

**Wilderness Workshop**  
Glacier National Park  
Notes by Suzy Stutzman, IMR Wilderness Coordinator

**Tuesday, March 25, 2008**

**Minimum Requirements** – led by Tim Devine, Arthur Carhart National Wilderness Training Center.

Tim went through Section 4 (c) of the Wilderness Act, Prohibition of Certain Uses, and referred to them as the “10 deadly sins.”

How different parks prepare Minimum Requirements Analysis

YELL – committee of 3 review MRA, fire program generates a lot, YELL has a good filter with their research permit process (good idea to combine MRA with other processes).

OLYM has a project proposal form, must state what the ISSUE is, if there is wilderness, then go to step one of MRW (does it have to be done in wilderness). They have a planning and compliance group that meets every two weeks, and the project originator must present the issue and step one to the group. Some projects may not go any further. If it does, the next steps are alternatives, impacts, and the best parkwide solution. They then put the MRW on parkwide review for two weeks. The entire process is a couple of months. For more routine, annual recurring issues, they are developing programmatic MRWs (toilets, signs). Programmatic MRAs should be reviewed every 3-5 years.

Discussion about what has the least impact: A lot of stock for a long time on a trail, or a helicopter that is only around for a little while? 10 pack horses = 1 helicopter? How does efficiency play into decision? USFS follows letter of the law and uses hand tools like cross cut saws more than NPS. NPS weighs things. You never see a cross cut saw on fire work in NPS. Issue: The fire program is well funded and funds big helicopters. We should seek good funding of the stock program, and invest in skills. Often, when helicopters are in the park and paid for, everyone starts to think up all kinds of uses. Try to combine flights for multiple tasks to reduce total numbers of flights. Question – can tracking researchers combine flights (elk, bears, sheep, etc.)? Now one person has to listen with headphones, maybe in future drones will fully automate, and tracking could be combined. Discussion about how the soundscape is important, and if we want to better manage commercial overflights, we should also carefully manage our own overflights.

Emergencies are situational. We don't always have to rush in and ignore Section 4(c). Technology is making it more complex. People have personal locator beacons that call 911 but do not specify what is wrong – out of water, or heart attack. Dinosaur has experiences with self-rescue. People have satellite phones, call for help, and get rescued by a flight for life – all of this without NPS involvement. SAR plans should address

MRA, and work out in advance coordination with other rescue groups and hospitals. Different parts of a rescue may also have different actions. For example, once an injured person has been evacuated, the emergency is over and the response team could walk out rather than fly.

Discussion about research and MRA. There is a group working on research guidelines [subcommittee of the National Wilderness Steering Committee]. Research is almost always valid, it is HOW we do the work. Issues around recurring monitoring (how we go out and collect data).

As we lose cyclic funding, we are more pressed for efficiency and may tend to pick up the chainsaw even more often. If we lose money, maybe we just don't clear all of the trails. But there is pressure to maintain trail standards for reasons of resource protection, public expectations, and to prevent worse maintenance problems by not clearing trails. Maybe NPS needs to think differently about how we get work done. We've prided ourselves on our professional NPS trail crews, but other agencies are using a lot of volunteers to get work done.

How do we get more consistency for good quality MRAs without "top-down" control? It was suggested that there be wilderness coordinators in every park, a mandate from the RD.

#### Food Storage Discussion

ROMO – require bear vault (canister) for certain areas, make them available for free

GLAC – multiple approaches, including food poles, cable between two trees, containers at designated sites (food locker 2 ft. x 3 ft. mounted in concrete), inverted "U," alpine pole. Use canisters for climbers, off trail, and above treeline; provide containers for free. All overnight users have to watch a food storage video.

YOSE is moving away from fixed food storage facilities and is removing them. They are putting the responsibility on the user – food storage containers.

