



CANADIAN INTERAGENCY FOREST FIRE CENTRE INC.
CENTRE INTERSERVICES DES FEUX DE FORÊT DU CANADA INC.

Canada Report 2020



Canada Report 2020

Preamble

The 2020 Fire Season will go down as one of the most memorable on record even though it was a relatively quiet season across Canada. Nationally, the number of fire starts were down 32% from the 10-year average and the total area burned in Canada was down 92% from the 10-year average. It was also the first time in over 10 years that the National Preparedness Level did not reach higher than NPL 2 during the entire fire season. The slower than normal domestic fire season, however, was book ended by busy periods before and after as Canada provided international support to Australia during the January to March period and to the Northwestern United States in September and October.

Fire Season

As the new year arrived, Australia continued to experience one of their most severe fire seasons ever recorded. The first Canadians to provide support to Australia arrived in November of 2019, however, Canada continued to assist the states of Victoria, New South Wales and South Australia until the second week in March 2020. In total, 243 Fire Management Specialists and firefighters, representing every Canadian agency, were deployed to Australia during their unprecedented fire season.

As the last of Canadian personnel returned from Australia in mid-March, the COVID-19 pandemic was developing into a global crisis. As much of Canada locked down to prevent the spread of the virus, the 13 Canadian Interagency Forest Fire Centre (CIFFC) member agencies were challenged with developing safe work practices and procedures that would protect their staff and limit exposure while fighting fire in a COVID-19 environment.

It ended up being a late spring across most of the country and the first request for interagency support in Canada did not come in until May 26th. Typically, it would be western or central Canada requesting resources at this time of year but this year it was New Brunswick (NB) requesting an air tanker group from Québec (QC). This trend would continue as all requests for assistance during the season would originate from the central and eastern parts of the country.

By mid-June, Québec was experiencing escalated fire activity and requested air support in the form of one air tanker group from Manitoba (MB) and another air tanker group from Ontario (ON). New Brunswick was also starting to heat up again and requested air tanker resources from Newfoundland and Labrador (NL). As several of Québec's larger fires continued to grow, their need for additional resources grew as well. From June 22nd to 26th, ON deployed 120 firefighters and Alberta (AB) mobilized an additional 60 to assist QC with suppression efforts. These 180 firefighters would be the only crew member personnel to be exchanged between Canadian agencies during the fire season. As QC continued to deal with several large fires in early July, they requested another air tanker group provided by MB. At the time, ON was beginning to experience increased fire activity and were also looking for air support. Manitoba, once again, stepped up by sending two air tanker groups to ON to help manage the fire load in that part of the country. By the second week in July, Parks Canada (PC) was dealing with a significant fire in Mealy Mountain National Park Reserve (Akami-Uapishk^u - KakKasuak) in Labrador and they received air tanker support from NL to help manage this fire.

During the second week in August, Ontario once again requested further air tanker support. On August 10th, Manitoba sent another air tanker group to Northwestern Ontario. As the situation in Québec was beginning to slow down, they were also able to help Ontario by sending an air tanker group to the eastern part of the province. Simultaneously, the Maritime provinces were experiencing severe drought conditions. On August 13th, New Brunswick requested a group of CL 415's from Québec to deal with several fires in the Miramichi region of the province. Later in August, it was NB's turn to assist another agency and they sent support to Nova Scotia (NS) in the form of three AT-802 ground based tankers.

As the fire season in Canada was winding down a request came in from the National Interagency Coordination Center (NICC) in Boise, Idaho looking for support from Canada. During this time, the US was at an NPL 5 with the Northwest experiencing their worst fire season on record. From late August until mid-October, six Canadian agencies teamed up to provide 593 Fire Management Specialists and firefighters to incidents on federal land located in the states of California (310 personnel) and Oregon (283 personnel). BC provided the majority of the resources (430 personnel) but Québec, Ontario, Alberta, Manitoba, and Parks Canada also provided assistance. In addition, two Interagency Resource Representatives (IARR) were deployed to the NICC in Boise to coordinate this exchange of resources. By October 18th, all deployed resources were returned to Canada.

Agency Seasonal Summaries

British Columbia

The 2020 wildfire season in British Columbia was quieter than anticipated with 649 wildfires burning just over 15,000 hectares of land between April 1 and Oct. 1, 2020. This is down from the 10-year average of 1,356 wildfires and 347,104 hectares that typically burn over a full fire season.

The COVID-19 pandemic made firefighting in B.C. challenging, but safety measures introduced early in the season minimized the risk of exposure while also ensuring an effective emergency response.



In the fall of 2020, the BC Wildfire Service responded to three requests for assistance from the United States via the Canadian Interagency Forest Fire Centre. In total, 430 personnel were deployed (224 to California and 206 to Oregon) to support firefighting efforts during the extreme wildfire season in the western United States.

Yukon

Yukon experienced an exceptionally slow fire season in 2020 with only 24 fires. The cool and wet season saw only one fire of note, which threatened a remote hotel and service station on the Dempster Highway between Dawson City and Inuvik, NT. Yukon did not engage in any mutual aid resource sharing due to a Territorial State of Emergency for the COVID-19 pandemic.

