



---

## ***Research Briefs Bibliography for Resource Managers***

**Release:**

October 2012

**Update:**

June 2016

**Contact:**

Jon E. Keeley

Marti Witter

Liz van Mantgem

**Phone:**

(559) 565-3170

(805) 370-2333

**Email:**

[jon\\_keeley@usgs.gov](mailto:jon_keeley@usgs.gov)

[marti\\_witter@nps.gov](mailto:marti_witter@nps.gov)

[evanmantgem@usgs.gov](mailto:evanmantgem@usgs.gov)

---

Central and Southern California Team, USGS Sequoia and Kings Canyon Field Station, Three Rivers, CA 93271

---

## **Central and Southern California Region Research Briefs**

### **Fire History / Fire Regimes/ Fire & Traditional Knowledge**

#### ***Climate, Human & Fire Effects on PORE Vegetation***

Anderson, R. S. 2005. Contrasting vegetation and fire histories on the Point Reyes Peninsula during the pre-settlement and settlement periods: 15,000 years of change. Center for Environmental Sciences & Education, Northern Arizona University, Flagstaff, Arizona.

#### ***Charcoal Evidence that Big SoCal Fires are Natural***

Byrne, R., J. Michaelsen, and A. Soutar. 1977. Fossil charcoal as a measure of wildfire frequency in southern California: a preliminary analysis. Pages 361-367 in H. A. Mooney and C. E. Conrad, editors. Proceedings of the symposium on environmental consequences of fire and fuel management in Mediterranean ecosystems. USDA Forest Service, General Technical Report WO-3, Washington, D.C.

#### ***Grassland-Shrubland-Woodland Mosaic Shifts***

Callaway, R. M. and F. W. Davis. 1993. Vegetation dynamics, fire, and the physical environment in coastal central California. *Ecology* **74**:1567-1578.

#### ***Sensitivity of Fire Succession Models to Fuels and Climate***

Cary, G. J., R. E. Keane, R. H. Gardner, S. Lavorel, M. D. Flannigan, I. D. Davies, C. Li, J. M. Lenihan, T. S. Rupp, and F. Mouillot. 2006. Comparison of the sensitivity of landscape-fire-succession models to variation in terrain, fuel pattern, climate and weather. *Landscape Ecology* **21**:121-137.

#### ***The Lead-up to California's Clar Plan***

Clar, C. R. 1969. Evolution of California's wildland fire protection system. California State Board of Forestry, Sacramento, California.

#### ***Early 20th Century Perspective on California Chaparral***

Cooper, W. S. 1922. The broad-sclerophyll vegetation of California. Carnegie Institute, Washington.

#### ***An Early View on Stopping Wildfire Conflagrations***

Countryman, C. M. 1974. Can southern California wildland conflagrations be stopped? , USDA Forest Service, General Technical Note PSW-7, Pacific Southwest Forest and Range Experiment Station, Berkeley, California.

#### ***The "Interval Squeeze"- Fire and Climate Change Combine to Accelerate Woody Plant Loss in Dry Climates***

Enright, N. J., J. B. Fontaine, D. M. J. S. Bowman, R. A. Bradstock, and R. J. Williams. 2015. Interval squeeze: altered fire regimes and demographic responses interact to threaten woody species persistence as climate changes. *Frontiers in Ecology and the Environment* **13**:265-272.

#### ***The 1957-1970's Fuelbreak Program Summarized***

---

Green, L. R. 1977. Fuel breaks and other fuel modification for wildland fire control. Agriculture Handbook 499, USDA.

***Five Historic Fire Regimes in the Monterey Bay Region***

Greenlee, J. M. and J. H. Langenheim. 1990. Historic fire regimes and their relation to vegetation patterns in the Monterey Bay area of California. *American Midland Naturalist* **124**:239-253.

***Non-sprouting Chaparral is Killed by Frequent Fire***

Jacobsen, A. L., S. D. Davis, and S. L. Fabritius. 2004. Fire frequency impacts non-sprouting chaparral shrubs in the Santa Monica Mountains of southern California. *in* MEDECOS conference. Millpress, Rhodes, Greece, Arianoutsou & Papanastasis.

***Growing Summer and Fall SoCal Fires Have Differing Seasonal Controls***

Jin, Y., J. T. Randerson, N. Faivre, S. Capps, A. Hall, and M. L. Goulden. 2014. Contrasting controls on wildland fires in Southern California during periods with and without Santa Ana winds. *Journal of Geophysical Research: Biogeosciences* **119**:432-450.

***Lightening and Human-Caused Wildfires in California***

Keeley, J. E. 1982. Distribution of lightning and man-caused wildfires in California. Pages 431-437 *in* C. E. Conrad and W. C. Oechel, editors. Proceedings of the symposium on dynamics and management of Mediterranean-type ecosystems. USDA Forest Service, General Technical Report PSW-58, Pacific Southwest Forest and Range Experiment Station, Albany, California, Albany, California.

