

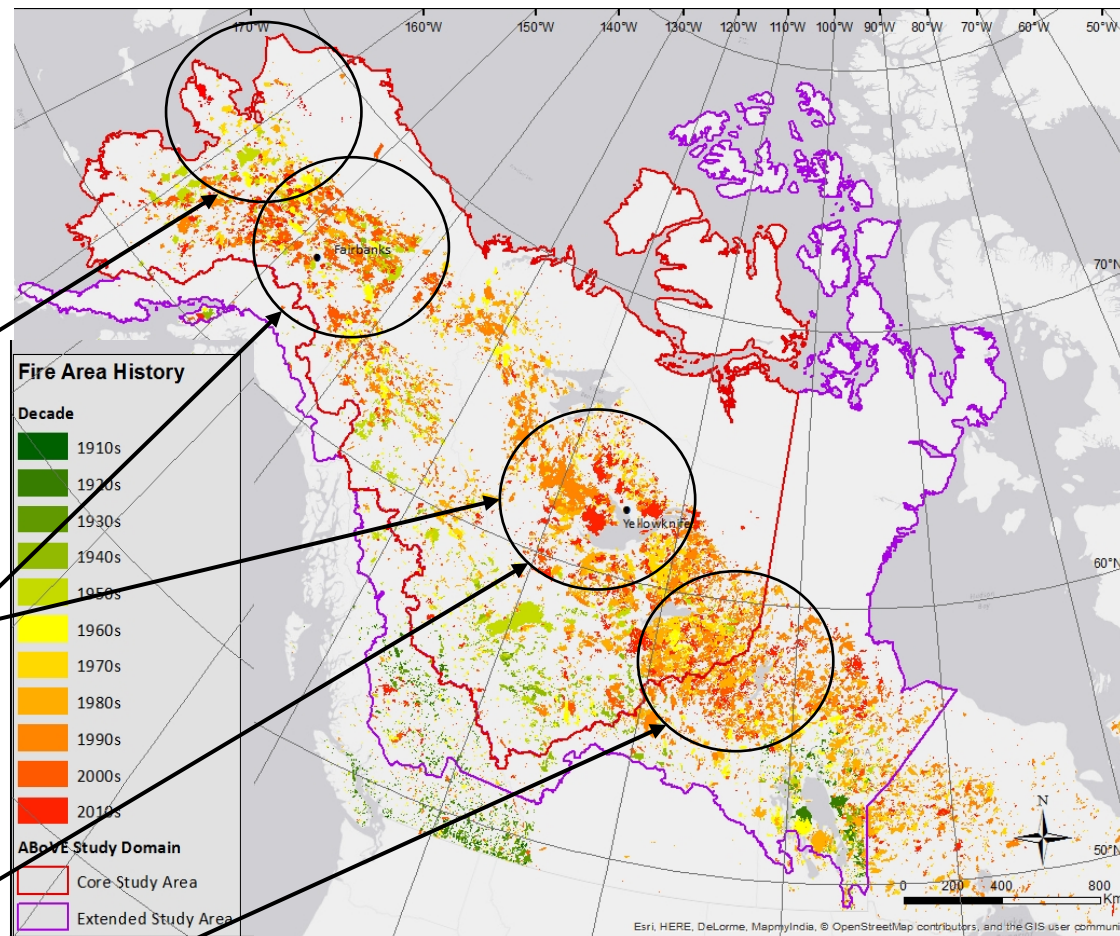
Fire Disturbance Working Group



M. Mack [Chair], Baltzer, J., Bourgeau-Chavez, L., Ebel, B., French, N., Goetz, S., Hoy, L., Jenkins, L., Johnstone, J., Kane, E., Loboda, T., Schuur, T., Rogers, B., Turetsky, M., Veraverbeke, S., Walker, X.

Summer field campaigns linked ground measurements to remote sensing in key fire-prone regions of the ABoVE Domain. Sites spanned from arctic tundra to the southern edge of the boreal forest. Focal activities included:

- Linking remote sensing products to fire severity and post-fire recovery in Alaskan arctic tundra (Loboda project).
- Scaling emissions and loss of legacy carbon from forests of the Northwest Territories (NWT) and alpine tundra (Denali National Park; Mack project).
- Detecting fire effects on post-fire vegetation trajectories in NWT forests and alpine tundra (Mack project).
- Predicting fire behavior and impacts in NWT permafrost wetland landscapes (Bourgeau-Chavez project).
- Scaling fire emissions of carbon and impacts on albedo at the trailing edge of the boreal forest in Saskatchewan (Rogers project).



New working group products include:

- Eight peer-reviewed publications (in press + published between 8/2015 and 8/2016)
- Daily 500m 'blue sky' albedo product for boreal North America using MODIS collection 6 BRDF and related products (e.g., aerosol optical depth; Rogers project).
- Burn Severity, Fire Progression, Landcover and Field Data for 2014 NWT fires posted on ORNL DAAC or LTER Network
- Landsat derived 30 m burned area maps, burn severity maps, landscape drainage maps, and previous fire history maps (1972 - 2015) for Arctic tundra

Outreach and stakeholder engagement:

- Public seminar at the Murie Science and Learning Center, Denali National Park
- K-6 environmental education program at Fred Henne Territorial Park, NWT
- Webinars (3) hosted by the Alaska Fire Science Consortia
- Featured in *The Nature of Things* (CBC Canada)
- Featured in NASA Earth Expeditions and the Earth Observatory Notes from the Field
- Community picnic and outreach in Kakisa, NWT