun to use the regulations to protect resources, and, for example, virtually no national forests produce annual reports monitoring ORV use and conflicts as required.

Because court decisions have permitted the agency broad discretion in interpretation of the executive orders, and because they have largely been forgotten, ORV management has become as much a product of "coffee-break policy" as anything else. Line officers tend to deal with ORVs as they care to and are able to given political pressures, and typically simply continue existing management practices. This tendency to manage for the status quo favors ORV advocates, who benefit from failure to reexamine policies in light of changes in machine numbers and technology. The Forest Service generally manages for the status quo, and the status quo, due to accidents of history, greatly favors ORVs.

There are significant differences in the way that ORVs are managed on different forests, and even on different districts. Accordingly, any generalization is about Forest Service management is apt to be disproved by exceptions. And to the Forest Service's credit, several line officers in the Northern Rockies have evinced increasing willingness and interest to limit ORVs where they have become problematic.¹⁰ Nevertheless, in

¹⁰In 1997, for example, Helena National Forest Supervisor Tom Clifford suspended the use of snowmobiles in the Electric Peak Roadless Area "to prevent the loss

general, Region One management of ORVs has been poor, characterized by failure to acknowledge that (motorized use displaces nonmotorized use,) accommodation to the greatest extent possible of motorized trail building, tolerance for illegal motorized use in closed areas and designated wilderness, failure to examine the environmental impacts of projects individually or cumulatively and general failure to protect, or even recognize as valuable, natural quiet and other aspects of the nonmotorized experience. To take one example, the region has questioned and fought a national directive to keep the nascent Continental Divide National Scenic Trail nonmotorized, proposing instead to open 89% of possible motorized trail miles in Idaho and Montana to motorized vehicles–510 of 795 possible miles.¹¹

In 1994, Forest Service Chief Jack Ward Thomas directed Regional Foresters to acknowledge that "motorized recreation is an acceptable form of recreation on national forests," and to "make efforts to provide this opportunity whenever we can,"(Thomas 1994). In the case of Region One, this effort was already well under way.

of solitude or unacceptable depreciation of the wilderness qualities of the Electric Peak Roadless Area," (Clifford 1997).

¹¹In Gatchell (1997). Trail mileage does not include areas within national parks or designated wilderness areas, where motorized use is already prohibited. For information on the region's proposal Gatchell cites U.S. Forest Service Region 1 and Region 4 Decision Notice for CDNST, 1989. For the most recent national policy statement, Gatchell cites a July 3, 1997, policy memo from Deputy Chief Robert Joslin to regional foresters reaffirming that "It is the intent of the Forest Service that the CDNST will be for non-motorized recreation."

Forest Service travel planning

The Code of Federal Regulations directs each national forest to engage in travel planning--mapping out for the public where different types of vehicle uses are permitted, and when. Most forest visitors are familiar with these standard maps, which, with a code and key, articulate for each trail, road and area whether and what dates they are open to snowmobile, ATV, motorcycle and four-wheel drive traffic.

In the Northern Rockies, travel plans were generally last revised in the mid-1980s. Travel planning is a formal planning process that must comply with the National Environmental Protection Act (NEPA) by, among other things, providing opportunities for public input and appeal. District rangers have broad authority to amend travel plans temporarily in order to protect resources from damage such as excessive rutting and siltation from a motorized trail following heavy rains. Any significant changes to travel plans, however, must be carried out according to the requirements of NEPA.

Theoretically, the travel plans should protect resources and nonmotorized users from excessive ORV use. In practice, however, three things have undermined the ability of the travel plans to do so: first, the travel plans have been outstripped by changes in technology and numbers; second, travel plans have been altered with minimal examination and public input; and third, on-the-ground changes have altered the way trails and roads are used.

Failure to address changes in technology

Despite the early court ruling that declaring areas open unless closed creates an inertial presumption in favor of ORV use (*National Wildlife Federation v. Morton*, 393 F. Supp. 1286 (1975)), many national forests left vast areas open to motorized use. The Lolo National Forest travel plan, for instance, left the entire forest open to snowmobiles "unless closed for other reasons," (Lolo National Forest 1986, II-19). Eighty-two percent of nonwilderness areas of the Lewis and Clark National Forest are open to ORVs (Arbaugh 1996b). In general, this was probably due to agency reluctance to unnecessarily restrict unintrusive uses. In many instances motorized use of certain trails or areas was either minimal or non-existent, so rather than create unnecessary regulations or disturb the few motorized users who might occasionally use those trails or areas, the areas were left "open." As use gradually increased, areas were marketed as motorized play areas and machines gradually improved, motorized users began to assert their traditional "right" to use those areas, and it became difficult for the Forest Service to close them.¹²

This pattern is repeating itself across the northern region. The Big Snowy Mountains, for example, one of central Montana's distinctive "island" mountain ranges in the Lewis and Clark National Forest, saw little or no motorized use in the 1970s.

¹²ORV advocates commonly refer to the privelege of using ORVs on public lands as a right. Alan Brown, president of the Montana Snowmobile Association, advised association members in a January 1997 newsletter that the Montana Wilderness Association's 1996 lawsuit to limit motorized use in Montana Wilderness Study Areas is an "attempt to take away your rights," (Downey 1997). According to Steve Jones, publisher of SnoWest magazine, "There are those who want us out of the National Parks (now in the private ownership of the National Park Service) . . . and want to restrict our right to recreate in a manner of our choosing," (Janes 1997a).

According to retired federal soil scientist Clair Clark, who conducted soil surveys in the range in 1976 and 1977, "There were no motorized vehicles or equipment on the Big Snowy Mountains. There were only deer and cow trail/paths here and there. . . . It was pretty wild country," (Montana Wilderness Association 1995). While there may have been some use by local ranchers, the Big Snowies were essentially nonmotorized. Technically, though, motorized use was permitted in much of the range. By 1993, when the Lewis and Clark Forest attempted to revisit travel planning and access for the Big Snowies, a vocal constituency of motorized users was pushing for the completion of loop trails in the range and complaining that any restriction on motorized use would infringe on their "traditional" use of the area.¹³ Four years later, the national forest has yet to revise the travel plan governing the Big Snowies, motorized use has become still more entrenched, and the future of the area will probably be determined by the resolution of a law suit brought against the Forest Service by the Montana Wilderness Association (see Devlin 1996).

In western Montana, to consider another example, "when the Lolo National Forest Plan was first published, there was little snowmobile use on the forest. Conflicts with other resources were minimal, so few restrictions were implemented," (Lolo National Forest

¹³And an equally vocal conservation constituency was asking the Forest Service to restore the range to its former quiet state.

1996). As improved technology and booming sales increased snowmobile use on the forest, the Lolo simply ignored increasing conflicts and the expansion of use into new areas, even when the use expanded into roadless areas where the Forest Plan prohibited motorized use.¹⁴ Ultimately the Lolo was

forced to initiate a costly and contentious environmental assessment of snowmobile use in the forest. The issue is still unresolved.

Failure to evaluate where ORV use is appropriate, and, instead, only to consider it where it becomes problematic, has resulted in huge portions of Region One national forests being left open to motorized use. Table 1 (U.S. Forest Service 1996b) shows the percentage of trail miles that permit some type of motorized recreation during the year for forests in Region One. Column one shows motorized trail miles as a

Table 1: Motorized Trail Miles, Region 1

Percentage of trail miles that permit some type of motorized use in the national forests as a whole, and in non-wilderness sections of the national forests (U.S. Forest Service, 1996b).

	% of total <u>trail miles</u>	% non-wilderness trail miles
Beaverhead	64%	71%
Bitterroot	40%	82%
Clearwater	66%	80%
Custer	4%	8%
Deerlodge	86%	92%
Flathead	38%	78%
Gallatin	71%	96%
Helena	50%	60%
Kootenai	43%	45%
Lewis & Clark	66%	82%
Lolo	60%	64%
Nez Perce	45%	85%
Panhandle	76%	77%
Region 1	58%	75%

percentage of total trail miles, while column two shows motorized trail miles as a

¹⁴In this instance, as in others in the Northern Rockies, the travel plan was not in compliance with the Forest Plan. Thus, the travel plan permitted ORVs in areas where the Forest Plan prohibited motorized use.

percentage of non-wilderness trail miles. Column one, then, speaks to the total recreational use of the national forests. Only 42% of all forest trail miles are protected for nonmotorized users, for example. Column two shows that where the Forest Service can legally permit motorized use of trails, they are permitted on 75% of trail miles.

Regulation of ORVs in roadless areas varies according to each Forest Plan, meaning that there is no particular administrative protection of roadless areas simply because they are roadless. ORVs are permitted in well-known roadless areas in Montana like the Badger Two-Medicine on the Rocky Mountain Front, Tenderfoot-Deep Creek and the Middle Fork of the Judith in the Little Belts, the Big Snowies, the Crazy Mountains, the Hyalite-Porcupine-Buffalo Horn in the Gallatin Range, Ten Lakes up in Northwest Montana, the Great Burn, the Sapphires, the West Pioneers, Nevada Mountain, the Tobacco Roots, the West Big Hole. According to John Gatchell, Conservation Director of the Montana Wilderness Association, ORVs are permitted in more roadless areas in the state than they are excluded from (Gatchell 1998b).

The travel plans in Region One are hopelessly obsolete. They were designed to regulate snowmobiles that could not drive off trail, and primitive motorcycles (forgive the oxymoron), rather than high-tech ATVs. The travel plans need desperately to be updated to deal with the vehicles driving through our national forests today, rather than those that were built in the early 1980s. If the plans are not updated, and motorized users establish

footholds where use is legal, it will be difficult to limit motorized use once motorized users feel they have a "right" to use a trail that they have "always" used.¹⁵

Travel Plan changes

The inadequacy of travel plans is due not just to obsolescence, but also to intentional accommodation of increasing motorized use. That is, in many instances national forests and the Forest Service as a whole have deliberately altered travel plans to the benefit of ORV users.

The most striking example of this sort of travel plan alteration is the 40-inch rule change that was finalized in 1990. Prior to 1990, vehicles wider than 40 inches were prohibited on national forest trails, and a road was defined as "a facility for purposes of travel by vehicles greater than 40 inches in width (Forest Service Manual 2355.05 (8)). In other words, no vehicles wider than forty inches were permitted on Forest Service trails, prohibiting the use of most snowmobiles and ATVs built today, and many in use then. Vehicles wider than 40 inches, or virtually anything mechanical other than a trail bike, were considered appropriate only for road use.

In September, 1988, the Forest Service published a proposal to eliminate the 40-

¹⁵A recent article in High Country News (Lenderman 1998), for instance, reviewed the revision of the Targhee National Forest travel plan. The article, entitled "Motorheads lose one," characterized a roll back of some ORV use in the forest as a conservation victory, even though the plan closed fewer trail miles than it left open to ORVs, and left "over 2,000 miles of roads and 773 miles of trails open to motor vehicles." A classic Pyrrhic victory, the Targhee story gives an indication of the "inertial presumption" skewed travel plans create in favor of ORVs, and the difficulty of challenging entrenched use.

inch rule because "manufacturers have created a variety of vehicles that are suited for trail use but, depending upon the model, may exceed the 40-inch rule by 1 to 5 inches," (U.S. Forest Service 1988). The proposed rule change permitted each Forest Supervisor to permit or preclude vehicle use on trails according to vehicle type, for example excluding 4x4s and snowmobiles, but permitting the use of ATVs and motorcycles. The rule change stated that it would "produce little or no environmental effects, individually or cumulatively.... Therefore, it is unnecessary to prepare an environmental assessment or an environmental impact statement." In 1990, having received only five letters commenting on the proposed rule change, the Forest Service eliminated the 40-inch rule (U.S. Forest Service 1990). The Forest Service had surreptitiously and with no analysis opened national forest trails to whole new generations of vehicles.

The Forest Service rule change, however, did not *mandate* automatic changes in all travel plans. The rule change simply gave each Forest Supervisor the *authority*, under the usual provisions that govern changes to the forest plans (specifically NEPA), to permit vehicles wider than forty inches on trails. It is currently unclear how many (if any) forests in Region One conducted NEPA analysis in changing trail regulations to accommodate vehicles, typically, up to 48 inches wide.¹⁶ Most of the region's travel plans, however,

¹⁶According to Forest Service regulations, the travel plan is more than simply the travel map. That is, while current travel *maps* may permit the use vehicles wider than 40 inches, simply altering the travel map does not alter the governing travel plan. Instead, the map is supposed to be a representation of a separate travel plan. In fact, few people inside or outside the Forest Service recognize a difference. Nevertheless, simply publishing a change, without carrying out an analysis under NEPA, is not legal.

have seen little wholesale revision under NEPA since their inception.¹⁷

These and other hanges to travel plans may have been made by Region One national forests without adequate environmental or public review. Such changes, each of which may, by itself, have been relatively insignificant, may each have allowed a few more vehicle types in a few more places. Cumulatively, the nature of recreation in an area can be transformed as wider vehicles are permitted, which permits more drivers to use the trail, who then come in greater numbers, which finally transform trails into minor roads.

Creeping motorization

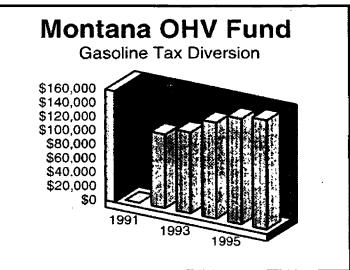
Problems caused by travel plans that failed to determine where use is appropriate have been compounded by on the ground changes. This is really another way to say that the travel plans are obsolete, but in these cases not because the machines that use them have changed, but because the trails themselves have changed, in a process sometimes called creeping motorization. In creeping motorization, ORV advocates take advantage of the technical right to use a trail to improve the trail to accommodate motorized use, thus encouraging use and making it more difficult for land managers to limit ORV use later.

¹⁷Or, for example, the 40 inch rule was illegally dropped by the Lewis and Clark National Forest in a travel plan revision two years before the federal rule was changed (Lewis and Clark National Forest 1987). That travel plan was successfully appealed by conservation groups (though not for that reason), but was never revised.

Trails sometimes change to accommodate motorized use simply through repeated use. Particularly in arid areas of southwestern and southeastern Montana, repeated use of ORVs can create trails or two tracks where there were none before (see, for example, Backus 1996; McMillion 1997). Repeated use can also widen trails and make them easier for inexperienced riders to find and drive. In addition, in several Montana national forests there has been illegal motorized trail building–actual trail blazing with a chainsaw (see, for example, French 1997; Long 1997)–to such an extent that one Helena area hunter received a state grant in 1997 simply to revegetate and take apart illegal motorized trails (Long 1997). Unlike other trail users, ORVers create their own trails.

But ORVers are also assisted in this endeavor by state and federal subsidies. Most western states now divert a portion

of their gasoline tax to support motorized recreation on public lands--between \$24 and \$26 million in California for each of the last three years, for example (Walder 1997). The balance of the funds are distributed as grants to land



managers (such as district rangers) and motorized clubs to improve or rehabilitate trails to motorized standards. Because maintenance of an existing trail is "categorically excluded" from environmental analysis, many trails are being quietly widened, flattened, straightened and rerouted to accommodate motorized use without public scrutiny or environmental impact evaluation. In the Northern Rockies, state subsidies are used to transform traditional pack and saddle trails that permit (but do not accommodate) motorized use into motorized routes. Local land managers, such as Forest Service District Rangers, able to pay for personnel and recreation "improvements" without recourse to their own strained budgets, have financial incentive to support ORV projects.¹⁸

These improvements are not always minor. Where traditional foot trails call for an 18-24 inch tread width, and eight feet of clearance, ATV trails call for five feet wide treads and 10 feet of clearance. Snowmobile trails call for eight feet wide treads, and 12 feet of clearance (U.S. Forest Service 1996a, Ch. 6: p. 1-11). Under the aegis of maintenance, a narrow path can quickly become a primitive road.

In Montana, funds for trail improvements come from two major sources. First, motorized users have arranged, through the state legislature, for the diversion of gas tax revenues to support their recreation. On the premise that ORVers burn gas and pay taxes for activities that do not benefit from highway maintenance (where most gas tax revenues are directed), since 1991 the legislature has diverted one-eighth of one percent of the Gasoline Distributor's License Tax to the Department of Fish, Wildlife and Parks (FWP) to support off-highway vehicle use (Montana Code Annotated 60-3-201). Similarly, in a program first funded in 1977, fifteen-twenty-eighths of one percent of the gas tax is

¹⁸Cooperation between motorized clubs and the Forest Service is extremely tight in some instances. The Great Falls Trail Riders Association, for example, which works on trails in both roaded areas and the Middle Fork Judith Wilderness Study Area, received an award from the Forest Service in 1996 for its work (Arbaugh 1996a).

diverted to a snowmobile fund (Ibid).¹⁹ In 1997, the OHV fund received nearly \$200,000 in state funding, and the snowmobile fund nearly \$800,000 (Tiberi 1997).

The second major source of funds is the federal government, from appropriations made under the terms of the Symms Act of 1991. Pushed as part of the Wise Use Agenda by the Blue Ribbon Coalition, the Symms National Recreational Trails Act diverts federal fuel taxes to the states for distribution to deserving local projects. The Blue Ribbon Coalition described the Symms Act as a major victory for motorized users, stating that "With your help areas that have been administratively closed in the past will be opened up for ORV recreation," (Collins 1992b).

The Blue Ribbon Coalition publicly portrays the Symms Act as beneficial to trail users of all types. Accordingly, in Montana, Symms Acts funds are distributed by a "Montana State Trails Advisory Committee," appointed to represent eight interest groups by FWP. Of the groups, four are motorized (snowmobilers, motorcyclists, ATV drivers and 4x4 drivers) and four are nonmotorized (hikers, skiers, equestrians and bicyclists).²⁰ The committee was chaired by the State Trails Program Coordinator, Bob Walker, until 1997, when Walker received a promotion within the department.

FWP generally, and Walker in particular, enjoy a close, cooperative relationship with motorized groups. In 1988, Walker, then Chairman of the International Association

¹⁹In addition to the gas tax diversion, both the OHV and snowmobile funds also receive money from decal fees paid annually by owners, totaling \$45,000 and \$51,000 respectively in 1997 (Tiberi 1997).

²⁰The statutorily required trails committee is supposed to fairly represent different user groups. Whether it does so, in light of the fact that over 90% of state trail use is nonmotorized, is debatable.

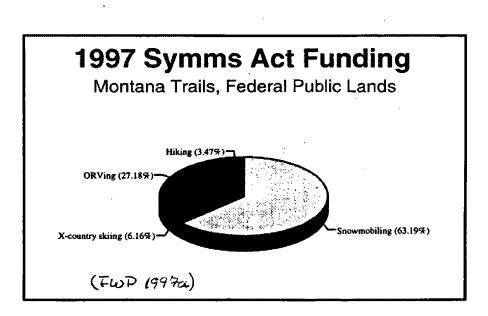
of Snowmobile Administrators, first suggested the idea of the Symms Act to the Blue Ribbon Coalition (Collins 1992a). In 1992, Walker praised the Blue Ribbon Coalition for their "phenomenal accomplishment" in passing the Symms Act, and said "... it was exciting to see the entire motorized community working so closely together," (Walker 1992).²¹ In 1996, Walker's boss, Arnie Olsen, administrator of state parks, met privately with the Montana Snowmobile Association board of directors and informed them that "our snowmobile program is at a turning point. There are threats we're aware of being made against the [snowmobiling] fund. There may be an attempt to divert some of the fund to non-motorized trail use," (SnoWest 1996). If Olsen did not enjoy such a close relationship with motorized users, he would care little if funds were shifted within the department to nonmotorized uses (particularly given the huge disparity in funding for motorized and nonmotorized trails).

In return for its support of the motorized programs, FWP retains a portion of all motorized funds for administration and overhead, e.g., devoting \$47,763 of the OHV fund to "support services" and "equipment" in 1996 (Graham 1996).

²¹Typically, when Walker went out of town in May, 1997, he referred questions regarding the Montana Snowmobile Fund to Alan Brown, president of the Montana Snowmobile Association (rather than another administrator within FWP). Walker then corrected himself: "Of course, he'll be gone to the same meeting that I'll be at so you'll probably have to take your best guess!" (Walker 1997).

The State Trails Advisory Committee is required to distribute 30% of funds to support motorized projects, 30% to nonmotorized projects, and 40% to projects that support diversified use. Since motorized use tends to displace nonmotorized use, some conservationists believe that Symms essentially directs 70% of available funds to the

benefit of motorized users. In 1997, nonmotorized trail uses on federal lands received \$11,105. Motorized trail uses received \$104,000 (FWP1997a).²² FWP retained \$13,519 for



administration (Ibid.).

The Symms Act has been used by motorized groups to good advantage. The Chamber of Commerce of West Yellowstone, Montana, for example, which essentially functions as a snowmobile club, received \$22,000 in Symms Act funding for snowmobile projects in 1996 (FWP1996a), and another \$30,000 in 1997, including \$15,000 from the "diversified use" kitty (FWP1997a).²³ Symms Act funds have also, for instance, purchased

²²Symms Act funds are also used for non-federal projects. The city of Missoula, for instance, received \$10,100 in 1997 for construction of a "Bitterroot spur trail." Such expenditures are not considered here because they are irrelevant to the discussion of national forest trail use.

²³The West Yellowstone Chamber also received \$56,000 in 1996 from the state snowmobile fund (Walker 1996a), and \$85,000 in 1997 (Walker 1997).

for a motorized club (the High Country Trail Riders) a five ton bulldozer to convert trails into thruways on the Beaverhead and Deerlodge National Forests in Montana, to the tune of \$38,000 in 1996, and an additional \$38,000 in 1997.²⁴ The Sweco 480 is capable of 1,000 feet per hour of new, five foot wide "trail" construction (High Country Trail Riders Association 1996).

FWP funded projects have targeted different areas across the state, including several roadless areas. Trail construction was funded in 1994 in the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area (Graham 1996), and snowmobile trail grooming is funded annually in the Ten Lakes and Hyalite-Porcupine-Buffalo Horn Wilderness Study Areas (Walker 1997). Snowmobile trails have been groomed almost to the boundary of the Sapphires Wilderness Study Area, formerly listed as a snowmobile play area on FWP maps (Walker 1997). Motorcycle trails have been improved to within a half mile of linked trails in the Middle Fork Judith Wilderness Study Area (Gatchell 1996).

FWP is spending over one million dollars each year to improve (or create) ATV and motorcycle trails, and to groom snowmobile trails into the backcountry. FWP now funds the grooming of over 4,000 miles of trails each winter (Walker 1996b), and contributes to multiple trail "improvement" programs. Assessment of the environmental impacts of the programs has, in most cases, been pro forma, designed simply to satisfy the most basic legal requirements, rather than honestly evaluate impacts. Motorized users

²⁴Project Catchup also received \$27,000 in 1996 (FWP1996b), and \$22,000 in 1997 from the state OHV fund, plus \$6,327 for a video of the Sweco Dozer "in action," (FWP1997b). Total public funding for this project seems to have topped \$131,000.

have created a tax-payer funded cash cow that flies under the radar of environmental analysis, and they're using it to radically alter the nature of trails in Montana.

