

CANADA REPORT 2005

by Tom Johnston, Operations Manager, CIFFC

The 2005 wildland fire season in Canada will reflect a near average year for both fire numbers and hectares consumed when compared to the ten year average. However, regionally the numbers show generally the west specifically British Columbia (BC) below and the east specifically Ontario (ON) and Québec (QC) above average. As of December 31st, Canada recorded 7,438 fires for 1,706,445.49 hectares.

The Canadian winter was relatively cold in many areas, with near normal snow and moisture levels being reported in most areas with some moisture deficit recorded in south central BC. Most agency were forecasting a near normal wildland fire season.

The spring weather system seamed to indicate the return of a 2004 type season as the warm dry April gave way to a cool damp May in south central portions of Canada. Cool damp conditions in BC, near normal weather across the north, heavy rains and severe thunderstorms across the southern prairies, hot, dry and humid conditions in eastern ON and QC and wet condition across the Maritimes dominated the first quarter of the summer.

These weather patterns set the stage for the 2005 wildland fire activity to begin. The first of June saw lightning activity spark-off fires in BC and QC. Many of the fires in QC experienced extreme fire behaviour due to the previous dry conditions, which resulted in a number of fires escaping initial attack and growing to project status. QC's internal resources were quickly depleted and additional resources were ordered through CIFFC in response to their growing need. The first week of June saw 20 project fires recorded in QC, with some threatening large Hydro Ouébec projects. At the height of this activity over 200 professional wildland fire personnel and 6 Canadair amphibious air tankers mobilized from Saskatchewan (SK), Manitoba (MB), Ontario (ON), Northwest Territories (NT), Newfoundland (NL), and New Brunswick (NB) responded to CIFFC's call in support of QC. Welcome precipitation assisted QC in gaining control over the majority of these fires and allowed for the return of many of the interagency resources. During the same period AB's emergency response system was tested when wildfire activity began to escalate from lightning activity in the north requiring wildland fire resources moving in from BC and SK. Flooding was occurring in the south resulting in a number of establishments in Calgary being flooded by the Bow River. By the middle of June cooler temperatures and precipitation across the wildfire areas stabilized the situation and allowed for the demobilization of the

interagency resources. The last half of June, sporadic rains continued across southern MB and parts of SK, resulting in large areas of overland flooding, while eastern ON and QC remained hot and humid.

The hazard in eastern ON and QC continued to build throughout late June and into July. The northern portions of the prairies were drying. Wildland fire activity increased during the second week of July. Lightning storms moving across the northern prairies resulted in multiple starts across SK, NT and MB. An open fire ban and restriction on logging operations were put in place in regions of QC. The continuing dry, hot temperatures and the addition of lightning once again resulted in increasing fire activity in QC. This time BC answered the call from CIFFC and a large contingent of resources began to move into QC. CIFFC moved from National Preparedness Level (NPL) II to III through this two week period. BC provided in excess of 300 type I wildland fire personnel. QC also activated the Northeastern Forest Fire Protection Compact (NFFPC) to obtain additional personnel through that channel, along with some personnel through the Canada United States Reciprocal Forest Fire Fighting Arrangement (CanUS). Ongoing fire activity and rising hazard in other agencies, limited their capabilities to respond to this growing need. With the high level of fire activity and subsequent resource movement, CIFFC's national resource pool dried up. CIFFC moved to NPL IV and level II of the Critical Resource Allocation Protocol, which dictates agency Director's involvement. CIFFC had resource requests for 200 type I firefighters from ON and QC with less than 100 available through the Yukon (YT) and MB. A Directors call was held to assist in the allocation of scarce resources. Resources were allocated by need and more resources became available through internal reallocation within the agencies. The situation had stabilized somewhat by the third week of July. While the wildland fire situation began to drop off in QC, it continued to escalate in ON. As QC began its demobilization process, ON began to mobilize.

Eastern Ontario had remained hot and dry for the bulk of the fire season. Western ON began to dry out after mid-July and a series of lightning storms tracked across the region sparking numerous new starts. In anticipation of multiple fire starts, ON began to bring in additional resources. Initial attack successes were good but the sheer number of new starts finally took its toll, with some escaping initial attack and growing to project size. Over 500 new fires were recorded in ON during the first two weeks of August. By August 12th, at the height of this activity 450 interagency personnel, 22 additional skimmer type airtankers, along with pumps, hose, communications equipment and assorted other fireline equipment were mobilized into ON through CIFFC. With more interagency personnel staged to be mobilized, favourable weather forecasts prompted ON to reassess their requirements. As the forecasted weather became a reality ON stood down the scheduled lift and cancelled any outstanding orders. The demobilization process was soon to follow. By August 31st, all personnel, aircraft and most of the equipment had been returned to their home agencies. All new starts were easily handled by home agency resources as the wildland fire season entered the fall season.

