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Lakes Region

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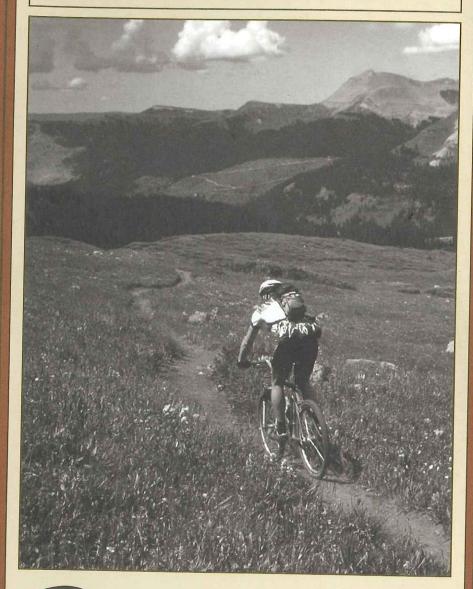


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For more Leave No Trace information or to order materials, call1-800-332-4100 or visit www.LNT.org.









The Leave No Trace educational program promotes skills and ethics to support the sustainable use of wildlands and natural areas. The concept originated in the U.S. as a way to help recreationists minimize their impacts while enjoying the outdoors. In 1991, the U.S. Forest Service teamed with the National Outdoor Leadership School (NOLS) and the Bureau of Land Management as partners in the Leave No Trace educational program. NOLS, a recognized leader in minimum-impact camping practices, became involved as the provider of Leave No Trace materials and training.

Today, the non-profit organization The Leave No Trace Center for Outdoor Ethics, established in 1994, manages the national program. The Center unites four federal land management agencies—the U.S. Forest Service, National Park Service, Bureau of Land Management, and U.S. Fish and Wildlife Service—with manufacturers, outdoor retailers, user groups, educators, and individuals who share a commitment to maintain and protect our wildlands and natural areas for future enjoyment.









## LEAVE NO TRACE

Outdoor Skills & Ethics



"A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise"

-Aldo Leopold, A Sand County Almanac

MOUNTAIN BIKING EDITION

### LNT Outdoor Skills and Ethics

"The notion that [outdoor] recreation has no environmental impacts is no longer tenable."

-Curtis H. Flather and H. Ken Cordell, Wildlife and Recreationists

People enjoy the outdoors in myriad ways. We explore on foot, kayak, horseback, mountain bicycles, skis, snowshoes, and crampons, to name a few, and there are more of us pushing our sports to greater extremes and into remoter parts of the natural world everyday. Our experiences are personally satisfying, but they can be costly to the places we visit and the animals we observe.

America's wildlands are diverse and beautiful. They can also be fragile. Polluted waters, displaced wildlife, eroded soils, and trampled vegetation are just some of the impacts linked directly to recreational activities. Even our mere presence has an influnce. Considerable damage could be prevented if recreationists were better informed, especially about Leave No Trace techniques.

This booklet is part of a national educational program called Leave No



Trace which aims to be part of the solution. At the heart of LNT are seven principles for reducing the damage caused by outdoor activities, particularly non-motorized recreation. Leave No Trace concepts can be applied anywhere—in remote wilderness, city parks, even in our

own backyards—and in any recreational endeavor.

Leave No Trace principles and practices extend common courtesy and are seven principles
for reducing the
damage caused by
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At the heart of LNT

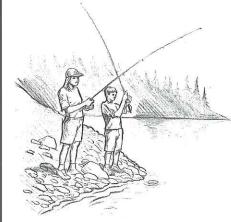
hospitality to other wildland visitors and to the natural world of which we are all a part. They are based on an abiding respect for nature. This respect, coupled with good judgment and awareness, will allow you to apply the principles to your own unique circumstances.

We can act on behalf of the places and wildlife that inspire us—in North America and beyond. First, let's educate ourselves and adopt the skills and ethics that enable us to Leave No Trace.