Conclusion

Without review, planning, or even acknowledgment, ORVs are transforming recreation in our Western national forests.²⁵ Arguably, public land managers have broad discretion to designate areas and trails open to motorized use. Indisputably, they have discretion to close such areas. When, for example, in the case of the Back Bay National Wildlife Refuge, the Department of the Interior closed ORV access to a beach--access that traditionally granted private property owners access to their property--the court granted the agency discretion to protect the resources of the area, including the experience of other, nonmotorized users (*Coupland v. Morton*, No. 750 ELR 30507 (4th Cir. July 7, 1975)). As the *Environmental Law Review* noted in its discussion of the Back Bay decision, "Any vaguely recreational and heretofore condoned use need not be forever perpetuated if the qualitative difference between the passage of a few wagons or rusty trucks and the invasion of a horde of modern vehicles is properly recognized."

Failure to address the inadequacy of current travel planning, to recognize that "open until there is a problem" does not work, to confront the radical improvements in machine technology and numbers that are altering the backcountry is to abandon large areas of our national forests, roadless and otherwise, to motorized users. Motorized users

²⁵For an example of the way cumulative trail changes can transform an area please see Appendix A.

will continue to establish their "rights" in areas that need and deserve wilderness designation. Motorized use will dominate untoward portions of our national forests. Those who prefer tranquility to the whine of engines, those who seek a quiet walk in the woods, will be forced to retreat for the most part to designated wilderness areas. As Lewis and Clark Forest Supervisor John Gorman advised a backpacker who complained of noisy motorcycles in the Middle Fork Judith Wilderness Study Area in 1994, "If you are looking for an area free of motorized use, I would suggest the Bob Marshall or Scapegoat Wilderness. The Dearborn River area out of Augusta is especially pretty this time of year," (U.S. Forest Service 1997).

Chapter 2

The politics of Wise Use and off-road vehicles

Funding for ORV trail improvements was secured by aggressive ORV advocacy groups. ORV user groups are a politically potent tool of and driving force behind the wider Wise Use movement. In concert with other Wise Use groups, they are strategically asserting and ensuring expanded mechanized use of national forest lands in the Northern Rockies. To understand the success of ORV groups, it is necessary to understand their place in the broader Wise Use movement.

The Wise Use movement was born in 1989, after a conference that brought together right-wing activists and natural resource-dependent corporations like Boise-Cascade, Du Pont, Exxon U.S.A. and Louisiana-Pacific (Ramos 1995). In the wake of the conference, the Center for the Defense of Free Enterprise published and submitted "the Wise Use Agenda" to President George Bush. According to T. H. Watkins (1995), the agenda included calls for

civic penalties against anyone who would legally challenge 'economic action or development on federal lands'; the protection of private-property rights by eliminating all restrictions on development; freeing up the national parks, national wildlife refuges, and all designated wilderness areas to mining and oil and gas development; allowing almost unrestricted off-road-

vehicle access to all public lands of any kind; clear-cutting all remaining ancient forests in the Pacific Northwest and elsewhere and replanting them as tree farms. . . ."

Rather than simply a name for the specific coalition that created the 1989 Wise Use Agenda, "Wise Use" is often used to describe those organizations and individuals that seek maximum private gain from the use of western public lands with the fewest possible restrictions, costs and other impediments.

ORV user groups are a key component of the Wise Use movement.²⁶ The recent growth in ORV use has spawned corresponding gains in the organization and power of ORV user groups. ORV users are typically organized in community-specific clubs, such as the Billings 4x4 Club and the Bitterroot Ridge Runners. Just as the environmental movement has loosely affiliated grassroots and national groups, there are umbrella ORV groups that lobby the state and federal governments and coordinate information and strategy among local groups. These organizations include such groups as the Sahara Club, the American Motorcyclist Association, the Montana Snowmobile Association and the Blue Ribbon Coalition. The Blue Ribbon Coalition, claiming 300 member organizations (Collins 1994, 303), is arguably the largest and most successful of these groups. Based in Pocatello, Idaho, Blue Ribbon's connections to manufacturers and industry groups has made the organization "among the most well-connected lobbies in Washington," (Switzer

²⁶In 1989, for example, the Blue Ribbon Coalition committed itself to the full Wise Use Agenda, and submitted a proposal for federal funding for motorized trails (the Symms Act) as part of the official agenda. According to Executive Director Clark Collins (1989), "The BlueRibbon (*sic*) Coalition is one of the key members of a growing WISE USE MOVEMENT."

1997, 95). Blue Ribbon has been particularly active in the northern Rockies, submitting comments on forest service decision documents, taking a lead role in the defense of the use of snowmobiles in Yellowstone National Park, testifying before congressional committees and litigating on behalf of motorized users.

The Wise Use movement has already achieved notable successes. In 1991, in a surprising flex of muscle, Wise Use organized local opposition to the Yellowstone Vision Document, shredding with vehement opposition a plan that conservationists hoped would give new coherence to ecosystem management in the Yellowstone area (Ekey 1995).²⁷ In 1995, Wise Use nearly pushed through Congress a bill to gut hopes for wilderness designation of Bureau of Land Management (BLM) land in Utah. In Montana, in 1997, Wise Use organized resistance to the Interior Columbia River Basin Ecosystem Management Project (Associated Press 1997).

Wise Use has succeeded in part by framing "public-resource debates in terms of jobs versus the environment, thus ensuring a constituency committed to fight any environmental regulation," (Brick 1995). In part, Wise Use has succeeded by taking advantage of national mood. In 1995, for instance, an ABC News/Washington Post poll showed that "Thirteen percent of Americans support private armed militias. . . . Twelve percent are afraid of the government, 9 percent are angry at it, nine percent say violence

²⁷The Yellowstone Regional Citizens Coalition formed to derail public land planning in the Yellowstone region included both natural resource industry representative and ORV user groups such as: Idaho Farm Bureau, Intermountain Forest Industry Association, Montana 4x4 Association, Montana Mining Association, Montana Snowmobiling Association, Montana Trail Vehicle Riders Association, Montana Wood Products Association, Multiple-Use Land Alliance, Petroleum Association of Wyoming, Rocky Mountain Oil and Gas Association (Stapleton 1993).

against it can be justified, and six percent call it their 'enemy,'" (Chaloupka 1996). Wise Use effectively manipulates the already considerable fear and resentment directed at the federal government.

Wise Use has also succeeded partly as a result of other contextual factors, like massive timber layoffs in the Pacific Northwest and coincident cuts in logging on federal land due to the Spotted owl. Wise Use taps legitimate fears in the western working class as "family wage jobs for unskilled workers are dwindling, corporations are downsizing, and real wages have been stagnant since 1990," (Brick 1995). In essence, Wise Use is a cultural response to structural economic and demographic changes in the West. As highpaying, blue collar jobs in natural resource industries appear to decline, as favorite hunting spots are subdivided and the economy appears subject to a "modemization" that favors outsiders with different skills and community expectations, the populations and cultures of small communities are changing, alienating some residents²⁸. As Don Snow (1994) writes:

Lots and lots of folks back home, in little hamlets like Deer Lodge and Burley and Salida, don't really want the new economy of environmental amenities. They want the old one, because that's where they find dignity, livelihood, and the fulfillment of what they and their ancestors saw as destiny. Mythic or not, it's the story of the West: the "settling" of the land; the "improvement" of nature through agriculture and industry; the "reclamation" of the hideous barren wilderness. Lots of folks who live next door still *believe* in those things. And they're willing to support anyone-including big business masquerading as "grassroots associations"--who promises to deliver. There is a large, and potentially larger, grassroots constituency for Wise Use....

²⁸And alienating those who moved to the West to find a particular idyll which is nowhere in evidence.

Regardless of whether the economic impacts of environmental regulation are as dire as opponents claim, and regardless of the extent to which modernization will fundamentally alter the small communities of the West, there is very clearly a committed core of grassroots supporters of the Wise Use movement who believe their economic well-being and traditional culture are threatened in part by government restrictions on the use of public lands.

The natural resource industries that seek to liquidate public resources with as few impediments as possible, need that type of grassroots support to achieve their goals. Natural resource industries succeed when working-class westerners believe that their interests coincide with that of extractive industry and accept a discourse of public resource liquidation. Ron Arnold, leading strategist of the Wise Use Movement, once explained to Canadian mining executives that the public distrusts them, and that therefore, to advance the natural resource industries' agenda, they need the support of a grassroots group speaking for their interests:

It can speak as public-spirited people who support the communities and the families affected by the local issue. It can speak as a group of people who live close to nature and have more natural wisdom than city people. It can provide allies with something to join, someplace to nurture that vital sense of belonging and common cause. It can form coalitions to build real political clout. It can be an effective and convincing advocate for your industry. It can evoke powerful archetypes such as the sanctity of family, the virtue of the close-knit community, the natural wisdom of the rural dwellers, and many others I'm sure you can think of. (Roush 1995)

It would be a mistake to believe that Arnold was talking about simply creating a

grassroots front for extractive industry.²⁹ Arnold hopes to create a pro-natural resource industry counter-culture (Ramos 1995). The Wise Use movement does not seek simply to generate a disguised mouthpiece, but rather a significant block of "average" westerners that calls for virtually unrestricted access to and exploitation of public lands, or, in the extreme, divestiture of the public domain.

In this regard, ORV users are uniquely important to Wise Use because they create a grassroots western group that is permanently wed to and will give voice to the goals of Wise Use. The similarities between ORV users groups and natural resource industries are striking. ORVs, like extractive industry, displace other users and negatively impact fish and wildlife. Like extractive industry, the ORV-connected industries profit from exploitation of public lands.³⁰ Like other extractive industries, the ORV industry and riders benefit to the extent that industry opens public lands to private exploitation.

The most striking congruence of interests between extractive industry and ORV users is opposition to wilderness. Inasmuch as motorized vehicles are prohibited in

³⁰One study, for example, albeit based on highly questionable assumptions, claimed that snowmobilers spend \$100 million in Montana annually (Sylvester and Nesary 1994). The motorcycle industry sold nearly one billion dollars worth of new off-road motorcycles and ATVs in 1993 (Motorcycle Industry Council 1994). New U.S. sales of snowmobiles were worth more than \$1.1 billion in 1997 (International Snowmobile Manufacturers Association 1997b). ORV use on public lands is big, lucrative business.

²⁹It would also be a mistake, however, to underestimate the extent to which industries that benefit from the exploitation of public lands fund and steers Wise Use groups. Kriz, for example, claims that "Nearly half of [the Blue Ribbon Coalition's] annual budget comes from Japanese manufacturers of off-road vehicles," (Kriz 1995), while the allegedly grassroots Wise Use group People for the West! "receives heavy funding from the mining industry," and was founded by John Wilson, Chief Executive Officer of the mining company Pegasus Gold (Stapleton 1993).

designated wilderness, ORV advocates oppose wilderness designation, much as extractive industries traditionally have. Because Congress has traditionally refused to designate as wilderness areas used by ORVs, entrenchment of ORV use militates against wilderness designation. (For more information on ORV advocates opposition to wilderness designation see Appendix B.)

The discourse of Wise Use

The Wise Use movement is simply the latest manifestation of grassroots western opposition to government regulations. The history of western public lands can be understood as a continuous conflict between extractive industries and a coalition of conservationists, one group advocating unrestricted development of the public domain for private gain, and the other advocating the protection of the public domain so that it may continue to serve certain environmental, cultural, financial or other functions.

Natural resource industries have long understood that they need some measure of popular support to carry out their agenda. To build grassroots support for exploitation the extractive industries articulate a philosophy about natural resources and public lands that appeals to deeply held beliefs about America's national identity. Far from simply being a set of persuasive arguments, such a philosophy, or discourse, can paradigmatically shape the way we think about natural resources and the public domain (Greenough and Tsing 1994).

The natural resource industries' discourse is basically laissez faire capitalism. That is, with regard to regulation of commerce, the government should impose only the

minimum of rules and regulations necessary to ensure smooth functioning of the economy. Since government regulation and, indeed, ownership, of land contradicts this basic policy, government regulations and land ownership are regarded as repugnant. Accordingly, the natural resource industries advocate the minimum possible restrictions on commercial use of the public domain, and, if possible, liquidation of the public domain.

Because the discourse of industry is internally coherent, its adherents, once they accept the discourse's basic premises, take a series of similar, predictable positions on public policy questions. By internally coherent I mean that the discourse is self-sufficient and self-reinforcing-it articulates a comprehensive view of politics, economics and cultural identity. Thus, in Montana, Wise Use activists tend not just to oppose government protection of resources, but government protection of labor. According to Don Judge, state director of the AFL-CIO, "We see this as a broad issue. The folks that have been involved in the Wise Use movement are also people or corporations that have been promoting politicians and policies that are detrimental to workers, not just on issues of environment but on issues like worker compensation, taxation and public employees," (Kriz 1995).³¹ Industry's discourse argues against government interference with the market, be it to protect labor, the environment or anything else.

To evoke and advance their discourse with regard to public lands, in addition to

³¹Consider also the words of Rick Sieman, director of the ORV group Sahara Club. Sieman gives a pretty good idea of the broad ideology he accepts and espouses in Sahara Club forums when he refers to environmentalists as "New Age nuts, militant vegetarians, antigun pukes, animal rights goofballs, tree worshipers, new-world-order pushers, human haters, prosocialists, doomsayers, homosexualrights activists, militant feminists and land-closure fascists," (Shaw 1994).

generally promoting laissez faire capitalism, the extractive industries have used a set of tried and true themes since the 19th century. When John Wesley Powell first mounted a campaign to protect Western public lands from exploitation in the 1878, he was characterized as a "scientific wiseacre" who "uses the vast appropriations. . . where they will do the most good, in procuring more appropriations," (Graf 1990, 20). In a 1910 speech to the State Bankers Association of Washington, Senate candidate Thomas Burk sounded off:

The opinion seems to prevail in the East that the West is opposed to the conservation of natural resources. . . . The people of the West believe in forest reservation based upon common sense and scientific principles. . . . They do not believe in hoarding the wilderness. They do not believe in the sentimental fad that trees are entitled to more consideration than human beings. . . . The people of today have a right to share in the blessings of nature. (Switzer 1997, 21)

For nearly a century, the natural resource industries have invoked themes that, for instance, portray public land issues as East versus West, bureaucrats versus folk wisdom and common sense, and blue collar versus over-educated "experts." The result of such dialogue is that local or state government is understood to be better and more efficient than federal government, and control of resources is shifted to those locations, where industry has much greater power and influence.

In other common themes, "access" to public resources is portrayed as a source of jobs and as a traditional "right," something that is a part of the unique (and superior) western culture; "development" of public lands is portrayed as inevitable and inevitably good progress, and limitation of individual (or corporate) use of the public domain is portrayed as a restriction on personal freedom. It follows from these themes that exploitation of the public domain is essential to the health of western communities, that development is patriotic, and that "preservation" of the public domain is socialist and anti-American, an attempt to deny America's working-class equal opportunity.³² In this context it is not necessary for those who accept the natural resource industries' discourse to examine individual issues or conservation proposals to see if they make sense. In fact, little thought is required at all. Instead, it is obvious that government regulations and environmental protections are bad, and any use of public lands is good.

The frontier myth

Laissez faire capitalism forms the foundation of the natural resource industries' discourse, but it is not, of itself, sufficient to muster the support of average westerners, blue collar or otherwise. Too obviously, unrestricted commerce does not result in equal rewards and opportunity for all. In this regard, frontier myth and the public domain have

³²For example, the Wise Use movement "often accuses environmentalists of 'putting rats ahead of family jobs,' impeding economic progress, and 'drowning individual rights with big government and regulations,'" (Brick 1995). At a 1995 congressional hearing regarding a proposal to sell off large portions of the public domain, U.S. Rep. Richard Pombo (R-CA) vowed support, stating "I would just as soon sell all this land and turn it into private land. That is my opinion. I really do believe in private property and we ought to privatize this land," (Pombo 1995). Rep. Wes Cooley (R-OR) fumed at a conservation witness from the Mineral Policy Center who dared to testify that public lands should be retained: "You know, I wish I had more time, because I would really like to take you to task on this, but I don't. . . . You know, there is such a thing as communism, socialism, you are somewhere in between there," (Cooley 1995).

played an important role by providing the illusion of equal opportunity for all.

Classically liberal politics are characterized by a tension between freedom and equality-between the idea that all citizens should enjoy equal economic opportunities, and that any regulation, taxation or other method of guaranteeing equality of opportunity, or justice, constitutes an infringement on freedom. Settlement of the public domain was the way in which Americans sought to reconcile these contradictory goals. The frontier became the geographic location of opportunity--a substitute for government guaranteed equality. As long as we had a public domain where any citizen could get his 160 acres or pan for gold, every citizen had the opportunity to become a self-made man. The frontier allowed Americans the illusion that they had both virtually total freedom, and virtually total equality.

According to Richard Slotkin:

The Myth of the Frontier is our oldest and most characteristic myth, expressed in a body of literature, folklore, ritual, historiography, and polemics produced over a period of three centuries. According to this myth-historiography, the conquest of the wilderness and the subjugation or displacement of the Native Americans who originally inhabited it have been the means of our achievement of a national identity, a democratic polity, an ever expanding economy, and a phenomenally dynamic and 'progressive' civilization. (Slotkin 1992, 10)

Frederick Jackson Turner and Teddy Roosevelt defined "the westward settlements as a refuge from tyranny and corruption, a safety valve for metropolitan discontents, a land of golden opportunity for enterprising individualists, and an inexhaustible reservoir of

natural wealth on which a future of limitless prosperity could be based," (Slotkin 1992).³³ As Turner concluded, since Columbus "America has been another name for opportunity," (Turner 1989). And America, of course, is quintessentially the frontier.

The frontier in American mythology stands not only for equal opportunity for all, but as an explanation of the allegedly exceptional national character. In 1893, Turner codified this myth when he delivered his address on "The Significance of the Frontier in American History." Turner directly credited the frontier with the creation of the American character, "that coarseness and strength combined with acuteness and inquisitiveness, that practical, inventive turn of mind, quick to find expedients, that masterful grasp of material things . . . that dominant individualism," (Turner 1989). The frontier, then, is not just the key to equal opportunity, but to an identity, to an essential Americanness. The frontier was the fire in which the rugged individualists and self-reliant heroes of America were forged.

This conception of the frontier lives on in popular culture. Movies (including recent movies, like *Far and Away*, starring Tom Cruise) continue to show the West as the place to make good and prove oneself. Authors like Gretel Ehrlich and newspapers like *High Country News* continue to romanticize ranching. And children see videos like *History Rock*. One *History Rock* animated story (Golden Book Video 1987), shown for years between network television cartoons, teaches children that the Louisiana Purchase

³³Roosevelt did this not only from the bully pulpit of his political position, but through his multi volume *The Winning of the West* (1885-94), a history that enjoyed less academic prestige but considerably greater popular appeal than the writings of Turner (Slotkin 1992).

gave us lots of "elbow room" and made the nation: "It's the West or bust, in God we trust, there's a new land out there." After Lewis and Clark, the video sings,

The way was opened up for folks with bravery, There were plenty of fights, To win land rights, But the West was meant to be, It was Manifest Destiny.

No Native Americans (except Sacagawea) are pictured, although one settler gets an arrow with a suction cup on the end through his hat.

The frontier has enjoyed widely varied geographic and philosophical definitions in American history, from Kentucky to California, and from the location of free land to a sparsely settled place. Thus, Malone defines the frontier as "the conquest of bounties of natural products" (1989), Nash uses the word interchangeably with "wilderness" (1982) and Baritz as the historical call from "Horace to Horace Greeley" to go West (1961). These definitions, with inestimable help from popular culture, today converge on the Rocky Mountain states-the most recent location of pioneering in the lower 48 states, the home of open landscapes where there has been little economic exploitation, or where one can imagine oneself the first white person to discover the place, and a place with vast public lands. Thus, for most Americans, the frontier and the Rocky Mountain West are synonymous (Malone 1989).

The durability of the frontier myth, and its location in the Rocky Mountains, is evidenced by the tremendous and continuing popularity of the Western, in literature and video. Since the turn of the century, the Western has been commonplace in American

culture, at times reaching tremendous levels of cultural influence. Between 1915 and 1924, for instance, Zane Grey failed to place a Western novel among the top ten annual bestselling books only once (Slotkin 1992, 211). In 1959, Westerns formed 24% of prime-time television programming by the three national networks (Slotkin 1992, 348). The Virginian, as described by Owen Wister,³⁴ is still one of the most powerful and best recognized marketing icons in the nation and the world in his latest incarnation as the Marlboro Man.

The American public still takes Turner at his word insofar as he claimed that the frontier made the nation, but steadfastly refuses to believe that the frontier ever closed. Nancy Shoemaker wrote in 19?? of giving college history students both Turner's frontier thesis and a masterful deconstruction of the frontier myth, *The Legacy of Conquest*, by Patricia Limerick (Limerick 1987). Afterwards, the students astounded Shoemaker by finding Turner far more compelling: "My students knew the frontier was a place of raw opportunity, where individuals flourished and men could prove they were men," (Shoemaker 1993). Not only do Americans refuse to abandon folk accounts of the frontier, but that they believe it lives on in the West.

Wallace, Idaho, demonstrates the continued appeal of the frontier, and exemplifies attempts to link ORVs to "the American creation myth"-the place where we go to escape our lives of quiet desperation and reinvent ourselves. Wallace promotes itself as the heart of 1,000 miles of ATV trails and "the world's largest snowmobile destination," and is

³⁴"Whatever he did, he did with his might. The bread that he earned was earned hard, the wages that he squandered were squandered hard. . . . The cow-puncher's ungoverned hours did not unman him. If he gave his word he kept it; Wall Street would have found him behind the times. Nor did he talk lewdly to women; Newport would have thought him old-fashioned," (Wister 1989, 441-3).

trying to create a sprawl of motorized "troads" (trails that are widened and improved to take vehicles) stretching from Missoula, Montana to Spokane, Washington (code-named "Silver Country"). "Picture yourself going back to a time straight out of a Clint Eastwood Western," Silver Country, Inc., advises, "Where horses were tied up in front of the saloon, now parking is reserved for Arctic Cats, Yamahas and Ski Doos. . . . From Lookout Pass you can open up the throttle on a 55 mile loop deep into the Montana wilds, and right up to the front door of Old-West casinos such as the famous \$10,000 Silver Dollar Bar," (Silver Country Inc. 1996).

Wallace markets itself as the fulfillment of the American dream. According to Silver Country, Wallace is full of "kids who could be mistaken for Opie Taylor" and "Barney Fifes on snowmobiles." Silver Country boldly predicts that Wallace may produce the Abraham Lincoln of the twenty-first century, and says dramatically, "For the rest of the world, Elvis has come and gone, and so have the dreams of John F. Kennedy, and Martin Luther King, Jr. But here in Wallace, Idaho, we still believe in Pink Cadillacs, the New Frontier, the American Dream, and the better place on the other side of the mountain," (Silver Country Inc. 1996).

