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Minnesota's Boundary Waters Wilderness: Time for a New Name and a New Philosophy

T. JEFFERY EVANS

Pick the wrong time and the wrong route and your canoe trip through the the Boundary Waters Canoe Area Wilderness (BWCAW), a million acres of rocks, pines, and lakes on the Minnesota-Canadian border, might be anything but a wilderness experience. Imagine you have a reservation to enter through Mudro Lake this summer. You park five miles from the nearest paved road yet you have to pay for parking, courtesy of a backwoods saloon owner. You will have no problem finding the portages along the historic route of the voyageurs; simply head for the congestion. If you are lucky and stop early enough you might find an unoccupied campsite (you must camp only at designated campsites equipped with a fire grate and latrine). Then sit back and pity the church groups, boy scout troops, and families, paddling forlornly into the night past your "No Vacancy" sign. Do not look too closely at the birch trees. Some of them have been stripped of bark so the United States Forest Service (USFS) is painting them white. Ignore the jet fighters screaming overhead . . . and don't drink the water.

Granted, this scenario is a worst case. You might be fortunate and hear a wolf howl or a loon wail and not see or hear another soul in the BWCAW. But the BWCAW is not the undisturbed paradise one would expect. Too many people, fire suppression, mining on non-federal land, and military aircraft training flights all threaten the area. If we do not solve these problems there will still be a Boundary Waters, but will there still be a wilderness?

History

No wilderness in the United States has been the subject of more legislation and court battles than the BWCAW. The area, set aside in 1902 by the Minnesota Legislature, was later enlarged by President Theodore Roosevelt to include what is now known as the Superior National Forest. During the 1920s there were efforts to stop road building through the canoe country. An act of Congress prevented timber baron Edward W. Backus from flooding the border lakes in order to provide hydroelectric power for his paper mills at International Falls. This was the first time an act of Congress intended to preserve federal land as wilderness.

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Shortly after World War II, Ely, Minnesota, at the edge of the Superior Roadless Area, was the largest inland seaplane base in the world. The tranquility of the canoe country disappeared because of planes droning their way to the interior. Lakes that had been two days of paddling and portaging away were now twenty minutes by airplane. Sigurd Olson and others mounted a nationwide effort which convinced President Truman in 1949 to ban aircraft below 2,000 feet in the area.

Logging and motorized use continued until 1978 when, after a bitter battle, the Boundary Waters Canoe Area received additional wilderness protection. Logging was banned, mining was restricted, and motorized use was reduced from 60 percent of the lake surface area to 24 percent in 1999.

Too Many People

"We have met the enemy and he is us."

-Pogo

The BWCAW is the most heavily used wilderness area in the United States. According to the USFS, the agency responsible for the BWCAW, about 180,000 people entered the BWCAW from May to September 1988 (1).

USFS data shows use has increased an average of five percent annually since 1983 and could double by 1995. During July and August in the BWCAW it is not uncommon to encounter crowded portages and flotillas of ten or twenty canoes paddling heavily used routes. Author Michael Furtman and his wife spent a summer in the BWCAW as volunteer rangers. Much of their time was spent providing "maid service"—cleaning campsites and replacing overflowing latrines. In one two hour period on the Basswood river Furtman saw 145 people (2).

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As Clay Beal, recently retired USFS supervisor whose area included the BWCAW, said after an August 1988 BWCAW canoe trip, "I know we saw too many people for much of a wilderness experience."

On-going research indicates over one-third of all people using the BWCAW overnight are part of large organized groups such as church groups or youth camps. Private groups average 3.3 people. The organized groups average 9.5 (3). While these groups play an important role in exposing first-time users to the benefits of wilderness, they tend to have fewer wilderness skills. They also are more likely to be hard on campsites; are noisy; and crowd portages.

In an attempt to control traffic within the BWCAW, the USFS set up a permit-quota system in 1976. It is based on a model which predicts where people are likely to camp after they enter through one of the 87 entry points. By setting entry point quotas, managers were able, to some extent, to control the number of people in a particular area. The present USFS target is 67 percent campsite occupancy within the interior of the BWCAW and 85 percent occupancy near the edge of the wilderness. But these limits are quickly exceeded if rain or wind bog people down, or if a lake becomes a "hot" fishing lake, or if people don't bother to obtain a permit. Unfortunately this model controls campsite occupancy only, it does not control how many other parties one may encounter in a day. Nor does it address the major problem—too many people.

...but the BWCAW is not big enough to be all things to all people.

Responding to various pressures including that from the Friends of the Boundary Waters Wilderness, the USFS has agreed to modify the visitor distribution plan by 1992.

