



**INTRODUCTION**

This map represents a compilation of historical landscape events that have caused fatalities in Canada from 1777–2018, which is updated from the one published in 2018 (Bain-Stevens *et al.* 2015). Included with the map is a table listing the events chronologically with coordinates and a brief description. We have also included landscape events that have caused tumors that turn, caused fatalities. The landscape information comes from two historical reviews, scientific reviews, newspaper reports, and from interviews with colleagues who shared their knowledge. Furthermore, it is also a map based on a previously published map of historical landscape fatalities (Bain-Stevens *et al.* 2015). The map shows the locations of landscape fatalities in Canada from 1848–1908 (Evans 1909). In updating, we included events that had fewer than three fatalities also. The newspaper article descriptions are often short and not listed, therefore, we had to make interpretations of the locations of landscape fatalities. Some of the events are coordinated with the locations of the landscape fatalities. The Geological Survey of Canada what was important was the regional setting in which the event took place. The events were plotted within Canada's physiographic regions (Botkoff, 2014) overlaid on a hillshade image created from a digital elevation model. This open file has tried to summarize, in a joint effort, all known landscapes in Canada that have resulted in fatalities. We also compiled the number of fatalities due to a landscape per province (Fig. 1). Undoubtedly some are missing. If the reader is aware of any such missing landscape events or inaccuracies, please contact the Geological Survey of Canada.

EVENT	DATE	LOCATION	PROV/LOCALITY (LONGITUDE/LATITUDE)	COMMENTS	EVENT #	DATE	LOCATION	PROV/LOCALITY (LONGITUDE/LATITUDE)	COMMENTS
1	1774/02/02	St-Rome de-Montigny	QC 68.4692 - 56.5546	4 Possible swept away a house and a barn.	78	1978/02/20	Woodbury, Buffalo, near Kato	QC 68.8860 - 136.928	2 Roadside killed a railway employee north of Kato's.
2	1871/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
3	1870/02/05	Regard	QC 68.4637 - 78.8653	2 Roadside swept away a house and its two occupants.	78	1978/02/05	Woodbury, Buffalo, near Kato	QC 68.8860 - 136.928	2 Roadside killed a railway employee north of Kato's.
4	1870/02/05	Regard	QC 68.4637 - 78.8653	3 Roadside destroyed houses.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
5	1870/02/05	Regard	QC 68.4637 - 78.8653	4 Roadside swept away a house and a barn.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
6	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	2 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
7	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	3 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
8	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	4 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
9	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	5 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
10	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	6 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
11	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	7 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
12	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	8 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
13	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	9 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
14	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	10 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
15	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	11 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
16	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	12 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
17	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	13 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
18	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	14 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
19	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	15 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
20	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	16 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
21	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	17 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
22	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	18 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
23	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	19 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
24	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	20 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
25	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	21 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
26	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	22 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
27	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	23 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
28	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	24 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
29	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	25 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
30	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	26 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
31	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	27 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
32	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	28 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
33	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	29 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
34	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	30 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
35	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	31 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
36	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	32 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
37	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	33 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
38	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	34 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
39	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	35 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
40	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	36 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
41	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	37 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
42	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	38 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
43	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	39 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
44	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	40 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
45	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	41 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
46	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	42 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
47	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	43 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
48	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	44 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
49	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	45 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
50	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	46 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
51	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	47 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
52	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	48 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
53	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	49 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
54	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	50 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
55	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	51 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
56	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	52 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
57	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	53 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
58	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	54 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
59	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	55 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
60	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	56 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
61	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	57 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
62	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	58 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
63	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	59 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
64	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	60 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
65	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	61 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
66	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	62 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
67	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	63 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
68	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	64 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
69	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	65 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
70	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	66 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
71	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	67 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
72	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	68 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
73	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	69 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
74	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	70 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
75	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	71 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
76	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	72 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
77	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	73 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
78	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	74 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
79	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	75 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
80	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	76 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
81	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	77 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
82	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	78 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
83	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	79 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
84	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	80 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
85	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	81 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
86	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	82 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
87	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	83 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
88	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	84 Roadkill from swept killed two brothers.	85	1982/02/21	St-Rome de-Montigny	QC 68.4692 - 56.5546	1 Roadside killed a house.
89	1889/03/24	Gravel Creek	QC 68.4637 - 56.5533	85 Roadkill from swept killed two					

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