



CANADA REPORT 2001

by
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The 2001 fire season in Canada will reflect a near average fire year for total fire numbers but a well below average for hectares consumed compared against the ten year average. As of December 31st Canada, recorded 7,713 fires for 629,836 hectares.

The Canadian winter was relatively mild with low snow levels in almost all areas from Manitoba west and above normal snow levels in the east. The western levels had western fire managers anticipating an active fire season. As in 1998, 1999 and 2000 spring came early with above normal temperatures and below normal precipitation in the west which further increased the fire occurrence and severity potential throughout April.

The hazard continued to build in the west through May. Late May high temperatures, lightning and wind escalated the fire season for the western provinces. Alberta (AB), British Columbia (BC) and Saskatchewan (SK) all experienced increased fire activity with AB picking up the most. Extreme fire behaviour resulted in some fire escaping initial attack and becoming project fires. National mobilization of resources were initiated and moved into AB. AB peaked with almost 500 interagency person on site assisting with their fire management activities. CIFFC move to a National Preparedness Level II for a 25 day period from late May to mid June.

By mid June the AB situation had stabilized and periodic moisture had reduced the fire occurrence and intensity. June and into July moderate weather conditions assisted many of the agencies in controlling the majority of their fires and resources were returning to their home agencies. Although temperatures remained above average in many areas across Canada through-out July the fire occurrence remained normal. This weather pattern spread primarily over the western half of the country effectively reducing the current and potential fire hazard and resulted in moderate fire activity. From central Ontario (ON) east the weather pattern remained hot dry and the potential for escaped wildfire increased daily. By the end of July the drought code in ON were at record levels.

August came in with no relief in sight for the eastern half of the country. For ON the writing was on the wall, fire modelling and instinct told the fire managers to bring on additional resources. Québec (QC) imposed an open fire ban and suggested that logging operations be suspended between 12:00 and 20:00 daily. The Maritimes were experiencing deep burning fires requiring extended time to extinguish. By August 12 ON had moved almost 400 professional initial attack firefighters in from every agency west of ON and an additional 8 CL215 skimmer aircraft with bird dog aircraft and air tactical group

supervisors. With the increase in fire activity CIFFC moved the National Preparedness Level III. ON had also activated the Great Lakes Compact and mobilized 2 initial attack fire crews and 2 type 1 wildland fire engines. Two CL-415 groups moved into Nova Scotia (NS) and New Brunswick (NB) from QC to assist in their escalating fire situation. From August 1 to August 12 over 1000 new fires were reported but none had moved to project or campaign size. This is a tribute to mobilization of fire management resources in anticipation of wildfire activity on the part of the fire management agencies. The fire weather in southern BC continued to climb into the second week of August. This coupled with forecasted and occurring dry lightning necessitated the recall of their crews in ON. The Northwest Region of the United States (US) was also experiencing extended drought and hot weather. By August 13 they had moved their planning Level IV and hit planning level V August 15. With the US at planning level V their protocol dictates that they call in their cooperators to assist in their planning and potential allocation of external resources. On August 16 CIFFC mobilized and activated the Canadian Liaison position to sit in on the US national Multi-agency Coordinating Group (MAC Group) part of the National Interagency Fire Center (NIFC) in Boise ID. By August 21 Canadian resources began to move south.

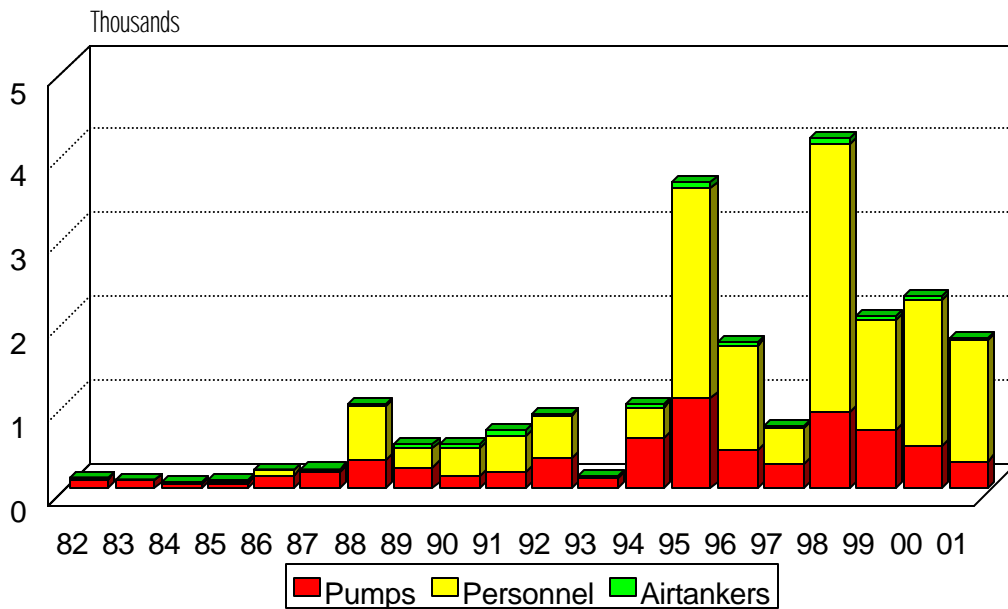
The situation in eastern Canada and primary Ontario east began to stabilize somewhat. Most resources were moving home. The situation in BC and southwestern AB was still critical with hot dry weather with the potential for dry lightning persisting. Resources were mobilized into BC, AB and PC from NT, MB, SK and ON in anticipation of new starts and to assist with new large fires. Project size fires were occurring in BC and the mountain parks of Parks Canada and the maritime provinces were still experiencing extreme fire hazard. The continuing fire activity in western Canada and the potential in eastern Canada restricted the availability of large numbers of resources. With the resource requirement in Canada being met we were able to move resources south to assist the USA. In total we were able to supply the US with 232 professional Fire Management personnel. Canada maintained a presence in the US from August 16 through to September 10, 2001 when the last Canadian demobilized out of the USA. The fire hazard in the Maritimes remained high well into the fall with new fires occurring near daily. Fire hazards rose also in parts of western Canada giving rise to new fires well into late fall.

