

Files\\Denver Post_2012_06_Wildfire research turns to the sky - § 4 references coded [14.79% Coverage]

Reference 1 - 3.55% Coverage

Researchers striving to understand the ways wildfires make some of their own weather are looking at clouds from both sides now.

Colorado scientists work to predict ground conditions by learning how heat and smoke radiating from big fires such as the more than 55,050-acre High Park fire can affect wind and cloud formation.

Reference 2 - 3.10% Coverage

With more accurate forecasts, fire managers could better predict fire behavior, deploy assets and protect firefighters, residents and property, said Sher Schranz, research coordinator with Colorado State University's Cooperative Institute for Research in the Atmosphere.

Reference 3 - 5.31% Coverage

Numerical weather-prediction models -- forecasting wind speed and direction, temperature, humidity and visibility for fire managers -- have greatly improved in the last 10 years, she said, but they still aren't good enough.

"We need greater resolution in real time," she said, referring to the institute and other collaborators at the NOAA Earth System Research Lab in Boulder. "We need more detailed observations of the atmosphere from the ground up to several thousand feet."

Reference 4 - 2.84% Coverage

To take the next leap forward, Schranz said, more instrumentation is needed to obtain more data. Several hundred thousand dollars for purchase of mobile atmospheric surface observing systems, or ASOS, and unmanned aircraft would yield better forecasts.

Files\\Denver Post_2012_08_CSU takes 3D look at cause and restoration of High Park Fire - § 2 references coded [29.68% Coverage]

Reference 1 - 6.45% Coverage

Researchers at Colorado State University think a clearer picture of one of the worst wildfires in Colorado history could help speed recovery of the High Park fire zone, as well as guide communities in the future.

Reference 2 - 23.23% Coverage

Using a grant from the National Science Foundation, scientists at CSU's Warner College of Natural Resources plan to combine data they've collected in the field with airborne remote sensing technology from the Boulder-based National Ecological Observatory Network, or NEON, in collaboration with local, state and federal agencies and land managers.

The result will be a fuller picture of the remaining vegetation, ash cover and soil content.

The airborne view will include 3-D imagery to within 1 yard of terrain, Tom Kampe, NEON's assistant director for remote sensing, said in a statement Tuesday.

CSU said the project represents the first comprehensive use of an airborne remote sensing system to better understand the causes and impacts of wildfires.

Files\\HCRC_2015_03_Meeting Notes - § 1 reference coded [4.65% Coverage]

Reference 1 - 4.65% Coverage

Southern Blues Collaborative Forest Landscape Restoration Program (CFLRP) Launched in 2014 – done at south end of the forest. Most of the design of the monitoring program has been developed by Gunnar

Carnwath. At this point in the project measurements have only been taken prior to treatment, none have yet been taken after treatments. In the southern Malheur primary monitoring is for fuel and forest vegetation monitoring, however we have a broad range of other monitoring for treatment effects. Included in the monitoring are forest vegetation structure, function and composition. There is also a discussion on if quantify spatial pattern in trees is needed. Working in all the forests it would be helpful to know this information. It would be good to prioritize the questions and if there is enough flexibility in the budget to take this on it would be good to do. The CFLRP monitoring committee should be making these decisions. Trying to go from damaging fires to more surface fires that are less damaging.

Files\\HCRC_2016_06_Meeting Notes - § 1 reference coded [1.72% Coverage]

Reference 1 - 1.72% Coverage

The HCRC is complementary of Emigrant Creek FS personnel for taking more risk and actually being on the cutting edge of forest science with completing landscape scale prescribed burns.

Files\\HCRC_2016_08_Field Day Meeting Notes - § 1 reference coded [6.70% Coverage]

Reference 1 - 6.70% Coverage

We learned how fuel loading data is collected and how 1, 10, 100 and 1000-hour fuel loads are determined. Essentially it is the time any fuel takes to reach current climatic/ environmental conditions – it is related to diameter of the fuels but it is not exactly how fast the fuels burn, it is how fast they respond to changes in moisture (rain, relative humidity). So 1 hour fuels are ¼ inch or smaller in diameter and they can dry out quickly in response to climatic conditions. Larger diameter fuels 3-8 inches in diameter will take up to 1000 hours to respond to changes in environmental factors. Measuring fuel loads is part of the monitoring data collection.