

# BIGHORN RESEARCH HIGHLIGHTS RECREATIONAL CONCERNS

By Chris Wearmouth, AWA Conservation Specialist

This past summer marked the end of primary data collection for the Bighorn Wildland Recreational Trail Monitoring Project. After five years, Alberta Wilderness Association (AWA) has a good understanding of the impacts and trends of recreational use on a 76-km trail network located in the Bighorn area of west-central Alberta – an understanding that still causes us concern despite the efforts of government staff and local volunteers in minimizing the impacts of recreation in the area.

Over the course of this year’s field season, AWA staff made five trips to the Bighorn for the purpose of downloading data from traffic counters and surveying damage “hot spots.” Branching off from the Hummingbird Forest Recreation Area, trails run along several creeks that are part of the Ram River watershed, which eventually drains into the North Saskatchewan River. Trails are managed by Alberta Sustainable Resource Development (SRD) as part of the Upper Clearwater–Ram Forest Land Use Zone. The trail system is designated for both motorized and non-motorized recreation, the primary users being those on off-highway vehicles (OHVs) or horses.

Most of the trail network lies within the Prime Protection Zone under the *Eastern Slopes Policy*. Under this zoning, the objectives for the area should be watershed and wildlife management, and recreational activities such as

Trail	Recording Period	2004	2005	2006	2007	2008	4 Year Change
Onion Creek Trail	July 1 - Sept. 30	382	n/a	906	1712	2585	+577%
Canary Creek Trail	July 1 - Sept. 10	236	379	327	701	1040	+341%
Back Trail North	July 1 - Sept. 11	210	343	381	n/a	778	+270%

Summer traffic trends on designated trails showing the number of passes by OHVs

non-motorized trail use and primitive camping. However, with the opening up of the area to motorized recreation in 2002, it seems that the government’s own policy, developed after extensive public consultation, is no longer being followed.

To better understand the impacts of recreation, including the inconsistency of allowing OHVs within the Prime Protection Zone, AWA set out in 2003 to investigate (1) the willingness of backcountry users to abide by regulations, (2) the trends in motorized traffic, and (3) the extent of damage present on the trail network.

To meet the first two objectives, we buried eight electronic traffic counters along both designated and non-designated motorized recreation trails. The counters respond to disturbances to the magnetic field caused by large metal objects such as passing OHVs.

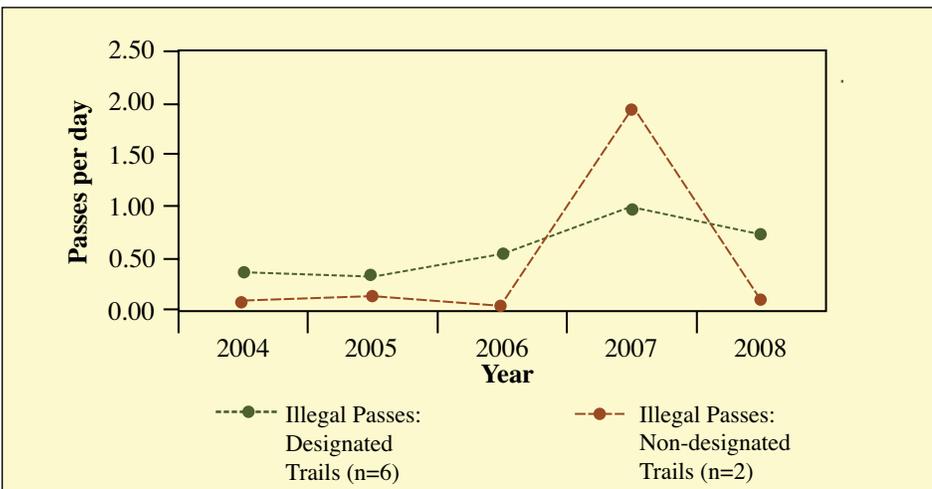
The number of vehicle passes recorded by the counters has increased significantly over the past five years,

leading to the conclusion that trail system use is increasing. For example, the Onion Creek Trail has seen an increase of 577 percent in the number of passes recorded. This increase could be explained in part by promotion of the area through government maps and local OHV clubs. As well, the reining in of rampant OHV use in other areas of the province could be driving people to the Hummingbird area.

Most designated trails have seasonal closures for motorized recreation from May 1 to June 30, with the exception of the Ranger Creek Trail, which is closed from May 1 to November 30. Information provided by the traffic counters allows us to determine if motorized users are staying off trails during the closures. As well, we placed two counters on non-designated trails, where motorized traffic is prohibited at all times.

During five years of monitoring, AWA has seen a rise in pass counts during the closures. The accompanying figure shows illegal passes on both designated and non-designated trails. While illegal traffic is down from last year, the trend of increasing illegal use over the past five years is clear. This past season, illegal traffic accounted for 15 percent of all traffic recorded in 2008. With such a high rate of infraction, it is apparent that more enforcement is needed in the area.

In order to assess the damage present on the landscape, AWA completed a survey of the trail network over several summers from 2003 to 2006. Damage sites included trail braiding or widening, erosion, inadequate water crossings, and random campsites. Our findings show that as of 2006, 20 percent of the trail system showed signs of damage.



Trends in illegal traffic on designated and non-designated trails shown by average OHV passes per day

We found that only 7 percent of water crossings had a formal structure and that the combined footprint of random camping sites was a staggering 50,574 m<sup>2</sup> – the equivalent of 32 NHL ice surfaces.