Alberta

Alberta experienced a relatively quiet 2020 wildfire season thanks to the diligence of Albertans, effective departmental preparations, and substantial precipitation in many areas of the province. The 2020 wildfire season saw 704 wildfires burning just over 3,269 hectares (8,068 acres), only 0.8 per cent of total area burned in comparison to the five-year average. Eighty-eight per cent of the wildfires were human caused, however this number has been declining over the past five years due to prevention programs.

Alberta exported 61 firefighters and support staff to Quebec, 3 to the Northwest Territories, and 44 to Oregon to assist with their wildfire operations.

Following the direction of Alberta Health Services, Alberta Wildfire quickly adapted to the demands of fighting wildfires during a pandemic, making important and necessary changes to daily routines to ensure the safety of all involved. Changes included introducing quarantine procedures for firefighters exported to the U.S. There were no confirmed cases of COVID-19 among Alberta firefighters during the 2020 wildfire season.

Northwest Territories

The 2020 fire season for the Northwest Territories was among the least active in recorded history with only 30% of the average number of fires occurring, resulting in only 3% of the average area burned. Due to COVID-19, fire management limited the amount of training in NT this season and increased in overall firefighting resources by adding three additional fire crews and a CL-215 air tanker group. To limit the impact of smoke on breathing, 60% of discovered fires were actioned compared to a normal response percentage of 40%. Fire response in the Northwest Territories this summer was composed primarily of initial attack fires with only one fire requiring a full incident management team.

Saskatchewan

Saskatchewan had a very quiet wildfire season in 2020 due to weather systems which brought significant precipitation during the summer months, as well as above normal late spring runoffs which contributed to many areas with localized flooding. Saskatchewan had a total of 145 wildfires in 2020 – this is well below the 5-year average of 303. Human caused fires accounted for 123 fires and lightning was responsible for the remaining 22 fires.

There were 82 wildfires in the Primary Area which includes Community, Primary Timber, Wildfire Management Area and Federal Lands Area. The total area burned in the Primary Area was 41,432.2 hectares and the Primary Area saw 55.94 percent of the province's wildfires, accounting for 98.27 percent of the total area burned.

The Secondary Area includes Secondary Timber Area, Rural/Urban Land Base, and Area North of Primary and Secondary Area. There were 63 wildfires which were allowed to play a more natural role on the landscape, with wildfire regenerating 727.3 hectares.

The total provincial area burned by wildfires was 42,160 hectares. The total hectares for the 2020 fire season are approximately 10.89 percent of the ten-year average of 387,099.3 hectares.

Due to the slower than usual fire season, Saskatchewan requested no out of province imports. Exports included equipment sent to aid Quebec, a three-personnel export to assist Australia, and two aircraft exports to the United States. There were no quick strikes performed out of Saskatchewan in 2020.

Manitoba

The Province of Manitoba experienced a well below average wildfire season in 2020, reporting a total of 149 fires burning a total area of 49,527 hectares. There were three fires of note: Field Lake south of Bissett, Pulp River Complex in the Camperville area and Beaver Creek provincial park near Hecla in the Interlake that resulted in structure loss.

Reorganization continues, with the renaming of the department to Conservation and Climate and the Wildfire Service in the Parks and Resource Protection Division. The Conservation Officer Service in the Resource Enforcement Branch, which has historically been integral in supporting wildfire operations, have been realigned to the Department of Agriculture and Resource Development. The two departments will continue to work together following a whole-of-government approach and shared services.

The Wildfire Service added four new seasonal helicopters for a three-year term beginning in 2020. The total for 2021 will be three intermediate and six medium lift helicopters available for wildfire suppression operations. Several full time Area Fire Managers were also added to staff. Retirements of a number of long-time wildfire staff and managers have occurred in the past year with more anticipated over the next few years.

The major challenge of 2020 was and will remain to be Coronavirus that affects all aspects of wildfire management, business, response, and operations. Planning, preparedness, and protection continues to be a very high priority.

Ontario

The 2020 fire season was characterized by a lower than average occurrence of fires throughout Ontario as well as a significantly smaller (less than ten per cent of the average) number of hectares affected by wildland fire on a seasonal basis. Ontario recorded a season total of 608 wildland fires affecting a total of 15,460 hectares during the 2020 fire season. In comparison, the 2019 season saw even less fires (537), though they affected an above average portion of the land base (269,635 hectares). The ten-year provincial average fire total is 869, affecting an average of 162,798 hectares. Ontario saw two fires of note during the 2020 season: the Red Lake 049 fire and the Nipigon 45 fire.

Red Lake 049 (RED049) began on August 10 under high to extreme fire behaviour and grew to the size of 552 hectares. An Incident Management Team (IMT) was dispatched to manage this fire along with multiple crews, heavy equipment, water bombers and helicopters. It prompted the evacuation of Red Lake by the Municipality of Red Lake due to its proximity to the community, with residents returning

on August 16 following a significant rain event that helped reduce fire behaviour on RED049. The fire was declared “out” on September 4, 2020.

Nipigon 45 (NIP045) started on August 9 near Walden Lake and eventually grew to 6,678 hectares in size, reaching 35 kilometers west of the community of Eabametoong, prompting the evacuation of vulnerable members of the community by the Ministry of the Solicitor General due to smoke hazards. Fire Ranger crews and an IMT were dispatched to this fire to limit its spread towards the community and to bring the fire to natural boundaries using aerial ignition and hose lays. NIP045 was declared “out” on September 16, 2020.