### LNT Outdoor Skills and Ethics

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• Leave What You Find
Minimize Campfire Impacts
• Respect Wildlife
• Be Considerate of Other Visitors
International Mountain Biking Association and other contacts

### LNT Outdoor Skills and Ethics LIBRARY



Visitors interested in stock use, river running, sea kayaking and climbing, or other regions and recreational activities can refer to the other booklets in the Leave No Trace Skills and Ethics series.

Information on obtaining
Leave No Trace curriculum
materials, courses and trainings
is available by calling Leave No
Trace, Inc. 1-800-332-4100
or visiting the extensive
LNT website: www.LNT.org.

### WELCOME to Mountain Biking

Mountain biking is an amazing mix of outdoor adventure, appreciation, thrill, exploration, skill and fitness. On a mountain bike, you can pedal at a pace that promotes intimacy and interaction with the environment, meandering through a section of quiet forest before stopping to take in the beauty around you. Or you can swoop along an open single-track before testing your skill on a steep descent.

The wonder of mountain biking is that you can feel so many types of enjoyment on



the same ride—sometimes within a few minutes (or a few feet) of each other. The mountain biking experience is as varied as the range of trails it happens on. There is no one type of mountain biking experience. It is what you make it.

It is what you make it: This concept applies not only to your ride, but to your responsibility as a mountain biker. On every ride, every mountain biker has the power to preserve the land...or damage it. Bikes contribute to enjoyable trail experiences, but cyclists, like other trail users, also have the ability to degrade the trail experience of others. Improper riding techniques can harm the trail environment and diminish the quality of trail experiences for others.

Irresponsible mountain biking can increase trail erosion, disturb wildlife, burden public land managers and anger private land owners, prompting them to restrict trail access. The legacy you leave as a mountain biker is decided every time you saddle up to ride.

When mountain biking became popular in the late 1980s, many off-road riders recognized the importance of low impact riding—both to protect the trail environment and ensure a bright future for the sport.

In 1988, the International Mountain Bicycling Association (IMBA) formed to promote responsible mountain biking, encourage volunteer trailwork, form partnerships with other trail user groups, and help provide trail management solutions for government officials.

### WELCOME to Mountain Biking

IMBA created a standard code of mountain biker conduct. IMBA's six Rules of the Trail are now recognized around the world. These rules are:

- 1. Ride on Open Trails Only.
- 2. Leave No Trace.
- 3. Control Your Bicycle.
- 4. Always Yield the Trail.
- 5. Never Scare Animals.
- 6. Plan Ahead.

Leave No Trace (LNT) was selected as an IMBA rule because many mountain bikers—including IMBA's pioneers—enjoy backcountry and wilderness hiking and camping. They respect the depth of research and years of experience that helped to shape LNT's principles.

Today, mountain biking is one of the most popular forms of trail recreation—not only in North America, but in much of the world. In the US alone, more than 10 million people regularly ride mountain bikes on trails. Many come to the sport with years of backcountry recreation experience, but others are new to the sport.

Now, more than ever, responsible riding is essential to helping ensure the long-term health of mountain biking—and the areas that truly make the mountain biking experience what it is.

The information in this booklet expands the concepts of IMBA's Rules of the Trail. It will help you minimize your impact on the area and the people you encounter during your ride, regardless of your ability level. If you're a novice mountain biker, this information may be inspiring. Even if

you're a longtime rider, you'll find plenty of fresh ideas here— and a few reminders of techniques you may have forgotten.

These guidelines for riding responsibly were developed by Leave No Trace in conjunction with IMBA. Although the LNT philosophy applies to all human powered outdoor recreation, the tips in this booklet are specific to mountain biking. You'll find out how to ride safer and with more control (which also translates to more fun). You'll also learn some Leave No Trace tips for planning your trip and minimizing the impacts you have on wildlife and other visitors. You can find more information about how to enjoy the outdoors with minimal impact in the region-specific or other activity-specific books produced by Leave No Trace. (For more information, see the back cover of this booklet.)

