



Fire Behavior Assessment Team (FBAT) 2022



Mission: FBAT's mission is to improve knowledge about the relationships among fuels, fire behavior, and fire effects; support application of that knowledge for the benefit of fire and land management; and promote firefighter safety and public understanding for current and future generations.



Operations: FBAT is an on-call module focused on coordinated measurements of fuels, vegetation, active fire behavior, and fire effects on wildland fires, primarily wildfire incidents but also prescribed fires. FBAT functions in collaboration with land managers, fire managers, and interested research groups. FBAT is ordered to wildfires through IROC while other support comes from Regions, Research Stations, and grants. In coordination with incident management teams, plots are established opportunistically ahead of the fire accounting for current and expected fire behavior, safe access, and fire management tactics. FBAT's program is described in Fire Management Today (http://www.fs.fed.us/fire/fmt/fmt_pdfs/FMT73-4.pdf).

Primary FBAT Goals:

- Measure fire behavior and effects and their relationship to fuels, fire history, and fuels treatments, and/or other values (botany, wildlife habitat, heritage sites, etc.).
- Supply data and active fire video useful for improving firefighter safety, training, and public outreach.
- Build a dataset for evaluating consumption (FOFEM, CONSUME), emissions, and fire behavior/effects models to improve decision support systems for land and fire managers.
- Coordinate with fire and land managers and research partners to design and implement applied science projects focused on answering questions critical for meeting agency and stakeholder goals.

Measurements:

- Pre-fire: ground, surface, and canopy fuels; and vegetation conditions
- Active-fire: video imagery, spread rate, fireline intensity, on-site winds, and energy transport
- Post-fire: ground, surface, and canopy fuel consumption, first-order effects on soils and vegetation

Achievements:

- Information delivered on over 29 wildfires since 2003 (<https://www.frames.gov/fbat/home>)
- FBAT data used for evaluating consumption models (www.fs.usda.gov/treesearch/pubs/46373) and carbon emissions and sequestration (www.fs.usda.gov/treesearch/pubs/57240)
- FBAT video used in the USFS PSW ecological restoration series (<http://www.fs.usda.gov/detail/r5/news-events/audiovisual/?cid=stelprdb5443943>)
- Datasets available in the USFS Research Data Archive (www.fs.usda.gov/rds/archive)

Please contact the FBAT leads for more information or to request FBAT support:

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FBAT website: <https://www.frames.gov/fbat/home>