

# U.S. Forest Service Pacific Southwest Research Station

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## U.S. Forest Service Pacific Southwest Research Station Experts: Wildland Fires

*BERKELEY, Calif.*, June 30, 2008—These U.S. Forest Service scientists with the Pacific Southwest Research Station have expertise in wildland fire forecasting, monitoring and recovery in California ecosystems. Media representatives are encouraged to contact them.

**Jan Beyers**, research plant ecologist, is testing the effectiveness of emergency post-fire rehabilitation treatments such as grass seeding, aerially-applied mulches and erosion barriers on hill slopes. She has also conducted research on ways fire affects rare Southern California flora and fauna. In addition, Beyers has collaborated on work examining how efforts to reduce wildland fuels that can feed fires might affect the spread of invasive non-native plants. Contact: Jan Beyers, Riverside Forest Fire Lab, 951/680-1527, [jbeyers@fs.fed.us](mailto:jbeyers@fs.fed.us)

**Francis Fujioka**, research meteorologist, has spent much of his career perfecting weather models to optimize forecasts for fire management decisions. He worked with the National Weather Service and universities to establish the first long-range fire weather forecasting system used by the National Interagency Fire Center to produce a monthly projection of fire severity and weather. Fujioka serves on working groups for the NOAA Science Advisory Board, and UN World Meteorological Organization's Commission for Agricultural Meteorology to address fire weather research and operational issues. Contact: Francis Fujioka, Riverside Forest Fire Lab, 951/680-1552, [ffujioka@fs.fed.us](mailto:ffujioka@fs.fed.us)

**Armando González-Cabán**, research economist, has studied decision-making processes of policy analysts and fire managers struggling to cost-effectively fight fires where past suppression led to a worldwide abundance of vegetation that feed fires. His research has taken him to many places, including Argentina, Chile, Ghana, Portugal, Russia and Spain. González-Cabán has also measured the public's willingness to fund protection of Northwest old-growth forests from catastrophic fires and fuels treatment programs for fire reduction purposes. He has also examined how suppression costs often bear little relation to values at risk. Contact: Armando González-Cabán, Riverside Forest Fire Lab, 951/680-1525, [agonzalezcaban@fs.fed.us](mailto:agonzalezcaban@fs.fed.us)

**Eric Knapp**, research ecologist, studies how fire suppression has altered fire-adapted ecosystems, and its effects on plants and animals. He is researching variations in the intensity of wildland fires and controlled burns in landscapes like Northern California's Klamath Mountains to provide land managers a better sense of controls to fire severity. Knapp is also studying how mechanical thinning treatments of forest fuels impact fire behavior and fire

effects. Contact: Eric Knapp, Redding Silviculture Lab, 530/226-2555 office, 530/941-3229 cellular [eknapp@fs.fed.us](mailto:eknapp@fs.fed.us).

**Malcolm North**, research plant ecologist, is studying how a century of fire suppression and selective logging has impacted mixed-conifer forests of the West. North has expertise in how these human actions have influenced forest structure, decomposition, nutrient cycling and wildlife habitat. His research involves fire's future role in restoring historic forest conditions. He has also been studying the role of forests in storing and releasing carbon to examine whether forest management practices contribute to or buffer against global warming. North is also a U.C. Davis associate professor of forest ecology. Contact: Malcolm North, Sierra Nevada Research Center, 530/759-1705; and U.C. Davis, 530/754-7398, [mnorth@ucdavis.edu](mailto:mnorth@ucdavis.edu).

**Phil Riggan**, research soil scientist, helped develop technology to monitor major wildland fires and their impact on the environment. His work includes FireMapper, an airborne remote sensing technology that provides on-line three-dimensional infrared imagery accessible to the public (<http://www.fireimaging.com>). Fire managers used the site last summer to direct firefighters on Southern California fires. Riggan has helped the Brazilian government develop imaging technology to assess fire and environmental changes in tropical forests. Contact: Phil Riggan, Riverside Forest Fire Lab, 951/680-1534, [priggan@fs.fed.us](mailto:priggan@fs.fed.us)

**Carl Skinner**, research geographer, studies fire and climate interactions in Pacific Coast areas of North America. His research emphasis is fire ecology and fire history, particularly the influence of fire and climate on long-term forest development. Skinner has studied tree-ring and lake-sediment core data to interpret fire and climatic influences on forest dynamics over thousands of years. This work provides information to understand how fires and forests are likely to respond to periods of rapid climate change. Contact: Carl Skinner, Redding Silviculture Lab, 530/226-2554, [cskinner@fs.fed.us](mailto:cskinner@fs.fed.us)

**David Weise**, supervisory research forester, has studied various models on wildland fire behavior. His current research objective is to develop fire behavior knowledge facilitating use of controlled burns in Southern California chaparral and other shrub ecosystems in the United States. Weise is studying the effects of wind and fuel moisture on fire ignition and spread to improve the capability to plan landscape-scale controlled burns. Contact: David Weise, Riverside Forest Fire Lab, 951/680-1543, [dweise@fs.fed.us](mailto:dweise@fs.fed.us)

**Shyh-Chin Chen**, research meteorologist, is developing real-time high-resolution weather predictions to support fire spread simulations, and long-range fire weather forecasts to project seasonal fire severity. Before joining the Forest Service, he was associate director of the Experimental Climate Prediction Center at Scripps Institution of Oceanography where he worked closely with Francis Fujioka to develop these weather models. Contact: Shyh-Chin Chen, Riverside Forest Fire Lab, 951/680-1554, [schen@fs.fed.us](mailto:schen@fs.fed.us)

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