***Are Large Fires the Result of Fire Suppression?***

Keeley, J. E., C. J. Fotheringham, and M. Morais. 1999. Reexamining fire suppression impacts on brushland fire regimes. *Science* **284**:1829-1832.

***Historical Fire-Climate Patterns in Sierra Nevada Foothills and Montane Landscapes***

Keeley, J. E. and A. D. Syphard. 2015. Different fire-climate relationships on forested and non-forested landscapes in the Sierra Nevada ecoregion. *International Journal of Wildland Fire* **24**:27-36.

***Global Climate Connections to Fire Occurrence***

Kitzberger, T., P. M. Brown, E. K. Heyerdahl, T. W. Swetnam, and T. T. Veblen. 2007. Contingent Pacific-Atlantic Ocean influence on multicentury wildfire synchrony over western North America. *Proceedings of the National Academy of Sciences* **104**:543-548.

***A Historic 1934 Flood After A Giant Chaparral Fire***

Kraebel, C. J. 1934. The La Crescenta flood. *American Forests* **40**:251-254, 286-287.

***Fire-Scar Record in Higher Elevation Chaparral Tree***

Lombardo, K., T. Swetnam, C. Baisan, and M. Borchert. 2009. Using bigcone Douglas-fir fire scars and tree rings to reconstruct interior chaparral fire history. *Fire Ecology* **5**:35-56.

***The Hardest Grasses for Type-converting Chaparral***

McKell, C. M., V. W. Brown, C. F. Walker, and R. M. Love. 1965. Species composition changes in seeded grasslands converted from chaparral. *Journal of Range Management* **18**:321-326.

***Chaparral Removal Increases Soil Moisture***

McKell, C. M., J. R. Goodin, and C. C. Duncan. 1969. Chaparral manipulation affects soil moisture depletion patterns and seedling establishment. *Journal of Range Management* **22**:159-165.

***The 1836-1929 Fire History in Angeles National Forest***

Mendenhall, W. M. 1930. Angeles National Forest: History of past fires. Unpublished report on file at the USFS Supervisor's Office, Angeles National Forest.

***560-Year Fire History in Fossil Charcoal***

---

Mensing, S. A., J. Michaelsen, and R. Byrne. 1999. A 560-year record of Santa Ana fires reconstructed from charcoal deposited in the Santa Barbara Basin, California. *Quaternary Research* **51**:295-305.

***Fire Mosaics in Southern California and Baja California***

Minnich, R. A. 1983. Fire mosaics in southern California and northern Baja California. *Science* **219**:1287-1294.

***A Snapshot of Fire Activity Prior to Fire Suppression***

Minnich, R. A. 1987. Fire behavior in southern California chaparral before fire control: the Mount Wilson burns at the turn of the century. *Annals of the Association of American Geographers* **77**:599-618.

***Evolution of Resprouting and Seeding by Fire***

Pausas, J. G. and J. E. Keeley. 2014. Evolutionary ecology of resprouting and seeding in fire-prone ecosystems. *New Phytologist*:n/a-n/a.

***The Vanishing Redneck As Ecosystem Hero***

Putz, F. E. 2003. Are rednecks the unsung heroes of ecosystem management? *Wild Earth* **13**:10-15.

***Fire Regimes in the "Two Californias"***

Safford, H. D. and K. M. Van de Water. 2014. Using Fire Return Interval Departure (FRID) analysis to map spatial and temporal changes in fire frequency on National Forest lands in California. U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station, Albany, CA.

***Converting Chaparral to Grassland in 1944***

Sampson, A. W. 1944. Plant succession and burned chaparral lands in northern California. University of California, Berkeley, Agricultural Experiment Station Bulletin 685, Berkeley, California.

***Hot Fires, Big Fuels Keep Soils Cooler***

Stoof, C. R., D. Moore, P. M. Fernandes, J. J. Stoorvogel, R. E. Fernandes, A. J. Ferreira, and C. J. Ritsema. 2013. Hot fire, cool soil. *Geophysical Research Letters* **40**:1534-1539.

***Do 1% of Fires Cause 99% of the Acres Burned?***

Strauss, D., L. Dednar, and R. Mees. 1989. Do one percent of forest fires cause ninety-nine percent of the damage. *Forest Science* **35**:319-328.

***Hydrologic Changes After 40 Years of Type Conversion***

Williamson, T. N., R. C. Graham, and P. J. Shouse. 2004. Effects of a chaparral-to-grass conversion on soil physical and hydrologic properties after four decades. *Geoderma* **123**:99-114.

***Vulnerability of Chaparral Shrubs to Fire Intervals***

Zedler, P. H. 1995. Fire frequency in southern California shrublands: biological effects and management options. Pages 101-112 in J. E. Keeley and T. Scott, editors. *Brushfires in California wildlands: ecology and resource management*. International Association of Wildland Fire, Fairfield, Washington.