In this world-view, driving a snowmachine or off-road vehicle through Silver Country, one becomes the embodiment of the Leatherstocking and Evel Knievel, rolled into one. The frontier is still alive, and there's still a pure America out West. A representative testified before Representatives Hill and Chenoweth's Wallace hearing that, "As the American West is marketed to the public, American citizens are seeking to experience and actualize upon this promise of freedom. . . . Silver Country is the promised land, still the Great American Frontier." Just as "I'm going to Disneyland" is shorthand for success and leisure, going to the Rockies (even to drive glorified go-carts) is shorthand for a claim to freedom, outdoor skills, self-reliance and other frontier virtues

Popular culture's continuing romance with the West has been supported by the presence of public lands. Presidential withdrawal of Forest Reserves was authorized by Congress in 1891 to protect streamflow and guarantee continuous supplies of timber (Steen 1991, 29), and Presidents Cleveland and Grover responded by reserving 46 million acres of forest (Graf 1990, 69). Teddy Roosevelt more than tripled the size of the forest reserve system during his presidency (Graf 1990, 74), probably not just to conserve resources, but partly as an attempt to prevent the end of the frontier by preserving opportunities for frontier experiences (Slotkin 1992, 56).

Roosevelt proposed the creation of national hunting parks as early as 1893, "in which new generations could live 'the free, self-reliant adventurous life' of the hunter, 'with its rugged and stalwart democracy, [and] wild surroundings . . . [which] cultivates that vigorous manliness for the lack of which in a nation, as in an individual, the possession of no other qualities can possibly atone," (quoting Roosevelt 1893, xxix; Slotkin 1992, 56). In this view, the public lands allow us to continue to have frontier experiences, preserving America's exceptional national identity.

For most Americans, the wide open spaces and still unexploited public lands of the West signify the continuing presence of an American frontier. For some it is an economic frontier, for others an experiential frontier. That the frontier of myth is gone, or never existed, is irrelevant. As Hutton (1989) wrote regarding the persistence of the Custer

myth, "The only constant in this reversed legend is a remarkable disregard for historical fact. . . . The work of diligent historians seems to have had only marginal effect upon the public mind." This conception of the West is so fundamental to the nation's identity that historian Hal Rothman (forthcoming, Introduction) calls the West "the location of the American creation myth, the national sipapu . . . home to the mythic landscapes where Americans become whole again in the aftermath of personal or national cataclysm." For most Americans, the frontier is still alive.

Scarcity

The problem with the myth of the frontier, or Manifest Destiny, is that it is unsustainable-an unsustainable myth for an unsustainable society. The frontier myth depends on the inexhaustible discovery of new resources available to public exploitation. As Cronon (1989) describes it, "there is a contradiction that lay at the heart of the frontier thesis. For the whole point of the frontier had been to vanish."

This fundamental contradiction was apparent even in the first literary codification of the American frontier myth, James Fenimore Cooper's Leatherstocking Tales (Slotkin 1992, 14). In those stories, as in classic western books and movies to follow, the hero ("the man who knows Indians," in Slotkin's terms) lives on the border between wilderness and civilization, expanding the reach of civilization as guide, warrior and bearer of culture, but depending on the wilderness for his virility and morality. In each story, the hero helps civilization move further West, then moves further West himself to escape civilization. Leaving aside the gender, racial and other conceptual shortcomings of this story as a national creation myth, the myth is self-evidently unsustainable in simple geographic terms. These contradictions become more apparent as the wilderness, the frontier and the public domain shrink, but they have always been evident. As Cooper's Deerslayer predicted 150 years ago:

Too wide! Too wide! They scourge the very 'arth with their axes. Such hills and hunting grounds as I have seen stripped of the gifts of the Lord, without remorse or shame! I tarried till the mouths of my hounds were deafened by the blows of the chopper, and then I came west in search of quiet... Look around you, men; what will the Yankee choppers say when they have cut their path from the eastern to the western waters... They will turn on their tracks like a fox that doubles, and then the rank smell of their own footsteps will show them the madness of their waste. (Cooper 1841, 78-9)

As unexploited public lands become ever more scarce, it becomes increasingly difficult to overlook the finite limits of the public domain, to avoid smelling the rank smell of our own footsteps. We cannot simply continue to develop the public domain and move on to the next territory. As Pat Williams puts it, America has crested the brow of its last hill.

Conservation critiques of public land management often point out the shortcomings of the frontier myth, or, in other words, are often critiques of scarcity. They point out that the resources on public lands are finite, and proclaim the end of unlimited opportunities to exploit the public domain. In effect, conservation critiques agree with Turner and suggest that the frontier is finally closed. According to the logic of the frontier

myth, crisis follows, because the frontier explains who and what Americans are, and how the country works.

There is a considerable body of work generally known as the New Western history that goes conservationists one better, and argues that the frontier never existed. By pointing out that Native Americans had complex cultures and economies, that Hispanics were well established in the Southwest long before the arrival of Americans, that there were Black cowboys, that women were strong, with stories and experiences far different from that of the Hollywood western, that economic advancement through Western movement was a cruel myth, that the Chinese built the railroads, and in many other ways, the New American historians argue that the mythical frontier as conceived by Northern Europeans never existed. Threats to the discourse of the frontier are not met any more kindly than are threats to what the public believes to be its reality today, the public lands. Thus, a whole class of students can find Turner more compelling than Limerick's critique of the frontier myth.

Environmental history and the New Western history critiques force the nation to face the crisis it has pretended did not exist since the crisis was first identified in 1890. These critiques force Americans not just to make difficult choices regarding the disposition of public lands, but, indirectly, to examine and address the shortcomings of the nation's creation myth and identity. They force Americans to reexamine the tension between liberty and equality and justice and capitalism. And, as Snow wrote, they force Americans to reexamine an identity in which many westerners find dignity, livelihood and fulfillment.

Critical self-reflection and the admission of flaws and inadequacies is as difficult and painful for a nation as it is for an individual. Admitting that the emperor of Manifest Destiny wears no clothes would force reappraisals that the nation would prefer not to make, and, accordingly, Hollywood still makes Westerns, and the work of diligent historians seems to alter the general public's conception of the frontier little.³⁵

The discourse of Manifest Destiny, of the frontier, of exploitation of public resources, reassures us that public resources are virtually inexhaustible, that mining and wilderness are compatible, that the public lands still ensure that every American has a chance to make it big. This discourse accepts the first half of Turner's thesis-that the frontier made America-but rejects his closure of the frontier. In this formulation, the frontier lives on, Americans don't have to make hard choices about limited resources, and we don't have to reconsider our basic identity. For many Americans, the frontier myth is still an attractive and compelling story, but it gets harder to sustain each year in the face of scholaraly work like that of Limerick, and the increasing difficulty of finding unexploited

³⁵A century ago, Teddy Roosevelt, complaining about those who questioned the myth of the frontier as extended to foreign imperialism, argued that "Their doctrine, if carried out, would make it incumbent on us to leave the Apaches of Arizona to work out their own salvation, and to decline to interfere on a single Indian reservation. *Their doctrines condemn your forefathers and mine for ever having settled in these United States*," (Slotkin 1992, 53). Roosevelt recognized that abandonment of the Frontier Myth would lead to a series of difficult questions about the moral authority, exceptionalism, history and identity of Americans that most of the nation would not wish to face. the case of the Frontier Myth, critical self-reflection is most difficult for those who played the greatest role (in myth, not reality) and have the greatest stake in maintaining the myth: white men. I know of no breakdown of ORV owners by race, but 93% of motorcycle/ATV owners are male (Motorcycle Industry Council 1994), and 80% of snowmobile operators are male (International Snowmobile Manufacturers Association 1997a).

or overrun backcountry. Wise Use, then, is searching for a way to sustain the power of the frontier myth, and it is here that ORVs may play an important role.

Symbolism of the machine

Off-road vehicle advocates function politically like advocates of extractive industry. The Blue Ribbon Coalition, for instance, says proudly that "We represent motorized recreation and industry," (Yake 1989). *Blue Ribbon Magazine*, the organization's newsletter, regularly carries articles regarding other Wise Use issues, like "Biodiversity treaty must be stopped!" (Putting People First 1994) and "For the Sake of a Rat, a Farm is Destroyed" (Blue Ribbon Magazine 1994). The December, 1997, issue of *Blue Ribbon Magazine*, carrying water for the timber industry, included an article describing prescribed fire as "risky," and recommending that the Forest Service consider "other forest restoration options such as mechanical removal," (Nanfelt 1997). In 1997, Blue Ribbon submitted comments to the Forest Service advocating oil and gas drilling on the Rocky Mountain Front, in Montana, and Executive Director Clark Collins is on record supporting oil drilling in the Arctic National Wildlife Refuge (Shaw 1994). Politically, there is no functional difference between the interests of ORV groups and Crown Butte Mines.

In terms of public perception, however, there is a huge difference between Crown Butte and the Gallatin Valley Snowmobile Association, and this difference may permit ORVs to make an invaluable contribution to the extractive industries' paradigm of exploitation. Because ORVs are uniquely perceived as instruments of recreation, rather than profit, they offer Wise Use an opportunity to escape the contradictions of the frontier myth. That is, where most Wise Use interest groups self-evidently shrink the "frontier" by leaving public lands less wild, less pristine, less beautiful, ORVs are an industrial use of the frontier that claims to have no impacts. Thus, ORV advocates claim both to utilize the frontier, and leave it intact, escaping the contradictions inherent in the frontier myth. Natural resource industries hope to follow the lead of ORVers and utilize this same argument to justify continued logging, mining and oil and gas development on public lands. To fully appreciate this, it is necessary to delve a little deeper into the history of transportation in the West and the symbolism of the machine.

ORVs are the successors to a long cultural history of machine locomotion as a vehicle of progress, capitalism, patriotism and the frontier myth, as well as the embodiment of the freedom, power and individuality of the automobile. Cultural historian David Nye (1994, 45) argues that railroads were almost universally seen in the 19th century as a force that would help "unify, dignify, expand, and enrich the nation." The motive power of railroads, in the common view, would liberate man and unlock the resources of a vast nation. According to orator Edward Everett, summarizing the attitude of the time, railroads represented "a miracle of science, art, capital, a magic power . . . by which the forest is thrown open, the lakes and rivers are bridged, and all Nature yields to man," (Nye 1994, 46). The iron horse was "the embodiment of the age, an instrument of power, speed, . . . a testament to the will of man rising over natural obstacles . . ." (Marx 1964, 191). In a time when the opposition, romantic view of wild nature was still young,

and the nation seemed inexhaustibly large, the railroad represented a triumph over space and time and a threatening and uncooperative nature. The burgeoning American railroad system symbolized unity in a culturally and geographically fragmented nation, and was taken as evidence of superiority over European cultures.

Albert Borgmann (1984, 85-101) argues that technology is the keystone of modern liberal democracies, inasmuch as it appears to reconcile the contradictory goals of freedom and equality by claiming to provide (now or in the future) unlimited opportunity. That is, since true equality would compromise freedom, we claim to provide our citizens not equality, but equal opportunities for self-realization (p. 89):

Self-realization constitutes a uniquely congenial specification of freedom and equality as they were understood in the Enlightenment because it appears to be a standard that puts the slightest constraints on the rebellious spirit of that movement and yet promises to provide enough guidance to steer society past social catastrophe. Finally, this vision appears to be practically feasible through modern technology, the latter understood instrumentally. In this view, technology provides a powerful and effective means without constraining the individual's choice of the good life.

In essence, Borgmann argues that the limitless potential of technology is believed to provide unlimited opportunity and reconcile the contradictions of equality and freedom in much the same manner that the limitless lands of the West were believed to in the 19th century. He suggests that the promise of technology so undergirds the paradigm of American democracy that to question technology is considered Luddite insanity (p. 103):

... technology is seldom offered as a choice, i.e., as a way of life that we are asked to prefer over others, but is promoted as a basis for choices....

A decision against technology, or, more accurately, against technologically specified democracy is one against freedom simply and for prejudice, paternalism, or totalitarianism. . . . The properly technological version is given as the promise of liberation and enrichment, and to refuse the promise would be to choose confinement, misery and poverty. . . .

Projects like the building of railroads, or space travel, can become symbols of the unlimited opportunity technology is alleged to be delivering. To question the value or use of such technology is to question some of the fundamental myths on which American capitalism is built.

Hal Rothman (forthcoming, Chapter 1) explicitly links this sense of technology as an expression of national identity and accomplishment to railroad travel through the West: "The locales that excited [turn of the century writers and artists'] consciousness, and especially the ability to deliver people to them in style, proved the knowledge, power, and grace of industrial civilization. For a people who believed themselves victorious in their conquest of the continent, the ultimate triumph became experiencing the mysteries of the sublime in comfort."

Arguments against railroads were met with appeals to democracy and the virtues of access that could ring true in today's debates about ORVs. In reply to William Wordsworth's query regarding railroads "Is there no nook of English ground/secure from rash assault?" orator Edward Everett (Nye 1994, 63) opined in 1851 that motorized access is democratic and progressive:

The quiet of a few spots may be disturbed, but a hundred quiet spots are rendered accessible. The bustle of the station house may take the place of

the Druidical silence of some shady dell; but Gracious Heavens? Sir, how many of those verdant cathedral arches, entwined by the hand of God in our pathless woods, are opened to the grateful worship of man by these means of communication.

Everett also argued that the railroad allowed the working class to visit sites that Wordsworth would reserve for "a score of luxurious, sauntering tourists."

Rothman (forthcoming, Chapter 5) traces the transfer of the railroad's heavy symbolic freight to the still more technologically advanced, individually liberating automobile:

Wheels . . . allowed travelers to burst the bubble of the corridor of transformation that the steel rails created, to move beyond a world that catered to the whims of industrial society. . . . Railroad vectors were determined by the roadbed on which the track was laid; an automobile driver could go anywhere the combination of imagination, wheels, and a dirt track might lead. These tracks pointed to wilds of Montana and the rainbow canyons of southern Utah, across the plains and along the coast, into Mexico and for the brave, into the Rockies.

Rothman argues that, in addition to the symbolism already attached to the machine, the automobile journey became an American rite of passage–a statement of freedom and individuality that everyone had to make. Since the early days of motoring the automobile has been loaded down with the symbolism of machismo, patriotism, geographic destiny and the sort of folk wisdom that made Richard Petty a household name.

ORVs take the weight

Just as automobiles once demanded a certain skill to handle, and were once amenable to garage soup-ups, ORVs test an individual's mastery of machine and nature. Just as automobiles assumed the symbolic role of railroads in the West, ORVs are now inheriting the burden once borne by automobiles. Just as automobiles did, ORVs open up public lands never before "conquered" by machines, delivering drivers to the wilds in comfort never before experienced. Just as building the transcontinental railroad symbolized the nation's technological triumph over nature, and just as driving automobiles symbolized the presence of civilization, driving ORVs through the backcountry is taken as a symbol and reenactment of America's Manifest Destiny.

Matthew Wilson (1997) argues that the reintroduction of wolves in Yellowstone National Park became invested with symbolism which made reintroduction a focal point of the conflict between the Wise Use movement and conservationists. "The wolf," in Wilson's interpretation, "is no longer just a wolf, it is a threat to an entire way of life. . . . Landscape itself thus can be conceived as a symbolic medium–a social resource–through which differing social groups express deeply held beliefs about relationships to society and nature."

In this contested landscape, ORVs symbolize freedom, access to public lands for all, the triumph of technology over nature, the triumph of America over the continent, and a blue collar folksiness sorely lacking in the hiking of elitists and "granolas" that whine about noisy machines on trails. As philosopher David Strong (1995, 30) writes, The conquest of nature is incorporated into the very design of these machines and the way that they make sense for their riders. From knobby tires, to advanced hydraulic suspension systems, to high clearance, to plenty of horsepower, to low and variable gearing, to lightweight aluminum alloy, such machines are designed to take one wherever, whenever, regardless. Not to submit the land to domination, then, is unmanly.

In the same way that the presence or absence of the wolf, a "biopolitical pawn," (Wilson 1997) serves as a symbol of wildness and untamed nature to some, and restrictions on private property and attacks on traditional western culture to others, the ORV symbolizes the frontier myth to advocates. Conflicts over travel planning and wilderness become invested with the sort of symbolism that turned wolf reintroduction into a conflict-ridden organizing tool for the Wise Use movement. As one ATV representative described her views, "Locking motorized recreationists out of the backcountry is an act of discrimination. . . . Americans, out West, are having their heritage and traditions stripped from them," (McDonald 1997). The protection of ORV "rights" becomes a focus for–or a gateway to–the larger discourse of the frontier myth, democracy and the right to enjoy private gain from public lands.

ORV discourse on record

The discourse of ORV advocates clearly falls within the liquidators' tradition, and advances their agenda. ORV advocates echo traditional themes like East versus West, folk wisdom versus experts and bureaucrats, preservation of jobs, access to public land, antisocialism, local government, progress and the invocation of Jeffersonian democracy and the frontier myth. In fact, ORV rhetoric often betters that of other Wise Users, to wit Blue

Ribbon's motto: "Preserving our natural resources for the public instead of from the public."

ORV advocates portray their "sport" as the target of Eastern elitists who don't want to get their hands dirty playing with a stuck fuel valve: "If you don't like the idea of strapping on a 50 pound back pack and munching on a Granola Bar, join Blue Ribbon Coalition," (Yake 1989). Clark Collins described in 1997 how the "GAGs" (Green Advocacy Groups) "have worked tirelessly to lock you and your sport out of public lands. It drives them crazy that you choose not to conform to their dictates on how you should enjoy yourself in the outdoors."

Much as loggers see massive logging of federal lands as the status quo, ORVers see vast open riding areas as the status quo ("how it's always been"), and accordingly perceive a steady loss of those lands to the increasingly regulatory federal government. As Sandra Mitchell testified in 1994 on behalf of the Idaho State Snowmobile Association and the Idaho Trail Machine Association:

Trail riders have been squeezed slowly and relentlessly into smaller and smaller places, many of which are the object of the current Idaho Wilderness Bill. As you might expect, backs to the wall, they're ready to fight for their last remaining quality riding areas. . . . Many of [the areas in the bill] are used now and will be used in the future by mechanized recreationists. Our numbers are growing and they'll continue to grow, and we need those wild lands.

In the Blue Ribbon Coalition's letter advocating oil and gas exploration on the Rocky Mountain Front, Public Lands Director Cook (1996) claimed that:

Oil and gas resources, crucial to our nation's economic survival, must be developed where they are found. Unfortunately, many petroleum deposits are located on public land where their development has been thwarted by misanthropes and bureaucrats. . . . Our nation's dependence on imported oil has left us most vulnerable.³⁶

Cook's diction is worth examining. In just three sentences the exploitation of public lands is linked to the economic well-being of the nation, the Forest Service is characterized as bureaucratic and, presumably, incompetent, and it is implied that opponents of development are not good Americans. These are themes that the extractive industries have been sounding for a century. And, just as as those industries have made another theme more explicit before her, in the April, 1997, issue of *Blue Ribbon Magazine*, Cook explained that environmentalists who wish to restrict ORV use on public lands are communists:

There is no room for choice. Where we should be most free, there is no room for freedom. . . . [Environmentalists] share these characteristics with most oppressive tyrannies. That's why they're sometimes called 'watermelons' (green on the outside and red on the inside), because Communism is our most recent experience with this type of brutal social organization.

Apparently Blue Ribbon is not nit-picky about ideological distinctions, inasmuch as a cartoon in the same issue compares enforcement of the Endangered Species Act with the Holocaust.³⁷

³⁶The letter was carbon copied to the Rocky Mountain Oil and Gas Association.

³⁷Fair questions, given the examples provided, is how many people the organized ORV interests represent, and whether they represent "average" ORVers. In answer to the first question, the Montana Department of Fish, Wildlife and Parks estimates that about

Just as conservation is equated with communism, ORVers equate use of their machines with freedom. "Freedom," for instance, is the largest and most legible word on an advertisement placed by the state of Montana in *SnoWest* magazine (October, 1997). The rest of the text is largely irrelevant–the relevant and lasting image is a snowmobile disappearing toward a mountainous horizon under the word "FREEDOM."

Promoters also play to the myths of western settlement. One ATV

Modern Day Cowboys

In the September, 1994, issue of Blue Ribbon Magazine, ATV rider Brent Zeglin said he and his buddies feel like "Old Cowboys . . . riding horses, modern day horses." Zeglin offered up the following list of "similarities" between horses and ATVs (abridged):

<u>Horse</u>	<u>ATV</u>
Four legs	Four tires
Muscles	Motor
Reigns (sic)	Handle bars
Saddle	Seat
Cowboy Hat	Helmet
Cowboy boots	MX boots
Bandana	Bandana
Feed & Water 'em	Fuel jem
Love hay	Love gas
Need oats	Need oil
Use spurs	Kickstart
Get tired	Rebuild motor
Hoof prints	Tire tracks
Can rear up	Wheelies
Put in stable	Put in garage
Stage coach	Motor home
Hit dusty trail	Hit dusty trail

two percent of Montanans snowmobile, and the same percentage use ATVs. It seems clear that there are relatively few motorized users, but that they have a disproportionate impact, and seem disproportionately numerous, due to the nature of their machines.

In answer to the second question, decision-making officials seem content to assume that the organized interests represent average users. The Blue Ribbon Coalition, the most visible umbrella organization, is considered a moderate ORV group, particularly in contrast with the more radical Sahara Club, which comes very close to advocating violence against conservationists.

Regardless of the actual numbers represented by ORV organizations, they are accorded power as if they represent a sizeable coalition. The Forest Service recognizes ORVs as a legitimate use of public land deserving equal consideration with other uses. Representatives of Silver Country, the Panhandle Trail Riders Association, the Montana Nightriders snowmobile club, the Coeur D'Alene Snowmobile Club and the Kootenai County Snowmobile Advisory Board all testified at the 1997 Wallace hearing, apparently held at their request. ORV advocates have successfully created the impression that they speak for a large number of westerners, and they wield power accordingly. advertisement specifically invokes the frontier myth, showing an ATV pulling a Conestoga wagon, and captioned, "How the West was really won," (Manning 1996). An article in a recent issue of *4-Wheel ATV Action* describes riding opportunities in the Badger-Two Medicine area of Montana, one of the wildest and most valuable unprotected wildlife areas and premier wilderness candidates in the United States, and warns lightheartedly "This area has more grizzlies (and we don't mean 600cc Yamaha 4X4s!) than any other spot in the contiguous 48 states." The article was penned by "the rugged individualists of 4-Wheel ATV Action."

Conclusion

In 1893, Frederick Jackson Turner made a two part pronouncement. First, he said the frontier was responsible for the exceptional American character.³⁸ Second, he said, the frontier was closed. For the past 100 years Western historians have been fighting against the first assumption, and wrestling with the implications of the second. The rest of America, however, has cheerily assumed that Turner was right in the first regard, and wrong in the second: the frontier created America, but the frontier has not closed.