AWA is taking a second look at some of the “hot spots” – the damaged sections that have high potential to get worse. In summer 2008, we randomly selected 10 sites for resurveying, including damage sites, water crossings, and a campsite. Most sites showed damage equivalent to or slightly greater than when they were first surveyed. Our conservative conclusion is that the condition of sites observed has neither improved nor degraded, leaving the damage that was there in the past still present.

While completing our fieldwork, we made some anecdotal observations regarding the state of the area. SRD and local volunteers have installed new signs that advise users which trails are designated. We also stumbled upon a new trail half-cut higher up from the wet valley floor of Hummingbird Creek. As well, evidence suggested that one section of the back trail between Hummingbird Creek and Onion Lake received a fair amount of work recently, including resurfacing the trail and installing culverts at small creek crossings.

Despite these improvements, problems remain. Tracks show that signage is being ignored; in some areas, erosion from use has left deep ruts that are near impassable; and in the process of resurfacing the back trail, the workers dug a 13-metre-wide pit in the adjacent valley, presumably for surfacing material.

At present this sensitive landscape shows evidence that it cannot sustain motorized activity. Although further work on the network by government staff and local volunteers may help to address some of the problems, AWA believes that Alberta should not allow such activity within important wildlife habitat and within a headwaters area that is the source of drinking water for many Albertans.

While AWA completed primary data collection this year, we have decided to continue monitoring OHV traffic next year. We will also continue to resurvey identified damaged sections of the network to further understand trends in trail conditions. For more information on this project, download a copy of the final report at [www.AlbertaWilderness.ca](http://www.AlbertaWilderness.ca). 🌲

## My Introduction to the Bighorn

Daylight lingers long into evening in mid-July in the Bighorn. That’s a good thing: it’s 9:15 p.m. and AWA’s Chris Wearmouth and I have yet to set up our camp. But we have our campsite picked. It’s a spot on a sloping bench with a sweeping view of the Hummingbird Creek valley and within earshot of the gentle chuckle of that stream’s crystal waters.

Easing our packs off, we both glance at the western sky, where a thick black cloud is threatening to dump its contents on us. Hurrying now – me struggling with the tangle of my rented tent’s poles and Chris effortlessly erecting his Zoid 2 – we manage to get our temporary wilderness homes up before Mother Nature lightly sprinkles our campsite. As the sun dips to the horizon, creating a rainbow in the eastern sky, I think to myself, “That’s the only streetlight we need right now.”

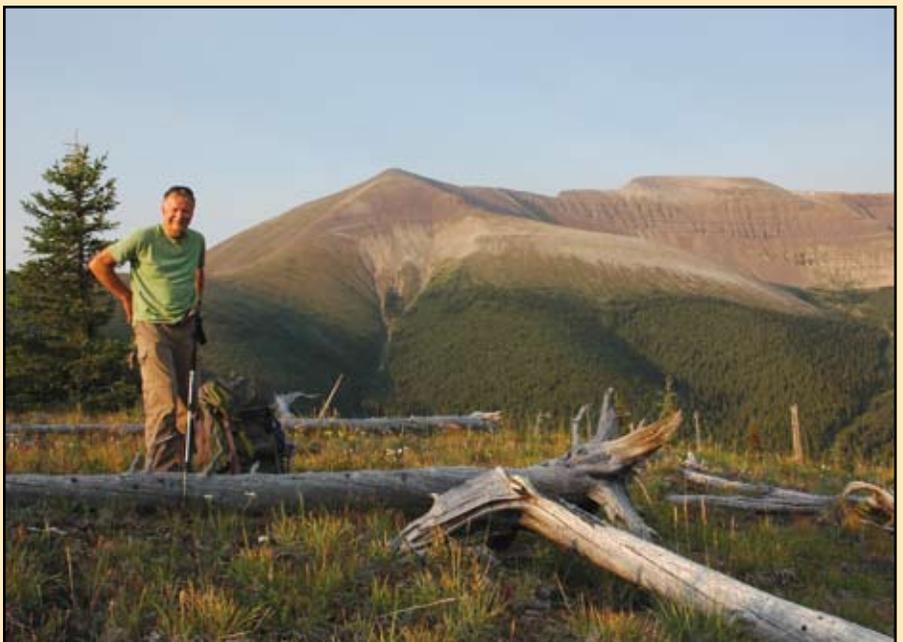
An hour later, stretched out beside a crackling campfire with bellies full of boil-in-a-bag sustenance, we’re finally able to relax after an afternoon of hustling our packs along the Hummingbird – more bushwhacking than trail walking. Under Chris’s leadership, we were surveying trail damage “hotspots” for AWA. As an area that is still relatively wild and unspoiled, the Bighorn is receiving special attention from conservation groups, and I feel genuinely privileged to be playing my own small part in this effort.

As the shadows of night creep up on our site, our weary eyes spot movement. Something big is out there, skirting the bush on the far side of the valley. Their red-brown coats just visible in the rapidly fading light, two elk briefly show themselves and then melt from view. Will such a wild and unscripted event be possible in 10, 20, or even 50 years? I certainly hope so.

Later, snuggled in my sleeping bag in the velvety darkness, my thoughts linger briefly on the events of the day and the pleasure of traveling through this pristine wilderness, unencumbered by the usual details that clutter so much of daily life. And then, lulled by the murmur of running water, I’m asleep, preparing for the next day’s mini-adventures in that backcountry jewel, the Bighorn.

– Paul Sutherland

*Paul Sutherland is an AWA member who helped with the Bighorn Wildland Recreational Trail Monitoring Project this past summer. We are extremely grateful for his assistance and look forward to working with Paul in future seasons.*



*Paul Sutherland on a Bighorn trail-monitoring trip* PHOTO C. WEARMOUTH