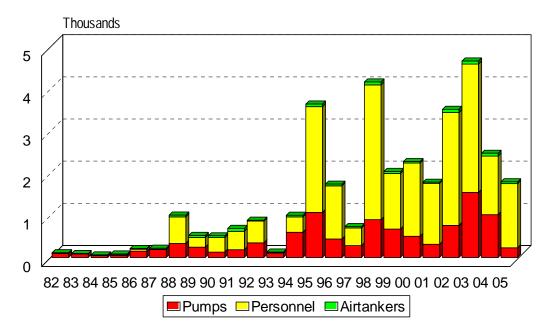
CIFFC responded to 119 resource requests during the 2005 wildland fire season, which resulted in the mobilization of approximately 1,500 professional wildland fire management personnel

from across Canada as well as 20 from the United States. In addition to personnel, 18 airtanker groups for a total 43 airtankers, 231 medium fire pump kits, 14,416 lengths of hose, along with other associated fire management equipment were mobilized in response to the wildland fire activity.

As shown in the following graph, (Resource Units) agency dependence on outside resources continues to remain at a high level. This year, once again, the national operational procedures, agreements, arrangements and exchange standards that have been developed and are in place for many of the agencies including CIFFC were tested. The continued development and acceptance of national and international standards for all resources and operational procedures will continue to raise the level of wildland fire management in Canada.

Resource Units

1982 - 2005



Using transport cost estimates reported from member agencies, conservative airtanker flight times along with personnel numbers and duration data tracked over the wildland fire season, it is estimated that approximately 18.5 million dollars worth of resource sharing was facilitated through CIFFC.

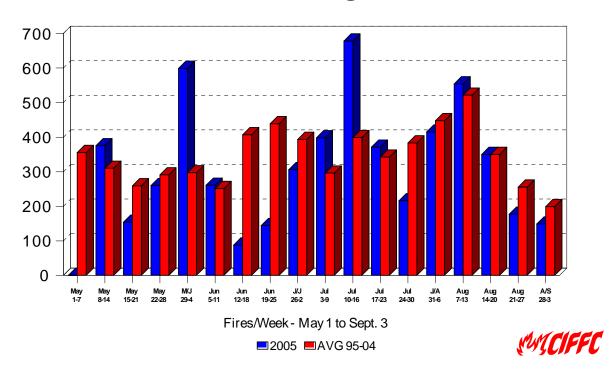
In spite of the wildland fire activity throughout the east, Canada, as a whole, experienced a lower than average wildland fire year for fire numbers and for hectares burnt. As of December 31st, Canada recorded 7,438 fires covering 1,706,445.49 hectares compared to the ten year end of season average of 7,536 fires and 2,514,795 ha respectively. There were 43 prescribed fires reported for a total of 8,216.53 hectares.

The following statistics show that by December 31st out of a total of 7,438 fires consuming 1,706,445.49 hectares, 648 were managed under a Modified Response, consuming 1,077,769.81 hectares. The fires that received a Modified Response account for only 8.7% of the total fires, but 63.2% of the total area consumed.

		Prescribed Fire						
		FIRES			HECTARES		Fires	На
	Full	Modified	Total	Full	Modified	Total		
ВС	889	81	970	32589	2502	35091		
YT	47	36	83	68	170623	170691		
AB	1359		1359	60601.92		60601.92	17	2759.53
NT	116	145	261	32310.26	192320.8	224631.06		
SK	199	123	322	30298.29	183225.01	213523.3		
MB	209	37	246	28994.00	43686.00	72680		
ON	1907	54	1961	32661	9647	42308	14	284
QC	1258	116	1374	386942	444080	831022		
NL	129	16	145	9710.00	13124.00	22834		
NB	305		305	355		355		
NS	304		304	516.5		516.5		
PE	13		13	49.71		49.71		
PC	55	40	95	13580	18562	32142	12	5173
TOT	6790	648	7438	628675.68	1077769.81	1706445.49	43	8216.53

The following graph shows the number of fire starts by week for 2005 as compared to the 10 year average. The anomalies in fire occurrence during the 2005 season can be seen.

FIRES10 Year Average vs 2005



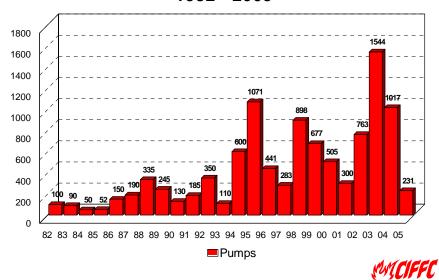
As of December 31st, 2005, there had been no wildland fire related fatalities reported. The following table shows total fire related fatalities in years past.

