



Natural Resources  
Canada

Ressources naturelles  
Canada

Special Issue

Wildland Fire

4a

## Fire Season 2015: Supporting National Fire Management in Canada

Almost every wildland fire season in Canada, which runs from March through October, brings challenges to one region or another. In 2015, dry conditions throughout much of western Canada led to an early start to the fire season (*Figure 1*). By the end of May, more than 2000 fires had burned across Canada. When conditions really heated up in late June and early July, fire suppression personnel and resources were strained.

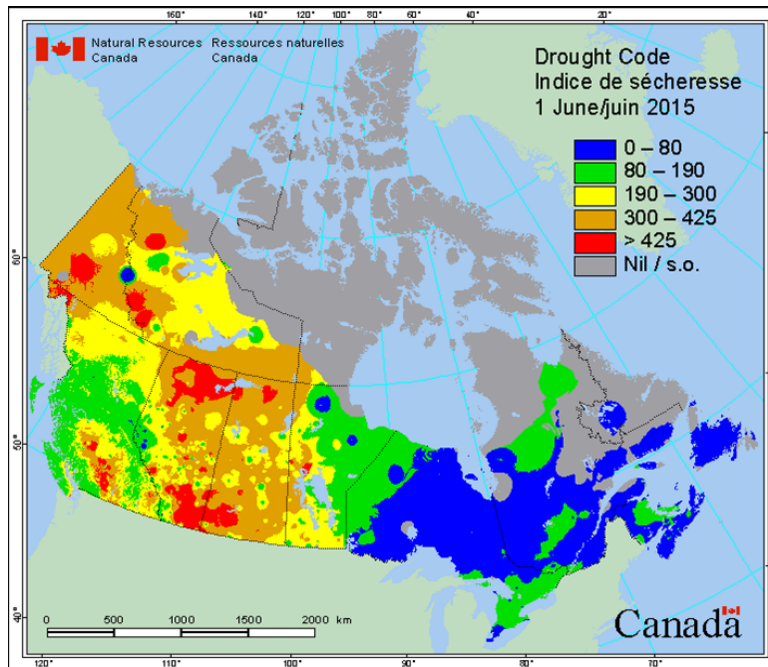


Figure 1: The Drought Code is a component of the Canadian Forest Fire Weather Index (FWI) System. It is an indicator of seasonal drought effects on forest fuels

Making matters worse, on July 4, a cluster of fast-moving fires threatened the community of Lac La Ronge, Saskatchewan, and several nearby communities. To help it deal with this worsening fire situation, the Government of Saskatchewan appealed for assistance from the Government of Canada.

With the help of [Canadian Forest Service \(CFS\)](#) liaison officers working on a rotational basis with [Public Safety Canada's Government Operations Centre \(GOC\)](#), the [Canadian Interagency Forest Fire Centre \(CIFFC\)](#) coordinated fire-fighting resources and personnel with the needs of provincial and territorial fire management agencies.

By July 10, 2015, 401 personnel from 8 provinces and territories and an additional 30 from the United States helped local crews combat several forest fires raging across the Prairies, the Northwest Territories and Yukon. These fire fighters included fire suppression specialists from the United States, Mexico, Australia, New Zealand and South Africa, as well as members of the [Department of National Defence \(DND\)](#) and fire management personnel from across Canada.

Bruce Macnab is Head of the Wildfire Information Systems at the CFS' [Northern Forestry Centre \(NoFC\)](#) in Edmonton, Alberta. "Throughout the 2015 fire season," he explains, "CFS fire personnel from the Northern Forestry Centre (NoFC) and other centres provided daily situational reporting using the Canadian Wildland Fire Information System (CWFIS), enhanced fire weather forecasting, and fire growth modeling; they also acted as liaison officers at Public Safety Canada's Government Operations Centre. The timing and intensity of the 2015 fire season tested the fire management capacity of several provinces and territories and in some ways the entire nation's capacity to manage fire."

