



CANADA REPORT

2004

by

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The 2004 wildland fire season in Canada will reflect a below average year for fire numbers and a slightly above average for hectares consumed when compared against the ten year average. However, regionally the story is quite different. As of December 31st, Canada recorded 6,634 fires for 3,277,181.03 hectares.

The Canadian winter was relatively cold in many areas, with deficit snow and moisture levels being reported in western regions and normal snow levels in most eastern regions. The persistent drought conditions of south central British Columbia (BC), Saskatchewan's (SK) agro-forest fringe area and the north central areas of Manitoba (MB) was worsened by the below average snow levels in these areas. This had western wildfire managers anticipating another active fire season. Drought codes in BC, which were a continuation of the low moisture level of 2003, forecasted the potential of another active wildfire season.

A blocking low north of Hudson Bay, which set-up in late April, set the stage for what resulted in an extremely volatile situation in BC and the Yukon Territory (YT), moderate to high activity in the Northwest Territories (NT) and Alberta (AB) and essentially left the rest of Canada in a cool damp low fire hazard situation. The jet stream travelled north over the YT sweeping down through the NT and AB, into the United States and up again into the Maritimes. This resulted in hot dry pacific air pushing into BC and YT and leaving the rest of Canada in a semi Arctic flow which left them cool and damp. This condition essentially lasted the entire summer.

The hazard in the west continued to build throughout May and into June. Saskatchewan (SK) through to Quebec (QC) continued to have cool damp conditions. Little to no wildland fire activity occurred during this period. By the second half of June the situation began to change. Dry lightning with hot dry conditions spawned multiple starts and subsequent escapes in the YT and BC. These conditions are not the norm for the west coast or for the YT, at this time of the year. By June 21st both the YT and BC were reporting large fires, all of which were displaying extreme fire behaviour due to the dry conditions. Continued lightning activity, day after day soon overwhelmed their efforts resulting in escaped fires which required assistance from across Canada. Between June 21 and June 27, BC picked up close to 450 new starts. They had 11 large fires of concern on their books. The YT also recorded 6 large fire of concern. CIFFC moved from a National Preparedness Level (NPL) II to Level V during this same period. The "Critical Resources Protocol" along with a Directors conference call was activated to assist in freeing up and allocating resources which were in dwindling supply. BC requested and received a CIFFC

Interagency Resource Representative to assist them with the administration of requests and the mobilization processes of interagency resources. At the height of this mobilization almost 700 wildland fire professionals including Incident Management Teams, Initial Attack and Sustained Action Type I crews and other assorted fire management positions, over 600 fire pumps and 11,000 lengths of hose and 21 air tankers had been mobilized in response to the wildland fire activity in BC and the YT. The vast majority of these resources moved into BC. In order to access additional resources BC activated the Northwest compact and received addition personnel from Washington, Oregon, and Idaho.

The first week of July showed a moderating weather pattern which assisted BC in the management of their large scale projects. The NPL moved back down to Level II and many of the personnel resources began to return home after the completion of their assignments. Equipment was still flowing into YT and BC in support of their existing large fire activity. Throughout the 2nd and 3rd weeks of July, the activity in AB and NT continued to increase. Multi-starts were occurring daily with over 400 new starts in AB of which 8 were listed as project size. This resulted in the mobilization of a large number of heavy air tankers in support of this activity. At the peek AB had brought in 14 additional air tankers, 12 of which were Canadair amphibious air tankers. The activity was once again escalating in BC. On July 25th BC started another series of high fire days and with the forecast of dry lightning, along with the historic start of their normal fire season looming, BC initiated an order for 200 type I wildfire management personnel. With the hazard rising in other parts of Canada, the full order could not be met by CIFFC in a timely manner. CIFFC had once again moved to NPL IV and made a request to the National Interagency Coordination Center (NICC) in Boise Idaho for 5, 20 person Type I crews. NICC responded quickly and the crews were moved into BC the following day. By the end of July moderating weather and good precipitation had moved into YT quieting their situation considerably. This allowed the demobilization process to begin for most of their interagency personnel. Across Canada the situation also moderated freeing up a good number of crews and overhead personnel.