Part of the difficulty in managing the BWCAW is that "wilderness" means many different things. For outfitters and resort owners it is a place to make a living. For youth groups it is a place to work on canoeing and camping skills or build confidence and character. For others it is a place to hunt and fish. For others still it is a place to escape civilization, or see wildlife, or ponder a sunset. All are noble pursuits but the BWCAW is not big enough to be all things to all people. It is time the USFS recognized this and changed their philosophy.

A New Management Philosophy

A good start would be to change the name from the bureaucratic sounding "The Boundary Waters Canoe Area Wilderness" to "The Olson-Oberholtzer Wilderness Sanctuary." This will honor two Minnesotans, Sigurd Olson and Ernest Oberholtzer, who devoted their lives to the preservation of the area. Without their efforts, the area would look like a Northern Wisconsin by now. Adding the words "Wilderness Sanctuary" also says loud and clear that, at least in the legislated non-motorized areas, this is a place of quiet, a place of escape, a sanctuary. It will be managed as such.

If indeed the area is to be managed as a sanctuary, its highest and best use, then the maximum party size should be cut from ten to six and the permit system should be based on the number of other parties encountered and not campsite occupancy. Three encounters per day within areas one lake in from the entry point is an appropriate standard.

Some will argue that reducing the permits limits their access to the BWCAW. Indeed it does. But limiting access is nothing new. Not everyone gets a permit to enjoy a moose hunt annually; why should everyone get a permit to canoe the Olson-Oberholtzer Wilderness Sanctuary? The old argument that freedom is synonymous with wilderness ignores the fact that space in a wilderness is limited. Is the wilderness to be managed for quality or quantity?

Non profit groups could be affected by reducing the group size from ten to six. The better programs, such as Camp Widgiwagan, a YMCA program using the BWCAW for over fifty years, have long recognized the value of holding the group size to six. Anything larger becomes a social event rather than a wilderness trip.

An old joke in the Ely area is "Canoeists come to the BWCAW with a pair of underwear and a ten dollar bill and don't change either for a week." Times have changed. Any attempt to reduce the number of people visiting the BWCAW will be seen by the owners of outfitting services, gift shops, and ice cream parlors as an unfair change in their market. Changing markets are nothing new in a competitive economy, as the now unemployed workers at Honeywell and Control Data have discovered. In order to lessen the impact perhaps the permit reductions could be phased in over five years. Let the most efficient businesses survive.

Businesses on the edge of the BWCAW have played too important a role in determining how the BWCAW is to be managed. For example, this summer the USFS could have eliminated jeeps, trucks, and trailers used to haul boats over three portages within the wilderness. Instead they chose to listen to the argument that removing them might harm the local economy. Outside the BWCAW, the USFS collects twenty-eight cents for every dollar they spend on timber sales in the Superior National Forest (4). They justify it by saying below-cost timber sales help the local economies. The Friends of the Boundary Waters Wilderness and the USFS will face off in court this winter on below-cost timber sales and motorized portages. Regardless of the outcome, local businesses influencing how many people should be using the BWCAW makes about as much sense as allowing the campus bookstores and restaurants to influence admissions policy at the University of Minnesota.

Fire Supression

The forest fires in the West in recent years have demonstrated the important role fire plays in an ecosystem. Fire supression over the last 75 years has resulted in a build-up of fuel and an unnatural maturing of the forest. The USFS has recently adopted a management goal of allowing up to one percent of the BWCAW to burn per decade. However Heinselman (5) indicates that prior to European settlement 10 percent of the BWCAW burned per decade in roughly a mosaic pattern. Although the new USFS policy is not consistent with the past, it is an improvement over the old policy of trying to extinguish all fires by 10 a.m. the next day.

Currently only natural fires started by lightning are allowed to burn if conditions are safe and no life or property is threatened. A more aggressive fire policy, perhaps one involving the USFS setting prescribed fires, might be required soon. Public perception that all forest fires are bad is changing but the public must accept the risk that will come from using fire as a management tool.

Mining

This winter ice fishermen in Ely will see an unusual site, a drilling rig among their ice fishing shanties on Shagawa Lake. BHP-Utah, Kerr McGee, and other companies have been looking for gold in the greenstone formations around Ely that are similar to rocks found at the Hemlo Mine bordering Lake Superior in Canada. If they find mineral concentrations high enough to be profitable, there will be another threat to the BWCAW. This modern mining won't be done with a mule, pick axe, and pan.

The ore found near the BWCAW could be open-pit mined or it could be mined by first sinking a vertical shaft next to the deposit. Mining will then proceed by digging up, down or sideways. The mined ore would then be trucked to a processing plant, crushed to a powder-like consistency, and

bathed in a vat of cyanide. The cyanide solution leaches the gold. The waste rock removed to get at the deposit, the rock bathed in cyanide (known as tailings), and the cyanide solutions; all pose an environmental problem. The dust and noise from blasting and hauling of rock present additional problems.