Canadian  
Forest Service

Northern  
Forestry Centre

Insights

With a few exceptions (e.g., national parks), wildland fire management is the responsibility of the provinces and territories. During periods of intense wildland fire activity, however, there is a need to support fire management efforts on a national scale. CIFFC provides such support by coordinating exchanges of aircraft, fire crews and equipment. CIFFC is a partnership funded and operated through federal, provincial and territorial governments, with [Natural Resources Canada/CFS](#) and [Parks Canada](#) being the federal partners. The CFS' fire program also provides another layer of support to the national fire management effort through the [Canadian Forest Fire Danger Rating System \(CFFDRS\)](#). Across Canada and in many other parts of the world, the CFFDRS is used by fire agencies on a daily basis to anticipate human or lightning-caused fires. This system is based on weather conditions and the amount of forest fuels, such as dry grass, twigs, branches, or tree types in any given area.

CFS officers work alongside representatives of the [Canada Border Services Agency](#), Department of National Defence, [Global Affairs Canada](#) and other departments to facilitate the flow of information and coordination between CIFFC and provincial and territorial fire management agencies. Officers field requests for additional international fire suppression specialists, deliver enhanced fire-weather forecasts to CIFFC, use computer modeling to prioritize fires, and provide updates from other government departments and private industry.

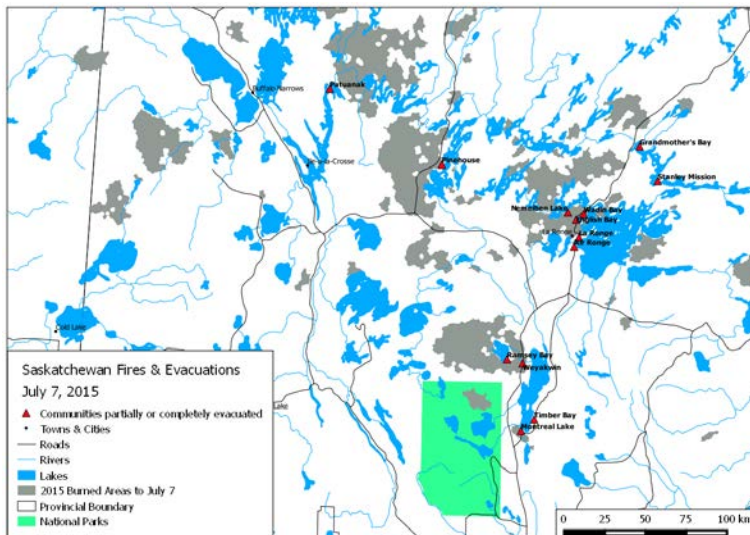


Figure 2: Saskatchewan 2015 Fires and Evacuations (CWFIS)

Says Macnab, “These well-established national and international partnerships give local fire management agencies the ability to leverage badly needed resources and receive real-time information at critical times, so that they can quickly and effectively suppress and contain wildland fires before they threaten communities or grow to unmanageable sizes.” (Figure 2).

Fortunately by mid-August, the 2015 fire season finally started to calm down. In the summer of 2015 there were nearly 4 million hectares burned from 6765 fires, compared to the 10-year average of 2 million hectares burned from 5296 fires. A changing climate is expected to further test Canada’s fire suppression capacity. The experiences gained from the 2015 fire season and the partnerships formed between government departments and international fire management agencies were called upon again this spring to fight the large forest fire that devastated parts of Fort McMurray in northern Alberta, and will likely be called upon again in the future.

“NoFC’s role in CIFFC brings many benefits to the CFS and its partners,” concludes Macnab. “It increases the uptake and relevance of CFS fire research and leads to new data sets that increase the analytical power of CFS research. Furthermore, while forest fires are dangerous and unpredictable, the effectiveness of the exchange of fire crews, aircraft, equipment and information is making Canada’s forests safer places for Canadians. In some typical and new ways, this unique collaborative arrangement provides opportunities for the CFS to support our provincial and territorial partners across Canada through the CIFFC partnership.”

**Head, Wildland Fire Information Systems: Bruce Macnab ([bruce.macnab@canada.ca](mailto:bruce.macnab@canada.ca))**

Aussi en français

To subscribe to *Insights*, please contact:

Ray Darwent  
Natural Resources Canada  
Canadian Forest Service  
Northern Forestry Centre  
Edmonton, AB, Canada

780-435-7279  
[nrcan.nofc-cfn.nrcan@canada.ca](mailto:nrcan.nofc-cfn.nrcan@canada.ca)  
[www.nrcan.gc.ca/forests](http://www.nrcan.gc.ca/forests)