What else can you do besides ride responsibly? Go the extra mile and talk it up with your friends. Volunteer your time to mountain bike clubs, IMBA, conservation groups and agencies that manage the trails you enjoy. Enhance your sport and the landscape that makes it so enjoyable by working on a trail crew. Mountain biking doesn't just consist of rocks and dirt and the occasional downed log. Great rides are also made of great views and nature experiences. As visitors to wild areas, we hold ultimate responsibility for their welfare. Protect the lands that contain the trails you love-not just to keep them open to bikes, but to preserve them-period.

# LEAVE NOTRACE Principles and Mountain Biking

A basic tenet of the Leave No Trace philosophy is that cyclists and other recreationists can enjoy the outdoors while protecting the natural beauty of the area and the experience of others. Over time, the LNT program has established a set of seven easy to remember principles to help guide people down the path of leaving no trace.

Of course, leaving no trace depends more on attitude and awareness than rules and regulations. Low-impact riding is a flexible concept, and you must be prepared to respond to changing conditions (in the terrain, your bike and even your body) or choose the best course of action from several options. There are several specific techniques and skills that will help you ride responsibly, and we'll look at those in detail later. But the seven

Leave No Trace principles are valuable signposts to help you become a low-impact rider:

- Plan Ahead and Prepare
- Travel and Camp on Durable Surfaces
- Dispose of Waste Properly
- Leave What You Find
- Minimize Campfire Impacts
- Respect Wildlife
- Be Considerate of Other Visitors

Now that we've briefly reviewed the LNT principles, let's look at how you can start using them on your next ride. These are simple suggestions on how to keep the trail, yourself, and others safe, while maintaining positive relations with land managers and landowners. All of this happens while you continue to have fun riding your bike.

### PLAN AHEAD and Prepare

Unnecessary bike impacts can be largely avoided through preparation. If you are too hot, too cold, dehydrated or otherwise uncomfortable, you will be preoccupied with your personal safety and may overlook your impact to the area. Likewise, if your bike is not well main-

tained, you risk injury, a long hike out, or both. Either way, an ill-prepared mountain biker becomes a liability to himself/herself, other trail users, and the area. To minimize danger and damage to the area, arrive at the trailhead prepared for your ride. Here's how:

### PLAN AHEAD and Prepare

BE INFORMED. Before arriving at the trailhead, take time to learn about the area you will be riding. Don't rely on old maps or hearsay. Check with land management agencies and knowledgeable bike shops before riding unfamiliar trails. Make sure that bikes are allowed on the trails; sometimes seasonal or area closures apply. For example, areas designated Wilderness under the Wilderness Act of 1964 are off-limits to mountain bikes and other mechanized modes of travel.

Let others know your planned route, make sure you have the right maps and a compass, check for updates on the latest trail conditions, and come prepared with the right gear to pack out whatever waste you might create. It's also your responsibility to know where private lands are and to obtain permission before using them. Respect all closures and "No Trespassing" signs.

Other important gear that you should bring on every ride includes: Food. If you'll be riding longer than 90 minutes, you'll need to eat. (Any shorter, and your body should have enough sugar stored up to fuel the ride.) Begin eating about 30-45 minutes into a long ride. If you wait until you're hungry, it could be too late and you may start feeling weak and spacey (a.k.a. "bonking"). Is it a serious health threat? Usually not, but avoiding bonking is good reason to bring plenty of calories for your ride.

**Helmet.** Use your head. Wearing a helmet could save your life and prevent energy intensive and areaimpacting rescue efforts.

Adequate clothing. Because you cover so much ground (and often changes in altitude) on a bike, you may encounter many types of weather on a single ride. You might need a lightweight rain jacket or wind shell, an insulating layer, long-fingered gloves, a headcap or bandana (that fits under your helmet) and arm warmers or leg warmers. Bring clothing that rolls up small enough to be packed away.



Tools. Every mountain bike— even a perfectly maintained one— can break down. Carry a mini-tool, which has everything you need in a combined set, or assemble your own. Whatever you rely on, be sure you have allen wrenches and box wrenches (that fit your bike's bolts and nuts), a chain tool, and tire levers.

*Spare tube and patches.* You can fix most flats with patches, but not all, so carry a spare tube.

*Pump.* A patch or spare tube is useless without a pump.