Quebec

During the 2020 season, SOPFEU fought 663 fires affecting 52,469.3 hectares of forest in the Intensive Protection Zone (IPZ). This is above the average for the last 10 years of 447 fires for 35,479.2 ha burnt. The high number of fires is mainly due to a warmer and drier spring, which was very conducive to the outbreak of vegetation fires. Subsequently, the summer proved to be a little calmer, with fire numbers more in the average range.

The beginning of the summer was marked by a heat wave, which notably led to the outbreak of two major fires. These fires generated a great deal of work for SOPFEU throughout the month of July. On June 16, a major fire broke out north of Lac-Saint-Jean, in the Chute-des-Passes sector, burning out of control for a few days, gaining ground even at night. This fire affected an area of 50,891.5 ha, making it the largest forest fire in Quebec in the last 10 years. It required the deployment of more than 325 people, including firefighters from Ontario and Alberta. This major fire was officially declared extinguished on August 17 after 63 days of firefighting and it should be noted that the area affected by this fire represents 97% of the hectares burned during the season.

In addition, a fire declared on June 19 in a peat bog in Rivière-Ouelle, in the Bas-Saint-Laurent region, was officially extinguished on Friday, July 24. The fire, which burned 361.1 hectares, required the mobilization of a large number of forest firefighters from Quebec and Ontario, in addition to municipal firefighters and the contribution of local farmers. A great deal of teamwork is required for this type of fire, which burns deep and requires more water and monitoring of hot spots.

The year 2020 was marked by two major firsts for SOPFEU – for the first time ever, the organization deployed crews to Australia at the beginning of the year, and to the state of California in September.



Newfoundland and Labrador

Prior to the beginning of the forest fire season in 2020, Department of Fisheries, Forestry and Agriculture (FFA) staff worked tirelessly to finalize COVID-19 safe work practices and procedures in preparation for the safe recall of wildland firefighters in the spring. In addition to the challenges related to staffing district offices by the pandemic, the Province of Newfoundland and Labrador faced a busy forest fire season.

The summer of 2020 brought slightly warmer than average temperatures in the summer for both the island of Newfoundland and Labrador. June temperatures in Central and Western Newfoundland were warmer than normal, with several days breaking record high temperatures. Warmer than average July temperatures in Labrador coupled with extended dry periods fueled naturally occurring wildfires. On the island of Newfoundland, August proved to be a warm and dry month, setting the stage for an increase in wildfire activity. Naturally occurring wildfires were the underlying story of the 2020 Forest Fire Season with 22 of 94 wildfires being caused by lightning, burning a total of 4,030 hectares in the province. The previous five-year average (2015-2019) for lightning caused fire starts was 11, with 3,018 hectares burned.

During 2020, 94 wildland fires were reported in Newfoundland and Labrador, burning a total of 4177.6 hectares. Compared to the five-year average (2016-2020), there was a decrease in the number of wildfires reported, however the total number of hectares burned increased. The five-year average for the period of 2016 to 2020 is 99 wildfires reported and 3,306.18 hectares burned, compared to the previous five-year average (2015 to 2019) which saw 106 wildfires reported and 3,262.28 hectares burned. Though the number of naturally occurring wildfires increased this year, the overall decrease in fire starts this season could be attributed to the restrictions placed on the general public during the COVID-19 pandemic.

During 2020, the Province of Newfoundland and Labrador remained committed to assisting other agencies by filling 6 resource orders under CIFFC's Mutual Aid and Resource Sharing Agreement (MARS) including: one resource order with Parks Canada for two staff to conduct WFX-Fit testing in Terra Nova National Park; 2 resource orders with The Province of New Brunswick for air tanker support

for a period of 12.5 days; 2 quick strikes with Parks Canada in Mealy Mountain National Park Reserve; and one resource order for 2 Technical Specialists with Parks Canada in Mealy Mountain National Park Reserve.

New Brunswick

The 2020 wildfire season was the busiest fire season New Brunswick has seen in the last 20 years. While in the final stages of preparing for the upcoming season, the coronavirus pandemic began. As with all agencies, NB had to pivot quickly and change many of their plans so that COVID-19 precautions could be integrated into firefighting strategies. Having a novel virus with new research information being provided on a continuous basis often resulted in changes to the recommendations provided by public health. This required New Brunswick's suppression plans to be in constant flux. With this in mind, New Brunswick fire staff were hoping for a quieter than usual fire season, but instead, mother nature opted to provide the province with a drier than usual summer (one of the driest on record), resulting in increased wildfire activity.

Based on the ten-year average, New Brunswick sees approximately 236 fires each year resulting in the burning of approximately 319 ha of forest land. In 2020, NB experienced 462 fires that burned 1388 ha of forest land. During the 2020 season, the largest wildfire in the province was approximately 850 ha, which tied up many of the province's firefighting resources, making it difficult to provide enough firefighters to combat the numerous smaller fires that were occurring at the same time. Without the airtanker assistance provided by Quebec and Newfoundland, several of these fires would have been much larger in size. One saving grace during the busy fire season was that New Brunswick's number of lightning strikes was significantly lower compared to previous years.

In January of 2020, New Brunswick teamed up with PEI to provide a crew to assist with the devastating wildfires in Australia. This was, by all accounts, a great opportunity for NB fire staff to help out with the remediation work that occurred after the major fires had passed. During the summer, New Brunswick was unable to mobilize staff to assist other agencies as they needed all hand on deck to battle fires occurring in the province. Although the 2020 fire season was a busy season, New Brunswick also considers it a successful season with no major incidents and very few structures lost.