The hot dry weather and lightning that BC had forecasted for the August long weekend, did not materialize and although the temperature remained high, all new starts were manageable. The parallels in BC with last years activity were ominous, US fire threatening to cross the border, large fires were threatening structures, drought codes were in the extreme range and hot dry conditions prevailed. All the indicators were once again lined up for BC to burn. CIFFC moved back to NPL III, and waited for the next flap. Although the first two weeks of August remained hot in BC, they did not experience the extensive dry lightning, common during this time of year. YT, NT and Alaska (AK) also returned to hot temperatures with the resulting increase in the activity on existing fires. One land based and two skimmer airtanker groups moved into AB from SK and MB, and three 415's from QC moved into BC in anticipation of increasing activity in those areas. To underline the dangerous environment of wildland fire management activities, not only on the fireline, but elsewhere, two AB firefighters died as a result of a traffic accident while on route to a wildland fire camp. In addition to the airtanker groups, mobilized into AB, two skimmer groups, one each from ON and NT, were mobilized, in response to a request from

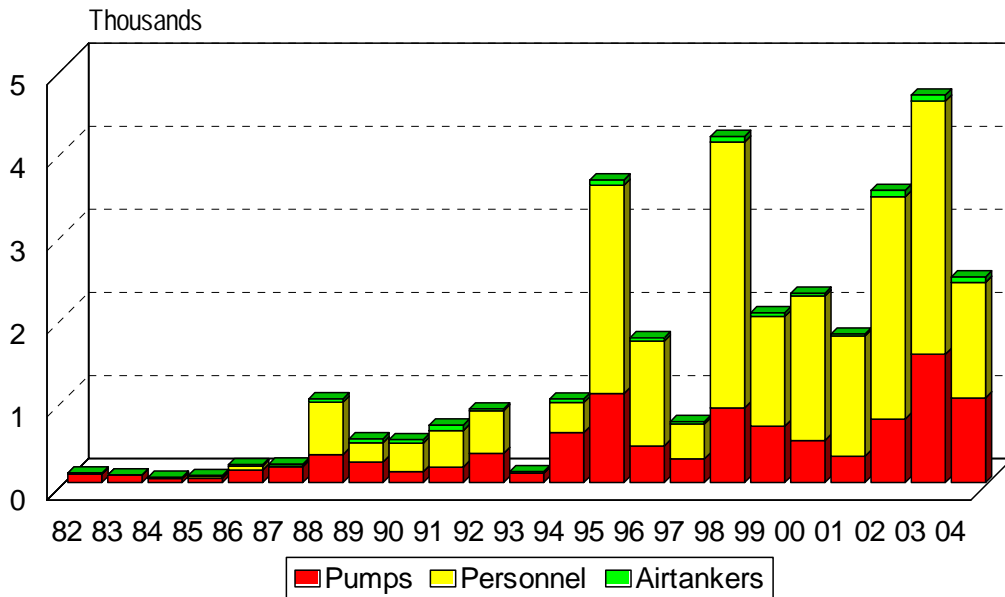
NICC in Boise to assist in the continuing fire activity in AK. In response to the forecasted continuation of hot dry weather with dry lightning during the third week of August, BC stepped up their level of preparedness and placed orders for additional sustained action crews, pumps and hose. 300 Type 1 sustained action personnel, 200 pumps and 4,000 lengths of hose were mobilized and by the end of the third week BC had recorded an additional 400 new fires. Welcome precipitation began August 22nd and spread across the BC areas of concern. By August 25th, BC was able to begin the demobilization of the interagency personnel and the 2004 wildland fire season wound down.

CIFFC responded to 135 resource requests which resulted in the mobilization of approximately 1,391 professional wildland fire management personnel from across Canada as well as 103 from the United States. In addition to personnel, 25 airtanker groups for a total 60 airtankers, 1017 medium fire pumps kits, 18,250 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 continued 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 wildfire management in Canada.

Resource Units

1982 - 2004



Canada as a whole experienced a below average wildland fire year for fire numbers and slightly higher average for hectares burnt. As of December 31st, Canada recorded 6,634 fires for 3,277,181.03 hectares were recorded compared to the ten year average of 7,631 fires and 2,827,489 ha respectively. There were 45 prescribed fires reported for a total of 3,698.2 hectares.

