

The Nature and Extent of Marijuana Growing Operations in the Cariboo Region of British Columbia: A 14 Year Review (1997 – 2010)



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Introduction

This report describes the nature and extent of marihuana growing operations in the Cariboo region of British Columbia, and, in particular, four communities within that region – 100 Mile House, Williams Lake, Quesnel, and Prince George. This report is based on an examination of marihuana growing operations that came to the attention of police over a 14-year period from January 01, 1997 to the end of 2010. Building upon the 2002 research conducted by Plecas et al.,¹ as well as the 2005 research conducted by Plecas et al.,² and using the same methodology, this analysis combined data collected through that previous research with newer data from police file reviews of cases coming to the attention of police between 2004 and 2010. Those police file reviews were completed in 2011 and focused on collecting data about the location of the grow operation, the nature and origin of the complaint, the police investigation, the size and type of the growing operation, the amount of marihuana seized, the presence of other drugs, the presence of various cultivation equipment, and decisions made by the prosecution with respect to criminal charges. Importantly, for comparison purposes, the researchers also had the benefit of being provided with police statistics on the number of marihuana growing operations coming to the attention of police throughout British Columbia for the period 2004 through 2010.

As this report will describe, the number and size of grow operations in the Cariboo has grown substantially over the last fourteen years. Further, and not unexpectedly considering the growth in the number and size of operations, the amount of electrical theft has also increased. Similarly, the likelihood of fires has increased to such a degree in the last five years that, on average, 6.8% of structures hosting indoor marihuana growing operations caught fire. Despite these increases, the proportion of cases where police fully investigated incidents of marihuana growing operations coming to their attention in the Cariboo substantially declined, as did the proportion of founded cases that were forwarded for charges. None of this will be news to those familiar with the problem of marihuana growing operations in the Cariboo. Still, this report quantifies the extent of the problem and the need to seek out new prevention and response strategies.

Incidents of Marihuana Growing Operations Coming to the Attention of Police

In the Cariboo, not only has the number of growing operations that came to the attention of the police increased substantially over the 14 year period studied, but the increase was far more than for the province overall (see Table 1). Although the number of marihuana grow operations that came to the attention of police in British Columbia each year over the last five years has doubled the number in the late 1990's, the average number of grow operations that came to the attention of police, on average, in each of the last five years in the Cariboo was nearly three times more than in

¹ Plecas, D., Dandurand, Y., Chin, V., & Segger, T. (2002). *Marihuana Growing Operations in British Columbia: An Empirical Survey (1997-2000)*. University of the Fraser Valley.

² Plecas, D., Malm, A., & Kinney, B. (2005). *Marihuana Growing Operations in British Columbia Revised, 1997 – 2003*. University of the Fraser Valley.

the late 1990's. In fact, while there was a slight decline in the number of marihuana growing operations across the province between 2006 and 2010 compared to 2000 to 2005, the Cariboo had an increase in their average number of marihuana growing operations.

TABLE 1: AVERAGE NUMBER OF MARIHUANA GROW OPERATIONS PER YEAR THAT CAME TO THE ATTENTION OF THE POLICE (1997 - 2010)

	Late 1990's	2000 to 2005	2006 to 2010
British Columbia	2,310	4,975	4,571
Cariboo	82	187	226

For further context, when considering the Cariboo against the rest of British Columbia, controlling for population differences in 2010 (see Table 2), the number of marihuana grow operations coming to the attention of police per 1,000 population in Prince George was essentially twice the provincial average, while Quesnel and Williams Lake had six times as many, and 100 Mile House had 30 times as many.

TABLE 2: RELATIVE NUMBER OF MARIHUANA GROW OPERATIONS COMING TO THE ATTENTION OF THE POLICE IN 2010

	Population 2010*	% of Total BC Population	# of Cases as a % of the Total # of Cases in BC	Rate per 1,000 Population in 2010	Total # of Cases
Prince George	80,981	1.79%	3.3	2.04	165
Williams Lake	10,744	.24%	1.5	6.89	74
Quesnel	9,326	.21%	1.3	6.86	64
100 Mile House	1,981	.04%	1.2	30.29	60
BC Overall	4,530,960	100%	100	1.10	4,974

*Source of population statistics: <http://www.bcstats.gov.bc.ca/data/pop/pop/BCPop.asp>

How Marihuana Grow Operations Come to the Attention of Police

While marihuana grow operations come to the attention of police from a variety of sources, the most common source in the Cariboo was, as it has been generally and historically the case across the province, crime stopper tips and anonymous informants. As demonstrated in Table 3, since the 1990's, in the overwhelming majority of cases, grow operations came to the attention of the police through crime stoppers and anonymous informants, and this proportion has increased since the 1990's. It would appear that this increase has replaced police serving a warrant or investigating another crime. This should not be surprising given the changes in the size, profile, and functioning of modern growing operations. In effect, there are far fewer small growing operations in the Cariboo than in the past, and fewer instances where suspects are on site as often.