Nova Scotia

During the 2020 season, a Provincial State of Emergency was put in place on March 24th in response to COVID-19. To coincide with this, Forest Protection decided to place the province in a "NO BURN" state to reduce fire potential, spread, and firefighter response. On May 14th, the fire ban was lifted, but because of fire risk was put back on seven days later. 42% of the fire season in Nova Scotia was set at "NO BURN".

The province's two busiest months were May and August – May at 48 fires burning 543 hectares, and August at 43 fires burning 53 hectares. Despite the drought conditions, fire numbers and total area burned were about average compared to past seasons. Fire suppression activities were as per normal with added COVID-19 protocols, but led to a delay in WFX-FIT training this season. Nova Scotia received out-of-province assistance from New Brunswick in August in the form of air support, but were not requested on any fires nationally.

Prince Edward Island

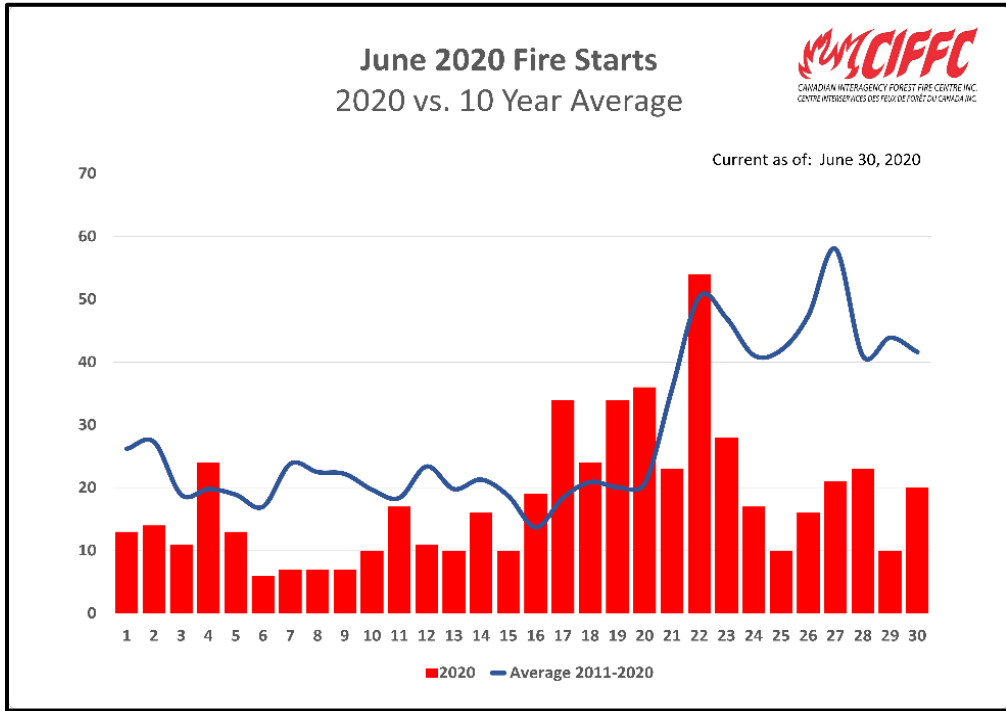
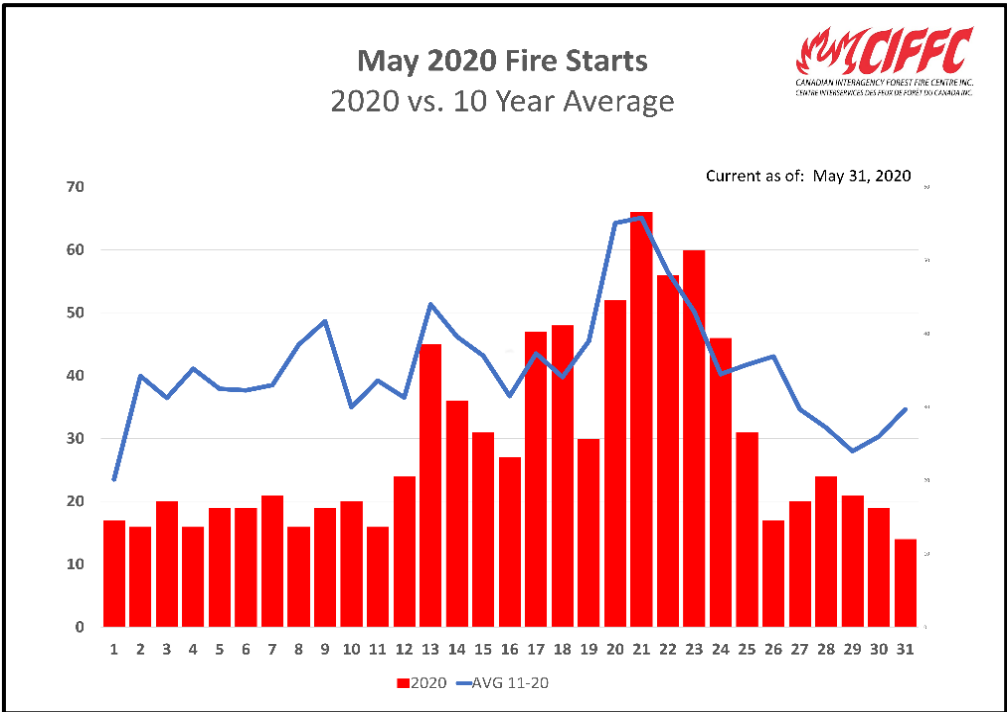
The province of Prince Edward Island experienced an average fire season in 2020, responding to 15 fires burning a total area of 12.5 hectares. During the summer months (April – August), PEI received an average of 26mm of precipitation per month for the central portion of the province. The drought conditions experienced lead to above average fire danger conditions, resulting in five fires occurring in extreme fire danger conditions. Additionally, PEI exported two staff to Melbourne, Australia in February to join New Brunswick and Nova Scotia in forming a 20-person task force.