CIFFC responded to 85 resource requests which resulted in approximately 1447 personnel including 232 mobilized into the United States, 11 airtankers groups for a total 25 airtankers, 315 fire pump kits, 7,500 lengths of hose, and other associated fire management equipment. CIFFC was able to make use of Canadian fire management personnel in support of the escalating late August fire activity in Washington and Montana.

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

Resource Units

1982 - 2001



Canada as a whole experienced a slightly below average fire year for fire number but well below at 23% of average for hectares burnt. As of December 31st 7,713 fires for 629,836 ha. were recorded compared to the ten year average of 8,018 fires and 2,761,314 ha respectively. There were 63 Prescribed fire reported for a total of 8,934 hectares.

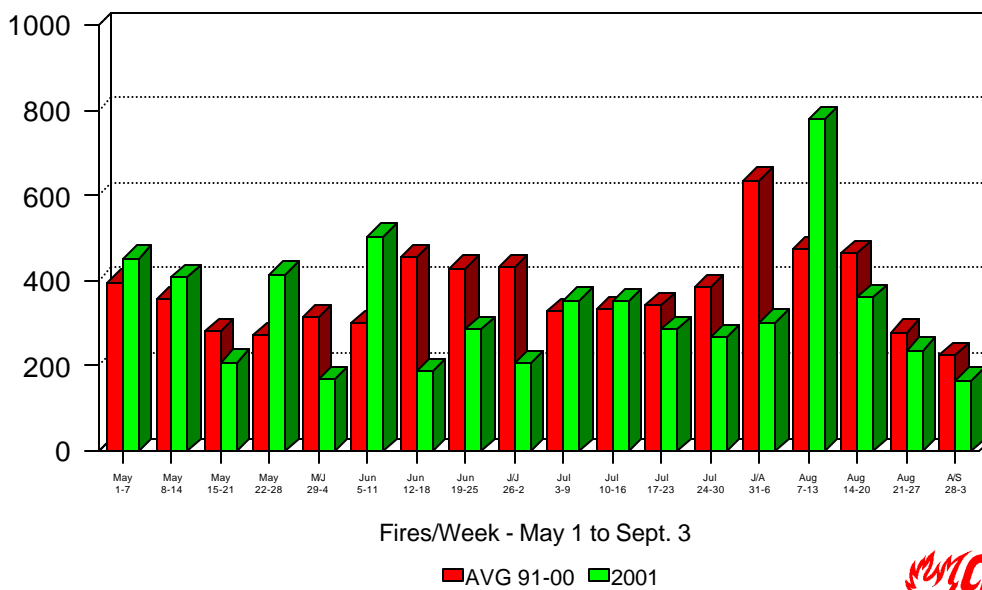
The following statistics show that out of a total of 7,713 fires burning 629,836 ha., 464 were actioned under a Modified Response, consuming 3403,113 ha. The fires that received a Modified Response account for only 6% of the total fires, but 64% of the total area consumed.

