Gallery of Geology - Dripping Springs fire

Jane C. Love

New Mexico Geology, v. 32, n. 1 pp. 24-25, Print ISSN: 0196-948X, Online ISSN: 2837-6420. https://doi.org/10.58799/NMG-v32n1.24

Download from: https://geoinfo.nmt.edu/publications/periodicals/nmg/backissues/home.cfml?volume=32&number=1

New Mexico Geology (NMG) publishes peer-reviewed geoscience papers focusing on New Mexico and the surrounding region. We aslo welcome submissions to the Gallery of Geology, which presents images of geologic interest (landscape images, maps, specimen photos, etc.) accompanied by a short description.

Published quarterly since 1979, NMG transitioned to an online format in 2015, and is currently being issued twice a year. NMG papers are available for download at no charge from our website. You can also <u>subscribe</u> to receive email notifications when new issues are published.

New Mexico Bureau of Geology & Mineral Resources New Mexico Institute of Mining & Technology 801 Leroy Place Socorro, NM 87801-4796

https://geoinfo.nmt.edu



This page is intentionally left blank to maintain order of facing pages.

Gallery of Geology—Dripping Springs fire



In June 2008 a relatively small fire in the Organ Mountains consumed about 1,750 acres of grass and brush. The fire began during the afternoon on Saturday, June 14, 7 mi east of Las Cruces in steep terrain near the Dripping Springs National Recreation Area (Soledad Canyon Road). Crews totaling 130 people worked for nearly 5 days to contain the fire. An approximately 30-acre prescribed fire earlier in February, part of the Dripping Springs Prescribed Burn Project, helped to contain the June fire and prevented it from spreading north and threatening the historic buildings of the late 19th–early 20th century Dripping Springs resort and Boyd sanatorium and the Aguirre Spring campground. From Las Cruces the fire was a dramatic sight particularly on the nights of June 14 and 15.

© Aaron Jackson (www.vicarious-photography.com)

The number of very large, rapidly spreading fires has increased nationally since the mid-1980s (for example, the California fires of 1987 that burned from August until October, the Yellowstone fires of 1988, the Florida fires of 1998, and last summer's Station fire in the San Gabriel Mountains just north of Los Angeles), some burning for months until they were finally suppressed by late fall rain or snow. Within the past 15 yrs large fires, along with small ones, have become more common and increasingly dangerous throughout New Mexico.

Before the expansion of settlements in New Mexico, frequent, low-intensity surface fires consumed forest litter in open ponderosa pine forests. In the late 19th century changing land use and forest density brought about by logging and by sheep and cattle grazing



© Aaron Jackson (www.vicarious-photography.com)



were accompanied by a decrease in the frequency of fire. This was compounded by a century of active fire suppression that encouraged the dense growth of small trees and bushes, and the pattern of frequent low-severity fires was replaced by one of less-frequent, larger, high-intensity, stand-replacing fires. Even though as many as 75% of fires are caused by lightning during the dry premonsoon spring months, the human factor is still profound, from the spread of communities into the wild land/urban interface to arson.

Smoke on the wind is often a harbinger of spring and summer following recent dry, mild winters, but the summer monsoon rains from late June through August traditionally brought an end to the seasonal spring fires. The wetter months of late summer and winter that stimulate the growth of new grasses, shrubs, and young trees typically alternate with the dry months of spring and early summer that transform the previous year's plant growth into fuel for fires. Although the greatest concentration of fires in New Mexico is still from March through June, drought, unseasonably warm temperatures, low humidity, minimal snowpacks, weak monsoons, tree mortality from bark beetles, as well as human carelessness and arson, increase the danger of severe wildfire almost any time of the year and in all areas of the state.

© Aaron Jackson (www.vicarious-photography.com)

The Dripping Springs fire was contained on BLM and Fort Bliss land, and no structures were lost. Larger fires can be much more destructive. In addition to the immediate and tragic loss of life and property, fires also have prolonged consequences for watersheds that can last for several years: flooding, debris flows, broad areas of erosion, and degradation of water quality. Recent studies of alluvial sediments, including fire-related alluvial deposits and radiocarbon dating of charcoal, have been used to establish the fire histories of watersheds back thousands of years and to show that the severe fires of the last 10–20 yrs are not without precedent. Hot and dry periods hundreds and thousands of years in the past have similar histories of severe fires.

Acknowledgments

I thank Aaron Jackson for allowing us to reproduce his photographs. I also thank Ryan Whiteaker, Grant Meyer, and David Gutzler for their suggestions for improving the content.

—Jane C. Love

Month & Year	Name	Location	Size (approx.)*	Property lost
June 2009	Pasco fire	Animas Mountains	92,000 acres burned	_
June 2008	Pine/Bonny fire	Sacramento Mountains	25,000 acres burned	_
April 2008	Trigo fire	Manzano Mountains	13,709 acres burned	99 homes and structures lost
November 2007	Ojo Peak fire	Manzano Mountains	7,000 acres burned	_
May–June 2006	Adobe fire	Animas Mountains	25,000 acres burned	_
April 2006	Ojo Feliz fire	Mora County	17,000 acres burned	_
March 2006	McDonald fire	Lovington, Lea County	92,390 acres burned	_
May–June 2004	Peppin fire	Capitan Mountains	64,488 acres burned	_
June 2003	Bosque fire	North Valley of Albuquerque	700 acres burned	_
June 2002	Ponil Complex fire	Colfax County including Philmont Scout Ranch	92,000 acres burned	_
June 2002	Rodeo-Chediski fires	eastern Arizona	467,066 acres burned	426 homes and structures lost
June 2002	Hayman fire	Colorado (largest fire in state's recorded history)	137,760 acres burned	600 homes and structures lost
May 2002	Borrego fire	near Truchas & Cordova	12,700 acres burned	_
May 2002	Rio Peñasco fire	Sacramento Mountains	15,400 acres burned	_
March 2002	Kokopelli fire	Sacramento Mountains	2,500 acres burned	32 homes lost
June–July 2001	Walnut fire	Animas Mountains	30,000 acres burned	-
May 2000	Scott Able Canyon fire	Sacramento Mountains	16,500 acres burned	64 homes lost
May 2000	Viveash fire	Sangre de Cristo Mountains	28,500 acres burned	_
May 2000	Cerro Grande fire	Los Alamos (worst fire in state's recorded history)	47,650 acres burned	235 homes and structures lost
June 1998	Oso Complex fire	Jemez Mountains	5,200 acres burned	-
April 1996	Dome fire	Jemez Mountains	16,774 acres burned	-

Recent fires in New Mexico and vicinity; -, indicates data not available.

Data from National Interagency Fire Center (http://www.nifc.gov/fire_info/fire_stats.htm), FEMA, BLM, and Natural Resources Conservation Service