

# Trail Usage Report

## Summer 2020



Ryan Legroulx, Stranded Man Photography

Prepared by  
**United Riders of Crowsnest (UROC) Club**

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[www.uroc.ca](http://www.uroc.ca)

## Introduction

This report covers trail traffic surveys on **Pass Powderkeg** trails for the period **May 1, 2020 to October 31, 2020**.

This is the seventh in a series of summer trail usage reports. A comprehensive description of the equipment and methodology is available in a previous report dated November 2014.

## Equipment and Methodology

### *Pass Powderkeg*

Six trail traffic counters were installed - referred to as PPTC01, PPTC02, PPTC03 etc. (Pass Powderkeg Traffic Counter 01 and so on). Trail counters were checked, and data downloaded approximately once a month.

PPTC01 was installed on the Double Dirt trail in the woods below the water tower;

PPTC02 was installed on the Double Dirt trail between the water tower and the Dale Strandquist trail;

PPTC03 was installed on the Chainsaw Massacre trail above the Dale Strandquist trail;

PPTC04 was installed on the lower half of Berma-Grin.

PPTC05 was installed on the Buck-50 trail above the mid-hill connector;

PPTC06 was installed on the Buck-50 trail near Southmore;

These trail counter locations are basically the same as used since 2017.

## Results

When discussing the results, we refer to "counts" not "users". We cannot tell whether a single user passes a counter once going outbound and a second time on their return (i.e. counted twice) or whether that user returned by a different route (only counted once).

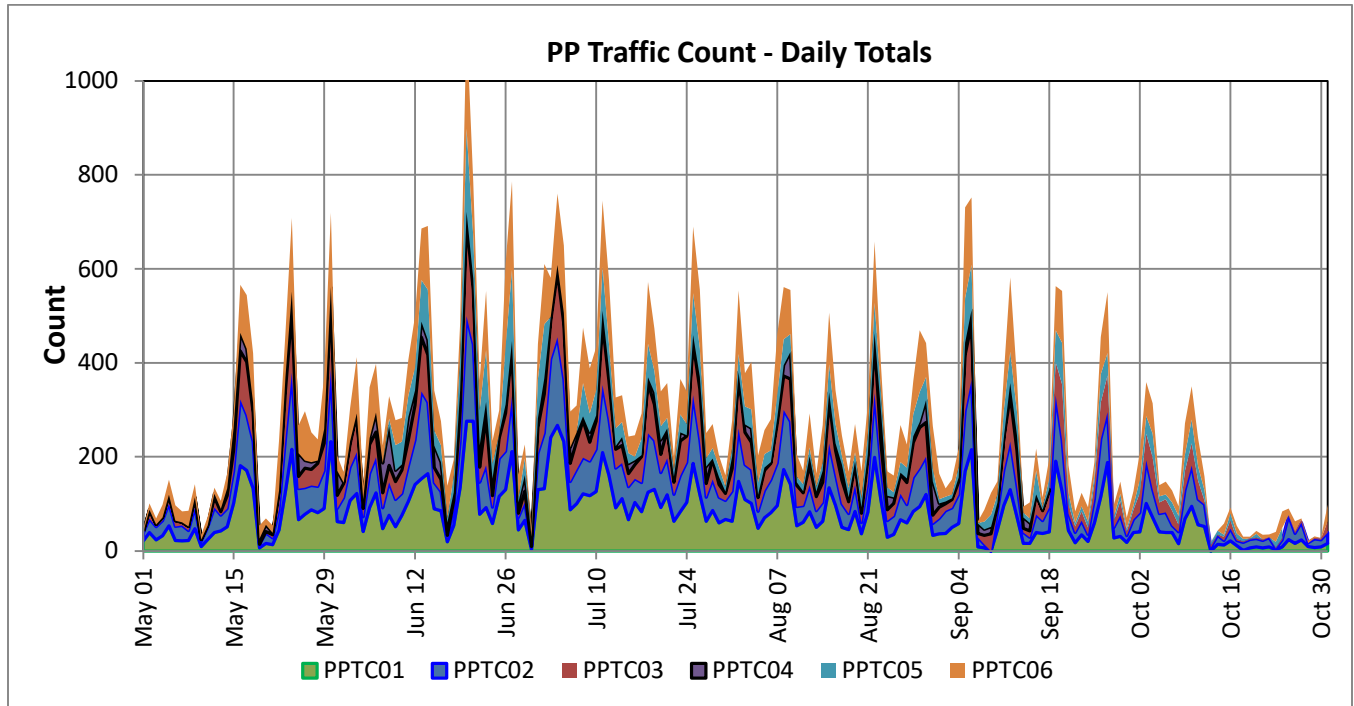
The data has received a limited amount of verification and some processing to remove obvious errors. The verification was simply that of comparing counted traffic with known traffic e.g. when the number of participants and approximate time of passage was known.

