CALIFORNIA FIRE SCIENCE CONSORTIUM

JOINT FIRE SCIENCE PROGRAM

Research Brief for Resource Managers

Release:	Contact:	Phone:	Email:
June 2013	Jon E. Keeley	(559) 565-3170	*jon_keeley@usgs.gov*
	Liz van Mantgem		*evanmantgem@usgs.gov*
	Hugh D. Safford	(707) 562-8934	*hughsafford@fs.fed.us*

Central and Southern California Team, USGS Sequoia and Kings Canyon Field Station, Three Rivers, CA 93271
Sierra Nevada Team, One Shields Avenue, Davis, CA 95616

Show Argues That Light Burning Creates Brush Fields

Show, S. B. 1928. The "light burning" menace to California forests. West Coast Lumberman (55): 50.

The 1928 U.S. Forest Service California Chief, S.B. Show (pronounced 'how'), defended fire suppression policies when he complained about constant attack by "light burning" advocates and their unfounded whisper campaigns. He insisted there had been 25 encouraging fire suppression years to prove that "light burning" was absolutely wrong, and it damaged timber, wrecked soil and humus, and created useless brushfields such as chaparral.

Show critically examined what he considered some of the light burners' false contentions. For instance, light burning advocates claimed that "in [the] early days, there were not conflagrations due to routine light fires by Indians. Records prove all these statements to be wrong." He also refuted the light burning advocates' claims that "periodic fires improve grazing conditions, kill wood beetles and make hunting easier." To correct the record, he described how repeated burning actually killed the desirable forage and established noxious weeds and shrubs over time, ultimately wrecking rangeland and turning it to valueless brushland that hindered hunting. Show also described how beetles were attracted to fire, and how fires made forests more susceptible to beetles because the insects preferred dead wood over live, green wood.

Management Implications

- In defense of his agency's blanket fire suppression policies, S.B. Show argued that conflagrations have always occurred and that "light-burning" advocates are wrong to say "there were not conflagrations due to routine light fires by Indians".
- He also argued that repeated light burning did not actually improve grazing, kill beetles, or improve hunting conditions as the "light burning" advocates had claimed. Instead, dead wood and brushland are the ultimate result, attracting insects, valueless for grazing, and impossible to traverse by humans.
- Mr. Show listed the way that "light burning" damages timber, with "cat-faces", soil destruction, and brush invasion. His conclusion was that if you want brush, then burn. Otherwise protect it from fire.

To finish, Mr. Show suggested that even if light burning was the correct management tool, a plan to burn 12,000,000 acres of forest every year was cost prohibitive and logistically impossible, so the discussion was moot.