Natural resource industries have adeptly used this myth of the frontier to further their political and economic goals, arguing that exploitation of the "frontier" (that is, public lands) is quintessentially American. In this paradigm, the exploitation of public

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³⁸Brilliantly, Turner argued the American character was made up of "traits of the frontier, or traits called out elsewhere because of the existence of the frontier," (Turner 1989). That is, one need not live on the frontier to enjoy its effects on character. In this construction, New Yorkers are as threatened by the passing of the frontier as Montanans.

resources provides the fabled equality of opportunity for economic and social advancement that lies at the heart of American democracy.

As the public domain has been exploited, it has literally and conceptually shrunk. It has become increasingly apparent that the myth of the frontier is geographically unsustainable. It is increasingly difficult to argue that the frontier is still open. Nevertheless, Americans keep trying.

One way to avoid the contradictions inherent in the frontier myth is to use technology, as Borgmann suggested, to slip the geographic noose of the frontier and thus avoid the doctrine's inherent limitations. As U.S. Representative Rick Hill recently articulated the theme, "For generations . . . Montanans have . . . worked the land, and we've done so without degrading the integrity of our environment. . . . I firmly believe that we have modern, environmentally sound technology for extracting the resources of our lands. Continual improvement on those technologies will give us the best of both worlds," (Hill 1997). Ron Arnold (1996) frames this issue as one of the basic tenets of the Wise Use movement: "Our limitless imaginations can break through natural limits to make earthly goods and carrying capacity virtually limitless." The public domain, by virtue of technology, is made effectively limitless.

ORV advocates, similarly, argue that their machines do not preclude a frontier experience-to the contrary, they claim that ORVs enable them to enjoy such an experience. More than just echoing the discourse of extractive industries, though, ORVs may represent a conceptual leap forward for Wise Use in that permitting their use requires that development is compatible with the frontier. ORV advocates are claiming that the

presence of machines makes no difference in the backcountry-thus, we can drive through "the Montana wilds." Thus, an ORV advocate testified, with no apparent sense of irony, that, "These folks go to wild and undeveloped lands to find their recreation for many of the same reasons that others visit wilderness. They want the challenge of wild lands, scenic beauty, remoteness and quality destinations. . . . " (Mitchell 1994, 57). To accept the use of ORVs on public lands the way they are currently promoted is to accept that the presence of motorized vehicles has no perceptible impact on the way we experience the backcountry.

In this regard, as in others, ORVs are carrying the colors for the Wise Use movement. As was mentioned in the introduction, the 1997 motorized use hearings held by Rick Hill and Helen Chenoweth represented the incorporation of ORV advocates into extractive industry's political coalition. Hearings for the benefit of motorized users were held because ORV advocates represent a grassroots constituency that is permanently wed to the agenda and discourse of the Wise Use movement. They have proven effective opponents of wilderness designation throughout the West, and act as foot soldiers in support of other Wise Use policies regarding public lands. They advance the discourse of liquidation in novel fashion, creating a permanent (and growing) constituency of average westerners that support the agenda and discourse of industry. Never before did industry claim so powerfully that we can utilize our public lands, and protect them as well. The Wallace hearing represented both a milestone for the growth in political power of ORV advocates, and, correspondingly, a mark of the effectiveness of their discourse.

According to the discourse of ORV advocates, machines have no impact on "the

frontier." If machines have no impact, then the public domain is inexhaustible. That is, if ORVs don't change the wild nature of the backcountry, then we can drive through them *ad infinitum*, each of us reliving the frontier experience. If we accept this principle, America has not crested the brow of the last hill, the public domain is not shrinking because of industrial exploitation, and our nation's creation myth is intact.

Chapter 3

The Natural Experience and Motorized Vehicles

Use of motorized vehicles is expanding dramatically on our national forests. The Forest Service currently treats off-road vehicles (ORVs) as a use of our public lands which deserves the same (or greater) consideration and opportunities as traditional, muscle-powered recreation. Leaving aside the question of whether ORV use is appropriate in roadless areas that may otherwise receive wilderness designation, as Roz McClellan writes, this "appears to portend a shift in our notions about the relation between humanity and nature and about appropriate uses of public lands," (McClellan 1996).

McClellan assumes, reasonably, that we intend with our national forests to provide for opportunities to engage with nature. As I will argue in Chapter Five, we ought to provide in our national forests for those activities that particularly require and benefit from the uniquely natural setting of our forests. McClellan intimates that if we are willing to accept ATVs as "modern day horses," then we may no longer believe that our forests are unique opportunities to interact with nature, and instead see them as large playgrounds. I do not believe that the general public accepts ATVs as a substitute for horses. That they

are treated so by land management agencies is, as we have seen, partly the result of aggressive and canny politics by Wise Use groups, and partly the result of the Forest Service's failure to address changes in technology and numbers.

ORV use is also promoted on public lands, however, because of a fundamental failure to consider clearly what constitutes a natural experience. Land managers, conservationists and even environmental philosophers for the most part see ORVs as simply another use of our national forests. Thus recreation managers tend to defend ORV use because their users claim to enjoy a natural experience,³⁹ conservationists often assume that opposition to a particular use is elitist and discriminatory⁴⁰ and philosophers frequently refuse to distinguish between experiential claims.⁴¹ This failure to articulate clearly what a natural experience is, and to evaluate ORV use in light of that description,

³⁹As the Montana Department of Fish, Wildlife and Parks concluded in 1980, "since snowmobilers in Montana and elsewhere have often actively campaigned against formal wilderness designation, many people assume they are unappreciative of the values wilderness offers. To the contrary, however, the survey showed snowmobilers preferred—and were more likely to seek—recreation opportunity in undeveloped wilderness settings.... Snowmobilers are actually the same people the department has always served—hunters, fishermen, and those who generally enjoy recreating in Montana's unparalleled outdoors," (as quoted in Smith 1983, 190).

⁴⁰Typically, a recent editorial in the *Missoula Independent* railed against the presence of snowmobiles in the backcountry, then cheerily proposed permitting them the use of 50% of public trails because "everyone has rights, everyone is a co-owner of public lands. . . it would seem only right to allow motors in some places," (Meadows 1998).

⁴¹See, for instance, J. Baird Callicot (1991): "Let me hasten to say that personally, I agree with Muir et al. Birdwatching, for example, is, in my opinion, morally superior to dirtbiking. But there is a contingent of powerful and influential professionals who do not agree. An axiom of neoclassical economics is that all human preferences concerning 'resource' use are morally equal and should be weighed one against the other in the marketplace."

permits ORV use to flourish under the illusion that it is simply another natural use of our national forests, which ought to be provided even if one happens to find it distasteful.

To provide a means of evaluating the kinds of environments that provide "natural experiences," in the first part of this chapter I will argue that a natural experience takes place only in a specific type of setting in which the works of man are of secondary importance. In this setting one must be able to experience the natural order of information, engagement with one's surroundings and "solemnity" in the sense of a certain private and social acknowledgment of the importance of the Other. In an appropriate setting that provides solemnity, possibility of engagement and natural order of information, a natural experience is possible.

In the latter half of the chapter, I will argue that ORVs disrupt each portion of this definition of "natural experience," precluding by their presence the possibility of a natural experience for either riders or observers.

By addressing the nature of natural experiences, rather than the nature of nature, I hope to shed light on the question of what our national forests should provide recreationally, rather than what they should look like ecologically. In ecology, what is natural "is acquiring as many levels as a lit major's interpretation of Moby Dick," (Wiley 1989). Environmental philosophy, likewise, seems preoccupied with determining whether and to what extent certain types of landscapes are natural (see, for example, Birch 1990; Callicot 1991; Katz 1992)). These are important discussions, but they can also be distracting. The opportunity to enjoy a natural experience depends upon more than just setting. If, then, we hope to provide opportunities to enjoy natural experiences we need to

be concerned with more than just the biology of natural areas. Depending upon what we hope to preserve and provide for, the difference between old and second growth forests may be less important than the way we manage recreation. Thus, this chapter is an attempt to consider how we experience landscapes, not the extent to which landscapes are "natural."

Defining a natural experience

A natural experience is defined, first and foremost, by its location: nature. Nature, in the words of Albert Borgmann (1995), is "plants and animals." To use the definition offered by Ralph Waldo Emerson (1836), "Nature, in the common sense, refers to essences unchanged by man; space, the air, the river, the leaf." A rock sitting where geologic upheavals, wind, water and insects have left it is natural. A cement square of sidewalk is not natural–it is manufactured or constructed. These two examples describe the poles of a spectrum of possible descriptions of a subject, rather than an iteration of the only possible choices. Thus, many subjects may fall in between, being constructed or influenced to some extent by both humanity and the physical world in which humanity lives.⁴²

⁴²This is not to claim that humanity is totally separate from or radically different from nature. Nevertheless, the argument that humanity is a part of nature should not lead to the conclusion that, therefore, everything humanity produces is natural, leading to the conclusion that there is no difference between "the works of man, however precocious," and those of beavers (Callicot 1991). As Holmes Rolston urges, "One hardly needs metaphysics or theology to realize that there are critical differences between wild nature and human culture," (Rolston 1991).

Providing direction along the spectrum, wilderness, designated and undesignated, represents the epitome of nature. It is, if not untouched by, at the least untrammeled by man. Wilderness is nature at its most natural, least influenced by humanity. With wilderness as a pole, we can assume that those subjects whose basic substance and essence have been largely shaped by forces other than man are natural, while those whose basic substance and essence have largely been determined by humanity are manufactured. Articulation of a bright and clear dividing line may not be possible, but these guides should lead to frequent and general consensus.

To make such distinctions it is not necessary to argue that wilderness is "pristine," a frozen tableau of a world untouched by humanity. Probably every acre of land in the West has been impacted by modern humanity's activities in some ways (McKibben 1989), humanity has manipulated its "wilderness" environment for time immemorial (Cronon 1995), and ecosystems are clearly dynamic and stochastic (Cronon 1995). All these statements are true to one extent or another, but too often the implication drawn is that because wilderness is not the pure and simple concept we (may have) once believed it to be, its qualities are no different than those of other places.⁴³ Consider an analogy: say that

⁴³Katherine Hayles, for example, argues that there is no easy distinction between manufactured experiences and nature experiences, no periodic chart to which we can turn to identify exactly the natural and manufactured proportions of a particular experience. She concludes that because separation is difficult, it is probably irrelevant: "Instead of accepting a construction that opposes nature to simulation, I seek to arrive at an understanding of nature and simulation that foregrounds connections between them. Not two separate worlds, one natural and one simulated, estranged from each other, but interfaces and permeable membranes through which the two flow and interpenetrate," (Hayles 1995). Hayles robs us of the ability to discriminate meaningfully between different kinds of things simply because they are not wholly dissimilar in every respect.

all soil contains some moisture. Though this might mean that no desert is purely desiccated, it does not eliminate the physical difference between swamp and desert or reduce the value of a vocabulary that describes differences in soils' respective moisture content. Further, the fact that desert is a culturally constructed term (unique to this time, to this century, with a certain amount of baggage, e.g., an exotic place, a wasteland, a place of stark beauty) does not mean that it does not provide a useful pole against which other landscapes can be measured for soil-moisture content. Regardless of whether wilderness is a pure and simple concept, it is the *most* natural thing we know, and thus provides a useful measure of what sorts of environments are natural.

Emphatically, nature, or the wild, can be less than wilderness. A garden, a city park or roaded portions of national forests may surround one with "plants and animals" that retain enough of their own identity, integrity and independence to be considered natural. One need not go to an ancient forest to find nature. At the same time, some settings, though composed of plants and animals, are wholly and artificially conceived and dependent upon humanity. Such settings are not necessarily "natural."

Solemnity

The second defining element of a natural experience is solemnity. Solemnity conveys the sense of respect, of privacy, of solitude that can often be found in natural settings. Solemnity is more than solitude, but in recreation management this combination of social conventions and the consensus that something important is present and at stake is often described as "opportunities for solitude."

Legally, one of the defining elements of wilderness is that it has "outstanding opportunities for solitude," (PL 88-577, 16 U.S.C. 1131-1136). The most obvious difference between the Bob Marshall and a local greenway is the amount of human intrusion in each. In wilderness, one's surroundings are free, perhaps for miles, from the presence of man-made structures and the transportation infrastructure that, together, generate crowds. In this century, perhaps most basically, wilderness offers refuge from other people.

Yet solitude should not be confused with aloneness. We know from experience that solitude is not equivalent to isolation when we consider how few people go into the backcountry alone; more typically, recreationists are accompanied by small groups of friends or like-minded companions. In fact, the presence of others seems to have relatively little effect on the experience of solitude.⁴⁴ Just as one can be lonely in a crowd, one can enjoy solitude in a group. It is not the absence of others that defines solitude so much as the behavior of those one meets.

In this regard, Bill Hammitt argues that solitude should, in fact, be understood to mean privacy (Hammitt 1982). Hammitt relates the results of a 1977 study of different groups of backcountry anglers at the same lake (Hendee, Stankey, and Dailey 1977). The groups stayed physically distanced and did not communicate with one another. Hammitt speculates that they sought withdrawal from the demands and complexities of modern social environments, and hence communicated within their own group–a known and

⁴⁴For example, in surveys of hikers in five wilderness areas in the eastern United States, "The most striking outcome of the study was the finding of no relationship between solitude and crowding perceptions," (Hollenhorst, Frank, and Watson 1994).

friendly quantity-while ignoring strangers. Hammitt concludes that they desired privacy, not isolation, that "it may not even matter for many people what the density of human use is in some wilderness areas, so long as an environmental setting remains such that an intergroup behavior preserving freedom of choice [to limit interaction] is operating," (Hammitt 1982).

Hammitt is close to identifying a key element of the natural experience, but, like solitude, privacy does not quite capture the essence of backcountry conventions. Consider again the backcountry anglers. Neither group controls the information it receives from the other–instead, both enjoy privacy because of the reticence of the other. Both groups respect the privacy of the other of their own accord.

The solitude of the backcountry, then, is based on neither aloneness nor control, but conventions of use. Different users recognize a common set of values and restrictions on their behavior in the backcountry. Based on extensive backcountry user surveys, Hollenhorst concludes that solitude in the backcountry is "seen as something positive and important and also as something solemn, serious, or consequential," (Hollenhorst, Frank, and Watson 1994). Solitude is a condition that facilitates self-reflection and personal growth, "creativity and expression, awareness and self-actualization, processing bereavement and mourning, escape and retreat, and meditation and prayer," (Hollenhorst, Frank, and Watson 1994). The term that best captures the sense expressed among diverse recreationists that their actions and those of others should act to facilitate opportunities for such self-reflection and personal growth is solemnity. In wilderness, and more generally in nature, we seek not isolation, but solemnity.

Solemnity does not necessarily imply seriousness in the sense of gravity or humorlessness. Instead, it is best understood as respect or reverence for the resource and the experience. Wilderness users express a certain respect not just for one another's privacy, but for the country they visit. Users are generally quiet even when others are not present to be disturbed. Litter is not left behind, plants are not wantonly damaged, cat holes hide human waste. These gestures are not directed as much at other users as consummated out of the general conviction that they are the appropriate way to display respect for something one values.

The exact conventions that surround the use of natural areas are quite complicated, vary by individual and area and may seem contradictory. Many things that are at odds with designated or pristine wilderness, such as well water, a wide and well-trod trail or the presence of noxious weeds, can be perfectly consistent with a sense of solemnity. Where a natural experience is still possible, however, we can expect at the minimum that conventions of use will require a measure of respect for one's surroundings, that one will not throw about the acoustic litter or plastic trash of Gotham, or in general behave in an unseemly, inconsiderate manner. This respect, this sense that something important is at stake, this solemnity, is a key part of the natural experience.

The natural order of information

Our senses often seem to come alive in natural environments-we are more relaxed, more physical, more animal, more conscious of our own bodies and more aware of the world around us. This development speaks to the importance of stimulating our senses

with the types and amount of information received in natural environments, or what we can term the natural order of information.

Consider the sort of sensory input we receive in natural landscapes. If a grouse coos it is because this is a place where grouse belong--in this climate, at this elevation, in this cover--and because one is near its nest. If the flaked bark at the bottom of a tree feels like puzzle pieces and smells like vanilla, it is because the tree is a Ponderosa pine, which should tell one a considerable amount about the world in which one finds oneself, such as whether you are standing on a north or south facing slope, that fire sweeps through this area every ten years or so-at the very least, you will understand that it could tell you such things, that Ponderosa pines do not grow at random. Everything connects.

Unlike the sensory bedlam of Gotham, or the dull uniformity of Suburbia, information is virtually unlimited, but unintrusive. Things such as the distant cry of a hawk are easily catalogued and dismissed. One is still aware of the hawk, but pays it little attention. David Abram (1996) captures well our response to the natural order of information:

When we begin to consciously frequent the wordless dimensions of our sensory participations, certain phenomena that have habitually commanded our focus begin to lose their distinctive fascination and to slip toward the background, while hitherto unnoticed or overlooked presences begin to stand forth from the periphery and to engage our awareness. . . . The patterns on the stream's surface as it ripples over the rocks, or on the bark of an elm tree, or in a cluster of weeds are all composed of repetitive figures that never exactly repeat themselves, of iterated shapes to which our senses may attune themselves while the gradual drift and metamorphosis of those shapes draws our awareness in unexpected and unpredictable directions.

Environmental psychologists have tried to explain the way in which the human brain encounters and catalogues its environment. Rachel and Stephen Kaplan argue that people are capable of both involuntary and directed attention.⁴⁵ Directed attention is characterized by cognitive focus on a single task, to the exclusion of other distractions, and is the state in which we commonly live our modern lives, learning to ignore and exclude distracting sensory input. Involuntary attention is a less focused state–a more general awareness of the environment that responds, in turn, to different sensory stimulation.

Kaplan and Kaplan believe that urban environments may often be stressful either because they create a conflict between interest and purpose, or because they deliver inappropriate amounts of information to our senses. In the latter instance, psychological tests show that people prefer environments with a particular amount of information–presumably enough to stimulate interest, yet not too much to devote attention to those things that deserve it. Constructed environments may either overload the senses, or under stimulate them, if they fail to approximate the amount of information conveyed to the senses by natural settings.

In the case that there is a conflict between interest and purpose, one may wish to attend to tasks that demand directed attention, such as reading a paper, safely negotiating a busy freeway, remembering what items are needed at the grocery store. By accident, or

⁴⁵Kaplan and Kaplan cite William James as the originator of this distinction, having suggested in 1892 the distinction between voluntary and involuntary attention (Kaplan and Kaplan 1982).

by design (say in the instance of advertisers), many portions of the constructed environment compete for our attention.⁴⁶ They redirect one's attention from the desired task at hand to the siren or traffic signal that delivers life-preserving information, the billboard that signals sex, the weather report on the radio and a myriad of other stimulations. One becomes frustrated by inability to concentrate on the task at hand, or one is forced to exert great concentration in order to do so. This constant, forced attention results in fatigue, irritability and unhappiness. Kaplan and Kaplan (1982) conclude that there is "beginning to be evidence that points to a deficit in attentional capacity as relating to a psychological state characterized by irritability, reduced effectiveness, and a less positive relationship to other people."

Kaplan and Kaplan, reviewing numerous studies, found that people tend to prefer natural to manufactured landscapes, and, within landscapes, prefer scenes with mixed cover and openness.⁴⁷ These are not elements that we simply weakly prefer. They speak to the basic human need to function in an environment similar to that which are brains, bodies and senses evolved to operate in. Thus, settings which convey the natural order of information "are likely to increase one's sense of competence because they are readily graspable. One can more readily determine where to focus attention and to sense what might lie ahead. Similarly, settings that are legible provide cues that help in maintaining orientation, thus making safety, competence and comfort more likely," (Kaplan and

⁴⁶The average American, for instance, is exposed to about 3,000 advertisements a day (Kanner and Gomes 1995).

⁴⁷Ulrich (1993) reaches the same conclusion.

Kaplan 1989). One tends to feel more confident, comfortable, relaxed and at home in settings that deliver the natural order of information.

When natural settings do not provide the natural order of information, then we can safely rule them out as places where a natural experience can take place. This distinction allows us to discriminate between some environments that contain elements of both constructed and natural environments. A garden, for instance, although clearly constructed, may answer to this portion of a natural experience to the extent that one can lose oneself within it, one can engage the mind and the senses with the natural order of information. An ancient grove that is a remnant of the original primordial hardwood forest of New England, on the other hand, may not offer a natural experience if it is sandwiched into the median of the Massachusetts Turnpike, where the sight and smell of cars constantly distract and demand one's attention.

Engaging with a community of life

The fourth and final defining element of a natural experience is the opportunity to engage with the Other. The easiest way to rephrase this is to say that things other than us matter.

Albert Borgmann argues convincingly that engagement with those things that are "real" help anchor us, help us define ourselves, and ultimately determine whether or not we live a rewarding life. Borgmann's definition of "real" matches that of conventional usage, "things and events that are notably serious, genuine, and valuable. One way of explicating the intuition that guides us in such talk is to say that what is eminently real has

a commanding presence and a telling and strong continuity with its world," (Borgmann 1995).

Nature, in this view, is important because it can speak to us eloquently, with commanding presence, with dignity. Wilderness provides an example of something obviously "real" where one can find things with commanding presence and continuity. In wild nature everything we pay attention to embodies and discloses the world it has emerged from (Borgmann 1995). Trees, animals, rock formations command their own identity, integrity and independence from humanity. It is this otherness that allows us to discriminate between natural experiences and more artificial, commodious experiences.

For the purposes of evaluating whether a setting provides "natural experiences," the possibility of engagement with the other offers a sort of gauge of authenticity, or quality. A carefully tended, loved, long-standing family garden that is appropriately planned for its region's soil and climate may well possess commanding presence and telling continuity with its environment. It thus provides opportunities for a natural experience. On the other hand, an immaculate Eden carefully planned and tended by others, with the best chemicals available, watered by underground, computer controlled sprinklers, filled with non-native species, may well lack dignity and continuity, and though natural in the sense of "plants and animals" may provide no opportunity for engagement with the other. And a setting managed simply to provide "rides" on ORVs may, likewise, be viewed simply as a setting for fun, rather than a living landscape.

A natural experience occurs when one has traded glances with nature. Hank Harrington's analysis of nature writing helps explain this. Harrington argues that typical American nature writing fails to bridge the gap between humanity and nature because it fails to grant nature the ability to look back at us (Harrington 1995). Run-of-the-mill nature writing does not seek to reveal the world as others experience it. Instead such writing implicitly claims that creatures such as bighorn sheep do not meaningfully participate in the same world that we do. It removes us as actors subject to the actions of others by robbing others of the ability to affect us--"it petrifies the animate world that it seeks to describe." To the extent that the natural world functions simply as a stage on which people act, with plants and animals as props, we are not engaging with nature.

In contrast, the best nature writing describes engagement. The world looks back at us, and it is through that meeting of eyeballs that we learn something of the other: "Instead of difference, the best nature writing . . . aims at asserting congruence. But congruence . . . requires giving up catching sight of the subject as the end of vision. Congruence is based on a potentially endless exchange of reciprocating gazes and feints, curtained by dancing veils of uncertainty," (Harrington 1995). If we fail to acknowledge that the world is able to look back at us, we are unable to engage with it. Instead, the world around us is reduced to an irrelevant collection of objects.