GRCA – not bears, but trouble with rodents, squirrels, ravens, ringtail cats, and mice. They had ammo boxes at key sites, but people filled them with trash. They now require people to rent or buy a "rat sack," a heavy-duty mesh material with a grommet for hanging.

YELL – similar to GLAC with wooden food storage poles, but the structures are difficult to maintain. They have not gone to canisters. Their regulations say all food has to be hung. Some issues regarding consistency with GLAC.

Parks Canada – some parks have food platforms, high poles with a cross bar. Some parks had a cable/lift mechanisms, but moose and elk would get hung up. At Baffin Island, where there are polar bears and no trees, they advise people to put their food a long ways away from camp and put rocks on it. They will likely head toward canisters in the future. They had trouble with food storage lockers – people would cook on top of them, they would spill, and the smell would attract bears.

USFS – The Bob Marshall Wilderness only requires that camp be occupied. People can carry firearms (shoot anything that comes into camp?). Outfitters sometimes put a solar powered electric fence around the perimeter of food areas.

OLYM – Has cable systems, but they rust easily there. Moving toward canisters.

### **Wednesday, March 26, 2008**

#### **Wilderness and Risk Management – led by Suzy Stutzman, NPS Intermountain Region**

Part I: Visitors and Risk. Discussion of hazard trees. Parks with designated camping sites (YELL, GLAC, Parks Canada) remove hazard trees in wilderness. ROMO has been having extensive park discussions about the topic with the huge amount of beetle kill. Do they clear 250 foot circles? Do they go to undesignated sites and let people decide where to camp with information about the hazard? Parks feel a legal obligation to remove hazards when they tell people where to sleep. What about food preparation areas? Trees with canopies can be worse hazards than some dead trees, because they catch more wind. But at some point, root rot makes the dead trees ready to fall. YELL recommended a professional arborist program through the Fredrick Law Olmstead Center. It is an 18 month commitment – combination of 12 weeks of training, homework, and practical experience. It takes a lot of knowledge to identify hazard trees. It is important to have a general plan (not too detailed) and let people know what it is. There needs to be a large component of personal responsibility, public education, and a communication strategy. There are multiple ways to communicate, and several should be employed simultaneously, such as a video, personal contact, and a checklist that communicate a variety of risks, such as drowning, food storage, rock fall, etc. as appropriate to the environment. Visitors must be aware that they assume risk in wilderness. The issue was raised that younger people and people from other cultures have fewer outdoor skill competencies, and we need to help them take steps to build those competencies by helping them choose the right level of challenge.

We moved into a discussion of how communications is affecting visitor use and risk. People have a false sense of security from GPS, cell phones, etc. For example, someone overheard a visitor say “Oh, this GPS needs *batteries?*” Land managers need to be at trade shows with a message about risk. SPOT is an emergency signal device that has GPS and tracks where a person is. They can send a signal for help with the push of a button, but there is no other information, such as whether it is “I’m out of water” or

“there’s been a heart attack.” How do we need to respond? What is our duty to act? How do we know a Personal Locator Beacon (PLB) is an emergency, or a kid playing around? Our duty is to investigate further, not necessarily to call out a complete search immediately.

Part 2. Employee safety. We have a responsibility ethically and under OSHA to provide a safe working environment, and to know where each employee is located. Communication is a key part of this, and that pushes us to have radio coverage everywhere. Satellite phones are not reliable, batteries run out. Push to have more repeaters. Maybe the SPOT system described earlier would help for employee safety. Maybe they will be improved so you can text a message along with the signal.

Per the memorandum from Steve Martin (when he was Deputy Director of NPS), all parks have to have a backcountry travel plan. They vary widely. For solo travelers, there is a high level of check-in. Do we need so much communication for a group of 2 or 3?

OLYM - 3 or more, no itinerary has to be filed. The logic is that if one person gets hurt, one can stay with that person and one can go to get help.

SAGU requires an itinerary to be filed for any overnight or solo trip into the backcountry.