Parks Canada

It was a below average year for Parks Canada with 3,055 hectares burned (about half of that area coming from 93 wildfires and the other half from 8 prescribed fires). Parks Canada saw wildfires in regions where they are not a common occurrence, such as in Mealy Mountain National Park Reserve (Akami-Uapishk^U-KakKasuak) in Labrador. They were grateful for the assistance provided by Newfoundland in managing these fires, particularly the White Bear River Fire (155ha). Prescribed Fires were suspended due to COVID from mid-March until late August.

Parks Canada was also able to support the ‘Team Canada’ deployment to the US, providing 25 personnel including 1 AREP, 4 TFLDs, 1 HLCO, and a Type-1 SA Crew. The deployment went very well, including the COVID protocols established and the ability to maintain a Parks Canada “bubble”. Parks increased their capacity across the country this year with the addition of 4 new Type-1 crews (4-person), bringing their total complement of dedicated crews up to 21 crews.

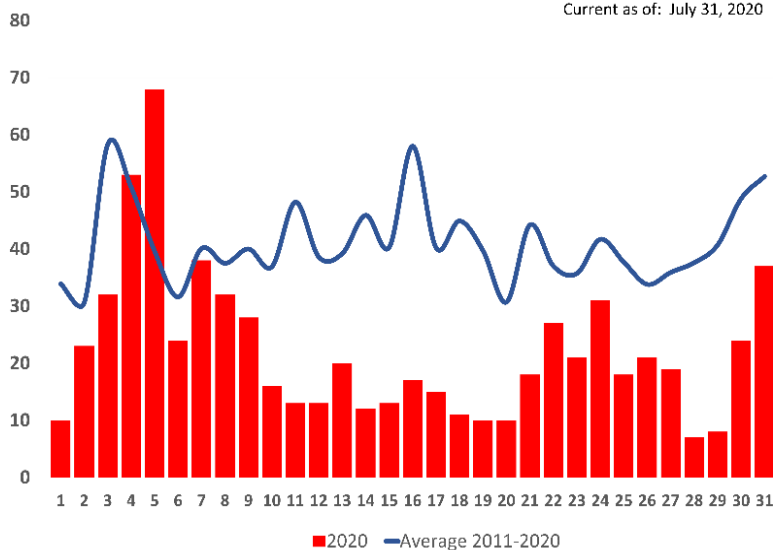






July 2020 Fire Starts 2020 vs. 10 Year Average

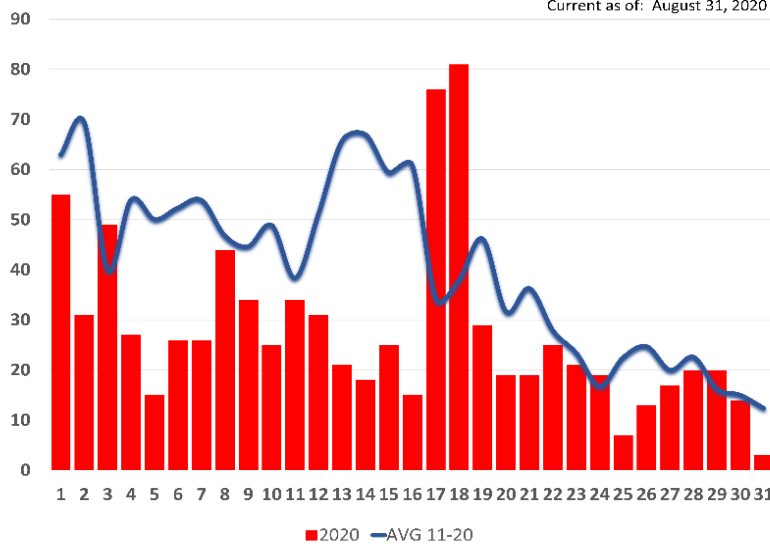
Current as of: July 31, 2020



August 2020 Fire Starts 2020 vs. 10 Year Average



Current as of: August 31, 2020



Fires by Month	May	June	July	August
	913	545	689	859

Statistics

As of December 31st, 2020, Canadian Fire Management Agencies recorded 3,916 fires with an area consumed of 227,389 hectares.