The natural experience

One need not retreat to wilderness to enjoy a natural experience. Such experiences may be available in corners of a college campus, in gardens, in a farmer's field or next to a reservoir. We can and do enjoy interaction with nature that is less wild than wilderness, less untouched by humanity, less solemn, less tranquil, less engaging. But without a certain

measure of the characteristics of wilderness, it is impossible to enjoy a natural experience. With this definition of a natural experience I seek to acknowledge that we need not require wilderness to find nature, but that nevertheless, we can use guidelines recovered from wilderness experiences to differentiate between natural experiences, and experiences that may occur in other than natural settings.

Consider a visit to a small, local natural area, such as Pattee Canyon near Missoula, Montana. The landscape is not pristine. Instead, one may hike along a two-track road that still permits infrequent, authorized motor travel. Old clear-cuts are visible on some hills, and one generally hikes through second-growth areas. As one approaches Mount Sentinel, knapweed becomes common, and a knowledgeable observer may be aware of the debate regarding the extent to which Sentinel was wooded before the advent of the horse and before settlement by European-Americans. It is not an uncomplicatedly, purely "natural" scene.

Nevertheless.

As one breaks into a gentle sweat one is reminded that one is nearing the top of the open, sunlit, south facing ridge, that it seems unseasonably warm when one exerts oneself, that the Ponderosa pines are thick and must have stood in those same spots, looking down toward the valley for more than a century, that the fir exhibit the bunched branches that indicate mistletoe, that yesterday's shower has left the soil moist and dark. The caw of a crow maps its movement from tree to tree; it watches. One's every sense seems to dance around the landscape, following and abandoning trails as easily as a curious dog.

Grasshoppers remind one that the Clark Fork is just over the hill, and fishing is good this

year. One walks quietly and carefully out of respect for the land and its plants, and converse with companions in low tones almost instinctively. Although this is not the most natural landscape imaginable, it is still, clearly, a natural experience.

The impact of motorized vehicles on the natural experience

With this definition of the conditions of a natural experience before us, we need next to consider whether ORV drivers have the opportunity for natural experiences. Because ORVers are more intimately engaged with their machines than with their surroundings, I argue here that ORV drivers are unable to enjoy a natural experience in the sense described in this paper.

At the risk of restating the obvious, natural experiences take place in nature. In important senses, ORVers' machines are more properly considered their setting than the landscapes they drive through. On an ORV, one is generally more concerned and focused on one's machine, than on one's surroundings. One's senses are coopted by the machine: one hears only the machine, one smells only the machine, one feels only the machine, one tastes nothing. As Forest Service recreation expert Warren Bacon writes, "Even superficial visual experiences are unlikely while the equipment is moving because so much attention must be given to keeping the vehicle on the trail or primitive road," (Bacon 1996). Further, at high speeds, one cannot even see individual trees or objects, except in the far distance.⁴⁸ As Bob Marshall noted back in 1933, "A large fraction of the vacation

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⁴⁸Snowmobiles now reach speeds of 100 miles per hour, and Arctic Cat's 1997 sales brochure assures customers "The ZRs you'll find at any dealer are the same models

motorists enjoy what features of the forests they can observe at a velocity of over 40 miles an hour, but never really transfer their lives from the highway to the forest. The woods are only a pleasant background for a type of satisfaction which could be enjoyed with no essential diminution in any open-air environment. . . ," (Marshall 1933). Like the forwardonly view screen that car racing video games often offer, the only part of the landscape that really matters is the small tunnel directly ahead that dictates the bounds of possible lateral movement, and warns of hazards. It is difficult to countenance advocates' claims that they are enjoying nature, when their primary location is not nature, but a machine.

With a driver's focus on the machine, setting is reduced to a pretty backdrop against which one acts. The National Parks and Conservation Association captured this sense well when it described motor sports as an end-form of recreation—one where setting is secondary to performance:

[Personal water craft] are manufactured and marketed by makers of motorcycles, all-terrain vehicles and snowmobiles. They are aggressively marketed as 'thrill' vehicles capable of performing rodeo-like stunts. . . . By and large, people use PWCs to drive erratically and jump wakes, not to go fishing, access a favorite fishing spot, or appreciate the natural beauty of a park. . . . In this regard, PWCs are typically used as an end-form of recreation - a 'sport' - that may have very little or nothing to do with a particular body of water, natural setting or national park. (Pearl 1996)

This focus on machine, rather than surroundings, is clearly evident in magazines

that absolutely dominated the professional racing circuits across the world," (Oakes 1997a). As Minnesota snowmobiler Jay Pederson says, "[Many riders] buy the biggest, fastest sled they can get their hands on, and they drive it as hard as they can get away with," (Ibid.).

aimed at ORV users. The magazines are dominated by articles and advertisements about equipment, rather than setting or experiences. The cover of a September, 1997, issue of *ATV 4 Wheel Action*, for example, contains the following equipment-focused teasers:

New '98 Kawasaki Mojave 400? Find Out On Page 16

Inside The Exciting Honda Quad Tech 25OR!

• First Test! Hot New '98 Arctic Cat 454 4x4!

• Outrageous BMX Tricks on Quads!

How To Stomp Your Buddy's Quad!

Glove Shootout: We Pick The Hands Down Winner!

No articles in this magazine are devoted even to particular places, let alone natural places or experiences. Like the riders it is marketed to, this magazine focuses on machines, not nature.

To the extent that ORVers register landscape, it is generally as a challenging obstacle course rather than an inherently intriguing landscape. For ORVers, risk, tests of machine and rider, and challenge are generally the objectives of an outing, rather than interaction with a particular environment. In this regard, ORV drivers tend to reenact a frontier myth fantasy of conquering landscapes. That is, rather than enjoying the setting for what it is, they enjoy it because they can dominate it.⁴⁹

This is not to say that setting is completely irrelevant to drivers: a drive through the backcountry is more pleasant than such a trip would be without spectacular

⁴⁹Many nonmotorized users probably share in this desire to "conquer" landscapes. Their means of transportation, however, generally (there are exceptions) does not preclude meaningful natural experiences. Nor does their means of transportation alter the landscape traveled to the same extent, or disturb the experiences of others to the same extent as do motorized vehicles (again, there are exceptions worth examining individually).

background scenery. But desire for a pretty backdrop does not necessarily indicate interaction with that backdrop. As Dave Strong (1995, 30) writes, "Though motorcyclists and snowmobilers certainly register different qualities and claims of the landscape. . . less of the landscape matters to them than it does to those without the devices detaching them from the landscape."

Solemnity

Solemnity, another indicator of the opportunity for a natural experience, was defined as a common attitude among users-a reverence for the setting and an expectation of behavior that respects the setting. Motorized users do not demonstrate this respect in their own behavior, indicating that solemnity it not part of their experience. Further, ORVers disrupt solemnity for others both practically (such as through the use of loud engines) and, symbolically, through their irreverence.

This is more clear if we consider the way we express reverence and respect for things other than nature. One demonstrates respect to an elder, or to secular or religious symbols through quiet attentiveness and introspection. The Jefferson Memorial, for instance, is a startlingly quiet place. Though the mood at the memorial is not somber, those who enter are silent or converse only in low tones with their own party. They contemplate Jefferson's words, inscribed on the interior walls, or sit on the steps looking out across the Tidal Basin. Strangers rarely approach one another. The memorial functions as an embodiment of the nation and the ideas that gave it birth, and quiet contemplation is a demonstration of respect for those things. To shout, chug a beer and belch, panhandle, engage in horseplay, or otherwise focus attention on oneself would be disrespectful, and would distract others from their own preoccupations. Both the legal regulations and social conventions of the memorial censure such behavior.

The behavior of ORV drivers is directly at odds with this attitude of respect. The ORV driver is self-evidently focused on his or her machine, self-absorbed, using the country as an obstacle course, running rough-shod over nature rather than meeting it on its own terms. Rather than the tranquility that promotes self-reflection, the ORV driver is driven by adrenaline and adventure.

For most who seek out a natural experience, the setting requires a change in behavior. For ORVers, however, behavir is unmodified. An advocate of recreational motorized use in the backcountry once rebutted complaints about noisy machines by pointing out that technological noise is nearly ubiquitous: "Noise? The way I feel about it is that noise is not of any importance. We have automobiles on the highways and in our cities. We have sonic booms from jets," (Downey 1997). This ORVer is unable to differentiate between a natural setting and Gotham, and, accordingly, is unable to conceive of changes in behavioral norms in accord with quietude, or respect, or solemnity in the backcountry is baffling. ORVers do not encounter natural environments with the solemnity that would permit a natural experience.

The natural order of information

Focused on driving a machine, rather than evaluating and experiencing a landscape, ORVers are unable to enjoy the next criterion for a natural experience, the

natural order of information. The experience of an ORVer is a sequence of focused attention directed at various phenomenon, whether the necessity to change gear as the whine of the engine climbs higher, the rock that threatens to upend one's vehicle, the stink of burning gasoline, the constant buzz of vibrating floorboards, or the agitation of the body in response to the fluctuations of the machine. Constant, directed attention is required of the driver, and part of the rush is the risk, the constant sense that vital information is coming a little too fast to be safely catalogued. Riders do not typically enjoy the relaxation and opportunity to engage in involuntary attention that is part of the natural order of information.

Engagement with a natural community

It is difficult to engage with nature if one is barely experiencing it. An ORV driver, for instance, cannot hear the call of a veried thrush over the roar in his or her ears. Even at a stately fifteen miles per hour, the motorcyclist does not notice deer tracks in the path. One never encounters the marten that haunts the creek. One does not feel the brush of the moisture-laden breeze heralding a storm that every other forest denizen knows and responds to. One does not smell the tang of pine or the gentle perfume of flowers. For ORVers, these things do not exist. Engagement with the Other requires portions of the environment looking back. For ORVers, nature does not look back. Instead, ORVers are the successors of a time-honored American tradition of imperialistically conquering nature by seeing it, but not being seen.

Earl Pomeroy, in his history of tourism in the American West, notes that even in

the 19th century many tourists sought out luxurious spas rather than roughing it, thus meeting nature on their own terms, rather than risking encounters where nature might dictate terms. And the tourists, in culturally prescribed fashion, typically saw nature as if it were a framed and constructed picture: "My own impression' said a visitor asked for his sensations on first beholding the Yosemite, "so skillfully is the view arranged for pictorial effect, was that of looking upon some perfect picture," (Pomeroy 1957).

Art historian Barbara Novak argues that in the 19th century the Hudson River school sought to define national identity through views of natural landscapes (Novak 1980). In both painting and life Americans sought landscapes that were picturesque or sublime. Novak argues that Americans believed that paintings, if perfectly rendered, could reveal these same essences--that simply seeing the view, as rendered on canvas, granted the viewer a special grace: "The very act of observing nature was virtuous, because nature conveyed a 'thought which . . . is good. . . . ' 'Looking' became an act of devotion. The morally correct beholder partook not only of Nature's goodness, but of Deity." Viewing a well-rendered picture and actual nature yielded the same results because they believed that the view was all that counted. Actual presence at a scene, for these painters, yielded no more engagement with their subject than a view of the canvas.

Picturesque scenes frequently look out across open landscapes from a high vantage point. Hank Harrington argues that "The picturesque tends to freeze scenes simply by its remove. At a great distance, even significant action appears still," (Harrington 1995). In other words, any action in the view will not affect the viewer. One sees the picture without taking part in it.

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According to Harrington, both landscape painting and nature writing sanction "looking" as a form of power (Harrington 1995). In nature writing narrators imitate picturesque landscape paintings by describing scenes from on high and at a distance-by describing the views of landscapes, rather than interaction with them. Harrington argues that even in moving through a landscape, narrators often retain a position of privileged sight, e.g., they stalk and see bighorn sheep, while the sheep remain dumb objects, incapable of seeing or influencing the narrators.

Mary Louise Pratt connects this sort of description of nature with a will to power. Pratt characterizes the Victorians, for example, as using word paintings to survey and claim landscapes for England (Pratt 1992, 201). In what Pratt characterizes as the masterof-all-I-survey syndrome, travel writers consistently describe landscapes in picturesque terms. The picturesque simultaneously asserts dominion over the scene and reduces to insignificance the people and animals that have long inhabited these landscapes, that see it from other vantage points, and that may see the "discoverer."

To see connotes power. To see without being seen, establishes an unequal power relationship. In his description of the perfect prison, Foucault bases the power to control on the power to see without being seen. A prisoner in the Panopticon can be held powerless because "He is seen, but he does not see; he is the object of information, never a subject of communication," (Foucault 1979). By the same token, the viewer is not in communication with the subject. Invisibility renders the viewer an omniscient observer, rather than a participant, in a scene.

It is well-documented that people generally prefer surroundings that approximate

the picturesque: open, park-like landscapes with scattered opportunities for cover (see, for example, Kaplan and Kaplan 1989; and Ulrich 1981). Jay Appleton theorizes that we prefer in both paintings and life landscapes that appear favorable in the sense that they address our inborn "desire to eat, to drink, to sleep, to meet, to seek shelter and to escape from danger." (Appleton 1975, 66) Appleton suggests that we translate these desires to their simplest components, seeking landscapes that offer both prospect and refuge, where prospect is the ability to see predators, prey, resources, and refuge the ability to elude danger. The easiest way to do this, Appleton suggests, is to find a place where one can see without being seen. Appleton cites Konrad Lorenz as the inspiration for this articulation: "Before we break though the last bushes and out of cover on to the free expanse of the meadow, we do what all wild animals and all good naturalist, wild boars, leopards, hunters and zoologists would do under similar circumstances: we reconnoitre (sic), seeking, before we leave our cover, to gain from it the advantage which it can offer alike to hunter and hunted-namely, to see without being seen" (Lorenz 1952). One and a half centuries ago Emerson (1836) summed up this same idea by describing himself, while viewing a picturesque scene, as an invisible eyeball:

Standing on the bare ground--my head bathed by the blithe air and uplifted into infinite space--all mean egotism vanishes. I become a transparent eyeball; I am nothing; I see all; the currents of the Universal Being circulate through me; I am part or parcel of God. . . . In the tranquil landscape, and especially in the distant line of the horizon, man beholds somewhat as beautiful as his own nature. (Emerson 1836)

As Emerson elevates, he withdraws from the world. He no longer feels "mean

egotism," and by "I am nothing" he apparently means that physical discomfort and even awareness have diminished. Emerson is no longer a part of the scene, but one who rises above and surveys it without taking part in it.

In a context of struggle for fitness, the will to see without being seen is indeed a desirable characteristic. However, as Stephen Kellert notes, "The dominionistic experience of nature, like all expressions of the biophilia tendency, possesses both the capacity for functional advantage as well as exaggerated distortion and self-defeating manifestation," (Kellert 1993). With the aid of technology, we can ensure ourselves the place of a transparent eyeball, untouchable by the nature we view. Indeed, perhaps this explains the popularity of televised nature shows, and the presence of an IMAX movie theater on Yellowstone's doorstep.

In modern society, our will to see without being seen plays out not just in our hunger for "scenic vistas" and ubiquitous postcards and postcard-views, but in our willingness to pay for the use of aircraft. There are currently as many as 1,000 sightseeing flights per day over Grand Canyon National Park, and the National Park Service is concerned that the ability to experience "natural quiet" in our national parks is threatened by the growing presence of sightflights at numerous national parks, including, in the Northern Rockies, Glacier National Park (National Park Service 1994). Sightflights offer a continuous sequence of picturesque views. At the same time, they avoid many of the complications that tourists who walk the Grand Canyon endure, e.g. heat, the risk of twisting an ankle in rough terrain, physical exertion. In every meaningful sense, they remove passengers from the scene they view, remove passengers from the possibility of

being seen or acted upon by the land, by the climate, by wildlife. Aircraft are the technological equivalent of Emerson's floating eyeball.

ORVs are essentially a low-slung sightflight. ORVs make seeing the backcountry more convenient, inasmuch as you don't have to sweat to get places, you can go a long distance in a short time, and you don't have to pay attention to things you could only learn in interaction with your environment, like how snow of a particular moisture content and structure requires a certain kind of wax for your skis. They deliver the essence of moving through a winter/summer/mountain/meadow landscape without the effort, just as Time-Life Video delivers killer whales without the boat ride. They deliver one triumphantly to a scenic destination, where one turns off the engine, dismounts and surveys the landscape before remounting and driving back.

As ORV technology advances, we can expect that the machines will ever more closely approximate the experience of sightflights, making the world they drive through less and less relevant. New snowmachines, for instance, already have heated seats and hand grips so you can ignore the winter conditions that make them possible, and they won't bog down in even the deepest powder, so you can ignore snow conditions. The logical end game of ORV engineering is a device that insulates you from the vagaries, inadequacies and inconveniences of the real world to the greatest extent possible.⁵⁰

Driving through landscapes as a transparent eyeball precludes the opportunity of

⁵⁰Rightfully, ORV advocates might argue that artificial fibers and freeze-dried meals insulate hikers from the nature they profess to seek out. In fact, there are many ways one can preclude or discourage engagement with nature short of ORVs. Motor vehicles, though, more so than any other device, make time, distance, and one's embodied physicality irrelevant, and thus, difficult if not impossible to engage with.

engaging with the other-in fact, the whole aim of such a viewpoint is to prevent the other from impacting one. ORVs and sightflights epitomize the conquistador's view of nature, which deliberately precludes the possibility of meaningful engagement. Rather than promoting full sensory engagement with nature and respect for the other, ORVs replicate a driving/adrenaline experience that is commonly available in many different forums. To the extent that ORV drivers interact with nature, their relationship is one of assumed domination. To the extent, then, that we wish to use our natural areas to promote natural experiences, there is no compelling reason to provide for the ORV experience.

ORV impacts on setting for nonmotorized observers

Simply because an activity does not promote natural experiences does not necessarily mean that it ought to be prohibited in natural places. ORVs, on the other hand, not only fail promote a natural experience for their users, but prevent others from enjoying the same.

A considerable body of evidence demonstrates that nonmotorized trail users intensely dislike encountering motorized vehicles. A Montana trail users survey, for instance, found that 89% of walkers found it disturbing to encounter motorcycles on trails (McCool and Harris 1994). As Knopp and Tyger summarized the issue, "The motorized vehicle literally destroys the quiet and undisturbed natural environment the self-propelled recreationist is often seeking," (Knopp and Tyger 1973).

The findings of recreation managers and environmental psychologists confirm that more than dislike for particular machines is at work. As recreation expert Bill Hammitt wrote, "It appears that natural environments, of which wilderness areas are the ultimate example, by definition lack human-made intrusions and noises that inhibit individual freedom of choice, tranquility, and peace of mind," (Hammitt 1994).⁵¹ As Ulrich (1993) concludes:

the 'natural' domain appears to be broad for people in industrialized countries, extending considerably beyond wilderness to include many obviously human-made settings such as pastures, fields planted in cereal crops, wooded parks, and even golf courses. In very general terms, European, North American, and Japanese adult groups tend to respond to scenes as natural if the landscape is predominately vegetation, water, and mountains, *if artificial features such as buildings, automobiles, and advertising signs are absent or inconspicuous*.

ORVs alter settings in part because they symbolize all that motor vehicles mean in our society. ORVs roar, move and are powered exactly like other motor vehicles. Today's ORVs are used to carry heavy payloads, including entire deer carcasses and massive amounts of camp equipment. ATVs reach speeds of up to 60 miles per hour, motorcycles go faster, and snowmobiles can reach speeds of up to 100 miles per hour. Although there are minor difference between automobiles and ORVs, the similarities are far more striking and compelling. ORVs are motor vehicles.

As motor vehicles, ORVs symbolize perhaps more than anything else the mobility, highways, pavement, frantic isolation, and pressure of modern life. Wendell Berry suggests that the sound of motors symbolizes modernity, placing one squarely in the 20th century in an otherwise timeless landscape, that the distant roar of a highway "is the voice of the

⁵¹For more information on displacement, please see Chapter Five.

American economy; it is sounding also wherever strip mines are being cut in the steep slopes of Appalachia, and wherever crop land is being destroyed to make roads and suburbs, and wherever rivers and marshes and bays and forests are being destroyed for the sake of industry or commerce," (Berry 1994). While motor vehicles may also symbolize good things, in a natural context they stand out like a sore thumb, indicating that this natural landscape is, in fact, an extension of the downtown traffic jam.

Berry's insight that the sound of motor vehicles indicates commerce is important. As early as 1855, Wilhelm Riehl, in his *Natural History of the German People*, plotted a series of oppositions between market-shaped and natural things and noted that "the 'road' connected producers and consumers while the 'path' connected villagers and citizens," (Schama 1995). ORVs turn paths into roads, converting their purpose from one of carrying people, to one of conveying goods. In this case, the good conveyed is usually a person, or an experience, but the principle is the same

In this light, we can understand how motorized vehicles catalyze and symbolize the commodification of nature. Commodification separates ends from means, and allows one to purchase a result (Borgmann 1984). When something is reduced to a purchasable result, its identity, integrity and independence are undermined. When the experience of "knowing" a mountain can be purchased for the price of a gondola ticket, or when connection to a remote winter landscape is available for the price of a rented snowmobile, these things lose their dignity and become simple commodities. ORVs create for their riders, and symbolize for those that see them, an amusement park experience where "skills, hardships, ecstatic experiences, and long term commitment to a place" (Cypher and Higgs

1997) are replaced by the price of admission.⁵² ORVs provide what Borgmann might describe as "a disposable experience that is discontinuous with its environment," and the result is profoundly unfulfilling (Borgmann 1995).

The natural experience is often seen as a refuge from excessive commercialization and commodification, meaning that selling natural experiences undermines attempts to find refuge from such things. And in the public eye, commercialization and commodification are tied to motor vehicle access. Thus, Sax rails against national parks filled with "traffic jams, long restaurant and shop lines, noise, congestion, litter, and banal standardized tourism. The style and rhythm of urban life have been imposed on highly scenic backdrops. On the California desert, or in the snow-covered north country, recreational vehicles impart the noise, intensity and high-speed freeway style onto the public lands," (Sax). The presence of motorized vehicles degrades and undermines the naturalness of a setting regardless of how drivers deport themsevies.

ORVs are not part of a natural environment.

Solemnity

As noted earlier, ORV drivers do not encounter nature with a sense of solemnity, or gestures of respect, because they are focused on their machines rather than their

⁵²ORV marketers explicitly recognize the connections between commerce and ORVs. Wallace, Idaho, for example, promotes itself as the heart of 1,000 miles of ATV trails and "the world's largest snowmobile destination," with trails on public land maintained by "corporations such as Ford, Isuzu, and Coca Cola." The area, Western Montana and North Idaho, is described as "the Waikiki of the 21st Century . . . a recreation preserve . . . the world's largest Eco-Disneyland," (Silver Country Inc. 1997).

surroundings. Likewise, nonmotorized recreationists often feel it necessary to keep motorized vehicles in sight, if only for safety's sake. The noise of the ORV demands not just the ORVers attention, in other words, but that of other recreationists. Rather than focusing on flushing grouse, or sighing tree limbs, or the smell of flowers, nonmotorized recreationists are forced to focus on the vehicles of others. In this respect, auditory or visual contact with ORVs disturbs the tranquility of natural scenes, and detracts from the solemnity of the experience for others.