ROMO requires an itinerary to be filed for any trip that is more than 1 mile from a trailhead, day or night.

Parks Canada has twice-daily check-in. They use the 2-way communication to also direct people to issues that arise in the field.

There are generational changes. The younger generation may not mind or even want to check in frequently. They were brought up with their play-times scheduled and with cell phones to contact mom and dad all of the time. People still need skill- technology cannot be relied upon. Satellite phones fail, batteries run out, radio coverage is inconsistent (GRCA has to hike up to high points to check in – a risk in itself). GRCA has river trips to help with communication and getting people out.

OLYM shared “behavior based safety” card system that they use. It is a constant assessment of yourself and others – and safety becomes part of culture. They give rewards like tickets to a baseball game for consistently filling them out.

Parks Canada sits down to discuss hazards before sending out employees. They always send out two people with a saw. They are interested about information about steel toed boots, which are required when using chain saws, but lead to foot problems that may be worse.

**Participant-Led Topic 1: Backcountry surveying and monitoring of people and animals, including by camera – led by Bill Thorpe, Parks Canada.**

Parks Canada has visitors register for overnight use. For day use, they do not know as much. They shared a copy of *Human Use Report 2007: Waterton Lakes National Park*. Some of the technology they use to gather data are infrared sensors (a person or animal passing is recorded), and magnetic sensors (record horse shoes), and a combination of high and low placed sensors to count hikers and horse users. There are many things that can cause this data to be unreliable. They supplemented these methods with remote cameras – that have a day and night stamp. The information provided interesting information not only about when and where people were going, but also how and when wildlife moved through the area. The discussion included questions about privacy. They also found it useful for surveillance, and found it to be a good law enforcement tool. YELL noted that they put cameras on antlers in a meadow to catch collectors. There is no expectation of privacy in an open meadow. There was a discussion about the appropriateness of cameras in wilderness. Cameras used for research may save on overflights and have less impact on wilderness. Maybe someday we'll use drones and reduce aircraft. There was a discussion about using “track sticks,” where people volunteer to put a small GPS unit on their pack that logs their position. It's a great tool for data, and can the data be used for modeling different alternatives of management.

Day use is one of the biggest issues for all areas that were at the workshop. David Cole advocates that every wilderness area should have a self-registration at the trail head. It takes a lot of resources to maintain the registries, collect the data, and put it into a useful form. Region 2 of the USFS is conducting a “wilderness recreation forum” that engaged agencies, partners, NGOs, and the public in a series of seminars and field trips to discuss “magnet” areas within Colorado's wilderness. One of the recommendations is to look at wilderness opportunities on a landscape level, and pay as much attention to the pristine areas as the magnet ones. The management needs to be holistic, and recognize that limiting high use areas will likely impact low use areas. Maybe it's OK to have some high use areas a stepping stone to introduce people to the idea of wilderness and build constituents. Maybe the most intense management should be directed at the pristine areas to keep them pristine.

**Participant-Led Topic 2: Educating and engaging youth (and other cultures) in wilderness – led by Joyce Lapp (Glacier National Park) and Kari Gunderson (UM).**

Joyce visits schools and finds that kids are afraid – they hear a lot about climate change and don't know what they can do about it. She is involved in a very interesting program of “Women, Water, and Wilderness” that engages young Native American women. It is very important to have age-appropriate programs on wilderness. Wilderness is a very abstract concept to little kids, and maybe you should just stick to something like “wildlife” to get them engaged. About 8<sup>th</sup> grade, kids start to really get the concept of wilderness and a lot more can be taught. People should work with their state environmental education organization. State standards can be tied to environmental education. The public school system is our strongest link. Project Wild takes a number of steps before putting kids into wilderness. Boy Scouts and Girl Scouts should start out in backyards first.