Agency	Fires as of December 31, 2020								Total
	Full		Modified		Monitored		Total		
	Ltg	Human	Ltg	Human	Ltg	Human	Ltg	Human	
BC	269	370	6	3	0	0	275	373	649
YT	2	8	1	2	10	1	13	11	24
AB	86	637	0	0	0	0	86	637	723
NT	22	18	3	0	27	1	52	19	71
SK	8	72	8	50	6	1	22	123	145
MB	37	74	16	0	16	6	69	80	149
ON	337	238	6	0	24	3	367	241	608
QC	101	562	21	5	15	3	137	570	707
NL	18	68	1	0	3	4	22	72	94
NB	28	434	0	0	0	0	28	434	462
NS	14	162	0	0	0	0	14	162	176
PE	0	15	0	0	0	0	0	15	15
PC	7	66	2	8	5	5	14	79	93
Tot.	929	2724	64	68	106	24	1099	2816	3916

Agency	Hectares as of December 31, 2020			
	Full	Modified	Monitored	Total
BC	14298	148	0	14446
YT	2	14032	1457	15491
AB	3275	0	0	3275
NT	1664	254	17156	19073
SK	41432	279	449	42160
MB	44122	3004	2401	49527
ON	11116	1278	3086	15480
QC	52469	536	6980	59985
NL	1388	2003	787	4178
NB	1388	0	0	1388
NS	709	0	0	709
PE	13	0	0	13
PC	78	155	1430	1664
Tot.	171954	21689	33746	227389

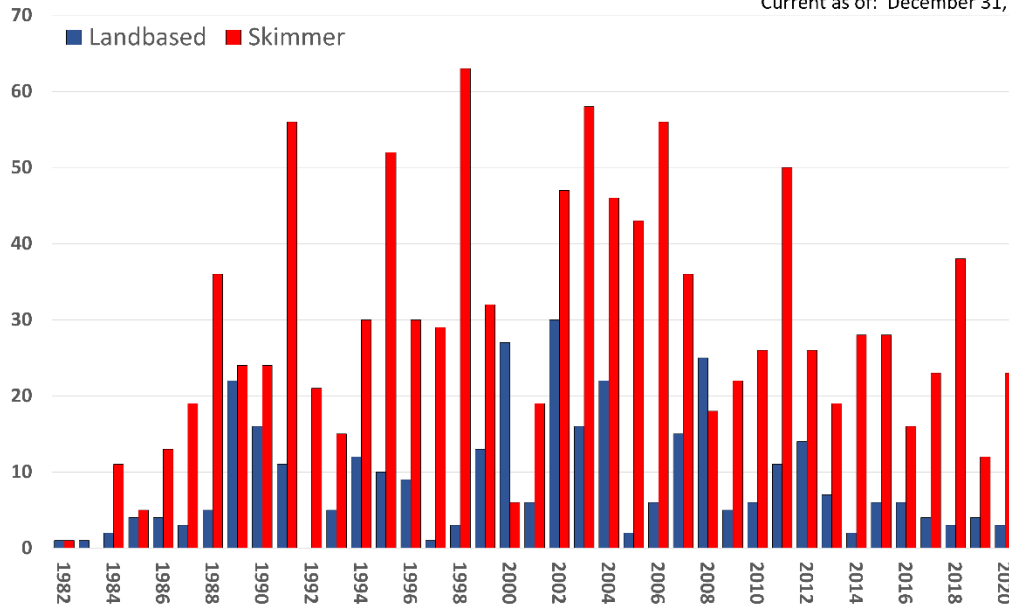
Prescribed Fires as of December 31, 2020		
Agency	Fires	Ha
BC	12	700
YT	0	0
AB	18	1313
NT	0	0
SK	0	0
MB	0	0
ON	0	0
QC	0	0
NL	0	0
NB	0	0
NS	0	0
PE	0	0
PC	8	1392
Tot.	38	3405

National Preparedness Level Days May 4 - Aug31					
Levels	1	2	3	4	5
No. of Days	96	24	0	0	0