The irreverence that ORV users are perceived to display exacerbates the effect of the machines. That is, above and beyond physical distraction, the display of irreverence violates the social conventions of the experience, thus disturbing nonmotorized users. By way of analogy, consider the efforts of modern civil war soldiers to construct their events. When enthusiasts recreate civil war battles they often set up gates where they regulate the kind of equipment that may be brought into camp. Interested in preserving the authenticity of the experience, they recognize that the sight of General Grant cooking on a shiny green Coleman camp stove will undermine the integrity of the experience they are trying to live. In the same way, motorized vehicles are an affront to the attempts of others to enjoy a natural experience.⁵³

Identifying the conventions that pertain to natural experiences is not easy, and they are not universal to either people or places. Yet there seems to be near unanimity among

⁵³In many settings, from the dinner table to church, there are a set of conventions or social rules that ensure an appropriate experience. As Ed Abbey (1968, 60) wrote, "We have agreed not to drive our automobiles into cathedrals, concert halls, art museums, legislative assemblies, private bedrooms and the other sanctums of our culture; we should treat our national parks with the same deference, for they, too, are holy places."

nonmotorized recreationists that motorized vehicles break the rules in natural places. A Forest Service manager proposing conventions to protect landscapes that preserve opportunities to build a "spiritual" connection to the land, for example, concludes that ORVs are self-evidently inappropriate: "motorized travel and high-tech artifacts are correctly perceived as extensions of another world into that landscape,"(Magary 1996). Motorized vehicles violate the solemnity of an area without even recognizing that such solemnity may exist or be valuable to other users. Motorized vehicles, be they helicopters overhead, snowmobiles off in the distance, or jet-skis buzzing your fishing spot, preclude solemnity, and, accordingly, are fundamentally incompatible with a nature experience.

The natural order of information and opportunities for engagment

Wilderness users typically say that they seek tranquility and peacefulness in the backcountry (Hammitt 1994). This, I believe, is in actuality a desire to enjoy the natural order of information. Users associated this tranquility less with an absence of people's presence, as with an absence of technological noise: "The lack of man-made noises seemed more important to users than man-made intrusions [such as structures]," (Hammitt 1982). In other words, a person may cheerily integrate a log cabin into the natural landscape without significant disturbance, but not the beeping, belching and roaring of the bull dozer possibly used to build it. Part of the reason for this is doubtless the conventions that govern the experience. Also important, though, is that a bulldozer disrupts the natural order of information and demands focused attention where a log cabin does not. As noted, physically, motorized vehicles break the spell of involuntary attention by demanding very focused attention. As Hammett observed, "noise seems to be more of an intrusion to thought and attentional states" than other evidences of "the hand of man," (Hammitt 1982). ORVs, their presence heralded by their unmistakable whine, demand focused attention in a way that immobile, static and unremarkable structures do not. No one walking or skiing a trail will fail to focus on the approach, pass and departure of a motorized vehicle. Since some vehicles can be heard for miles in either direction, depending on terrain, this is problematic. At best, one is momentarily annoyed and distracted from one's reverie to watch, say, a motorcycle race by. At worst, the presence of numerous bikes, ATVs or snowmobiles raises a constant whine, the constant prospect of contact, and constant demands for focused attention. ORVs disrupt the natural order of information for observers, and eliminate the possibility of a natural experience.

ORVs also decrease opportunities for nonmotorized recreationists to engage with nature because engagement depends upon a certain respect for the other. To the extent that ORVs assert the dominance of a sightflight view of nature, to the extent that they symbolize traffic jams, consumption and the commodification of experience, to the extent that they violate the conventions of solemnity, they prevent the change in mind set that is necessary to acknowledge the existence and importance of the other. As Aldo Leopold summed up the demoralizing effects of motor vehicles on muscle-powered recreationists, "It is bootless to execute a portage to the tune of motor launches, or to turn out your bell-

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mare in the pasture of a summer hotel. It is better to stay at home," (Leopold 1949, 270).

ORV drivers cannot enjoy the identified elements of a natural experience. More, they disrupt each element of a natural experience for others.

Chapter 4

WHY DOES A NATURAL EXPERIENCE MATTER?

People often value natural experiences, and even the simple view of natural landscapes. Americans seem to understand this at a gut level, as they build homes on creeks, pay top dollar to back their lots onto national forests, drive thousands of miles to visit national parks, watch hundreds of nature shows and visit zoos in greater numbers than attend all major sporting events in the country combined (Wilson 1993). Scenes of nature resonate deeply in our psyches, from the scenes of Mark Twain's Mississippi to the mountains of Montana.

This liking for natural landscapes appears to stem from a deep-seated *need* to engage with nature. I will argue in this chapter that natural experiences are good for us, mentally and physiologically; that, if we pay attention, we have much to learn from nature; that the engagement with the other that comes with natural experiences is invaluable; and that nature provides an invaluable referent, or anchor to reality in an increasingly manufactured world. We ought to protect and provide natural experiences not just because many Americans enjoy them, but because they lead to healthier, happier lives.

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Spirituality

Many sojourners in the woods (or deserts, or prairies) feel a sense of being part of something greater than themselves. It is a feeling of special connection to landscape, often described as spirituality. Consider the following passage:

I like to go up high enough to see all God's creations. And the more you see of God's creations the more you realize of the gift to you...

If you're there for three or four days. Your need as each day goes on gets so strong and you're wanting so much help that you actually communicate with your creator. And the place to do it is up high, in the mountains, that is a cathedral, without a roof, without a wall, it's forever, as far as you can see is what he has given you....

And everything about you, especially the animals, the insects and the birds, they come to you, because they're curious, and when they come to you and if you concentrate strong enough you can communicate with them, you can see how they live. They're stronger than we are. And you can concentrate on their ways, you can find ways to survive. . . .

This is how I see that mountain.

This description of the Pryor Mountains, by John Pretty On Top, a Crow Indian (Nabokov and Loendorf 1994, 97), speaks to our special, spiritual relationship with the natural world.

Recently, several attempts have been made to valuate spirituality, incorporating this fairly vague sense of importance into a utilitarian calculus. These attempts reveal a halting consensus regarding the meaning of spirituality and an almost unanimous esteem for its value, even among social scientists. Stringer and McAvoy, for instance, called in 1992 for further research to enable managers to plan conditions that promote "spirituality" in adventure recreation programs (Stringer and McAvoy 1992). They defined spirituality a vague, non-secular way as "an awareness of and fusion with a power or principle greater than the self. Spirituality has often been described as that which gives meaning and purpose to life."

In 1996, a collection of Forest Service recreation managers and outside professionals published a book exploring the spirituality inspired by or found in nature, and ways to protect and provide for spiritual experiences on public lands. Spiritual meanings, as the editors defined them, "refer to the broad range of hard-to-define and hard-to-measure values and benefits that relate to the deep psychological or higher order human needs that characterize what is called in this text the 'human spirit: and that is derived in part from humankind's relationship with the natural world," (Driver et al. 1996).

This sense of something secular but awe-inspriring and almost inexplicable pervades the volume. Jennifer Friesen, for example, defined spirituality as "both the sacred and the secular. . . . A longing for transcendence through connection with something infinitely larger and more permanent than ourselves; a reverence and wonder for something we can never reduce to mere data; or renewal of the human spirit, a mysterious sense of well-being in the world,"(Friesen 1996).

Similarly, Holmes Rolston, a prominent environmental philosopher, argued that spirituality "is the state of being grasped by something unconditional, holy, absolute" (Rolston 1996). Rolston asserted that nature inspires spiritual experiences: "Ultimately, there is a kind of creativity in nature demanding either that one spells nature with a capital N, or pass beyond nature to nature's God. If anything at all on Earth is sacred, it must be

this enthralling creativity that characterizes our home planet. If anywhere, here is the brooding Spirit of God."

The volume is less remarkable for its content than its intent. Prominent agency recreation managers are attempting to translate the sense of transcendence that many people experience when they engage with nature into terms meaningful to line officers. Their failure to adequately do so-adequate in the sense of providing either a narrow and unassailable definition of spirituality, or a simple equation which spits out the "spiritual value" of a particular tract of land-is more a measure of the difficulty of the task than the competence of the contributors. The front plate of the book contains some words from Norman Maclean, and the entire volume might be seen as an attempt to explain, as social scientists, why his words move us:

Then in the Arctic half-light of the canyon, all existence fades to a being with my soul and memories and the sounds of the Big Blackfoot River. . . . Eventually, all things merge into one, and a river runs through it. . . . I am haunted by waters," (Maclean 1976)

Some psychologists speculate that natural settings may promote "higher order cognitive functions," e.g., creativity (Ulrich 1993). Some biologists speculate that we have an inborn natural preference for natural settings (Wilson 1984), and it is conceivable that that preference manifests itself as "spirituality." Regardless, that so many people from so many different disciplines and cultures sense a similar spiritual value should be taken as evidence that something important is at stake. That we have difficulty defining, explaining, or putting a dollar sign on this experience speaks to its inestimable value. There is something spiritually inspiring in nature, and we would be fools to throw away anything that can inspire us in this drab, cynical world.

It is admittedly difficult to incorporate spirituality into a calculus of values. In that regard I can only suggest that, first, we acknowledge as a concept that spirituality matters, and turn to regional histories and local wisdom to explain the value of specific landscapes.⁵⁴ That is, that we pay attention when people say that a particular landscape is sacred to them. This, in fact, seems to be occurring both within academia, the popular press and public land management agencies. Second, we need to protect not just "sacred" landscapes, but the opportunity for spiritual experiences. Spiritual experiences—in this context—result from natural experiences.

Our need for the Other

We need the Other. We need that which is different from humanity, that from which we can gain insight both with regard to the way we do live, and the way we could live. We need to be able to recognize and accept the other in order to build an ethical relationship with our world. Because nature uniquely represents this "other," we need it as a context within which and against which to define ourselves.

Nature, as the other, provides a context in which humans can place themselves. Animals most strikingly fulfill this function. Some researchers cite the prominence of

⁵⁴Every Morning of the World is an admirable attempt to explore the spiritual value of the Pryor Mountains to one people within the confines of traditional scholarship and public land management agencies. Less scientifically rigorous, but no less powerful, volumes seem spawned each day in different regions.

animal metaphors in many cultures and languages as evidence that people learn much from the natural world. In English, for example:

We duck our heads, crane our necks, clam up, crab at one another, carp, rat, crow, or grouse vocally. We cow, quail, toady, lionize, and fawn in servility, admiration, and fear. We fish for compliments, hog what should be shared, wolf it down, skunk others in total defeat, and hawk our wares. We outfox and buffalo those whom we dupe; we bug and badger in harassment. We hound or dog in pursuit, bear our burdens, lark and horse around in frolic. We bull, ram, or worm our way, monkey with things, weasel, and chicken out. We know loan sharks, possum players, and bullshitters. (Shepard 1996)

Shepard argues that this is not merely a quirk of symbolism, but that a good portion of our stories, games and visual imagery stem from interaction with the animal world around us. The extinction of wild nature, he argues, will leave our language and lives impoverished: "The loss of the wild others leaves nothing but our own image to explain ourselves by-hence empty psychic space," (Shepard 1993).

Similarly, Stephen Kellert found that "animals constitute more than 90 percent of the characters employed in language acquisition and counting in children's preschool books," (Kellert 1993). Kellert suggests that symbols borrowed from nature form our primary method of communication and thought. The loss of natural experiences, again, threatens to impoverish our languages and lives: "Plastic trees, stuffed animals, and their fabricated kin seem but a meager substitute . . . likely to result in a stunted capacity for symbolic expression, metaphor, and communication," (Kellert 1993).

Without arguing for the rather sweeping conclusions that Kellert and Shepard

reach,⁵⁵ there is good evidence that we learn a good deal of what we think we know about the world from our interaction with nature. We recognize parts of ourselves in our animal brethren, both positive and negative, and recognize possibilities. Nature "is a successful model of many things that human communities seek: continuity, stability and sustenance, adaptation, sustained productivity, diversity, and evolutionary changes," (Sax 1980a)p46. Seeing these things in the larger context of "life," we can, perhaps, better live our own lives, and construct our own societies.

The only way for animals, or nature more generally, to serve this function is if it retains its independence, integrity and identity. We cannot, for instance, learn from Walt Disney World's Wilderness Lodge what we could learn from a more genuine experience in a wilderness area (Cypher and Higgs 1997), because the Wilderness Lodge does not retain its independence and integrity, and its identity is wholly defined by our engineers (or imagineers). Thomas Birch argues that in order to maintain the law-bringing order and "reality" that modern western culture espouses, our culture must leave some space for the other: "In order to do the job of preserving its reality principle, and in spite of its need to simulate or define the other according to its own models, *the imperium must leave at least enough otherness intact to maintain the glance of the other*," (Birch 1990).

It is in exactly these terms, in terms of being seen by the other, that art critic John Berger argues strikingly for the maintenance of wildness. Berger believes that a relationship of observation, rather than interaction, inevitably leads to disappointment,

⁵⁵Kellert and Shepard both conclude that the prevalence of animal metaphor in speech supports the biophilia hypothesis.

because it removes the other. Something that has lost its identity, integrity and independence cannot look back in any meaningful sense. For example:

The zoo cannot but disappoint. The public purpose of zoos is to offer visitors the opportunity of looking at animals. Yet nowhere in a zoo can a stranger encounter the look of an animal. At the most, the animal's gaze flickers and passes on. They look sideways. The look blindly beyond. They scan mechanically. . . . Looking at each animal, the unaccompanied zoo visitor is alone. (Berger, 26)

Finally, the zoo visitor asks "Why doesn't he move? Is he dead? Why are these animals less than I believed?" (Berger, 21) Whether in a small plot of dirt, an orchard, or a million acres of roadless wildlands, we require some opportunity to encounter other life. And the wilder the nature, the more (and more obviously) it looks back.

Building an ethical relationship with the world

Many conservationists are concerned with the question of an appropriate relationship between humanity and nature. Deep ecologists, for example, attack anthropocentric world-views, "rejecting the position that some life forms (such as humans) have greater inherent worth than other life forms," (Devall 1988). Reams of paper have been devoted to trying to decide whether humanity is part of nature or apart from it. Ecofeminism is concerned with the relationships–"historical, symbolic, theoretical–between the domination of women and the domination of nonhuman nature," (Warren 1990).

Many of these discussions revolve around a central supposition that our

relationship with nature reflects and is indicative of our relationship with other "others." Thus, Warren (1990) argues that an oppressive conceptual framework of domination makes possible both sexism and the exploitation and degradation of nature. Thus Donald Worster (1994), building on the work of mainstream conservation writers like Barry Lopez, argues that until we build a concept of community that includes other nonhuman living beings, we will fail to build a community that includes other sexes and cultures.

Worster's arguments are descended directly from Aldo Leopold's. Leopold (1949, 239) defines ethics as living in a cooperative community, as accepting "a limitation on freedom of action in the struggle for existence." Thus, "the land ethic simply enlarges the boundaries of the community to include soils, waters, plants and animals, or, collectively: the land. . . . In short, a land ethic changes the role of Homo sapiens from conqueror of the land-community to plain member and citizen of it. It implies respect for his fellow-members, and also respect for the community as such," (Leopold 1949, 240).

Using the land ethic we can discuss our obligations toward others without making claims about the rights of others, or addressing the need for including feminism in an environmental ethic, or of resolving epistemologically whether we are part or apart from nature. That is, rather than arguing about exactly how we ought to conceive of our relationship with nature, most people can agree that we ought to respect other life. To an ethical being, the recognition of others implies obligations to those others, such as respect for the autonomy, the freedom and the rights of each other member. Recognition of the natural community does not imply that humanity ought to return to hunting and gathering (or to forego hunting) any more than it is to suggest that the lion ought to eat grass. But it does demand that careful consideration be given to the needs of other beings.

Without a change in the way humanity inhabits the world, we will face, at best, an impoverished future, with a lower quality of life, spiritually, physically and economically. To slow down our pell-mell progress toward ecological disaster, it is vital that we begin to forge a more ethical relationship with the world around us. The easy way to inculcate this, the easy way to help people feel this, is to show them that there are others in nature with whom we can and should meaningfully communicate. We need to let people engage with a natural community of life that, in and of its own dignity and commanding presence, demands respect. Recognition of the other, through engagement with it, is a necessary first step toward respecting it. Preserving meaningful natural experiences is vital if we hope to preserve any meaningful portion of nature.

Conclusion

It is difficult to answer the question "what good is nature?" adequately, in the sense of faithfully articulating all the reasons nature is so important to us. The opportunity to engage with nature is fundamental to our happiness, our health, and possibly our survival. It is vital that we protect areas where we can still encounter plants and animals.

Chapter 5

The appropriate role of ORVs in national forests

America's national forests were originally set aside to protect timber reserves and watersheds. They were also reserved as a place for Americans to rediscover a nature believed lost with the end of the frontier. When Teddy Roosevelt withdrew the bulk of today's national forests, he conceived of the forest reserves as a place for blue-blooded Americans to keep their blood red by testing their resourcefulness and self-reliance through hunting and the cowboy life. As Arthur Carhart foresaw years ago, "It is to the great forest lands of the nation that the people will ultimately have to turn to find the outdoor recreation that they crave," (Carhart 1920).

There is no doubt that recreation has long been considered an important purpose of our national forests. Already in 1912 the Chief of the Forest Service included an update on forest recreation in his annual report (Cate 1964, 44). Outdoor recreation was given statutory recognition as one of the purposes of the national forests in 1960 with passage of the Multiple-Use and Sustained Yield Act [Public Law 86-517'; see also \Cate, 1964 #206, 245]. At issue is what kind of recreation the national forests should provide. In this regard, we need to consider the implications of the previous two chapters.

In chapter three we found that natural experiences are available in natural settings,

where there is characteristic solemnity, where one receives the natural order of information and where there are opportunities for engagement with the other. These criterion are met uniquely often and compellingly on large tracts of public land, such as national parks and national forests.

In chapter four we found that natural experiences are extremely valuable for people, if not vital. Yet natural experiences seem to play an increasingly small role in Americans' day to day lives, despite their documented importance.

These two paragraphs, juxtaposed, suggest an obvious conclusion: that national forests should be used to provide natural experiences to the greatest extent practical. That is, if natural experiences are extremely valuable, and rarely encountered, and our national forests can provide these experiences, they should do so. As Elizabeth Roberts writes (1996), "Those who manage our public lands have the responsibility to ensure that their management policies do not obstruct or degrade the public's deep-seated need for psychological and spiritual connection to (as well as physical contact with) the land." In this chapter I will review this argument by considering, in turn, the unique ability of the national forests to provide natural experiences, public expectations for our national forests and, finally, in light of this information, the appropriate role of ORVs on our national forests.

National forests and the natural experience

The concept of the national forests as a reserve for natural experiences, present since Roosevelt's day, was strengthened by the wilderness movement, as various

administrative versions of wilderness were implemented as much to protect wilderness recreation as to protect "pristine" land. Aldo Leopold, for example, along with Arthur Carhart the first wilderness advocate within the Forest Service, argued for wilderness as much to preserve the wilderness experience as to protect ecological integrity. Robert Marshall, co-founder of the Wilderness Society and name-sake of the massive Bob Marshall wilderness complex in northwestern Montana, actually defined wilderness in terms of nonmotorized recreation, suggesting that "Wilderness areas' are regions which contain no permanent inhabitants, possess no means of mechanical conveyance, and are sufficiently spacious for a person to spend at least a week of active travel in them without crossing his own tracks," (Marshall 1933, 177). In fact, Marshall saw the designation of wilderness areas less as a measure to protect natural forests, as to protect natural experiences: "Of course, wilderness areas may contain within their boundaries much that is primeval. Their chief function, however, is not to make possible contact with the virgin forest but rather to make it possible to retire completely from the modes of transportation and the living conditions of the twentieth century," (Marshall 1933, 178).

Wilderness is the most rigorous protection available for the natural experience, but early conservationists saw that designated wilderness would not be enough. Thus, Marshall proposed protecting natural experiences of differing "wildness," so that even those unwilling to stray more than an easy walk from their cars could encounter the quietude and magnificence of nature.

The vast majority of our national forests retain enough integrity to provide a natural setting for recreation. They also seem to provide an environment that uniquely

seems to inspire solemnity, a sense of reverence, opportunities for relaxation and selfreflection. With their scale national forests often seem to swallow sound and movement, reducing one to irrelevance, leaving one listening to what legendary Ovando, Montana outfitter Hobnail Tom Edwards called the "hush of the land" (Roth 1984, 28).

Further, huge portions of our national forests (such as roadless areas) retain their integrity, identity and independence, providing unparalleled opportunities for engagement with nature. Rich with wildlife, riven with tumbling trout streams, the home of trees hundreds and even thousands of years old, national forests offer an area of plants, animals and land forms with commanding presence and telling continuity with their surroundings. In the canvas of erosion and geologic forces visible on a canyon wall, in the grace of poised marten, in the rich organic smell of loam, moisture, rotting leaves, cedar shavings and pine tar, and in a hundred other encounters one can find other things looking back at us with a dignity that has much to teach us.

Finally, as something approaching the ancestral environment, our national forests provide the natural order of information. They seem filled with landscapes routinely able to inspire involuntary attention, uniquely able to attune one's body to its environment in a fascinating yet relaxing fashion. The national forests, then, meet all the criterion necessary to provide natural experiences.

Public expectations

To protect the opportunity to enjoy natural experiences in national forests, we need to limit the use of ORVs. While there may be some appropriate use of ORVs off-

road, ORVs are basically inappropriate on trails. In fact, ultimately, ORV trail use is an oxymoron: ORVs convert trails into primitive roads wherever they go. There are more than enough existing roads on national forests in Region One, but, too few nonmotorized trails. Motorized vehicles should generally be confined to existing roads, and prohibited on trails.

This is an intuition that much of the general public seems to share. The most extensive public survey regarding attitudes toward ORVs in the Northern Rockies of which I am aware was conducted by David Scudder, of Boise State University, for the Idaho Public Policy Survey Group (1997). The study found remarkable support for the restriction of off-road vehicle use, and clearly indicated that the public believes automobiles and ORVs to be of a kind.

More than 66% of Idahoans, for example, "would oppose the use of motorized off-road vehicles such as ATVs or motorcycles when roads are closed to cars and trucks." More than two-thirds approve of the use of non-motorized vehicles such as bicycles on closed roads, 91% approve of the use of pack stock on such roads, and "there is almost no disagreement that foot traffic should be permitted during road closures."