TABLE 3: SOURCE LEADING TO OPENING A MARIHUANA CULTIVATION FILE IN THE CARIBOO

Source	Late 1990's	2000 to 2005	2006 to 2010
Crime Stoppers/Informant	64%	70%	86%
Other = Crime	15%	9%	6%
Other = Traffic Violation	0%	3%	3%
Landlord	6%	4%	2%
Fire Department	0%	0%	2%
BC Hydro	2%	1%	1%
Neighbour	1%	2%	1%
While Serving a Warrant	7%	2%	0%
General Investigation	2%	7%	0%
Routine Check	2%	1%	0%
Grow Rip	0%	0%	0%

**All figures rounded.*

Investigations of Marihuana Grow Operations

Just because a grow operation comes to the attention of police does not mean that the police are able to fully investigate the incident. The position of the police is that the lack of resources has contributed substantially to the police in the Cariboo not even being able to conduct a preliminary investigation. However, even in those instances where the police do conduct a preliminary investigation, sometimes they are unable to find enough evidence to support obtaining a search warrant. Accordingly, a significant percentage of grow operations coming to the attention of police do not lead to a full investigation. Across the province historically, the percentage of cases in which any action was taken by the police on a marihuana grow operation fell from 93% in 1997 to 78% in 2003 (Plecas et al., 2005). Further, the percentage of time a full investigation was conducted fell from 91% to 52% (Plecas et al., 2005). In terms of the Cariboo, the percentage of time any action was taken on a grow operation coming to the attention of police fell from 80% in the late 1990's to 66% between 2000 and 2005 to 31% in the last five years. While all of the reasons that may have contributed to this decline in the Cariboo are not entirely clear, the lack of resources, the increasing sophistication of grow operations, and the size of properties they are hosted are likely contributors.

Similar to the case with marihuana grow operations throughout the province historically, where cases were fully investigated in the Cariboo, they usually proved to be founded (see Plecas et al., 2005). In the Cariboo, the percentage of cases that proved to be founded in the last five years (90 per cent) was only slightly lower than the 92% of cases founded in the late 1990's, and the 93% of cases founded between 2000 and 2005. Included in these percentages are a small number of cases in the Cariboo where clear evidence of a marihuana grow operation was apparent, but the operation was founded too late. In terms of detail, the number of such cases was, on average, four in the 1990's, seven between 2000 and 2005, and six in each of the last five years. These numbers are consistent with the percentage of fully investigated cases historically across the province in which the operation was found too late (see Plecas et al., 2005).

Type of Marihuana Growing Operations in the Cariboo

Similar to the rest of British Columbia, in the Cariboo, the vast majority of marihuana grow operations have been located indoors (Pleacas et al., 2005). As demonstrated in Table 4, more than two-thirds (69 per cent) of grow operations in the Cariboo known to police since 2006 were located in a house and another 17% in a detached building. In terms of changes over time, the percentage of operations located within detached buildings basically doubled since the late 1990's. Over the same period, the number of operations located on Crown land has tripled from 4% in the late 1990's to 12% in the last five years.

TABLE 4: LOCATION OF FOUNDED MARIHUANA GROWING OPERATIONS IN THE CARIBOO

	Late 1990's	2000 to 2005	2006 to 2010
House	70%	83%	69%
Detached Building	8%	4%	17%
Outdoors – Crown Land	4%	3%	12%
Outdoors – Private	5%	3%	2%
Warehouse / Commercial	1%	0%	0%
Other / Vehicle	7%	3%	0%
Apartment / Multiple Units	6%	4%	0%

The Size of Marihuana Grow Operations in the Cariboo

The size of growing operations in the Cariboo increased substantially since the late 1990's. As indicated by Table 5, the average number of plants seized per indoor operation in the last five years (n = 915) was a six-fold increase over both the average number of plants seized in the late 1990's (n = 134) and between 2000 and 2005 (n = 146). Likewise, the average number of plants seized through outdoor operations in the last five years (n = 1,050) was more than five times the number seized in the late 1990's (n = 185) and more than twice the number seized per operation between 2000 and 2005 (n = 482).