GRSA sends an education specialist to classrooms, and participants get family fee waivers. They get 23% coming back to the park. They are also working on a high school enrichment camp for about 15 students this summer. The hope is to get at least one to become an intern, apply for a job, or at least share wilderness with their family. In PMIS, it is possible to get “Parks As Classrooms” (PAC) grants.

SAGU works with urban kids, culturally diverse. It is a challenge to get kids to understand public land, let alone wilderness. Teacher Ranger Teacher is very effective. SAGU is also using the family pass idea.

GRCA has used the Leave No Trace master program to go out from the park and get junior high kids interested. Each kid has to learn and teach one of the seven principles. The discussion is much more effective than a lecture.

YELL mentors local high school kids in the fire program to engage young local people in the park and strengthen ties with the local communities (give them a job, help them understand what the park is about).

### **Participant-Led Topic 3: Employees and wilderness values – led by Carol Sperling, Great Sand Dunes National Park and Preserve.**

The IMR Wilderness Executive Committee has been working on a project about “Why Wilderness.” Most of our parks have no signs or maps showing where there is wilderness, designated or otherwise. Our reluctance makes it unimportant to visitors or employees, there is no daily reminder. It’s hard to communicate about wilderness with employees. In the fire program, they try to give training on how people can do jobs in wilderness – and the tools. Most of our parks are wilderness with roads through them. Glacier National Park is 95% recommended wilderness, and 98% of the budget goes to the developed areas. The message appears that wilderness is not important. Management needs to address resource allocation. Wilderness IS the experience. Even if you stay on the roads, your views and experience are about the wilderness.

Carol shared a draft power point that begins with some real quotes about employees’ perceptions (not true) about wilderness, then a lot of nice pictures and quotes about the values of wilderness. Some additional misconceptions discussed include: it costs too much money or time to use traditional tools and skills; traditional tools and skills are more unsafe; it is a waste of taxpayer money to see cross-cut saws; wilderness is elitist, for a working man wilderness is a luxury; it’s a National Park, we don’t need to protect it.

The reaction to the power point was that the best way to try to inspire values and an emotional connection to wilderness is to get employees out into wilderness. The importance of wilderness needs to be connected to what the employee does. Maybe there should be some guided questions, or a field situation that asks “what would you do?,” then give them an outcome. Maybe bring in hand tools and accomplish a project together. A slide show alone is not going to connect people. Everyone needs to forge

their own connection. We need to say what we CAN do in wilderness, not just say “NO.” Work leaders should model behavior.

**Participant-Led Topic 4: Extreme sports and BASE jumping – led by Suzy Stutzman, NPS Intermountain Region.**

Earlier in the day, Suzy showed a three minute video from YouTube entitled “Mountain Wingsuit.” It shows BASE jumpers in special suits maneuvering like flying squirrels. Suzy presented the general issue of BASE jumping, and that the Alliance of Backcountry Parachutists is organizing to work within Management Policies 2006 that state that while BASE jumping is not generally allowed, it could be determined through a planning process to be an appropriate use and allowed subject to the terms and conditions of a permit. Parks will have to use management policies on determining appropriate use to make a general parkwide decision about the issue. For wilderness, we should have a single answer. There is general agreement among the agencies that manage wilderness that landing with a parachute is a form of mechanical transport, which is prohibited in wilderness.