Airtankers Mobilized 1982-2020



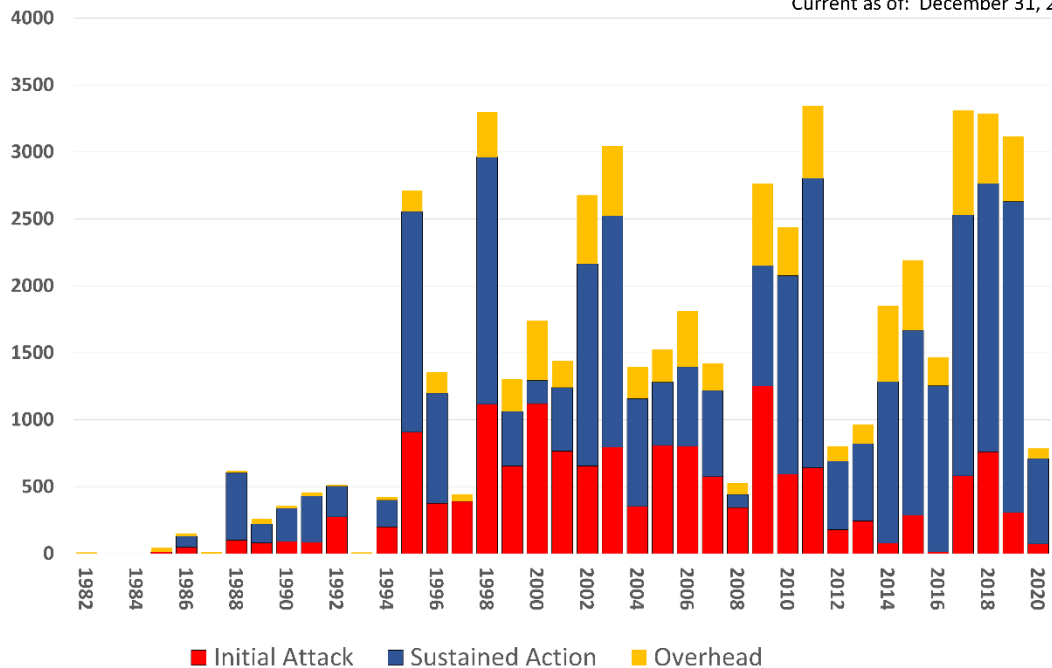
Current as of: December 31, 2020



Personnel Mobilized 1982-2020



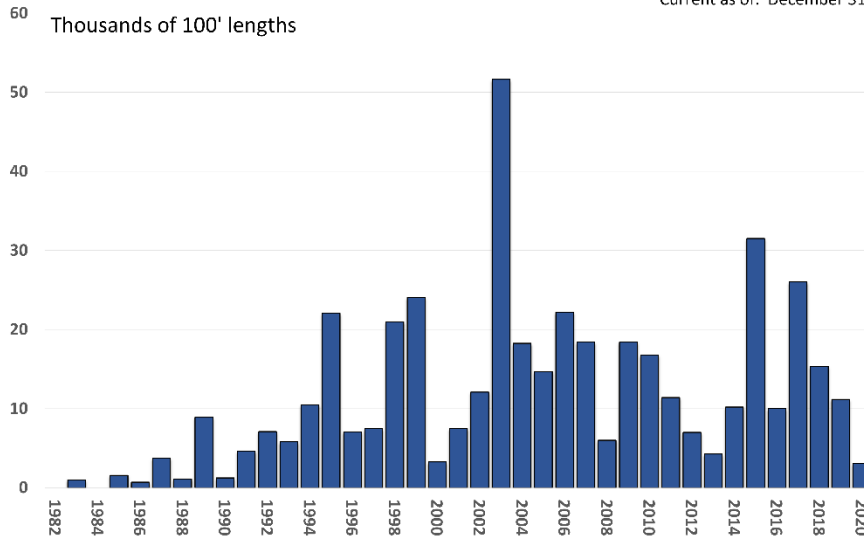
Current as of: December 31, 2020



Hose Mobilized 1982-2020



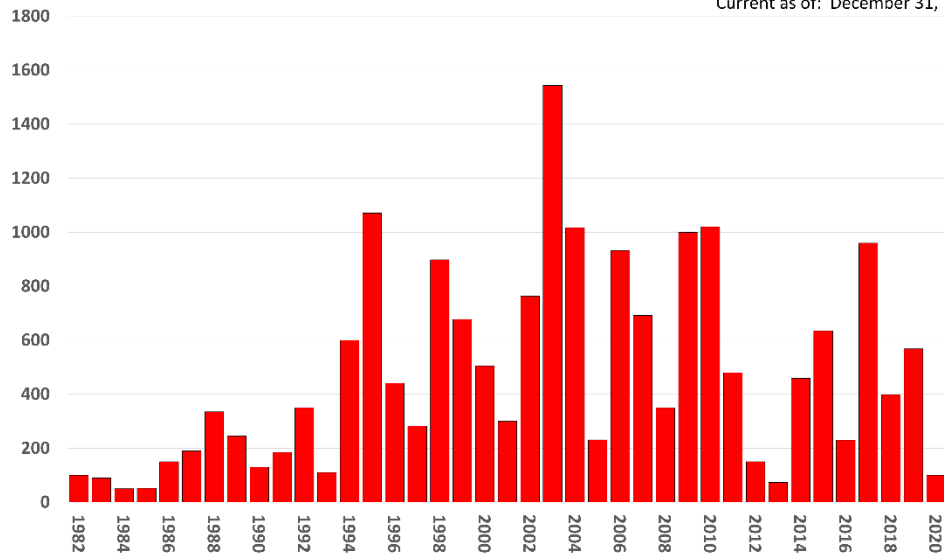
Current as of: December 31, 2020



Pumps Mobilized 1982-2020



Current as of: December 31, 2020



Wildfire Related Fatalities

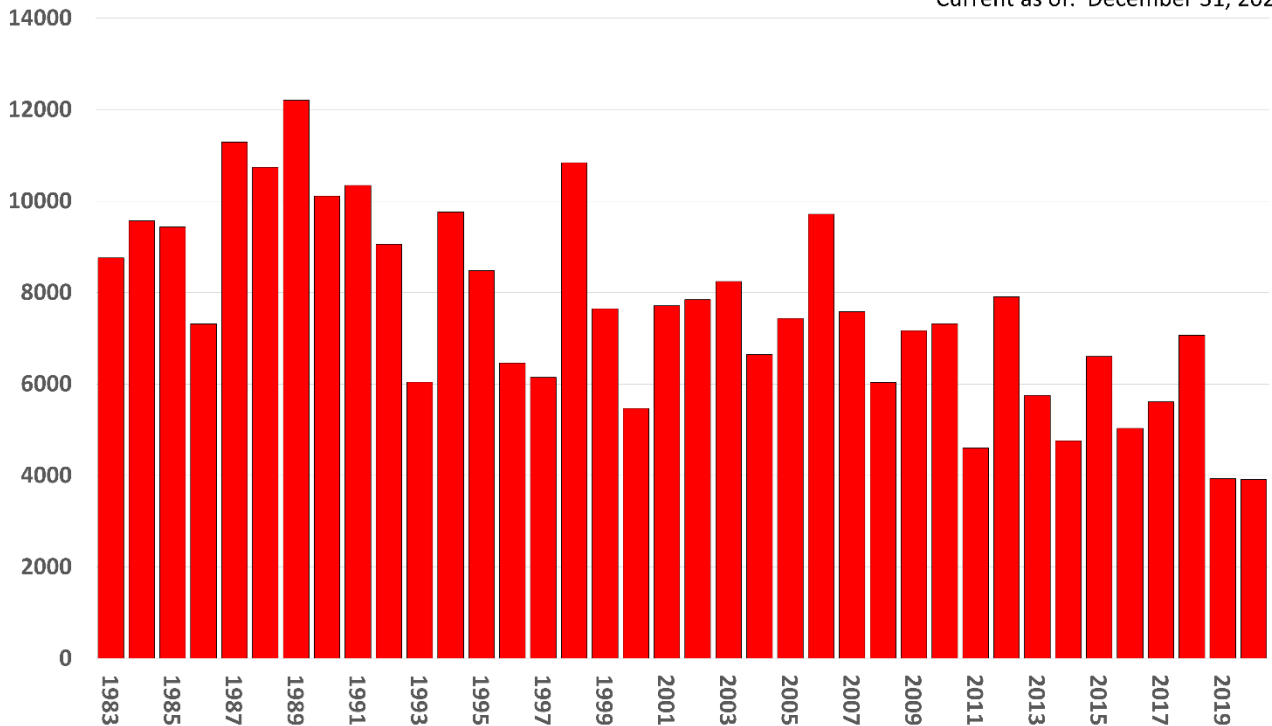
Year	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20
Fatalities	6	3	3	0	3	4	2	0	2	4	0	0	0	0	0	2	0	3	2	0	3	3	2	1	5	4	0	1	0	2	1	0	1	0	0

Wildland Fire Starts												
Total Numbers of Fires (Lightning and Human Caused)												
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Avg.	2020
BC	1,678	646	1,642	1,854	1,455	1,836	1,049	1,352	2,087	792	1,439	649
YT	88	56	126	177	34	184	53	115	67	117	102	24
AB	1,837	1,097	1,565	1,214	1,451	1,850	1,366	1,217	1,288	1,004	1,389	723
NT	224	207	279	248	385	245	189	262	59	149	225	71
SK	571	303	409	429	403	723	364	353	416	243	421	145
MB	583	315	497	494	245	454	202	545	477	254	407	149
ON	931	1,334	1,615	582	303	668	648	776	1,327	537	872	608
QC	737	329	795	515	292	384	602	319	593	357	492	707
NL	61	53	198	101	124	128	91	80	132	99	107	94
NB	179	81	344	356	178	222	285	245	282	182	235	462
NS	313	116	352	171	171	247	274	175	190	143	215	176
PE	4	4	8	9	4	5	7	4	10	4	6	15
PC	113	67	87	96	81	122	43	168	140	52	97	93
Total	7,319	4,608	7,917	6,246	5,126	7,068	5,173	5,611	7,068	3,933	6,007	3,916