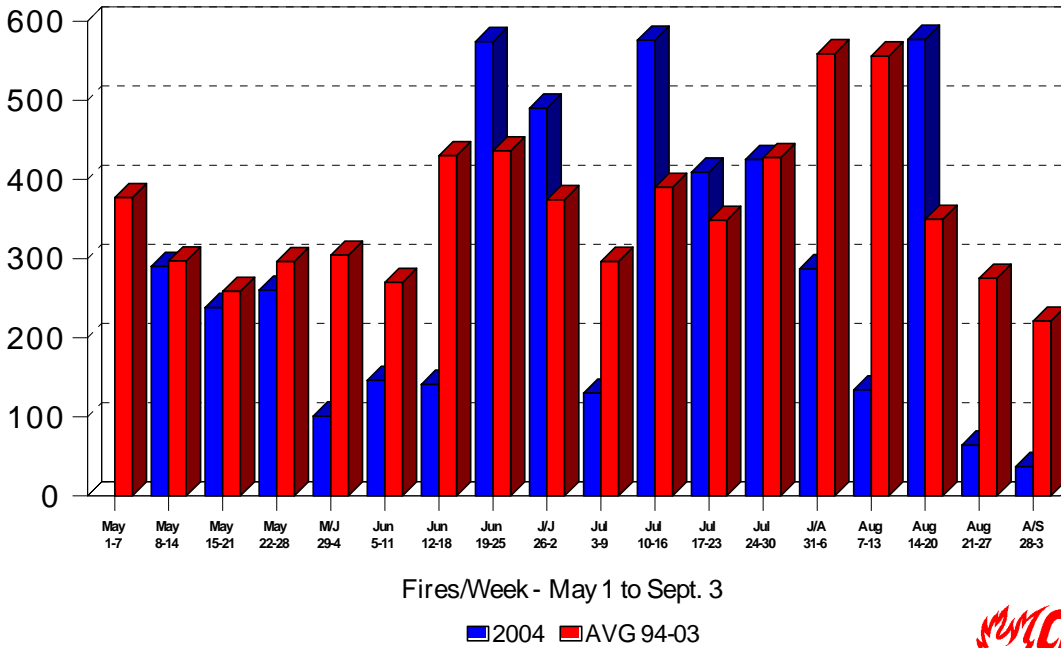
The following statistics show that out of a total of 6,634 fires consuming 3,277,181.03 hectares, 706 were managed under a Modified Response, consuming 2,656,406.08ha. The fires that received a Modified Response account for only 10.6% of the total fires, but 81% of the total area consumed.

WILDFIRE							Prescribed Fire	
FIRES				HECTARES			Fires	Ha
	Full	Modified	Total		Full	Modified	Total	
BC	2295	86	2381		87450.00	134759.00	222209	
YT	85	197	282		55079.86	1762431.14	1817511	
AB	1597	0	1597		234747.88	0	234747.88	13
NT	142	155	297		165545.39	350075.64	515621.03	
SK	185	143	328		852	257589	258441	1
MB	178	56	234		1683.00	21434.0	23117	
ON	415	16	431		1546	70.5	1616.5	11
QC	300	19	319		258.40	2785.80	3044.2	
NL	139	14	153		2162.4	199.4	2361.8	
NB	240	0	240		294.90	0	294.9	
NS	258	0	258		290.02	0	290.02	
PE	20	0	20		15.4	0	15.4	
PC	74	20	94		70849.7	127061.60	197911.3	20
TOT	5928	706	6634		620774.95	2656406.08	3277181.03	45

The following graph shows the number of fire starts by week for 2004 as compared to the 10 year average. The anomalies in fire occurrence during the 2004 season can be seen.

WEEKLY FIRE STARTS

2004



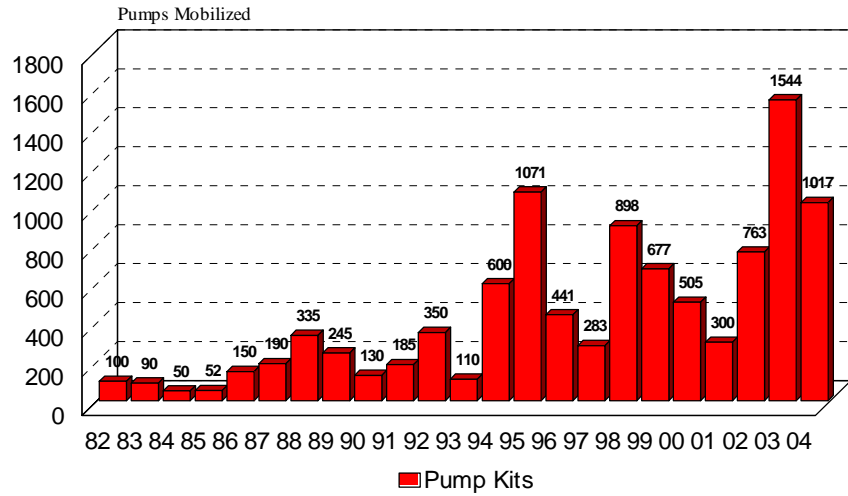
As of December 31st, 2004, there had been two wildland fire related fatalities reported. The following table shows total fire related fatalities in years past.