| WILDFIRE | | | | | | | Prescribed Fire | |
|----------|-------|----------|----------|---------|----------|---------|-----------------|-------|
| FIRES | | | HECTARES | | | | Fires | Ha |
| | Full | Modified | Total | Full | Modified | Total | | |
| BC | 1244 | 21 | 1,265 | 5,585 | 4,083 | 9,668 | | |
| YT | 49 | 19 | 68 | 221 | 17,551 | 17,772 | | |
| AB | 974 | 0 | 974 | 153,459 | | 153,459 | 25 | 4,036 |
| NT | 76 | 51 | 127 | 1,577 | 109,685 | 111,262 | 1 | 1 |
| SK | 717 | 140 | 857 | 32,112 | 151,708 | 183,820 | 6 | 247 |
| MB | 430 | 108 | 538 | 25,548 | 60,651 | 86,199 | | |
| ON | 1502 | 60 | 1,562 | 2,880 | 7,853 | 10,733 | 12 | 983 |
| OC | 970 | 33 | 1,003 | 1,358 | 31,710 | 33,068 | | |
| NF | 192 | 10 | 202 | 1,049 | 226 | 1,275 | 1 | 95 |
| NB | 490 | | 490 | 604 | | 604 | | |
| NS | 486 | | 486 | 530 | | 530 | | |
| PE | 34 | | 34 | 27 | | 27 | | |
| PC | 85 | 22 | 107 | 1,773 | 19,646 | 21,419 | 18 | 3,572 |
| TOT | 7,249 | 464 | 7,713 | 226,723 | 403,113 | 629,836 | 63 | 8,934 |

The following graph shows the number of fire starts by week for 2001 as compared to the 10 year average. The anomalies in fire occurrence during the 2001 season can be seen.

WEEKLY FIRE STARTS

2001



Wildfires in which structures and or other human development have been lost or damaged, have become known as "Interface Fires." The following table will show the wildfire loss estimates for 2001 as compared to previous years.

INTERFACE LOSSES

(not including forest resources)

| Ag | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|--------------|------------------|------------------|------------------|------------------|--------------------|--------------------|------------------|------------------|--------------------|--------------------|-----------------|------------------|
| BC | \$169,425 | \$180,000 | \$513,750 | \$103,337 | \$5,800,000 | \$NA | \$181,500 | \$0 | | | \$0 | |
| YT | \$50,600 | \$0 | \$30,300 | \$0 | \$0 | \$156,000 | \$14,000 | n/a | \$300,000 | \$1,000,000 | | \$15,000 |
| AB | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | n/a | n/a | n/a | | |
| NT | \$0 | \$0 | \$0 | \$10,000 | \$225,000 | \$0 | \$10,000 | \$0 | \$250,000 | | | |
| SK | \$0 | \$0 | \$0 | \$0 | \$81,500 | \$451,800 | \$0 | \$0 | \$350,000 | \$2,250,000 | | |
| MB | \$67,500 | \$0 | \$0 | \$200,000 | \$0 | \$2,400,000 | \$105,000 | n/a | \$0 | \$350,000 | | |
| ON | \$209,150 | \$217,100 | \$9,500 | \$151,200 | \$0 | \$500,000 | n/a | \$800,000 | n/a | | | |
| QC | \$100,000 | \$182,276 | \$95,900 | \$5,745 | n/a | n/a | n/a | n/a | n/a | n/a | | |
| NF | \$140,400 | \$410 | \$680 | \$3,230 | \$13,500 | \$20,000 | \$0 | \$600 | \$150,400 | \$415,700 | \$42,000 | |
| NB | \$0 | \$125,000 | \$19,500 | \$0 | \$163,500 | \$11,600 | \$17,000 | \$35,000 | \$630,000 | \$1,852,600 | | |
| NS | \$166,650 | \$109,700 | \$5,200 | \$100,300 | \$2,750 | \$50,317 | \$1,000 | \$24,700 | \$4,000 | \$229,500 | | \$250,550 |
| PE | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$4,900 | \$0 | | | |
| PC | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | | | \$27,000 |
| Total | \$903,725 | \$814,486 | \$674,830 | \$573,812 | \$6,286,250 | \$3,589,717 | \$328,500 | \$865,200 | \$1,684,400 | \$6,097,800 | \$42,000 | \$292,550 |

As of December 31st, 2001 there have been 2 forest 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 |
|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Fatalities | 6 | 3 | 3 | 0 | 3 | 4 | 2 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 2 |