We discussed additional reasons this activity is not consistent with the purposes of wilderness. In Yellowstone, Hayden Valley, visitors are not allowed to boat or fish, because visitors should be able to look out and see a natural setting and wildlife, not a zillion boats. YOSE established concerns about the visual impact of parachutes opening in the air. Places where BASE jumping occurs have issues of abandoned equipment. People flying through the air could be as disruptive as overflights, and you would not allow overflights in a cathedral. One of the purposes of wilderness is historical use, which really talks about traditional use. BASE jumping and parachutes are not a traditional use such as hiking, climbing, and horseback riding. Tim Devine offered that the NWSA needs to revisit Directors’ Order 41. But we will need to articulate why BASE jumping is an inappropriate use of wilderness before then. Andy Mitchell related that Tim Reid of Yellowstone does not think that parachutes/mechanical transport should be the reason BASE jumping is inappropriate in wilderness, as we could all get hung up on the “mechanical transport” definition. It is an activity that can take place in elsewhere, but is not appropriate in wilderness. It compromises other experiences, opportunities for solitude, and the primeval character. It leads to magnet areas – the same points for jumping and for landing. It attracts spectators. Climbing is a traditional use. In Parks Canada, they consider a parachute an unauthorized landing of aircraft. Case law at GLCA stated that parachutes do not fit the definition of an aircraft. Wilderness is intended to be a place where we leave behind the trappings of civilization. It provides a feeling of timelessness. BASE jumping would distract from the distinct experience of wilderness, the experience would be gone. Wilderness is not for thrill seeking.

**Recruiting and Managing Volunteers in Wilderness – led by Patti Johnson, Flathead National Forest.**

Having a not for profit do the coordination of volunteers is the way to go. The Bob Marshall Foundation coordinates a number of volunteer groups, and matches them to the

needs of the forests. The volunteer groups incorporate safety. Volunteer recognition is important. Grants and creative funding can be found with the help of the NGO.

Rocky Mountain National Park uses about 1,500-2000 volunteers a year. They have a designated, year-round volunteer coordinator to make that work. They get a lot of returning volunteers, so training investment pays off over time. It is important that volunteers get meaningful work. They had all divisions identify unmet needs, and have volunteers in all aspects of park management. They have a recognition dinner, get donated prizes, and link prizes to number of hours (more hours, more valuable prize). Returning volunteers strive to get to higher levels.

GRSA uses a lot of volunteers in visitor services. It is critical to providing these services, but does take a lot of NPS staff time to manage.

DINO has a lot of volunteer crews (SCA, etc.), but they always provide one NPS project manager to each crew. It has greatly improved safety.

Parks Canada brought up collective bargaining issues. They cannot take work away from paid employees.

Background investigations are hindering volunteers, sometimes even deterring them from applying. They feel intruded upon.

YELL has a lot of volunteers and success with grants.

### **Thursday, March 27, 2008**

#### **Managing Human Waste in Wilderness – led by Kyle Johnson, Glacier National Park.**

Kyle shared slides of several different systems. Sperry Chalet has a large BMI system. Waste is hauled out in drums by helicopter. The system was designed for the number of lodge users, but did not account for other hikers that flock to the area so it is overwhelmed. GLAC is using a BMI toilet in the alpine. It reduces the amount of liquid, and results in only a small amount of dry matter that has to be removed and could be spread or packed out. The human pathogens should be killed by the freezing winter temperatures. The cost about \$10,000 each (installed). The park still has outhouses that have to be periodically moved. Also, “low riders” that are short, un-walled pit toilets. They also have a few “Romtec” units. They see how things work and make adaptations for their unique factors. It was asked whether minimum requirements analysis had been done to determine IF they needed the toilets, or whether they could consider “wag bags” in some areas. Management does not think the public will accept the “pack it out” idea. Clean toilets are an important part of a visitor’s experience.

Parks Canada shared some constructed toilet structures that they built indoors and intended to transport by helicopter and set over pits. They were wood frame, well braced,

fitted with a plastic toilet unit, and clad with cedar shingles and siding to blend with the environment. The design paid attention to ventilation, and there was handsome hardware. They weigh about 900 pounds, and could be moved by backcountry crew in the future. They hope the wood design does not attract flies and then woodpeckers, that would destroy the wood.

GRSA is going to sell “wag bags” in the bookstore this year, and see how it goes. Some visitors ask for them.

GRCA presented their “Mr. Poop” poster and program, which imparts leave no trace principles with a bit of humor and with success. A lucky few got signed posters.