The IR counters will count people, large dogs, deer and other large animals i.e. any reasonably large warm body. It cannot indicate whether the user is ascending or descending the trail or whether a person is hiking, biking or using snowshoes.

In the histograms presented in Appendix A, for "Day of the Week", Sunday is represented by "1", Monday by "2" etc. The histograms show normalized data where, for example, the count for a particular day of the week was divided by the total count i.e. its proportion of the total. The normalized data provides a better basis for comparing the distributions for the different locations.

For the "Time of Day" histograms, the first time period is from midnight to 02:59, the second from 03:00 to 05:59 etc. It is probably reasonable to assume that most counts after 10 pm and before 6 am are animal movements. The overnight counts have been typically less than 1% of the total for each data set (after eliminating probable animal movements).

## Pass Powderkeg Summary



**Figure 1 Traffic Count, Daily Totals Summer 2020**

The above **stacked area graph** gives a general idea of the traffic pattern through the summer season. Individual users may pass several counters, so the daily totals are not helpful in quantifying unique users; it is the pattern of usage that is illustrated – busy weekends, periods of low usage etc. Unlike in previous years, there are no distinct peaks associated with events such as Sinister 7, Sole Survivor and UROC’s Bikefest-Enduro since these did not place in 2020 because of Covid restrictions.

This graph is also of interest in comparing to past years’ traffic and the influence of seasonal weather – late snow clearing, early snow arrival etc.

## Summary Table

**Table 1 Summary Statistics**

Counter	Trail	Start Date	End Date	No. of Days	Counts		
					Total	Avg Daily	Max Daily
PPTC01	Double Dirt-spresso	May 01	Oct 31	184	14402	78	276
PPTC02	Double Dirt-spresso	May 01	Oct 31	184	11392	62	223
PPTC03	Chainsaw Massacre	May 01	Oct 31	184	8239	45	199
PPTC04	Berma-Grin	Jun 08	Oct 31	145	2770	19	83
PPTC05	Buck-50, mid-hill	Jun 08	Oct 31	139	4950	36	177
PPTC06	Buck-50, lower hill	May 01	Oct 31	184	11420	62	228

### Notes:

1. Start Date – start of reporting period or when counter was first installed; End Date – end of reporting period or when no further data was available.
2. No. of days – number of days between Start and End when valid data was available.