Saddlebag or pack for your gear.

### PLAN AHEAD and Prepare

**GROUPS AT LESS POPU- LAR TIMES.** Large groups of mountain bikers— or any trail users— make others feel a sense of crowding and tend to cause more trail impacts than smaller groups. Mini-

mize the size of your group

when on trail. Consider split-

TRAVEL IN SMALL

ting larger groups into smaller ones. Also, consider riding your bike at less popular times. Generally, trails tend to be more crowded on weekends, holidays and evenings. If you schedule your ride for off-peak hours, you will be less likely to encounter other users along the trail.

### TRAVEL AND CAMP on Durable Surfaces

RECOGNIZE DURABLE **SURFACES.** Limit your bike riding to durable surfaces. What's a durable surface? Where bikes are concerned. trails, dirt roads and pavement are durable surfaces. Although it's sometimes OK when hiking, off-trail travel on a bike is never appropriate. Off-trail riding may damage plants, cause erosion, fragment wildlife habitat, endanger the rider, and encourage the development of poorly designed social trails. Stick to the existing trail instead.

A properly ridden bicycle has little effect on a packed, well-designed dirt trail. But some types of terrain are more fragile. Here's what to avoid:

*Mud.* Riding on muddy trails is usually inappropriate and avoidable. If you ride in mud, your bike will carry soil away, gouge the trail and speed the

process of erosion. There are some areas—such as small, eternally wet portions of the Pacific Northwest-where mud is constant and boggy trails can support some use. Also, some trails have hardened surfaces to support recreation in wet conditions. But the general rule is don't ride off improved surfaces when the ground is wet. If you come upon an isolated muddy patch, ride slowly through the middle of it. Don't ride to the side, which widens the mudhole, damages vegetation, and creates more erosion.

Water. You can ride across water if two conditions exist: the crossing is established on a bare rocky or sandy surface, and the depth is no greater than your hubs or bottom bracket. If the water crossing begins or ends with mud, or goes across moss or any other material that tires

### TRAVEL AND CAMP on Durable Surfaces

will damage, stop and walk. If the water will reach your hubs or bottom bracket, your bike releases harmful lube and grease into the water. Again, stop, shoulder your bike, and walk across.

Ideally, you will pass over the trail as smoothly and lightly as possible—so that someone coming behind you will never know you were there. Here are some ways to keep the durable surfaces durable:

Don't widen trails. Ride the center of even the narrowest singletrack. If you ride the downhill edge, you contribute to damage that will eventually widen the trail— altering its path and destroying vegetation alongside. If you encounter a waterbar, ride over, not around, it. These trail features reduce erosion, shed water and help keep the trails rideable. By riding around waterbars, you increase the likelihood of the trail becoming a watercourse, a messy bog and, ultimately, closed.

Don't cut switchbacks. Switchbacks—sharp turns in a trail that form a 'Z'- help trail users ascend (or descend) slopes that are too steep to be ridden straight up or down. Switchbacks are one of the most important features of a trail because they minimize erosion and make climbing easier. Some riders are tempted to "cut" (ride across the inside corner of) switchbacks. This shortcutting quickly leads to erosion that destroys the turn and can eventually ruin the entire slope and trail. When riding a switchback, stay on the trail, or get off and walk if you can't make the turn.

Don't detour. If you approach something you can't ride, such as a big log, a waterbar or a tough rock field, stop, get off your bike and walk across. Many riders go around obstacles, creating unnecessary new paths. If there's an established ride-around, use it- but if it looks fresh or appears to have been ridden by only a few people, avoid it. When in doubt, stop and walk the main trail.



Avoid skidding. Skidding creates ruts in the trail, increases the rate of erosion, mars slickrock and greatly decreases your control. Once your wheels begin skidding, you lose your slowing power and your steering control. If your rear wheel begins to skid, use more force on your front brake. If the skid continues, decrease your rear braking pressure. The idea is to modulate the force so your wheels are continually braking instead of skidding.