TABLE 5: AVERAGE NUMBER OF PLANTS INVOLVED WHEN PLANTS WERE SEIZED BY TYPE OF OPERATION IN THE CARIBOO

	Late 1990's	2000 to 2005	2006 to 2010
Indoor	134	146	915
Outdoor	185	482	1,050
Other	163	146	0

Also noteworthy was the increase in the amount of harvested marihuana seized through indoor operations. As demonstrated in Table 6, the amount of dried marihuana seized per operation has, on average, more than doubled since the late 1990's.

TABLE 6: AVERAGE NUMBER OF KILOGRAMS OF HARVESTED MARIHUANA SEIZED IN THE CARIBOO

	Late 1990's	2000 to 2005	2006 to 2010
Indoor	2.0	3.3	4.8
Outdoor	.007	1.3	0
Other	.2	2.0	0

Translating the amount of marihuana seized per operation into pounds and considering the number of seizures each year, it would appear that the quantity of marihuana seized in the Cariboo has increased substantially over the past 14 years (see Table 7). Specifically, the volume seized annually has increased nearly six fold since the late 1990's to where the total seized has averaged 3,239 pounds per year in each of the last five years; triple the average number of pounds per year over the 2000 to 2005 period.

TABLE 7: TOTAL AVERAGE AMOUNT OF MARIHUANA SEIZED PER YEAR IN THE CARIBOO

	Late 1990's	2000 to 2005	2006 to 2010
Total Pounds Seized in Plant Form	461	823	3,167
Total Pounds Seized in Harvested Form	83	196	72
Total Pounds Seized	544	1,019	3,239

Value of Marihuana Seized

The procedure to estimate the average market value of seized marihuana was used from the Plecas et al. (2011)³ study that provided a method of estimating the value of domestic and export marihuana production levels. That study conservatively estimated that the average wholesale market value of one pound of dried British Columbia marihuana was \$2,000. Using this estimate, and based on the estimate of marihuana seized in the Cariboo (see Table 7), the value of marihuana seized per year over the last 5 years would yield a wholesale market value of approximately \$6,478,000 per year. This represents a six-fold increase in the market value of marihuana seized per year in the late 1990's (\$1,088,000) and a tripling from the period between 2000 and 2005 (\$2,038,000).

Electrical Consumption – Fire and Theft

One significant issue with indoor marihuana growing operations is the matter of electrical consumption. Notwithstanding that it should be considered an issue because use of electricity for growing marihuana detracts from the provincial desire to conserve electricity in British Columbia, it is an issue because growers will often steal the electricity they need for their operations and,

³ Plecas, D., Diplock, J., Garis, L., Carlisle, B., Neal, P., & Landry, S.. (2011). The Marihuana Indoor Production Calculator: A Tool for Estimating Domestic and Export Production Levels and Values. *The Journal of Criminal Justice Research*, 1(2).

regardless of whether they are stealing or not, the electrical systems they put in place are commonly overloaded and do not conform to bylaw requirements. Consequently, there are risks to first responders and there is a substantial increased risk of fire. In this regard, it is noteworthy that 6.8% of structures hosting founded indoor growing operations in the Cariboo in the last five years caught fire. This finding is essentially a six-fold increase over the percentage of fires associated to indoor growing operations in the previous nine years (1.4% in the late 1990's and 0.8% between 200 and 2005). However, this increase should not be surprising in view of the increase in the number of lights being used in operations in the Cariboo. Specifically, the number of lights seized has increased substantially since the late 1990's (see Table 8).

TABLE 8: TOTAL NUMBER OF LIGHTS SEIZED PER MARIHUANA GROWING OPERATION IN THE CARIBOO

	Late 1990's	2000 to 2005	2006 to 2010
Lights Seized (No electricity theft)	6.2	8.2	28.4
Lights Seized (electricity theft)	22.4	33.6	48.9

In terms of electrical theft, this too has increased six-fold in terms of the percentage of operations since the late 1990's that installed a bypass to steal power. Specifically, 23% of operations over the last five years were stealing electricity (see Table 9). Moreover, and again not surprisingly given the increase in the number of lights involved, the amount of theft involved per operation over the last five years has more than doubled to, on average, \$21,638 between 2006 and 2010 compared to \$9,912 in the late 1990's. Further, it is worth noting, those marihuana growing operations that involved electricity theft were consistently larger than operations that do not involve electricity theft (see Table 8)

TABLE 9: THEFT OF ELECTRICITY IN CASES OF INDOOR MARIHUANA GROWING OPERATIONS IN THE CARIBOO

	Late 1990's	2000 to 2005	2006 to 2010
% of Indoor Growing Operations Involving Theft of Electricity	4%	12%	23%
Average Value of electricity Theft per Operation	\$9,912	\$14,868	\$21,638