Forest Fire Related Fatalities

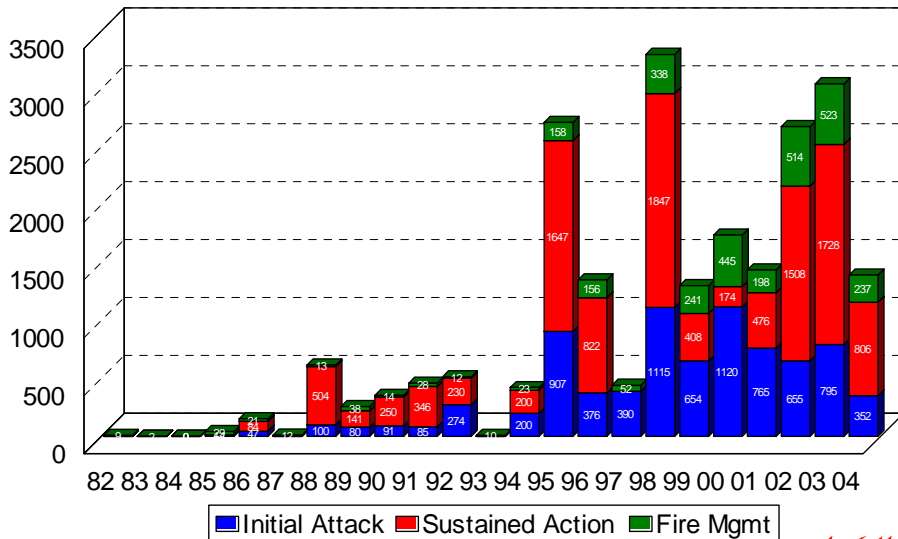
Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Fatalities	6	3	3	0	3	4	2	0	2	4	0	0	0	0	0	2	0	3	2