Adapt your braking power to varying terrain. In sand, gravel or any loose surface, your front wheel is

### TRAVEL AND CAMP on Durable Surfaces

more prone to dig in and dive away, so use as much rear force as possible (or scrub off extra speed before entering such a section). A good rule of thumb: Brake hard when the ground is hard, but brake soft when the ground is soft.

Ride the mountain; don't make the mountain rideable. Instead of riding around tough obstacles, some mountain bikers alter obstacles to make them easier to ride—rolling rocks out of the way or stacking small logs in front of a big one, for example. This ruins the fun for better riders who can successfully negotiate the obstacle, and disturbs the natural area when materials used or altering are foraged for or discarded.

Don't create new trail markers, cairns, or other "signposts" unless you're part of an approved (and supervised) trail work crew.

Don't do unauthorized trailwork.

You might think you're being helpful by rolling a blowdown off the trail, but you could damage vegetation or somehow alter the trail in a way that will cause more damage than the situation you were trying to correct. Note any fresh blowdowns, clogged waterbars, new erosion or other elements, and report them to the trail manager or local club when your ride is finished. If you are interested in performing trailwork, volunteer your time to your local bike club or land manager. Contact IMBA at the address listed on page 16 for more information on bike advocacy groups in vour area.

#### GETTING TO THE TRAILHEAD.

Impacts from mountain biking extend beyond riding your bike. If you drive to the trailhead, be sure to consider the impacts that your motor vehicle will have on the area. When driving to the trailhead, drive only on open roads and park only in durable, designated areas. Do not park or drive on private lands unless you have permission. Doing so without permission will damage the area and relations with the landowner. Do your part by following local travel regulations while ensuring that your trip to the trailhead is safe and doesn't damage the area.

Water quality is also a big concern when driving a motor vehicle. If the road crosses a stream, cross at designated fording points only and at a 90 degree angle to the streambed. Check water depth carefully, then drive slowly across the stream. Crossing watercourses at high speed endangers fish and other aquatic habitat, not to mention your engine. For more information on motorized vehicle driving techniques, consult Tread Lightly! Inc. at the number and address listed on page 16.

**CAMPING.** If camping is part of your mountain biking trip, please consult the most appropriate Skills and Ethics booklet for the area you plan to visit. A complete list of the Skills and Ethics series can be found on the back cover of this booklet.

### **DISPOSE** of Waste Properly

#### PACK IT IN, PACK IT OUT.

Leaving behind one punctured tube, or even the back of a patch, might not seem like a big deal, but small litter accumulates into big problems. Litter can potentially endanger wildlife, attract scavengers and diminish other visitors' experiences.

When left behind, even 'biodegradable' wastes such as apple cores, banana peels or pieces of your energy bar threaten the health of area wildlife by promoting an unhealthy reliance on humans as a food source. Studies have shown that animal populations can grow then decline based on human food availability. Be part of the solution by stuffing your jersey pocket or pack with all litter, food wrappers and leftover food. Even rubbish left by others along the trail should be taken out. Once you begin looking, you'll be surprised how much trash is left behind— and how much of a difference you can make by riding it back out.

#### PRACTICE GOOD SANITA-

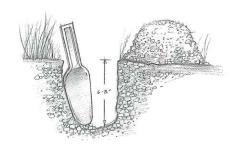
**TION.** Beyond the trash and garbage associated with your ride, human waste disposal is also an important concern. If disposed of inappropriately, human waste can pollute water sources, attract animals, offend other visitors



and pose health threats. Proper disposal of solid human waste is therefore based on the following concepts:

- Avoid polluting water sources
- Eliminate contact with insects and animals
- Maximize decomposition
- Minimize the chances of social impacts

If a restroom facility is provided at the trailhead, use it. Otherwise, solid human waste should be disposed of using the cathole method. Selecting a proper site is the first step. Choose a site that is at least 200 feet from water sources, trails, campsites, and any location that might flow with water during heavy rain or snowmelt. Next, dig a hole 6-8 inches deep and 4-6



### **DISPOSE** of Waste Properly

inches in diameter in organic soil (the critters in the soil will help the waste decompose more quickly). Deposit the waste in the cathole, then cover and naturalize the area when you're finished. Be sure to pack out all toilet paper and feminine hygiene products.