## Discussion of Results

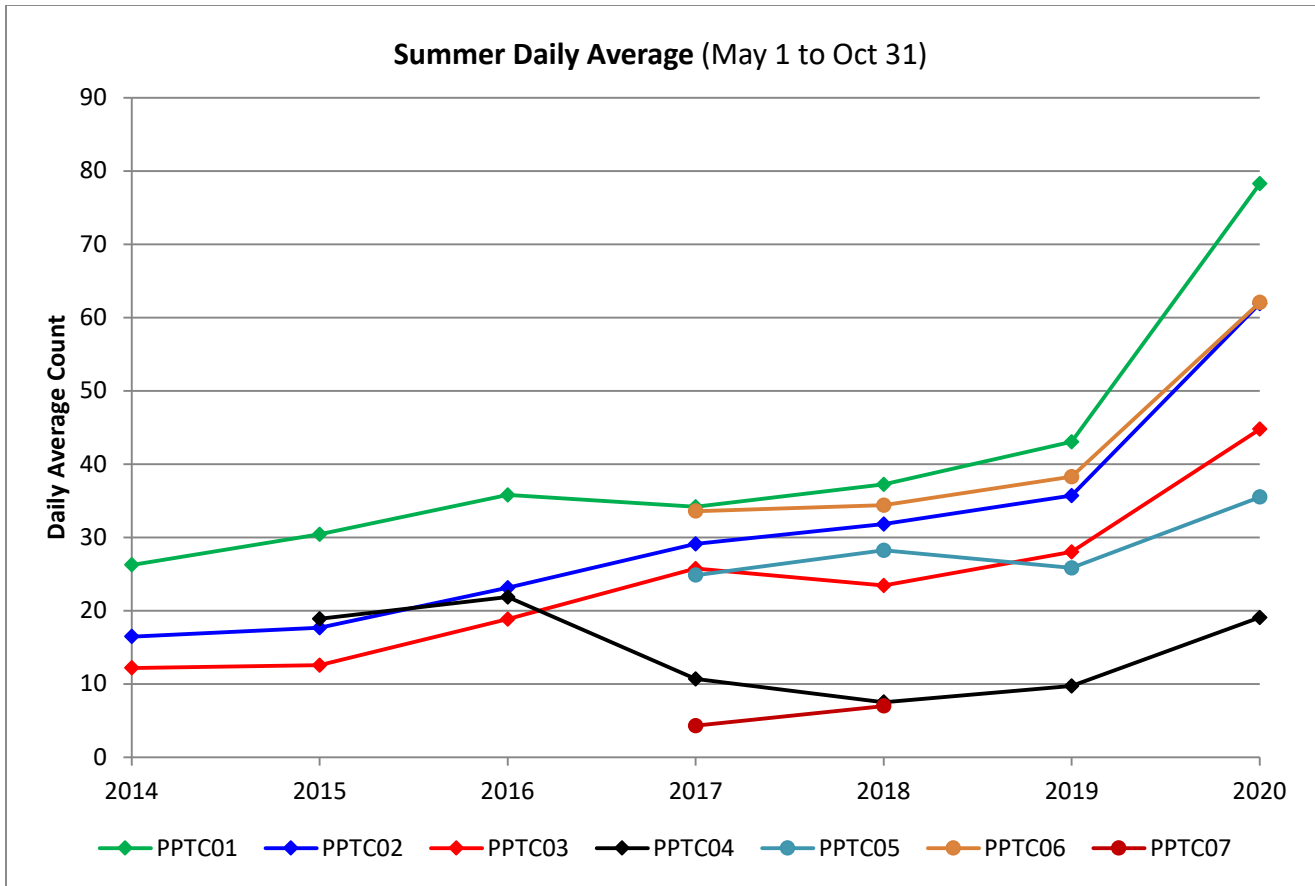
The data provides a good general indication of the overall level of traffic and is useful for year to year comparisons. The IR counters provide no meaningful distinction between types of users and undoubtedly includes some animal counts. However, despite the limitations of the IR counters, the installations have remained consistent for five years, so the data is considered to be valid for year over year comparisons. From a trail managers perspective, the data helps to show which trails are favoured by users and on what type of trail the club should focus its development activities.

The 2020 summer biking season has been heavily influenced by the restrictions associated with the Covid pandemic. Overall traffic has been up by 67% (based on average daily count) as people have increasingly turned to outdoor recreation when other options have been limited. The increase will have been offset by a somewhat later than usual pickup of traffic in Spring and the absence of the big trail-based events – Sinister 7, Sole Survivor and the Bikefest-Enduro.

On aggregate, there was a total of 53,173 counts in 2020 versus 28,997 in 2019 (for the same six counters) however when adjusted for the number of active days of counting, there was an average 52 daily count in 2020 versus 31 in 2019.

The annual change in “Daily Average” count is readily viewed in Figure 2. The daily average count is the best, simple basis for comparison since there are periods of missing data for some counters.

Clearly this year, the out-of-towners (non-residents/visitors) were responsible for much of the traffic increase as evidenced by random surveys of groups at the trailhead parking lot.