Mobilizations 2004

Pump Kits 1982-2004



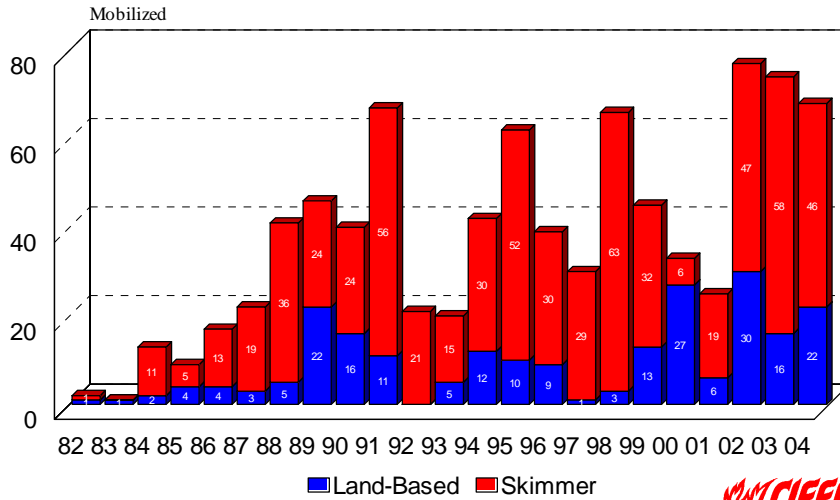
Personnel Mobilized 1982 - 2004



Mobilizations 2004

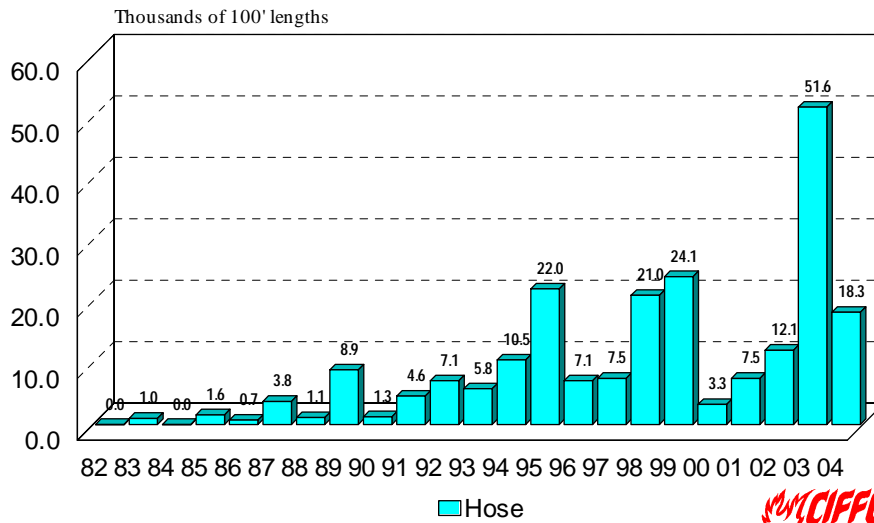
Airtankers

1982 - 2004



Hose

1982 - 2004



Wildfire Starts												
Total Number of Fires (Lightning & Human Caused)												
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Ave.	2004
BC	4,094	1,489	1,343	1,198	2,663	1,150	1,508	1,265	1,758	2447	1,797.1	2381
YT	255	148	149	112	196	160	55	68	69	77	134.8	282
AB	872	804	376	445	1,696	1,355	782	974	1,430	1191	958.2	1597
NT	627	215	350	105	399	170	275	127	85	160	282.2	297
SK	700	649	428	491	1,266	735	417	857	878	642	706.7	328
MB	555	663	423	373	516	612	353	538	754	1148	502.6	234
ON	1,053	2,121	1,243	1,634	2,267	1,002	636	1,562	1,114	1015	1,337.5	431
QC	499	1,265	1,250	876	854	1,037	516	1,003	895	716	873.7	319
NF	143	103	148	110	192	228	219	202	143	191	157.1	153
NB	516	546	367	368	288	606	333	490	317	228	426.1	240
NS	245	408	272	371	348	462	210	486	267	274	338.4	258
PE	43	29	25	34	26	34	26	34	29	14	30.9	20
PC	160	57	72	51	127	40	108	107	85	115	86.5	94
Total	9,762	8,497	6,446	6,168	10,838	7,591	5,438	7,713	7,824	8218	7,631.8	6634

Totals as of December 31 st , 2004	
Full Response Fire Numbers	5,928
Modified Response Fire Numbers	706
Total	6,634

Wildfire Hectares												
Total Area Burned in Hectares												
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Ave.	2004
BC	29,063	53,256	22,048	2,640	77,781	10,620	16,830	9,668	8,604.0	266412.00	49,692	222209
YT	411,397	257,280	105,935	10,120	385,579	185,956	7,651	17,772	35,700.0	49036.8	146,643	1817511
AB	29,700	342,610	1,990	4,728	734,816	122,612	14,676	153,459	496,566.69	55481.83	195,664	234747.88
NT	3,085,977	2,827,367	371,545	126,532	1,459,360	550,046	177,814	111,262	27,089.17	127821.4	886,481	515621.03
SK	994,889	1,643,552	14,516	3,884	995,498	180,820	140,922	183,820	879,582.6	126590.8	516,407	258441
MB	1,469,258	803,299	116,724	35,009	408,918	121,826	86,129	86,199	81,174.0	430170	363,871	23117
ON	83,455	617,978	451,927	38,528	158,218	328,248	6,633	10,733	172,512.0	314,219.1	218,245	1616.5
QC	116,035	727,727	691,590	393,079	418,318	97,747	39,205	33,068	1,012,785.6	87860.3	361,741	3044.2
NF	110,629	794	82,448	8,981	40,226	39,292	148,820	1,275	35,484.0	36533.1	50,448	2361.8
NB	462	472	1,770	178	303	1,211	336	604	246.4	237	582	294.9
NS	243	405	643	564	397	1,822	488	530	211.25	1256.76	656	290.02
PE	22	36	196	107	77	77	29	27	132.3	11.61	71	15.4
PC	73,017	6,160	16,581	298	31,284	65,368	7,538	21,419	7,086.9	141133.01	36,988	197911.3
Total	6,404,147	7,280,936	1,877,913	624,648	4,710,775	1,705,645	647,071	629,836	2,757,175	1,636,764	2,827,489	3,277,181.03

Totals as of December 31 st , 2004	
Full Response Hectares Consumed	620774.95
Modified Response Hectares Consumed	2656406.08
Total	3,277,181.03