Suspects Identified in Marihuana Grow Operations

The analyses conducted for this report did not include an analysis of the characteristics of suspects found at marihuana growing operations. Instead, it only considered the matter of whether suspects were present at the time police arrived on scene. The percentage of time suspect were present when the police arrived has been decreasing since the late 1990's. Specifically, the percentage fell from 88% in the late 1990's to 80% between 2000 and 2005, to, on average, 71% of cases in the last five years. Why this pattern exists is not clear, but at least it is one more indicator of the efforts of growers to avoid prosecution. In any case, the issue is important because, unless suspects are present, police are generally required to treat the case as a no case seizure in the first instance.

Case Seizures

Not every instance where police showed up at a founded grow operation led to a recommendation of charges. As already noted, if there are no suspects present, there will be no charges. Beyond that, there are often legal issues that preclude the police from doing anything more than seizing the marihuana and equipment found. In any case, it is interesting that the percentage of instances where the police treated the case as a “no case” seizure climbed substantially since the late 1990’s. Specifically, as demonstrated in Table 10, the percentage of incidents of marihuana growing operations with suspects present that became case seizures was already quite low (61 per cent) in the late 1990’s. This percentage fell to, on average, 45% over the last five years. Furthermore, the percentages were still relatively low even when considering those instances where suspects were present.

TABLE 10: PERCENTAGE OF FOUNDED MARIHUANA GROWING OPERATIONS CLASSIFIED AS CASE SEIZES AND PERCENTAGE WHERE SUSPECTS WERE PRESENT IN THE CARIBOO

	Late 1990’s	2000 to 2005	2006 to 2010
Percentage of Case Seizures	61%	61%	45%
Percentage of Case Seizures Where Suspects were Present	68%	71%	61%

Beyond the effect of suspects being present, it is also interesting to note that the likelihood of a marihuana grow operation being treated as a “case” seizure would also appear to be affected by the number of plants involved – with “case” seizures on average involving more plants (see Table 11).

TABLE 11: AVERAGE NUMBER OF PLANTS SEIZED COMPARING ‘NO CASE’ AND ‘CASE’ SEIZURES IN THE CARIBOO

	Late 1990’s	2000 to 2005	2006 to 2010
No Case Seizures	114	99	609
Case Seizures	155	201	1,349

Charges Laid In Marihuana Growing Operations Cases

In cases where a founded growing operation was not classified as a ‘no case’ seizure, police recommended charges to Crown and those recommendations were usually accepted (see Table 12). Of note, this has been rather consistent since the late 1990’s. While these percentages are impressive, they are, of course, less so when considering them against the total number of cases coming to the attention of police (see Table 12).

TABLE 12: NUMBER OF CASE SEIZURES AND PERCENTAGE OF CASE SEIZURES THAT RESULTED IN CHARGES IN THE CARIBOO

	Late 1990's	2000 to 2005	2006 to 2010
Number of Case Seizures	33	52	25
Percentage Case Seizures that Resulted in Charges	95%	96%	100%
Percentage of Total Number of Cases Coming to the Attention of the Police Which Resulted in Charges	38%	27%	11%

Conclusion

As noted in the introduction, the fact that marihuana grow operations in the Cariboo have grown substantially in number and size over the last 14 years will come as no surprise to those tasked with dealing with the problem. It will also be no surprise that these operations often involved substantial electricity theft and posed a serious fire hazard. Moreover, we should expect that given the size of the average grow operations in the Cariboo (i.e. in the range of 1,000 plants), and given the likelihood that each is set up to produce four crops a year, the offenders who operate them today are, on average, producing marihuana with a wholesale value of more than \$500,000 annually. Accordingly, offenders have a great incentive to remain in the business. This is especially so given that the likelihood of prosecution for operating a marihuana growing operation is relatively low. In this regard, it is noteworthy that the likelihood of a marihuana growing operation that came to the attention of police in the Cariboo leading to charges over the last five years was essentially one in ten. With the assumption that the actual number of marihuana grow operations in the Cariboo is at least three times the number coming to the attention of police, the odds of any one grower facing charges is about one in 30.

In considering the results presented in this report, it is important to remember that the analyses only considered the situation in the Cariboo to the end of 2010. Since the fall of 2010, the federal drug section of the RCMP has employed a very aggressive enforcement campaign targeting grow operations in the region. It will be interesting to see the extent to which that campaign effects the incidents of marihuana growing operations in the Cariboo and throughout British Columbia over the next few years.