Liquid human waste urine— generally poses little health threat to humans, but it can have an impact on backcountry settings. Animals in search of valuable nutrients are attracted to the salt in urine. In fact, many animals will defoliate plants (eat all the leaves) or dig up soil to obtain the salts from urine. To avoid such impacts, urinate on a sunny rock or another durable surface. You can also dilute the urine by pouring water on the area when you are finished. Doing so will allow animals attracted to your urine to not impact the area as they obtain salt. Urine also leaves a strong scent. For this reason, urinate away from campsites and other heavily traveled areas.

### LEAVE What You Find



Part of a great mountain biking experience is a beautiful natural landscape. Yet the very plants, animals, rocks and cultural artifacts that

make those areas (and rides) beautiful are vulnerable to human actions. Wildflowers get picked. Pot shards and arrowheads are taken. Antlers become home decorations. Rocks are removed as tokens of remembrance. The natural and cultural heritage treasured by outdoor enthusiasts is threatened by the very people who appreciate it. As mountain bikers, we have a responsibility to preserve these important resources by leaving them where they are found.

Imagine you're riding the same trail a day later- you'd want to see the same plants, the cool rocks, the berries

### **LEAVE** What You Find

and the cultural artifacts. Other people would also appreciate the chance to enjoy such natural treasures. So when you see those things on your ride, leave them for others...and because they belong there. Here are some specifics:

- 1. Don't "collect" plants, leaves and souvenir rocks. They should remain where they are found to play an important role in the wild.
- 2. It may be OK to snack on safe edibles such as berries, but don't deplete the supply. Those plants, berries and seeds are important food sources for wildlife. Feel free sample a berry, but be sure to carry and consume your own calories.
- 3. Preserve the past: Look at, but don't touch, cultural artifacts such as petroglyphs, arrowheads and pot shards. By simply walking— or riding— into a cultural site, you could unwittingly cause damage to the area by crushing artifacts beneath the surface. Midden moundsancient trash piles important for dating and reconstructing history— are often located in front of cultural sites. Enjoy cultural sites from a distance.

4. Avoid introducing and transporting non-native (exotic) plants and animals. As an increasing threat to native plants and wildlife, exotic species such as purple loosestrife, leafy spurge, spotted knapweed, ragweed, dalmation toadflax, European thistle and kudzu have begun taking over areas and dramatically changing the



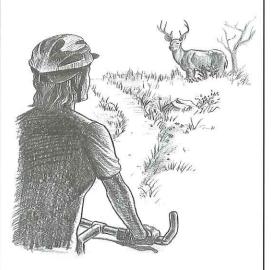
landscape and species composition. As a mountain biker, vou should educate yourself about exotic species in your area, then be careful not to ride through stands of them. Check your clothes, bike and body for plant seeds before and after your ride. Also, wash your bike between rides to minimize the chance of transporting exotic seeds. Learn more about the threat of nonnative species, then do your part to prevent the spread of noxious weeds and exotic animals.

### MINIMIZE Campfire Impacts

If you intend to camp on your mountain biking trip and are considering building a fire for warmth, cooking or ambiance, please consult the Skills and Ethics booklet that is the most appropriate to the area you intend to visit. A complete list of the Skills and Ethics series can be found on the back cover of this booklet.

### RESPECT Wildlife

Just as you can inadvertently cause trail damage, you can unwittingly disturb wildlife if you are not aware of how your actions as a cyclist affect them. Studies have shown



that mountain bikers travel more quietly and quickly than other trail users. At the same time, cyclists tend to be more predictable in their travel patterns and directions. What does this mean to you as a mountain biker? Well, there are several ways to enjoy your bike ride while minimizing the impact you have on wildlife. Here's how:

Stick to the trail. Riding on the trail avoids some potential problems with wildlife because your actions are predictable. If an animal becomes accustomed (or habituated) to the presence of cyclists on the trail, they are more comfortable to forage, hunt or rear their young where they are. By riding off trail, you are more likely to be perceived as a threat by wildlife, thereby causing a flight, fight or freeze response. The animals may therefore expend valuable energy due to your presence. Simply put: stay on the trail.

