Canadian National Fire Database (CNFDB)

Data Documentation

Abstract

The Canadian National Fire Database (CNFDB) – Fire Point and Polygon Data is a collection of forest fire locations and fire perimeters as provided by Canadian fire management agencies including provinces, territories, and Parks Canada.

Supplemental Information

Please note: an End-User Agreement is required for accessing these data. Please refer to this agreement for information regarding restrictions of use

http://cfs.nrcan.gc.ca/common/cwfis/End_User_Agreement_EN.html

The CNFDB fire point and polygon data are collected from Canadian fire management agencies including provinces, territories, and Parks Canada. To create the Canada-wide product, the data collected from each agency are projected into a common format and combined with data from other agencies; attribute fields are standardized; agency specific attribute fields are removed; and polygon areas are calculated using GIS.

Note that the data contained in the CNFDB are not complete nor are they without error. Locations are approximate. Not all fires have been mapped, and data accuracy varies due to different mapping techniques. This collection includes only data that has been contributed by the agencies. Data completeness and quality vary among agencies and between years.

For analyses for a single province or territory or for Parks Canada, we suggest you contact the appropriate agency. Links to the agency web sites can be found at https://cwfis.cfs.nrcan.gc.ca/ha/nfdb, or can be found through the Canadian Interagency Forest Fire Centre (CIFFC) website at http://www.ciffc.ca

The database is a large collaborative effort by all Canadian fire agencies. We thank the many individuals who contributed to this effort, including fire crews, field personnel, photo interpreters, pilots, digitizers, and analysts. Compilation of the Canada-wide database was partially supported by the Canadian government programs of ENFOR (ENergy from the FORest), the Program on Energy Research and Development, the Climate Change Action Fund, and Action Plan 2000.

Citation:

When using these data for mapping activities and analysis, research, evaluation or display, please acknowledged the source using the following citation: Canadian Forest Service. 2021. Canadian National Fire Database – Agency Fire Data. Natural Resources Canada, Canadian Forest Service, Northern Forestry Centre, Edmonton, Alberta. https://cwfis.cfs.nrcan.gc.ca/ha/nfdb

Publications:

The following publications present analyses of these data:

Hanes, C.C.; Wang, X.; Jain, P.; Parisien, M.-P.; Little, J.M.; Flannigan, M.D. 2019. Fire-regime changes in Canada over the last half century. Canadian Journal of Forest Research 49: 256-269. doi:10.1139/cjfr-2018-0293

Burton, P.J.; Parisien, M.-A.; Hicke, J.A.; Hall, R.J.; Freeburn, J.T. 2008. Large fires as agents of ecological diversity in the North American boreal forest. International Journal of Wildland Fire 17(6): 754-767.

Parisien, M.A.; Peters, V.S; Wang, Y.; Little, J.M.; Bosch, E.M.; Stocks, B.J. 2006. Spatial patterns of forest fires in Canada 1980–1999. International Journal of Wildland Fire 15:361–374.

Stocks, B.J.; Mason, J.A.; Todd, J.B.; Bosch, E.M.; Wotton, B.M.; Amiro, B.D.; Flannigan, M.D.; Hirsch, K.G.; Logan, K.A.; Martell, D.L.; Skinner, W.R. 2003. Large forest fires in Canada, 1959–1997. Journal of Geophysical Research 108, D1: FFR5, 1-12. doi:10.1029/2001 JD000484

Amiro, B.D.; Todd, J.B.; Wotton, B.M.; Logan, K.A.; Flannigan, M.D.; Stocks, B.J.; Mason, J.A.; Martell, D.L.; Hirsch, K.G. 2001. Direct carbon emissions from Canadian forest fires, 1959 to 1999. Canadian Journal of Forest Research 31:512–525.

Note: For additional information, please see the metadata included with the data itself.