LANDFIRE

LESSONS LEARNED: Issue 5

Collaboration on Science in Support of Fire Management in California

Sydney Smith, Max Creasy, Marchel Muenneke, and Hugh Safford collaborate on a quantitative reference model for ponderosa pine.

California's Potential Natural Vegetation Types Modeled for the Rapid Assessment

Alpine Meadows Barrens
Aspen With Conifer
California Grassland
California Mixed Evergreen - North
Chaparral
Coastal Sage Scrub
Coastal Scrub/Coastal Prairie
Coast Redwood
Herbaceous Wetland
Interior White Fir, NE CA
Jeffrey Pine
Mixed Conifer- north slopes
Mixed Conifer- south slopes
Montane Chaparral
Oak Woodlands
Ponderosa Pine
Red Fir / White Fir
Red Fir / Western White Pine
Saltbush
Sierra Nevada Lodgepole (Cold/Wet)
Sierra Nevada Lodgepole (Dry)
S Coast Mixed Evrgrn/Big Cone Douglas-fir
Wet Mountain Meadow/Lodgepole Pine

Look for more online at:
http://www.landfire.gov

Over twenty ecologists and fire managers from the USFS, BLM, NPS, NRCS, CDF, and TNC met in Sacramento, CA, November 1-5, 2004 to work in collaboration and document their knowledge about ecosystem structure, succession, and disturbance dynamics for major potential natural vegetation types across the state. Over the 5-day workshop, participants learned how to model ecosystem structure and function, and then completed 23 quantitative ecological models (see sidebar, below).

Model outputs - reference conditions by potential natural vegetation type - will be used in the LANDFIRE Rapid Assessment of Fire Regime Condition Class (FRCC) (to be completed in summer 2005), and further refined to more accurately map FRCC across the state by 2007 via the national LANDFIRE project.

The quantified ecological models developed from this workshop are also available for use in land and resource management, fire management and conservation area plans. While reference models include estimates of expected ecosystem function under native disturbance regimes, these same models can be used to develop alternative scenarios representing current or alternative future conditions. For example, federal, state, county and Conservancy partners in the Lassen Foothills project of northern California are considering refining these models to guide development of landscape-level desired future conditions and alternative restoration strategies for a proposed community-based fire management plan.

Collaboration on the science of fire and ecosystem function is proving beneficial to achievement of common goals for fire regime restoration in California, and elsewhere across the U.S.

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