Don't follow or approach animals. If you encounter wildlife along the trail, the best response is to stop and allow the animal to depart on its own time. By pursuing or spooking animals, you are mimicking a predator's

### RESPECT Wildlife

actions. Again, this will alter an animal's natural behavior. Keep your distance from birds and other animals so you affect their behavior as little as possible.

Never feed animals, or leave food behind to be eaten. Animals that develop a taste for human food will tend to forage and hunt less, develop health problems from poor diet, and become a nuisance to other human visitors. Although 'nuisance' animals can be anywhere from cute to annoying, many can also be quite dangerous to human visitors. Rather than promoting bad habits and causing more human/animal conflicts, keep human food where it belongs— with humans. If you are camping, make sure you store your food securely.

Control your dog, or leave it at home. Dogs can be good mountain biking companions. They love the pace and the trail environment. But if not properly trained and controlled, dogs can wreak havoc on wildlife. If your dog does not respond to your commands, or barks at or chases wildlife, it's better to leave Fido at home. Although many dog owners believe otherwise, dogs have a profound impact on wildlife when they give chase. Even if

the dog does not actually capture the animal, the energy expended fleeing could have been used for survival-hunting, foraging or eluding natural predators. For this reason and others, some parks and forests do not allow dogs at all. The best choice is to control your dog, or leave it at home.

Avoid sensitive times for wildlife. Animals are more susceptible to human impacts during certain times of the year (particularly winter and spring) and stages of life. For example, animals that are mating, nesting or raising young will likely change their actions due to your presence. Your actions can therefore have long-term effects on the health and reproductive success of wildlife. Likewise, most large animals are active at dusk and dawn. For this reason. your best chance for reducing wildlife interactions is to ride during daylight hours.

### BE CONSIDERATE of Other Visitors

You can think of rude riding as social erosion- it's just as ugly and ultimately as damaging as physical erosion. Mountain bikers can inadvertently spoil the wildland experience for hikers, equestrians, climbers or any other users- even other riders. A few simple steps will keep you in harmony with the landscape and other people enjoying it.

Yield to hikers and equestrians. Slow down, establish communication, and pass safely. Be prepared to stop and dismount if the trail is narrow or crowded, or if the situation calls for it. You might ask horse riders how they'd like you to behavesome prefer that you talk

softly to let the horse know you're there. Others would like you to remain silent. Almost all stock users prefer that you step to the downhill side of the trail so that the animal does not feel threatened by you standing 'above' them. If you're approaching any group from behind, let them know you're there with a friendly greeting or the chime of your bell. Don't ride up silently, or shout commands such as "passing," or "on your left," (which can be misinterpreted as rude). Ask to pass- and pass other cyclists just as politely.

When descending, yield to climbing cyclists. In general, they're working harder than you and will have a tougher



### BE CONSIDERATE of Other Visitors

time restarting if they stop. When a descent is really tough, or if the climbers are already walking beside their bikes, they yield; it's pretty apparent when this is the case.

Travel in small groups. Big packs of cyclists can kick up dust, make lots of noise, and can make a quiet trail feel more like a city sidewalk. Try to ride in groups no bigger than five, breaking into smaller packs if your group is larger than that.

Don't race recreational trails. Fast riding on heavily used trails at popular times is dangerous, inconsiderate and foolish. Even if you feel like you can control your bike at high speeds,

others along the trail may not be as comfortable with fast-traveling bikes. Ride at a reasonable speed and always slow when you encounter others.

Let nature's sounds prevail. Sound seems amplified in the wildlands. Save your shouts of joy for the post-ride stories. On extended descents, switch to a low gear to reduce noisy "chain slap". Although there are times when making noise can be good- such as when passing or approaching blind corners- remember that many people (including mountain bikers) seek trails as sources of solitude and contemplation. Respect this desire by making appropriate noises at the right times.

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#### WILDLAND ETHIC

Those of us with a stake in the future of wilderness must begin to develop... an agenda which will place a clear, strong, national focus on the question of the responsibility of the wilderness user to wilderness.