Most of the waste rock and maybe half of the tailings can be stabilized with cement and returned to the original shaft. Even though buried, there is still a risk that cyanide or trace metals may leak into the groundwater and then into surrounding lakes. However that which cannot be buried presents the biggest problem. For the first time the tailings are exposed to air and water. Depending upon its mineral content, products such as sulfuric acid could result. Such products entering the soil could pick up a variety of trace metals such as copper and lead. All are toxic in an aquatic environment. The tailings, soaked in the cyanide solution and then rinsed to recover most, but not all of the cyanide, would be spread out in a five to one-hundred acre tailings pond where sunlight would break down any remaining cyanide. However according to the DNR's Bill Brice, manager of the minerals division, there has yet to be a tailings pond built that doesn't leak.

In Northern Minnesota, what groundwater there is mostly flows between cracks in the bedrock, sometimes faster than groundwater found in Southern Minnesota. Any leak could be difficult to monitor and contain. Cyanide will not break down if it isn't exposed to sunlight, so it could remain in the groundwater and the deep part of lakes for years.

To anticipate some of the environmental problems associated with mining, there is a mining simulation project funded by the Minnesota Legislature, the Blandin Foundation, environmental groups, and industry. The participants in the study include the Minnesota Department of Natural Resources (DNR), the Pollution Control Agency (PCA), the mining industry, and Project Environment Foundation.

In addition to leaky tailings ponds, Don Arnosti, Project Environment Foundation's representative on the project has two other concerns. "Minnesota needs to change the reclamation laws. Presently an operator could walk away from the tailings and waste rock piles and the taxpayer would be stuck paying to clean it up. Wisconsin, South Dakota, and Montana all require a bond to be posted equivalent to the estimated cost of the clean up. Minnesota needs to do the same."

Arnosti's second concern is the way mineral leases are allowed by the state. There is no formal environmental study before a lease is made. Any attempt to mitigate the environmental risks is done after the decision is made to have a mine. It is like proposing a new airport in downtown Minneapolis first and worrying about the environmental problems later.

Since exploration doesn't require an environmental impact statement as does actual mining, no one knows what exactly will be required by the PCA, DNR, and other governmental agencies involved in issuing permits. A trade-off must be made between profits and protecting the wilderness. Political pressure exerted by the public, environmental groups, and the mining companies on the PCA and DNR will ultimately determine what risks we are willing to take to protect the wilderness.

Aircraft

Through the efforts of Sigurd Olson and others aircraft overflights in the BWCAW were restricted in 1948. Incredibly this did not stop the Minnesota Air National Guard from using

the BWCAW as a training area. The Friends of the Boundary Waters Wilderness, the Izaak Walton League, and others took the Air Guard to court in an attempt to force them to file an environmental impact statement on the effect of military jet noise over the BWCAW. "Military jets flying over the BWCAW," testified Colonel John Broman, commander of the 148th fighter interceptor unit, "are only as noisy as a household vacuum cleaner or garbage disposal." (Hardly the noise level one wants to hear in a wilderness.) He also said there have been no studies done on the effect of aircraft noise on the BWCAW. In November of 1989 an out-of-court agreement was reached. The Air Guard has now promised to fly above 16,000 feet rather than 2,000 feet. One small victory perhaps, but it nonetheless illustrates how little tranquility in the wilderness is valued by some.

Conclusion

Twenty-five years ago Congress passed the Wilderness Act. The Wilderness Act defined wilderness, in part, "as a place where there is an outstanding opportunity for solitude or primitive or unconfined recreation." Today three percent of the total acreage in the U.S. is set aside as wilderness. Half of that is in Alaska.

In 1978 Congress passed the Boundary Waters Canoe Area Act, establishing the area as part of the wilderness system. Neither the Boundary Waters Canoe Area Act nor the Wilderness Act specifically addresses the many problems facing the BWCAW today including crowding, fire suppression, military overflights, mining pollution, acid rain, forest fragmentation, and the greenhouse effect.

Science will play an important role in solving these problems. After all we need good data. But the ultimate answers to the BWCAW's problems will not be found in data. It will be found in a philosophy which answers these questions. What is a wilderness? How is a wilderness to be managed? What costs are we willing to pay to protect such a wilderness?

In 1925 author and conservationist Aldo Leopold first proposed setting aside areas as wilderness. Sixty-five years later we are still struggling with the wilderness idea. This article has proposed making the BWCAW a wilderness sanctuary. After all we have wildlife sanctuaries, why not a sanctuary for the human spirit? Outfitters, mining companies, and others with an economic interest will surely voice their opinion as to how the area should be managed. The USFS may or may not agree with the wilderness sanctuary idea. It is up to the public to speak up or lose out.

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