Because the survey pertained largely to hunting, several questions were asked regarding the acceptability of limiting the use of ORVs off-road during hunting season. Nearly 70% of Idahoans would support limiting the use of ORVs off-road to small geographic areas during hunting season, and "over seventy percent of Idahoans would support restrictions on the use of motorized vehicles off of the roads during hunting season in large geographic areas such as watersheds or entire game management units. The clear implication of the survey is that the public is in favor of area restrictions of ORVs, does not necessarily approve of the use of ORVs off-road, and believes ORVs have much more in common with automobiles than with any form of muscle-powered locomotion.

Montana FWP, 1998

A survey made public by the Montana Department of Fish, Wildlife and Parks (FWP) in 1998 also revealed deep public doubts regarding the use of ORVs on public trails (FWP1998). In the poll, only 53% of Montanans approved of legal motorized trail recreation. 41% of Montanans disapproved of the legal use of all-terrain vehicles on Montana trails. More Montanans strongly disapproved of the use of ORVs than strongly approved their use.

Although barely acknowledged by FWP in its report, these numbers reveal an astonishingly deep seam of public doubt regarding a major public program. More than 40 percent of Montanans flat out disapprove of a use that is currently legal on 57% of the state's national forest trail miles, and to which FWP devotes more than one million dollars a year. It is an astonishing show of disapproval, revealing considerable public doubt about whether ORVs should be permitted on public trails at all, let alone to the massive extent currently allowed.

The results are even more astonishing in light of the question's context. The two preceding survey questions asked whether survey respondents approved of legal hunting and legal fishing, respectively. Respectively, 92% and 95% of Montanans approved of

these activities. In this context, for 41% of respondents to disapprove of the status quo, to disapprove of a *legal* use of national forests implicitly compared with hunting and fishing, reveals considerable disapprobation of the status quo.⁵⁶

A & A Research, 1991-92

It is in light of general ignorance regarding the scope of ORV use on national forests that a series of reports by A & A Research in the early 1990s become remarkable. Commissioned by the Forest Service, the Kalispell company surveyed area residents in several general regions of the Northern Rockies corresponding to specific national forests. In eight of these surveys, A & A asked respondents to respond to the statement: "More areas of the [Bitterroot, Gallatin, etc.] National Forest

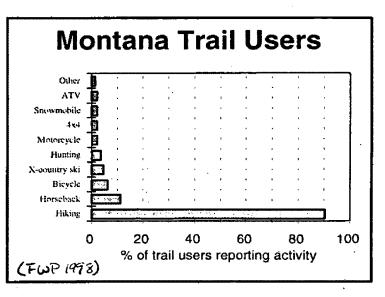
Table 2	
A & A Research 1991-92 Respondents opposed to increasing areas open to motorized recreation:	
	72%
Bitterroot NF	67%
Deerlodge NF Flathead NF	68%
Gallatin NF	78%
Kootenai NF	67%
Nez Perce NF	60%
Northeastern M7	76%
Panhandle NF	60%

should be available to motorized recreation, such as snowmobiling, motorcycling, and

⁵⁶Further, probably very few respondents have a clear sense of the massive proportion of trails devoted to motorized recreation. To provide an idea of the baseline of ignorance, respondents had to be advised that Glacier National Park and Yellowstone National Park are not state parks, before being asked whether they had visited a state park this year. In the survey, respondents generally apeared to trust FWP when ignorant of given programs. For example, two-thirds of respondents were satisfied with efforts to educate Montana residents about the state's parks, fish and wildlife resources, while 70% were satisfied with efforts to increase public awareness of those resources. Yet 74% of respondents knew little to nothing about the state's Parks Program, and 78% knew little to nothing about the fisheries program. Clearly, in the absence of knowledge, respondents are willing to assume that the land management agencies are doing their job responsibly.

other off-road vehicles." In every case, at least 60% of respondents disagreed with the statement. In Montana, in no case did fewer than 67% of respondents disagree with the statement. Table 2 lists the regions/national forests regarding which local residents were surveyed, and the percentage of respondents who were opposed to increased motorized use.

It is impossible to surmise from the surveys how respondents would have reacted to a proposal to decrease areas available to motorized use. It is safe, however, to surmise that respondents were unaware of the high percentage of



trails that permit motorized use in the respective forests-numbers as high as 71% of total trail miles on the Gallatin, including 96% of non-wilderness trail miles. In essence, then, one must assume that respondents are opposed to expansion beyond a baseline number considerably lower than that where motorized use is already permitted. These numbers probably represent strong disapproval of permitting some type of motorized use on 58% of total trail miles in Region One.

User numbers

Broad disapproval of motorized use on our national forests is further evidenced by the low numbers of people who actually use ORVs. According to the Montana Department of Fish, Wildlife and Parks (FWP1998), only 2% of Montanans use ATVs, only 2% snowmobile, only 2% use off-road motorcycles and only 2% use 4x4 vehicles on Montana trails. In contrast, 90% report hiking on trails, 11% ride horses and 4% crosscountry ski. Similarly, FWP found in 1988 that 90% of total trail use in Montana is nonmotorized (FWP1992).⁵⁷

These low user total numbers illustrate both the disproportionate power and disproportionate use needs of motorized users. That is, even with drastic increases in motorized use (see Chapter 1), motorized use remains low as a percentage of total use. Even with increased numbers, motorized users are a very small minority of those Americans who use our national forests.

However, motorized users have many more impacts and demand far more resources than other users. Where a hiker may walk 10 miles in a day, passing relatively few other walkers, an ATV may go 60 miles in a day, passing virtually every musclepowered recreationist on the trail. In effect, ORVs shrink the public domain. Although there are actually relatively few motorized users, with their big rigs and trailers, their loud machines and flashy outfits, those few can have a great impact on other users.

Displacement

Strong disapproval of motorized use of trails may be evidenced further by

⁵⁷A 1994 Montana study found considerably different results (McCool and Harris 1994). In this survey, while 70% of Montanans reported walking or dayhiking in the preceding six months, 15.3% reported snowmobiling, 11.8% ATVing and 9.1% motorcycling.

displacement. Displacement occurs when conflicts with another activity, or crowding, or development, or another factor causes some recreational users to cease using a particular area (Anderson and Brown 1984). Motorized use typically displaces nonmotorized use.

"Generally speaking," for example, "the use of snowmobiles is not compatible with travel by skis or snowshoes on the same routes. Thus, the designation of routes for snowmobile use would have the effect of preventing other, more popular, uses on these routes," (Glacier National Park Superintendent 1975). According to Jackson and Wong (1982), "one of the most bitter forms of conflict is that which exists between recreationists who engage in mechanized activities and those who prefer non-mechanized or selfpropelled forms of recreation." Jackson and Wong identify as factors causing displacement the noise of machines, knowledge of their presence, the loss of solitude and tranquility, fear of personal injury, and perceived impacts on the environment (see Butler 1974). As motorized use increases in an area, then, nonmotorized users may quit using the area.

It is clear that the vast majority of Montanans prefer to use trails that are not frequented by motorized vehicles. For example, according to a survey of Montana trail users in 1994 (McCool and Harris 1994), only 15.8% of horseback riders felt that motorcycling is compatible with horseback riding. Only 11.4% of walkers/day hikers felt that motorcycling was compatible with their activity, and only 9.1% felt that 4x4 activity was compatible. These numbers are consistent with other available data. For example, 74% of cross-country skiers in Alberta disagreed with the statement "skiers and snowmobilers can mix happily if both use common sense," (Jackson and Wong 1982). And, for example, a 1987-88 hunters survey for the Idaho Department of Fish and Game found reported that 86.3% of hunters believe "encountering motorized vehicles used off roads while I'm out hunting" detracts from the experience (Idaho Department of Fish and Game 1989).

Given the recentmassive increases in motorized use and infrastructure in the Northern Rockies, and the large impact even just a few machines can have, one would expect that nonmotorized recreationists are being disproportionately displaced from formerly "quiet" trails. In fact, independent of changes in use, Schreyer and Knopf speculate that in the absence of deliberate protection, recreationists seeking solitude and tranquility are being and will be disproportionately displaced from our national forests. They suggest that there is a feedback loop that swells the use of areas where recreation is permitted: "The prototypical scenario involves swelling numbers of visitors to a recreation environment, the construction of new facilities and other support services to accommodate them, and the subsequent arrival of a whole new clientele who are attracted by the support services rather than the original character of the setting. In effect, there is a progressive shift from more primitive-focus values to more socially-oriented, urban-centered, facilitydependent values," (Schreyer and Knopf 1984). Schreyer and Knopf conclude that "the most endangered recreationists" are those who seek nature-based outcomes such as solitude, have developed strong attachments to certain areas, and know particular areas well. That is, in effect, those who seek natural experiences, and those who recognize that an environment is becoming decreasingly natural as it is flooded by more infrastructure dependent users.

Succession

Almost as frightening as the idea that motorized use will soon drive nonmotorized users from 58% of Northern Rockies trails is the idea that nonmotorized users won't be driven from heavily used motorized trails. That is, instead of a social succession where new, infrastructure-dependent users displace previous recreationists, it is probable that to some extent old users adjust their expectations of the experience they can enjoy in a particular place. The new users and old users alike come to accept a relatively urban, motor-dependent experience as a natural experience.

Schreyer and Knopf argue that the availability of natural experiences attracts a new clientele, which demands new services, and denigrates exactly the experiences they originally sought-but that the new clientele keeps coming anyway. Dustin and McAvoy (1982) argue that no matter what the quality of experience available to recreationists, a majority will declare themselves satisfied. In other words, not recognizing that, with changes, they could enjoy a truly great natural experience, national forest visitors will accept the motorized experience available as the way national forests are supposed to be. Recreation managers, in turn, seek to provide *en masse* the experience that the largest number of users have been satisfied with. Over time, the recreation experience available spirals downward into a grey mediocrity that may have little in common with what is possible. According to Dustin and McAvoy, "Dubos illustrates the nature of this problem by discussing the facility with which people have adjusted to the negative properties of urban environments such as air pollution, traffic congestion, and urban sprawl. He cautions that people not only adapt to such elements over time--they eventually define

them as normal and then rely on them as bases for further expectations."58

The danger is that future generations will not know opportunities to experience the natural order of information, will not miss the solemnity, or the chance to engage with the other. As a motorized, commodified experience of nature becomes common, we may come to accept it as normal, real. Already, for instance, an ORV user thrills about the different rides in Canyonlands National Park, "I can't believe how one park can have such a variety. It's almost like being in a natural shopping mall," (Blue Ribbon Magazine 1987). Already, for instance, even dedicated wilderness recreationists accept technologies in the backcountry that radically change experiences.⁵⁹ We may soon come to accept and expect a human-constructed world even in designated wilderness, precluding genuine engagement with nature

Recreation Opportunity Spectrum

As Chapter 1 demonstrated, the use of ORVs on public lands is being systematically promoted. This is essentially a political decision, but it is made possible by

⁵⁸Dustin and McAvoy refer to (Dubos 1965, 256). More Dubos: "Life in the modern city has become a symbol of the fact that man can become adapted to starless skies, treeless avenues, shapeless buildings, tasteless bread, joyless celebrations, spiritless pleasures--to a life without reverence for the past, love for the present, or hope for the future," (p. 279)

⁵⁹Our willingness to embrace technologies that alter natural experiences is almost unparalleled. The National Outdoor Leadership School, for instance, now has "a generation of field staff to whom emergency radio or cell phone use is a natural and appropriate wilderness tool... The issue is not if we will use technology, but how we will use it and what this will mean to the wilderness experience," (Schimelpfenig 1996).

fundamental philosophical dishonesty regarding the impact of ORVs on natural experiences. The Forest Service ignores public desires, displacement research and common sense by assuming that ORVs are part of a natural experiences. As one district ranger said, "[ORV users'] come out to the forest for peace, solitude, and to be a part of nature," (Major 1987).

This faulty assumption is readily evident in the Recreation Opportunity Spectrum, or ROS. ROS was developed in the mid 1980s to address concerns about deteriorating environments for recreation. ROS seeks to describe lands according to the sort of recreation opportunities they provide. The six broad categories typically used are Primitive, Semi-Primitve Non-Motorized, Semi-Primitive Motorized, Roaded Natural, Rural Recreation Use and Urban Recreation Use. The basic problem with the Forest Service account of motorized recreation is encapsulated in the oxymoron "semi-primitive motorized recreation."

In describing primitive and semi-primitive recreation, the Forest Service essentially describes natural experiences, such as opportunities to engage with largely natural environments hike, horseback ride, gather forest products, picnic, ski, conduct nature studies or snowshoe (U.S. Forest Service 1986, II-31). As we have seen at length, the presence of motorized vehicles negates the potential for natural experiences for both drivers and nearby nonmotorized users. Nevertheless, the use of ORVs on trails in "semi-primitive" settings is permitted. Thus, for example, a description of semi-primitive motorized experiences reads like this:

Moderate probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman and outdoor skills in an environment that offers challenge and risk. Opportunity to have a high degree of interaction with the natural environment. Opportunity to use motorized equipment while in the area. (U.S. Forest Service 1986, II-33)

The Forest Service simply does not acknowledge the impacts of motorized vehicles on nature experiences.⁶⁰ ROS is supposed particularly to preserve opportunities "that are highly dependent on the natural resources and areas being managed by agencies such as the USDA Forest Service and USDI Bureau of Land Management" (Driver et al. 1987). Theoretically, "ROS is only concerned with those recreation experiences that are affected by activities and settings. It does not address those experiences and dimensions of recreation diversity that are unrelated to activities or settings," (Driver et al. 1987). Instead, the Forest Service accepts at face value claims by ORVers that their activity depends on natural settings, and disregards displacement research, common sense, and the testimony of many nonmotorized recreationists. In sanctioning motorized experiences as "semi-primitive," the Forest Service ducked the hard choices that a more honest description would have entailed. The result, again, is that 58% of trails in Region One

⁶⁰In fact, the Forest Service does not even recognize a conflict between motorized use and wilderness character, presumably a stricter standard. In 1996, the Montana Wilderness Association sued the Forest Service for failing to protect wilderness study areas from degradation by motorized vehicles (Devlin 1996). Statutorily, the wilderness study areas are to administered by the Forest Service "so as to maintain their presently existing wilderness character and potential for inclusion in the National Wilderness Preservation System" (Public Law 91-150, Nov. 1, 1977). The Forest Service has promoted motorized use in the wilderness study areas by, for instance, improving trails to accommodate all-terrain vehicles and grooming trails for snowmobile use. At issue is whether the increased use of motorized vehicles in an area lessens its "wilderness character." The Forest Service argues that they do not.

permit some type of motorized use.

Conclusion

Natural experiences are vitally important and increasingly rare. In our national forests we have a resource uniquely available to uniquely provide natural experiences to millions of Americans. Instead of squandering this resource by paving and driving every mountain top and every valley, we ought to treasure the natural, wild landscapes we still retain or can rebuild.

This is, in essence, common sense. Certainly, based on the surveys cited above, it is what Idahoans and Montanans envision for their national forests. It is even what the Forest Service claims to believe. According to the Forest Service's 1986 ROS Book, the purpose of semi-primitive and primitive settings is to provide "opportunities not as available in Roaded Natural and Rural" areas (U.S. Forest Service 1986, II-17). These opportunities include:

- 1. Obtaining privacy, solitude, and tranquility in an outdoor setting.
- 2. Experiencing natural ecosystems in environments which are largely unmodified by human activity.
- 3. Gaining a new mental perspective in a tranquil outdoor setting.
- 4. Self-testing and risk-taking for self-development and sense of accomplishment.
- 5. Learning more about nature, especially natural processes, human dependence on them, and how to live in greater harmony with nature. To the extent practical, these opportunities should be goals

in all ROS settings on the National Forest System.

With the exception of opportunity four, which could apply to any number of types of recreation, these priorities describe almost perfectly the opportunity to enjoy natural experiences. As one would hope, and as personal experience with Forest Service personnel probably confirms, many in the agency believe that the forests should be used to encourage engagement with the natural world that defines and sustains us. Nevertheless, national forest policy is directly at odd with these sentiments, because it favors, rather than excludes, the use of off-road vehicles on trails.

As we have seen, ORVs disrupt natural experiences. Simply by their presence, they change perception of a landscape from "semi-primitive" to roaded. Where ORVs are common on national forests trails, they preclude the possibility of natural experiences. Where they are permitted, they will soon be common. Common sense, intuition, logic and the Forest Service's avowed policy founder on the promotion of off-road vehicle use.

ORV advocates often claim that their experiences should enjoy the same claims on our sympathies and on our public lands. Is this true? The ORV experience has more in common with race tracks, motocross and traffic jams than it does with nature. There is no compelling reason for the public to provide dirt tracks for this form of recreation.

On the other hand, there are compelling reasons to limit the use of ORVs on public lands. Aside from resource damage issues, ORVs preclude the chance for other recreationists to enjoy natural experiences. To permit ORV use on our national forests,

then, is to permit the approximately four percent⁶¹ of the population who wish to have an ordinary experience in an extraordinary setting to eliminate the chance for the other 96% of the population to enjoy a unique experience, uniquely available. At issue is whether we will have the vision to protect the unique opportunity for these natural experiences, or whether we will run over nature in our haste to accommodate ORV enthusiasts.

The way to protect natural experiences is to abandon the illusion that ORVs, unlike other machines and automobiles, do not disrupt natural experiences. ORVs are essentially stripped down jeeps, light motorcycles and snow motorcycles. This does not make them good or bad-it makes them useful. It also means, however, that they should be treated like jeeps and motorcycles. While exceptions may be sensical in specific instances, as a rule of thumb we ought to adhere to a simple, common sense proposition in concert with normal definitions, usage, and expectations for our public lands: national forest *trails* are for people and animals; motor vehicles belong on *roads*. Trails for people; roads for vehicles.

This definition meets the common usage of the word trail-a path or narrow-width way used by people and animals to traverse natural landscapes, such as Indian trails and game trails. Roads, on the other hand, are considered thorofares of commerce and machinery, devoted to the swift conveyance of people and goods. One would not (without danger) walk down the middle of a road; on the other hand, one would stroll the center of

⁶¹This is a rough guess at the motorized user population, using FWP data as a guide. FWP's data shows that 8% of Montanans engage in various motorized activities, but does not eliminate redundancies (FWP1998). I assume here that roughly half of those who engage in one motorized activity engage in another.

a path with perfect confidence that, at the least, one would not be run over by motor vehicles. Trails are for people, roads are for vehicles. This simple definition allows one to protect natural experiences, and still permit the use of ORVs on national forests.

ORV advocates, their sympathizers, and even conservationists often obfuscate this crux issue using three arguments. These arguments are first, that ORVers are generally good people, and shouldn't be punished for the actions a few bad apples; second, that ORVs are necessary for access to our national forests; and third, that limiting ORV use is discriminatory.

The first argument stems from conservationist complaints that ORVers often illegally use areas that are supposed to be closed to them (such as wilderness areas), that they harass wildlife, that they cause damage to soil and riparian areas, and that they otherwise cause severe resource damage. ORVers complain that, as a group, they are being held responsible for the actions of a few individuals, and argue that attempts to limit their use of trails is based on such unfair generalizations.

While it is indeed the case that ORV use may be limited based on resource damage caused by illegal activity, this argument is irrelevant to the question of where ORVs are appropriate in the first place. The question, though, is not whether ORVers are good . people who obey the law, but whether machines belong on our foot trails.

The second argument, that limiting the use of ORVs limits access, depends on a definition of "access" that is modified by "vehicle." When ORV advocates complain that "access" is being limited, what they really mean is that "motorized access" is being limited. Wilderness areas, for example, do not preclude the entrance of any individual, they simply

ask that one leave internal combustion engines at the door. City parks, even pedestrian zones in downtown areas ask the same thing. To suggest that failure to permit motorized use of every acre of our national forests is a denial of access is nonsensical, yet this is what ORV advocates in effect argue.

Further, this view of "nature" encounters accepts implicitly the sightflight view of nature, that is, that the point of our national forests is to provide quick, direct routes to scenic overlooks, where we can have a natural epiphany, then pile into our cars (or ORVs) again and leave (Roberts 1996). As Elizabeth Roberts (1996) writes, "the passage into the wild place is as important a part of the experience as the arrival at a destination."

The success of this argument is linked to that of the third, that failure to provide for ORV experiences is discriminatory. This is an assertion that even many conservationists seem to accept at face value, witness environmental philosopher J. Baird Callicot's "objective" refusal to condemn the use of ORVs on public land on the basis that all possible uses are morally equal, even while he hastens to say that "personally" he regards birdwatching as morally superior to dirtbiking (Callicot 1991). The assertion of discrimination depends upon two assumptions: a) that any experience that is desired should be provided for; b) that there is a shortage of opportunities for motorized use.

The first assumption is easily debunked by pointing out that discrimination *between* possible uses of our national forests does not inherently constitute discrimination (in a pejorative sense) against different users. There are many activities, such as tennis, golf, badminton, 15 meter platform diving, and even chess, bridge and the drinking of cold tap beers on breezy, bugless porches that would be enhanced by a pretty background. But we

do not feel compelled to provide for these experiences on public land, and it is not "discrimination" to determine that they are inappropriate in national forests.

The second assumption is patently wrong. In fact, there are 433,000 miles of national forest roads [Sonner, 1997 #325; see also Federal Register/Vol 63, No. 18/ January 28, 1998, 4350-4354] often built right on top of traditional pack trails.⁶² In Montana alone national forest road miles boomed from 8,600 miles in 1947 to 32,900 miles in 1997 (Gatchell 1998a).⁶³ There is emphatically no shortage of places to *drive* in our national forests, just as there is no shortage of access. In this context, should we really turn more of our trails into motorized thruways?

At issue is what experience we want to provide on national forests, and how the use of ORVs effect that experience. The elimination of activities that are incompatible with our mutual vision of the national forests is common place and common sense. This results in the rational administration of a limited resource, not discrimination.

⁶³By way of comparison, there are an additional 16,056 miles of national forest trails in Montana and northern Idaho that permit some type of motorized use, but only 11,550 trail miles devoted to nonmotorized recreation.

⁶²It is currently illegal to drive ATVs and snowmobiles on public roads open to automobiles in some states (including roads on national forests). Use is illegal because these machines are not legally registered, regulated and insured in the same manner as automobiles, and out of safety concerns stemming from both the inherent instability of the vehicles and concerns about mixing traffic. These concerns, however, are not lessened on trails which are often used by people and livestock, and which are not built to the safety standards necessary to accommodate machines capable of reaching highway speeds. The appropriate answer, then, for ORV advocates who complain that, in fact, they are not permitted to use public roads, is that if ORVs are not appropriate on roads, they are most certainly not appropriate on trails. If there is no compelling reason to limit ORV use on public roads, then ORV advocates should raise the issue with the appropriate state legislatures.

With regard to recreation, the national park system may offer a useful model for our national forests. With the caveat that natural resources administration may continue to be radically different, consider in recreational terms the statutory directive for the National Park Service "to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" (Sellars 1997, 39). While the national parks have their own problems, and while this "dual mission" leads to difficult decisions, we should consider for our national forests a similar sense that there should be access to the forests, or opportunities for natural experiences, and at the same time that the basic natural integrity of the forests should be left unimpaired in perpetuity.