Wildland Fire Related Fatalities

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Fatalities	6	3	3	0	3	4	2	0	2	4	0	0	0	0	0	2	0	3	2	0

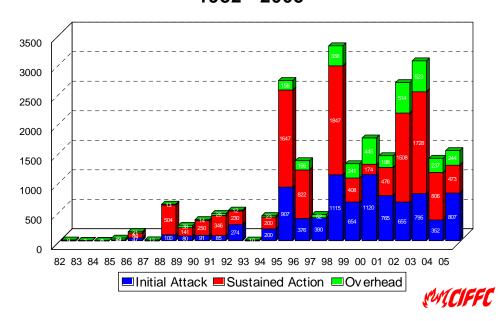
Mobilizations 2005

Pumps 1982 - 2005



PERSONNEL MOBILIZED

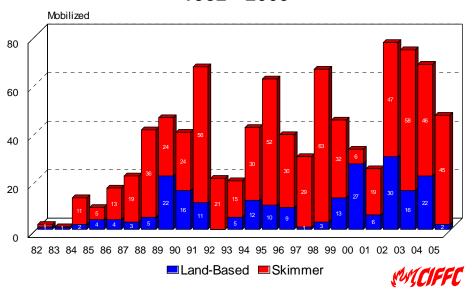
1982 - 2005



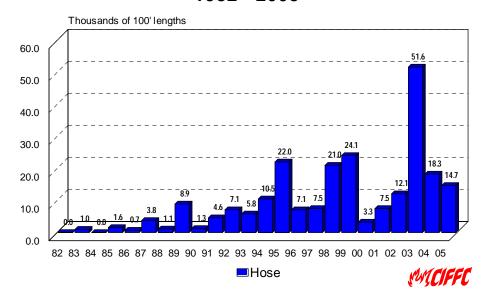
Mobilizations 2005

Airtankers

1982 - 2005



Hose 1982 - 2005



	Wildfire Starts Total Number of Fires (Lightning & Human Caused)											
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Ave.	2005
BC	1,474	1,358	1,175	2,665	1,208	1,539	1,266	1,781	2472	2398	1,733.6	970
YT	148	149	112	196	160	55	68	69	77	282	131.6	83
AB	804	376	445	1,696	1,355	782	974	1,430	1191	1597	1,065	1359
NT	215	350	105	399	170	275	127	85	160	297	218.3	261
SK	649	428	491	1,266	735	417	857	878	642	328	669.1	322
MB	663	423	373	516	612	353	538	754	1148	234	561.4	246
ON	2,121	1,243	1,634	2,267	1,002	636	1,562	1,114	1015	431	1,302.5	1961
QC	1,265	1,250	876	854	1,037	516	1,003	895	716	319	873.1	1374
NF	103	148	110	192	228	219	202	143	191	153	168.9	145
NB	546	367	368	288	606	333	490	317	228	240	378.3	305
NS	408	272	371	348	462	210	486	267	274	258	335.6	304
PE	29	25	34	26	34	26	34	29	14	20	27.1	13
PC	57	72	51	127	40	108	107	85	115	90	85.2	95
Total	8,482	6,461	6,145	10,840	7,649	5,469	7,714	7,847	8243	6647	7,549.7	7438

Totals as of December 31 st , 2005								
Full Response Fire Numbers	6790							
Modified Response Fire Numbers	648							
Total	7,438							

	Wildfire Hectares Total Area Burned in Hectares											
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Ave.	2005
BC	48,080	22,669	2,960	76,574	11,581	17,673	9,677	8,529	264,733	220,468	68,294	35091
YT	257,280	105,935	10,120	385,579	185,956	7,651	17,772	35,700.0	49,036.8	1,817,511	287,254	170691
AB	342,610	1,990	4,728	734,816	122,612	14,676	153,459	496,566.69	55,481.83	234,763.83	216,170	60601.92
NT	2,827,367	371,545	126,532	1,459,360	550,046	177,814	111,262	27,089.17	127821.4	515,621.03	629,446	224631.06
SK	1,643,552	14,516	3,884	995,498	180,820	140,922	183,820	879,582.6	126590.8	258,441	442,763	213523.3
MB	803,299	116,724	35,009	408,918	121,826	86,129	86,199	81,174.0	430170	23,117	219,257	72680
ON	617,978	451,927	38,528	158,218	328,248	6,633	10,733	172,512.0	314,219.1	1,616	210,061	42308
QC	727,727	691,590	393,079	418,318	97,747	39,205	33,068	1,013,749	87860.3	3,044	350,539	831022
NF	794	82,448	8,981	40,226	39,292	148,820	1,275	35,484.0	36533.1	2,361.8	39,621	22834
NB	472	1,770	178	303	1,211	336	604	246.4	237	289	565	355
NS	405	643	564	397	1,822	488	530	211.25	1256.76	290.02	661	516.5
PE	36	196	107	77	77	29	27	132.3	11.61	15.4	71	49.71
PC	6,160	16,581	298	31,284	65,368	7,538	21,419	7,086.9	141133.01	197,904	49,477	32142
Total	7,275,760	1,878,534	624,968	4,709,568	1,706,606	647,914	629,845	2,758,063.31	1,635,085	3,275,402	2,514,179	1,706,445.49

Totals as of December 31 st , 2005	
Full Response Hectares Consumed	628675.68
Modified Response Hectares Consumed	1077769.81
Total	1,706,445.49