| Wildfire Starts | | | | | | | | | | | | |
|---|---------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|
| Total Number of Fires (Lightning & Human Caused) | | | | | | | | | | | | |
| | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Ave. | 2001 |
| BC | 2,037 | 3,809 | 1,503 | 4,094 | 1,489 | 1,343 | 1,198 | 2,663 | 1,150 | 1,508 | 2,079 | 1,265 |
| YT | 187 | 117 | 136 | 255 | 148 | 149 | 112 | 196 | 160 | 55 | 152 | 68 |
| AB | 923 | 1,055 | 848 | 872 | 804 | 376 | 445 | 1,696 | 1,355 | 782 | 916 | 974 |
| NT | 331 | 285 | 469 | 627 | 215 | 350 | 105 | 399 | 170 | 275 | 323 | 127 |
| SK | 762 | 701 | 646 | 700 | 649 | 428 | 491 | 1,266 | 735 | 417 | 680 | 857 |
| MB | 675 | 298 | 239 | 555 | 663 | 423 | 373 | 516 | 612 | 353 | 471 | 538 |
| ON | 2,560 | 960 | 743 | 1,053 | 2,121 | 1,243 | 1,634 | 2,267 | 1,002 | 636 | 1,422 | 1,562 |
| QC | 1,211 | 765 | 542 | 499 | 1,265 | 1,250 | 876 | 854 | 1,037 | 516 | 882 | 1,003 |
| NF | 166 | 109 | 83 | 143 | 103 | 148 | 110 | 192 | 228 | 219 | 150 | 202 |
| NB | 656 | 576 | 430 | 516 | 546 | 367 | 368 | 288 | 606 | 333 | 469 | 490 |
| NS | 733 | 299 | 315 | 245 | 408 | 272 | 371 | 348 | 462 | 210 | 366 | 486 |
| PE | 48 | 27 | 29 | 43 | 29 | 25 | 34 | 26 | 34 | 26 | 32 | 34 |
| PC | 56 | 57 | 58 | 160 | 57 | 72 | 51 | 127 | 40 | 108 | 79 | 107 |
| Total | 10,345 | 9,058 | 6,041 | 9,762 | 8,497 | 6,446 | 6,168 | 10,838 | 7,591 | 5,438 | 8,018 | 7,713 |

| Totals as of December 31st, 2001 | |
|--|--------------|
| Full Response Fire Numbers | 7,249 |
| Modified Response Fire Numbers | 464 |
| Total | 7,713 |

| Wildfire Hectares | | | | | | | | | | | | |
|--------------------------------------|------------------|----------------|------------------|------------------|------------------|------------------|----------------|------------------|------------------|----------------|------------------|----------------|
| Total Area Burned in Hectares | | | | | | | | | | | | |
| | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Ave. | 2001 |
| BC | 29,396 | 28,259 | 5,180 | 29,063 | 53,256 | 22,048 | 2,640 | 77,781 | 10,620 | 16,830 | 27,507 | 9,668 |
| YT | 129,370 | 30,123 | 86,115 | 411,397 | 257,280 | 105,935 | 10,120 | 385,579 | 185,956 | 7,651 | 160,953 | 17,772 |
| AB | 6,173 | 3,330 | 25,633 | 29,700 | 342,610 | 1,990 | 4,728 | 734,816 | 122,612 | 14,676 | 128,627 | 153,459 |
| NT | 225,324 | 36,950 | 858,577 | 3,085,977 | 2,827,367 | 371,545 | 126,532 | 1,459,360 | 550,046 | 177,814 | 971,949 | 111,262 |
| SK | 239,372 | 96,192 | 613,827 | 994,889 | 1,643,552 | 14,516 | 3,884 | 995,498 | 180,820 | 140,922 | 492,347 | 183,820 |
| MB | 142,978 | 433,773 | 67,275 | 1,469,258 | 803,299 | 116,724 | 35,009 | 408,918 | 121,826 | 86,129 | 368,519 | 86,199 |
| ON | 318,883 | 175,994 | 104,681 | 83,455 | 617,978 | 451,927 | 38,528 | 158,218 | 328,248 | 6,633 | 228,455 | 10,733 |
| QC | 438,299 | 27,112 | 128,243 | 116,035 | 727,727 | 691,590 | 393,079 | 418,318 | 97,747 | 39,205 | 307,736 | 33,068 |
| NF | 65,374 | 1,814 | 26,998 | 110,629 | 794 | 82,448 | 8,981 | 40,226 | 39,292 | 148,820 | 52,538 | 1,275 |
| NB | 3,335 | 5,071 | 551 | 462 | 472 | 1,770 | 178 | 303 | 1,211 | 336 | 1,369 | 604 |
| NS | 1,775 | 1,160 | 369 | 243 | 405 | 643 | 564 | 397 | 1,822 | 488 | 787 | 530 |
| PE | 120 | 44 | 87 | 22 | 36 | 196 | 107 | 77 | 77 | 29 | 80 | 27 |
| PC | 1,224 | 1,377 | 1,651 | 73,017 | 6,160 | 16,581 | 298 | 31,284 | 65,368 | 7,538 | 20,450 | 21,419 |
| Total | 1,601,623 | 841,199 | 1,919,187 | 6,404,147 | 7,280,936 | 1,877,913 | 624,648 | 4,710,775 | 1,705,645 | 647,071 | 2,761,314 | 629,836 |

| Totals as of December 31st, 2001 | |
|--|----------------|
| Full Response Hectares Consumed | 226,723 |
| Modified Response Hectares Consumed | 403,113 |
| Total | 629,836 |