-Paul Petzoldt

Paul Petzoldt believed in the power of the "wild outdoors" to make us better, more capable, compassionate people. Over a 70 year career he traveled wilderness lands around the globe teaching technical outdoor skills, leadership and "expedition behavior" to thousands of young adults. Paul was an advocate nonpareil of youth and wilderness. The father of "minimum impact" died in 1999 at the age of 91.

Like others, Paul noticed that outdoor recreation altered the land, but he was the first to develop a systematic approach to reducing the impacts of camping and outdoor travel. At first this meant tossing tin cans into the willows where they wouldn't be seen and building smaller fires. Ultimately, it meant an entirely new way of seeing and appreciating nature.

Paul thought that people could enjoy wildlands without harming



them—if they were educated. Millions of outdoor enthusiasts have shared his dream of sustainable outdoor recreation. But that dream is fading as more and more acres are lost to development around the globe. The pursuit of non-motorized outdoor recreation, long considered a "non-consumptive" use of wildlands, is taking a toll on native species, the appearance of the land, and the quality of our experiences.

We can travel the world, climb the peaks, ride the waves, float the rivers, and sail down the single track, but we won't save a single acre unless we put our experiences to use as wildland advocates. The future of wildlands and wildlife depends on responsible recreation—and a whole lot more.

### INTERNATIONAL Mountain Biking Association

**IMBA** serves as a unified voice for mountain bikers—individual riders, local clubs, regional associations and national organizations. For more information, contact:

#### 888-442-IMBA (4622) PO BOX 7578 Boulder, CO, USA 80306 www.imba.com

The International Mountain Bicycling Association (IMBA) is a non-profit 501(c)(3) organization dedicated to bringing out the best in mountain biking. IMBA helps mountain bicycling groups, other trail groups, land managers and government officials design, construct, maintain and manage sustainable trails. IMBA encourages responsible mountain biking and volunteer trail work participation.

### FOR MORE Information...

...please contact the following organizations:

Tread Lightly! 800-966-9900, www.treadlightly.org

National Off-Road Bicycle Association (NORBA) www.adventuresports.com/asap/norba.htm

United States Forest Service www.fs.fed.us

National Park Service, www.nps.gov

Bureau of Land Management www.blm.gov

Susan Benepe, National Outdoor Leadership School

Tim Blumenthal, International Mountain Biking Association

David Cole, Intermountain Forest and Range Experiment Station

Eleanor Huffines, National Outdoor Leadership School

Stew Jacobson, Bureau of Land Management

Craig Mackey, Outward Bound

Jeff Marion, U.S. Geological Survey

Hawk Metheny, Appalachian Mountain Club

John Neeling, U.S. Forest Service

Tami Porkorny, National Outdoor Leadership School

Scott Reid, Leave No Trace, Inc.

Roger Semler, National Park Service

Del Smith, Eagle Crag Adventures

Bill Strickland, Bicycling Magazine

Ralph Swain, U.S. Forest Service

Illustrations by Jacque Devaud and Scott Knauer

Cover photography by Carl Yarbrough Photography



### A FINAL Challenge

Humans need to know about wild . places, to experience them and understand the rhythms they follow. We need to contemplate our place within these wildlands, to discern what it is that draws us there. We need to carry with us an ethic that recognizes the value of wild places, and acknowledges our responsibility to treat them with respect, and apply good judgement as we visit and travel within them. We need to care for wild places as if they were our homes because, in many ways, they are. To do this is good for us, it's good for those who will surely follow, and it's good for the wild places, wherever they may be found.

Contact land management agencies and groups in your area and see how you can help. Be active in the planning and management of areas that are important to you. Volunteer for trail clean ups and maintenance, habitat restoration efforts, and public education programs, or organize them for your local area. Get involved and let your opinions on land use be known. Support wildlands and sustainable recreation.

Information on obtaining Leave No Trace curriculum materials, courses and trainings is available by calling 800-332-4100 or visiting the extensive Leave No Trace website: www.LNT.org.

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