ROMO gives out bags to anyone willing to try them. They put them near climbing points and a little ways down a trail head, with information about them and a trash receptacle to put them in when they come out. They do not put them right next to parking lots, where people may just take them and drive off. They are also doing a survey with CSU to determine people’s attitudes about the bags.

CEBR had a yurt this winter off of the road, and did not want to provide a toilet so provide bags.

DSC did a comprehensive backcountry waste disposal study in 1989. Maybe we need an updated study. We should be moving toward more visitor responsibility for human waste. It may take a generation, but people will get used to it as they have on rivers. There were questions about having a filled bag would create a bear problem. The powder provided with the bags neutralizes odor. There were questions about whether landfills would accept them. Those questions can be directed to the website. Many states (including Utah and Colorado) have letters that state they are OK for disposal. We should make sure there are no long-term issues about disposal (environmental responsibility). They are designed to break down in a reasonable amount of time. It was suggested that the IMR WEC help promote region-wide direction toward user responsibility for human waste.

### **Intangible Values of Wilderness: The Perspective of Montana Tourists – led by Christine Oschell, UM)**

There is a Gateway to Yellowstone study done by NPCA (could find on web) and a paper about economic impacts of tourism from Glacier NP (brought copies). Montana has a \$3 billion tourism industry. The Bob Marshall WA accounts for about 2% of tourism. She related a survey of intangible values (Putney, 1993). They include recreation, therapeutic, spiritual, cultural, identity, existing, artistic, aesthetic, educational/scientific, and peace. Intangible values are at the heart of tourism (Harmon 2004). She has data on her website about \$\$\$ and tourism ( [www.itrr.umt.edu](http://www.itrr.umt.edu) ). She used the term “geotourist,” which many had not heard of. It was coined by National Geographic, and is inclusive of tourism by people concerned about the environment, history, and culture.

The term, similar to “geocaching,” led to a short discussion of that activity. Parks Canada sees some very positive sides to the activity, while US National Parks discourage the activity. A good future topic for a workshop.

### **Glacier’s New Shuttle System and Social Science Surveys– led by Melissa Barker, UM.**

She has done social science work with Wayne Freimund (UM-College of Forestry and Conservation) before and after the Going to the Sun Road shuttle was started. They asked a lot of visitor questions about how and why people might use a shuttle before it was established. The purpose of the shuttle is to “temporarily” reduce traffic on the Going-To-The-Sun Road by 20% during road construction. The new transit center is at Apgar, about 150 car parking, many walk from Apgar campground, and the building is LEEDS certified. The shuttle first operated last season, and had much higher use than expected. It is free (paid mostly with fee-demo money).

What’s happening:

- People do a lot more loop hikes
- Some people hike a little too late, into twilight
- Some users are not well prepared (they decide to hop off shuttle to hike)
- Need more education for preparation
- People who want to view scenery prefer the bus to driving
- Some local people like to ride all of the way across and back
- There is not a big difference of acceptance of the bus between people who want solitude and people who do not
- Some people want more control over their trip and don’t like the bus
- It does not complete with the commercial red busses (jammers) that give guided tours (they did better last year)
- Some 70% were willing to pay \$5
- Need more information about whether it affects length of stay.

### **CONCLUSION**

Participants were pleased with this year’s format of mostly discussion topics, which differs from some of the previous workshops that were more of a lecture or “talking head” format. People liked the mix of having the IMR Wilderness Steering Committee and a few others from outside the northern Rockies participate. However, because of the dates of the workshop overlapping with USFS training, there was only two USFS participants plus two Parks Canada staff. Future workshops should not start with what you CAN’T do in wilderness (minimum requirements discussion). It was suggested in the future to include some outfitters, more interpreters, and other agencies. Possible topics include how parks structure their wilderness programs (wilderness coordinators), big park vs. little park issues, permitting, what people should burn in campfires, seasonal/volunteer training, deeper information on safety, and geocaching.

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