

LANDFIRE Product Application Summary

Fire Regime Syntheses: Synergy between the Fire Effects Information System and LANDFIRE

Citation

Three Fire Regime Syntheses are published to date.

- Innes, Robin J. 2013. "Fire regimes of Alaskan coastal herbaceous communities and active inland dunes." In: *Fire Effects Information System* [Online]. Missoula, MT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Missoula Fire Sciences Laboratory (Producer). <http://www.fs.fed.us/database/feis/>
- Innes, Robin J. 2013. "Fire regimes in Alaskan tundra communities." In: *Fire Effects Information System* [Online]. Missoula, MT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Missoula Fire Sciences Laboratory (Producer). <http://www.fs.fed.us/database/feis/>
- Abrahamson, Ilana L. 2013. "Fire regimes in Hawai'ian plant communities." In: *Fire Effects Information System* [Online]. Missoula, MT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Missoula Fire Sciences Laboratory (Producer). <http://www.fs.fed.us/database/feis/>

Authors

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Application Location: lat 46°50'54.28"N, long 114° 1'5.55"W (Missoula, MT)

Objective

Address possible influences from invasive species and climate change

Project description

Managers and planners need scientifically sound, up-to-date information on historical fire regimes. To address managers' needs for syntheses of the growing body of research on historical fire regimes, the Fire Modeling Institute's Information Team developed and showcased a new product, the Fire Regime Synthesis, in the Fire Effects Information System (FEIS, <http://www.feis-crs.org/beta/>) during 2013.

Fire Regime Syntheses bring together information from two sources: the scientific literature and Biophysical Settings (BpS) models and associated geospatial data developed by LANDFIRE (<http://www.landfire.gov/>). The BpS models represent vegetation that may have dominated the landscape prior to Euro-American settlement.

Fire Regime Syntheses provide consistent, current information to the management community on historical (presettlement) fire regimes and contemporary changes in fuels and fire regimes; supplement information on individual species' adaptations and responses to fire provided by FEIS species reviews; and enable LANDFIRE to incorporate the latest science on historical fire regimes into data revisions and identify regions and plant community types lacking fire history data.

Fire Regime Syntheses present current information on historical fire frequency, spatial pattern, extent, and seasonality; historical natural and human-caused ignition sources; and typical patterns of fire intensity and severity. The syntheses also provide information on contemporary changes in fuels, especially in relation to their potential to influence fire regimes. This discussion addresses possible influences from invasive species and climate change. Each Fire Regime Synthesis links to related species reviews in FEIS. In the future, the species reviews will be linked back to Fire Regime Syntheses, so up-to-date fire regime information will be available for all 1,100 Species Reviews in FEIS.

Fire Regime Syntheses are now available for all of Hawaii and for Alaskan tundra and Alaskan coastal communities. More syntheses will be added to FEIS in the coming year.

LANDFIRE products used

Biophysical Settings

Value of the work to the natural resource management/conservation community

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