Annual Number of Fires in Canada 1982-2020



Current as of: December 31, 2020



Wildland Fire Hectares												
Total Area Consumed (Hectares)												
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Avg.	2020
BC	331,508	12,357	102,042	17,990	368,785	280,445	100,336	1,215,851	1,353,861	20,966	380,414	14,446
YT	146,957	39,091	58,280	179,510	3,160	169,841	21,543	399,280	85,624	279,819	138,311	15,491
AB	83,643	940,596	337,000	21,890	23,120	492,536	741,550	49,118	59,809	883,414	363,268	3,275
NT	333,435	406,693	297,618	537,912	3,416,291	646,955	254,980	861,030	15,736	111,108	688,176	19,073
SK	1,734,799	343,720	227,512	312,194	343,430	1,758,376	241,607	399,562	118,984	47,738	552,792	42,160
MB	187,494	126,844	216,888	1,115,412	40,333	47,358	38,408	176,677	234,334	64,153	224,790	49,527
ON	14,824	635,373	151,564	43,422	5,386	39,311	83,113	112,337	265,587	269,635	162,055	15,480
QC	314,884	12,726	70,086	1,872,842	63,721	5,380	33,371	38,392	62,529	9,604	248,354	59,985
NL	1,020	594	225,524	43,076	16,816	3,958	10,953	700	396	316	30,335	4,178
NB	156	45	362	886	112	262	265	568	304	228	319	1,388
NS	463	136	817	301	564	517	755	728	253	155	469	709
PE	5	6	12	55	4	2	20	7	12	15	14	13
PC	5,912	85,653	273,037	58,377	282,125	458,336	5,539	117,575	74,840	100,642	146,204	1,664
Total	3,155,100	2,603,834	1,960,742	4,203,867	4,563,847	3,903,277	1,532,440	3,371,825	2,272,269	1,787,793	2,935,499	227,389

Annual Number of Hectares Burned in Canada 1982-2020



Current as of: December 31, 2020