Again, natural resource management may be different in parks and forests, but sustainable logging, for example, is not *necessarily* incompatible with retaining the basic natural integrity of national forests. While some may well feel that recreational development has played too big a role in the national parks (e.g., (Sax 1980a)), there is still a common agreement that the parks should not be used to provide recreation for recreation's sake, or urban experiences in a park setting, but recreation that offers engagement with nature. Even during the National Park Service's most ambitious road building years, when it was attempting to lure more motorized tourists to the parks, it was understood that the parks were not to be "gridironed" with roads, and that large areas of the parks would be left in a "natural wilderness state," accessible only by nonmotorized trail (Sellars 1997).

While it is too late to prevent most national forests from being gridironed by roads,

it is possible to prevent them from being further gridironed with a network of de facto roads for ORVs. In this regard, again the national park service can offer a model. ORVs are generally considered to be incompatible with the purpose of the national parks. While there are notable exceptions, such as snowmobiles (on roads) in Yellowstone, the use of ORVs is strictly regulated and, in Yellowstone, limited to the use of existing roads. Glacier National Park, perhaps a better example of rational policy, banned snowmobiles in 1977 (Yochim 1998). Responding to new machines and new technology, nineteen years later, Glacier banned the use of jet-skis (i.e., water ORVs) in all park waters (Mihalic and Frye 1996). The Forest Service should be so bold.

The Code of Federal Regulations requires strict limits on the use of ORVs. Leaving aside the resource damage caused by ORVs, the regulations require that ORV trails be located so as to minimize conflict with other users, and require that use be suspended where it conflicts with existing or proposed uses of an area. Once we accept that motorized use displaces nonmotorized use-that it makes natural experiences impossible-then arguably these regulations make motorized use on many trails in Region One national forests illegal. At the minimum, they provide broad discretion to land managers intent on protecting nonmotorized experiences. Forest Service land managers have all the authority they need to limit motorized use; it remains to be seen whether they have the will to use it.

Places where ORVs are permitted have more in common with roads and traffic jams than they do with trails and nature. Because of their proliferation it is increasingly a challenge to find places to fish, or hike, or sprawl in the sun without hearing the sound of whining, two-stroke engines. People use national forest trails to seek out nature. Off-road vehicles disrupt natural experiences. Trails are for people, roads are for vehicles.

Conclusion: The Hush of the Land

At Pearl Lake, on the Bitterroot Crest, you can hear the lake lap against the shore. Distantly, you may hear the thump of horse-hooves or the soft speech of fellow anglers. You can taste sun-warmed trail dust and smell the breath of the lake and the flowers. You can feel the west wind drop over the Bitterroot Divide and die against your cheek. You can hear a hawk cry.

Hobnail Tom Edwards, former school teacher and legendary outfitter from Ovando, described a similar sense of tranquility in 1969, when he testified before Congress on behalf of the Scapegoat Wilderness (Roth 1984, 27-8). Edwards spoke reverently of the country he loved:

Into this land of spiritual strength I have been privileged to guide on horseback literally thousands of people--the old, many past 70, the young, the poor, the rich, the great and little people like myself. I have harvested a self-sustaining natural resource of the forest of vast importance. No one word will suffice to explain this resource, but let us call it the 'hush' of the land....

Pearl Lake is suffused with what I believe Edwards meant by "the hush of the land." So, too, I think, are the other wild places we love in Montana. Rather than the sound of telephones, or sirens, or off-road vehicles, each is filled with the murmur of

water, or the sigh of the wind, or the clatter of cleft hooves, or the rushing whisper of needles. In the peace of the land, we find peace of mind.

Our quiet places, though hushed, are far from silent. They are gently filled with the buzz and grunt of insects and mammals, and the footsteps of hikers as well as the song of the thrush. Our wildlands are hunted and fished, climbed and hiked, skied and snowshoed. Montana's wildlands are filled with, among other things, Montanans and other Americans.

Our presence changes these wildlands. But exactly how our presence changes them is up to each one of us. We can heedlessly foul them with litter, tie stock to living trees and fill our creels with fish we don't need, or we can pack out our garbage, use existing camp-sites and tread unintrusively through the habitat Montana's wildlife depends upon. To borrow a sustainability concept anglers have adopted in the face of increasing demands on a diminishing resource, we can practice catch and release with our wildlands.

Hikes, not highways

Choosing or eschewing to drive machines into the backcountry is part of that choice. Off-road vehicles (ORVs) pollute air, water and snowpack. ORVs drive wildlife from quiet refuges, disperse sensitive species to inferior habitat and upset the delicate balance between access for hunters and security for game. When we drive through our wildlands we are not practicing catch and release. ORVs do not conserve wildlands, they consume them.

ORVs do not just impact landscapes, they impact human experience. It is hard to overstate the effect that ORVs have on quiet recreationists. With their noise, their smell

and their highway speeds, ORVs disrupt what most Americans seek in the backcountry. In simple terms, the Beartooth Mountains are wild; the Beartooth Highway is not.

ORV advocates sometimes invite nonmotorized users to share trails with them. But ninety percent of walkers believe motorcycles are incompatible with the experience they seek on forest trails. Seventy-five percent of skiers believe the presence of snowmobiles ruins their experience. As the Department of the Interior (1978) wrote more than twenty years ago, "Any substantial ORV-presence in a backcountry area tends to displace tranquility-seeking visitors and preclude their further use of the area." Inviting picnickers, walkers and equestrians to share motorized routes is like inviting them to take a relaxing hike along I-90.

The U.S. Forest Service largely ignores the impacts of ORVs. The Forest Service accepts motorized use as something that does not impact wildlands or our experience of them, permitting the majority of the trail miles in Region One to be used to provide "semi-primitive motorized" experiences. This failure to recognize the impacts of motorized vehicles threatens the natural experience that most Americans seek in their national forests by leaving a vacuum of policy. Ignoring the increasing range and numbers of ORVs, the Forest Service is allowing the Northern Rockies to degenerate into a motorized playground.

This failure to protect nonmotorized experiences threatens both the opportunity for natural experiences, and the opportunity to know what nature is. As we come to accept motorized vehicles as part of a natural experience, we lose sight of a nature that retains its own dignity, commanding presence and continuity with its surroundings.

ORV advocates support such a view of nature in order to further their "sport." They also do so to further the agenda of the Wise Use movement. Wise Use would have Americans believe that the resources of the western public lands are effectively infinite, permitting continued commercial exploitation of these lands. To advance this agenda, Wise Use argues that a frontier (or natural) experience is not impacted by the presence of machinery or commercial exploitation. Accepting ORVs as part of a natural experience furthers this goal.

Where vehicles belong

In many places we have chosen to accept the impacts of motor vehicles in exchange for the commerce, convenience and pleasure they provide. We call those places roads, and they are necessary and valuable.

But there is no road shortage in Montana. Since World War II we have built more than 24,000 miles of new road on national forests in this state (Gatchell 1998a). Nationally, we have built a forest road system eight times the length of the entire U.S. interstate system (Sonner 1997). At issue today is whether we should allow a new generation of motor vehicles to create yet another road system in our national forests, filling in the roadless gaps that prudence and terrain have left behind.

ORVs may be appropriate on public lands for use in agriculture, at downhill ski areas, and in some roaded areas where impacts would be minimal. The Forest Service, however, apparently indifferent to the impacts of motorized recreation, has allowed ORVs to vastly expand their range and convert many traditional trails into motorized thruways.

As if the existing 30,000 miles of roads in Montana's national forests (Gatchell 1998a) are insufficient for motorized recreation, the Forest Service permits some type of motorized use on nearly 57% of national forest trail miles in the state.

The Montana legislature and the Department of Fish, Wildlife and Parks (FWP) also seem uninterested in responsible management of public lands when it comes to ORVs. The legislature, through FWP, pumps nearly \$1,000,000 a year into converting traditional trails into motorized thruways, building bridges and unloading ramps for ATVs and grooming routes for snowmobiles. FWP even promotes ORV use in proposed wilderness areas in the Sapphires, the West Pioneers, the Crazies, the Badger-Two Medicine and the Hyalite-Porcupine-Buffalo Horn. Far from keeping Montana's landscapes wild, our public agencies are filling them with two-stroke engines quicker than you can say "unrestricted motorized development."

The quiet majority

It doesn't have to be that way. According to FWP's own numbers, ninety percent of national forest use in Montana is non-motorized (FWP1992). When more hunters tell FWP to keep ATVs out of winter habitat, FWP will listen. When more skiers tell the Forest Service to keep snowmobiles off quiet trails, the Forest Service will listen. The quiet majority has the passion, the people power and the science to force public land managers to protect the hush of the land.

The law, too, supports quiet trails. The Forest Service is required by its own rules to suspend any ORV use that negatively impacts fish, wildlife, vegetation, cultural resources or other users. Although enforcement of these standards has been lax, it is not discretionary. Public awareness and oversight will force the agency to do its job and protect the resources of our national forests from excessive motorization.

If Montanans wish quiet landscapes, they can no longer be silent themselves. Because ORVers constantly announce their presence with flashy trailers and roaring engines, they seem to be everywhere. But ORV drivers are not nearly so numerous as those who visit the Swan for a quiet picnic, the Pryors in hopes of seeing a falcon or the Big Hole to stalk an elk. If the quiet majority demands quiet trails, our grandchildren, too, will know the laugh of the ptarmigan, the lap of Pearl Lake against the shore, and Tom Edwards' hush of the land.

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Appendix A: Middle Fork of the Judith River

There are a vast number of trails and areas that are "open" to motorized use, but where motorized use is not yet securely established. Motorized clubs are engaged in a process of "claiming" such areas by making motorized use possible and by establishing a "tradition" of use. State funded, Forest Service funded, and privately sponsored improvements are used not only to alter trails, but to reinforce motorized claims to them. After spending thousands of dollars to rebuild a trail with the help of a local motorized club, a district ranger is unlikely to turn around and exclude ATVs from the trail. For trails that permit motorized use, then, but do not accommodate it, trail improvements are a way to cement claims to more miles of trails.

Roz McClellan, who monitors the use of ORVs for the Southern Rockies Ecosystem Project, describes a variation on this theme in the hot battles over recreational use in Colorado's national forests (McClellan 1996). Through "a combination of cajoling and bullying" ORV users establish use on a foot trail simply through use, or through a donation of time and money for maintenance. They reward friendly agency personnel with awards, and attempt to integrate them into their groups socially. If ORV use of a given trail is restricted, they complain about violation of their "rights" and threaten to sue.

The result of the motorized users' strategy, of the availability of financial assistance for trail conversion, of the inadequacy of travel plans and of Forest Service sympathy for motorized users and of changes in technology and numbers is the wholesale transformation of once-quiet roadless areas into motorized proving grounds. One place where this pattern of cumulative change is clearly evident is the Middle Fork of the Judith River.

The Judith River is one of the few year-round streams to issue from the East side of the Little Belt Mountains. The Little Belts, south of Great Falls, Montana, range from 5,000 to 8,000 feet, and are defined more by ridges and limestone canyons than spectacular peaks. The Middle Fork of the Judith gathers rain and snow melt from a nine mile by sixteen mile bowl in the heart of the Little Belts, then cuts a canyon through the eastern edge of the range to emerge into the Judith Gap, and turn North toward the Missouri.

Filled with lodgepole pine and Douglas fir, the Middle Fork is one of the last few remaining wild pieces of the Little Belts. Still today the Middle Fork reflects the words of renowned cowboy poet Charlie Russell, who rode there:

Shut off from the outside world, it was a hunter's paradise, bounded by walls of mountains containing miles of grassy open spaces, more green and beautiful than any man-made parks. These parks and the mountains behind them swarmed with deer, elk, mountain sheep, and bear, besides beaver and other small fur-bearing animals. The creeks were alive with trout. Nature had surely done her best, and no king of the old times could have claimed a more beautiful and bountiful domain.⁶⁴

⁶⁴As quoted in Montana Wilderness Association (1993).

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In 1977, Montana Senator Lee Metcalf shepherded the Montana Wilderness Study Act (16 U.S.C. § 1331) through Congress. The act directed the Forest Service to protect nine roadless areas in Montana, including 81,000 acres of the Middle Fork Judith, until Congress could determine whether to designate them wilderness. The Forest Service was specifically directed to administer the areas "so as to maintain their presently existing wilderness character and potential for inclusion in the National Wilderness Preservation System." In 1996, the Montana Wilderness Association (MWA) sued the Forest Service for failure to abide by the stipulations of the act by permitting and promoting increased motorized use of the areas (Devlin 1996).

Some motorized use may have existed in the Middle Fork Judith in 1977. Motorcycles were permitted on several trails, and hunters may have occasionally used four wheel drive vehicles. The Montana Wilderness Study Act may or may not permit motorized use to continue in the area, provided such use is not materially different in scope or type from 1977 use. MWA maintained that the Forest Service permitted a change in the amount and type of motorized use in the area, violating the statutory requirement to maintain wilderness characteristics.

A review of the administrative record for the Middle Fork Judith reveals that trails are being aggressively converted to facilitate motorized use. The following trail maintenance projects and improvements have taken place in the Middle Fork since just 1990:⁶⁵

⁶⁵All information contained in the Administrative Record for the Middle Fork Judith Wilderness Study Area, as compiled for MWA's 1996 lawsuit (U.S. Forest Service 1997).

1. The Montana Trail Vehicle Riders Association signed an agreement with the Forest Service in 1996 to provide trail maintenance on motorized trails in the WSA, and "to provide educational materials and information to OHV trail users."

2. In 1994, Rimrock 4x4 of Billings "adopted" Woodchopper Ridge Trail (within the WSA) for maintenance.

3. In 1995 the Central Montana Trail Users agreed to annually maintain approximately 19 miles of trail within the WSA, Middle Fork Road #825 and King Creek Trail #429.

4. In 1996, the Great Falls Trail Bike Riders Association (GFTBRA) volunteered 180 man/hours and an estimated contribution of \$2120 dollars to improve motorized trails in the Little Belts and the Highwood Mountains. Among those trails, seven are within the Middle Fork WSA, the West Fork of the Lost Fork of the Judith, 442 Prospect Ridge, 436 Sand Point, 434 Sand Point, 441 Coyote, 444 Kelly Mountain, and 407 Doerr Creek.

5. Also maintained by GFTBRA in 1996 was Silver Gulch Trail #402, just North of the Middle Fork WSA. Silver Gulch connects to Woodchopper Ridge, within the WSA, and both trails permit motorcycle use. The Judith Ranger District applied for \$5,300 in Symms Act funding for Silver Gulch/Dry Wolf trail improvements.

Forest Supervisor Gloria Flora rejected Montana Wilderness Association arguments that trail improvements would increase motorized use in the WSA. Flora described the action as routine maintenance. Silver Gulch Trail does not appear on Forest Maps from 1978, apparently having evolved since then.

6. In 1992 the GFTBRA agreed to share costs with the Judith Ranger District to reroute and reconstruct 1.5 miles of Steiner Trail, within the WSA. The improvement was designed to alleviate erosion, mark the trail, and avoid steep switchbacks. The agreement notes that GFTBRA "has already contributed 500 hours of labor to relocate 2.7 miles of the Steiner trail."

7. In 1990 the Judith Ranger District reconstructed and rerouted 3.3 miles of the West Fork of Lost Fork Trail #442 because "the present trail is difficult to find, is quite steep, and is eroding noticeably since the 1984 Sand Point Fire."

8. Also in 1990, the Judith Ranger District rerouted the Schaffer Trail between Kelly Mountain and the Middle Fork Ranch. Now shown on maps as a forest system trail open to motorcycles, in 1990 the trail was steep and difficult to find. "It was developed by recreationists over a period of years, and is not part of the formal trail system."

The improvements for Steiner, the West Fork of Lost Fork and Schaffer trails were simultaneously categorically excluded from an environmental assessment. The categorical exclusion fails to mention that the improvements take place within a WSA. Instead, it simply notes that "the desired future condition for this management-area is to provide quality semi-primitive recreational opportunities. The proposed construction/reconstruction of these three trails is consistent with this goal."

9. In 1995, the Judith Ranger District proposed improving the Middle Fork Trailhead, the primary eastern access point for the WSA. The improvement was undertaken because of extensive ORV caused erosion just outside the WSA, and was to include construction of an all weather road to the trailhead. The Montana Wilderness Association appealed the decision to proceed, arguing that damage from ORVs should prompt access restrictions, rather than improvements. The appeal was rejected.

When the trailhead improvement proceeded, contrary to the decision document and verbal commitments to the Montana Wilderness Association, the trail from Yogo Crossing to Woodchopper Ridge was improved so as to enable easier ORV access to the WSA, not simply to correct erosion and resource damage.

Virtually every trail within the wilderness study area that permits motorized use is being maintained and "improved" to motorized standards by motorized clubs. As use has led to the widening of old trails, or the creation of new ones, the Forest Service has sanctioned the changes. As use causes damage, trails and facilities are improved. Each change, by itself, is minor. Considered cumulatively, however, they have radically altered the nature of use within the Middle Fork.

The wild and the beautiful land that Charlie Russell described is a lot harder to find in the Middle Fork today. In 1996, Great Falls attorney Howard Strause watched nine all-terrain vehicles (ATVs) drive into the Middle Fork in a single thirty minute span. "Fifteen years ago you wouldn't have seen any," said Strause, who first started hunting the Middle Fork thirty-eight years ago with his parents. Strause guessed conservatively that there are ten times as many motorized vehicles using the Middle Fork today as there were in 1977 (Strause 1997).

Appendix B: ORVs and Wilderness

The interests of ORV groups and other Wise Use groups most obviously coincide in opposition to wilderness. As the numbers and range of ORVs have increased, conflicts with conservationists and "quiet" (non-motorized) recreationists have become particularly acrimonious regarding the use and disposition of roadless, potential wilderness areas. Travel plans often fail to limit motorized use in roadless lands with the potential for wilderness designation, permitting ORV use even in congressionally designated wilderness study areas, and in consensus wilderness areas like the Great Burn and the Badger-Two Medicine. In Montana and Idaho, where statewide wilderness bills have never been passed, the future of huge roadless areas are at stake.

Because ORVs are not permitted in designated wilderness areas, ORV advocates generally oppose wilderness designation. According to Effie Kemp, past president of the Bitterroot Ridge Runners, a snowmobile club that uses state funding to groom snowmobile trails in the Bitterroot and Sapphire Mountains, "The first reason for reorganizing (sic) the club was to fight the wilderness issue. Our members will lose four of their areas if any of the proposed Wilderness bills are passed. The areas are Stony Mountain, Sapphires, West Big Hole and the Great Burn. . . ." (Kemp 1992). The Blue Ribbon Coalition celebrated the veto of the 1988 Montana Wilderness Act as a major victory (Yake 1989), and according to Blue Ribbon Executive Director Clark Collins, "It is time for 'wise use' legislation to remove roadless areas from consideration for wilderness without designating more," (Stuebner 1987).

On other occasions, Collins has tempered his opposition, stating only that "We do .

. . actively oppose Wilderness designation of areas presently used by mechanized recreationists becuase that designation disallows our continued use of those areas." (Collins 1994, 303). Others in the ORV community echo this position. The Gallatin Valley Snowmobile Association, for example, "oppose[s] any more designation of our riding areas as wilderness," (Harvey 1997). While at first blush this may appear to be a reasonable compromise, many roadless areas recommended and proposed for wilderness designation fall into the category of "riding areas." Members of the Gallatin Valley Snowmobile Association object to restrictions in proposed wilderness areas in both the nearby Crazy Mountains and the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area. In fact, when one examines a map, it becomes evident that there are very few roadless areas in the Bozeman area that the Gallatin Valley Snowmobile Association does not consider "riding areas." And as Sandra Mitchell snowmobile advocate testified before Congress, "As technology improves, we're going to go higher and higher and stake out larger [areas]...." (Mitchell 1994, 63). Thus, the Montana Snowmobile Association opposed wilderness designation not just for wildlands that are currently used by ORVs, but those that have "potential for snowmobiling and other forms of motorized recreation," (Smith 1983, 190).

Establishing regular ORV use in an area builds an entrenched local constituency opposed to wilderness designation. In fact, traditionally, the Montana congressional delegation has not supported wilderness in areas used by ORVs. The last bill to designate wilderness areas in Montana (1983) specifically avoided including any areas used by snowmobiles in the Lee Metcalf Wilderness, even those that contained vital elk and grizzly

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bear habitat. House Interior Committee Chairman John Seiberling, speaking at a time when ORV use was still relatively slight, their users' organization weak and the congress friendly to wilderness, proudly said of the 1983 bill, "Just for the record I would note that the way this resolved the question of snowmobiling was to drop the snowmobile areas out of wilderness. So there are no snowmobile areas in the wilderness areas in this bill," (Seiberling 1983).

Grants can play a major role in expanding the power of ORV groups by building local opposition to wilderness in a specific area. FWP, in effect, subsidizes not just the recreational, but the political agenda of ORV groups. In the same wise, advertising areas as motorized play areas reduces their likelihood of being designated. Thus, travel plans that fail to preemptively close areas like the Badger-Two Medicine run the risk of seeing them advertised nationally (as the Badger-Two Medicine was in The rugged individualists of 4-Wheel ATV Action 1997).

Because wilderness designation prohibits logging and mining, industry has traditionally opposed wilderness. ORV advocates now function as a viable grassroots constituency-the "locked out" locals-that industry often lacked in particular areas during previous wilderness debates. Further, ORV advocates can legitimately distance themselves from the interests of industry. As a result, disagreements over wilderness appear to be conflicts between Montanans of different persuasions, rather than conflicts between extractive industry and local conservationists-a change likely to result in far fewer wilderness designations. For many roadless areas in the Northern Rockies, ORV groups now represent an opposition more politically potent than the timber, mining or oil and gas industries.

The value of ORV advocates as a stalking horse for anti-wilderness industries is reflected in the corporations that support ORV groups. For instance, according to the Environmental Working Group, supporters of the Blue Ribbon Coaliton include not only local motorized clubs such as the Bitterroot Ridge Runners, Gallatin Valley Snowmobile Association and the Flathead Snowmobile Association, and the manufacturers that predictably want more territory for their products, such as Kawasaki, Honda, Bombardier and Polaris, but natural resource industry corporations that should care little about travel plans, including Plumcreek Management Co., Rocky Mountain Oil and Gas Association, Stoltze Land and Lumber Co., Stone Container Corporation, the American Petroleum Institute, Boise Cascade Corporation, Crown Butte Mines, Inc., Golden Sunlight Mines, Inc., Louisiana-Pacific Corporation and the Ketchikan Pulp Corporation.⁶⁶ As Clark Collins once said, Blue Ribbon is supported by "natural resource industry companies who realize the value of the Blue Ribbon Coalition to the entire multiple use community," (Niemala 1997).

⁶⁶All proper names are printed as listed by the Environmental Working Group. The Environmental Working Group lists proper names as they are printed in *Blue Ribbon Magazine* as designated supporters.