**Figure 2 Daily Average Count**

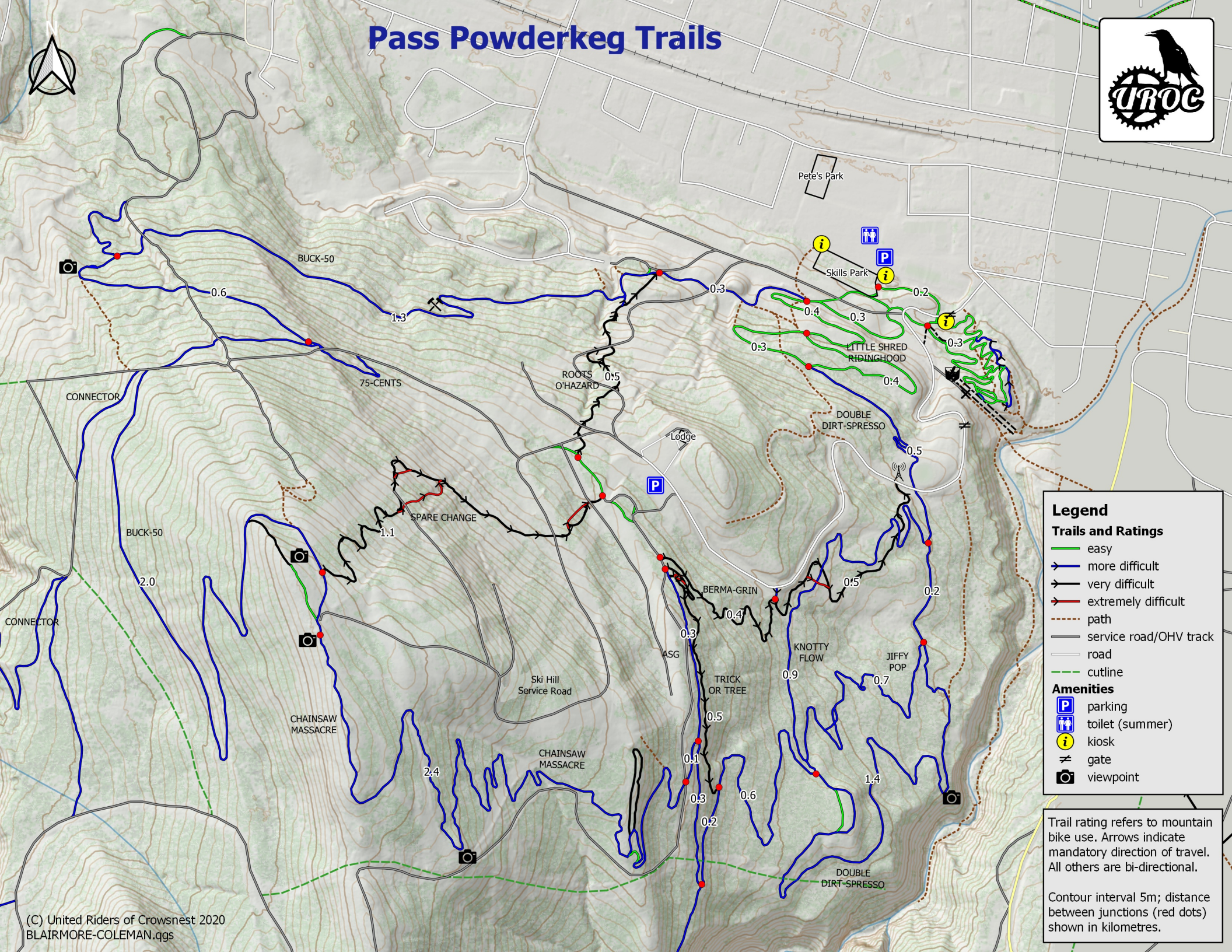
- PPTC01 Double Dirt trail in the woods below the water tower
- PPTC02 Double Dirt trail between the water tower and the Dale Strandquist trail
- PPTC03 Chainsaw Massacre trail above the Dale Strandquist trail
- PPTC04 Berma-Grin, lower half
- PPTC05 Buck-50 trail above the mid-hill connector
- PPTC06 Buck-50 trail near Southmore
- PPTC07 Spare Change (this location no longer used)

## Recommendations

Four trail counters will be left out for the winter, but monitoring will be reduced.



# Pass Powderkeg Trails



**Legend**

**Trails and Ratings**

- easy
- more difficult
- very difficult
- extremely difficult
- - - path
- service road/OHV track
- road
- - - outline

**Amenities**

- parking
- toilet (summer)
- kiosk
- gate
- viewpoint

Trail rating refers to mountain bike use. Arrows indicate mandatory direction of travel. All others are bi-directional.

Contour interval 5m; distance between junctions (red dots) shown in kilometres.