***Impact of Short Interval Fires in Shrublands***

Zedler, P. H., C. R. Gautier, and G. S. McMaster. 1983. Vegetation change in response to extreme events: the effect of a short interval between fires in California chaparral and coastal scrub. *Ecology* **64**:809-818.

**Fire Models/Tools/Technology/Prescribed Fire/ Fuels & Fuel Treatments**

***The "Interval Squeeze"- Fire and Climate Change Combine to Accelerate Woody Plant Loss in Dry Climates***

Enright, N. J., J. B. Fontaine, D. M. J. S. Bowman, R. A. Bradstock, and R. J. Williams. 2015. Interval squeeze: altered fire regimes and demographic responses interact to threaten woody species persistence as climate changes. *Frontiers in Ecology and the Environment* **13**:265-272.

***Modeling How Fire Frequency Alters Species Composition***

---

Franklin, J., A. Syphard, H. He, and D. Mladenoff. 2005. Altered Fire Regimes Affect Landscape Patterns of Plant Succession in the Foothills and Mountains of Southern California. *Ecosystems* **8**:885-898

***Fire Suppression is Necessary in California Chaparral***

Keeley, J. E. and C. J. Fotheringham. 2001. Historic fire regime in Southern California shrublands. *Conservation Biology* **15**:1536-1548.

***Global Climate Connections to Fire Occurrence***

Kitzberger, T., P. M. Brown, E. K. Heyerdahl, T. W. Swetnam, and T. T. Veblen. 2007. Contingent Pacific–Atlantic Ocean influence on multicentury wildfire synchrony over western North America. *Proceedings of the National Academy of Sciences* **104**:543-548

***Model Forecasts of a Seasonal Shift in Santa Ana Winds***

Miller, N. L. and N. J. Schlegal. 2006. Climate change projected fire weather sensitivity: California Santa Ana wind occurrence. *Geophysical Research Letters* **33**:L15711-15716.

***Early Stages of Remote Sensing of Burn Severity***

Rogan, J. and J. Franklin. 2001. Mapping wildfire burn severity in southern California forests and shrublands using enhanced thematic mapper imagery. *Geocarto International* **16**:91-106.

**Risk Assessment/Human Dimensions of Fire/ Wildland-Urban Interface**

***Fire Protection Inequality in Urban and Suburban LA***

Davis, M. 1995. The case for letting Malibu burn. *Environmental History Review* **19**:1-36.

***Fire Suppression is Necessary in California Chaparral***

Keeley, J. E. and C. J. Fotheringham. 2001. Historic fire regime in Southern California shrublands. *Conservation Biology* **15**:1536-1548.

***How Much Defensible Space is Needed to Reduce Home Losses in Chaparral?***

Syphard, A. D., T.J. Brennan, and J.E. Keeley. 2014. The role of defensible space for residential structure protection during wildfires. *International Journal for Wildland Fire*. **23**:1165-1175.

***The Riskiest Ignition Sources in Southern California***

Syphard, A. D. and J. E. Keeley. 2015. Location, timing and extent of wildfire vary by cause of ignition. *International Journal of Wildland Fire* **24**:37-47.

**Wildfire Operations & Management/Post-fire Environment & Management/ Invasive Species /Type-conversion**

***Chaparral Fuel Structure after Mechanical Treatments***

Brennan, T. J. and J. E. Keeley. 2015. Effect of mastication and other mechanical treatments on fuel structure in chaparral. *International Journal of Wildland Fire*.

***Permanently Converting Chaparral to Rangeland***

Burcham, L. T. 1955. Recent trends in range improvement on California foothill ranges. *Journal of Range Management* **8**:121-125.

***The 1967 Handbook for Type-converting Chaparral***

Bentley, J. R. 1967. Conversion of chaparral to grassland: techniques used in California. USDA Forest Service, Agricultural Handbook No. 328, Washington D.C..

***Frequent Burning to Control “Invasive” Chaparral***

Biswell, H. H. 1954. The brush control problem in California. *Journal of Range Management* **7**:57-62.

---

***Grassland-Shrubland-Woodland Mosaic Shifts***

Callaway, R. M. and F. W. Davis. 1993. Vegetation dynamics, fire, and the physical environment in coastal central California. *Ecology* **74**:1567-1578.

***Sensitivity of Fire Succession Models to Fuels and Climate***

Cary, G. J., R. E. Keane, R. H. Gardner, S. Lavorel, M. D. Flannigan, I. D. Davies, C. Li, J. M. Lenihan, T. S. Rupp, and F. Mouillot. 2006. Comparison of the sensitivity of landscape-fire-succession models to variation in terrain, fuel pattern, climate and weather. *Landscape Ecology* **21**:121-137.

***The Lead-up to California's Clar Plan***

Clar, C. R. 1969. Evolution of California's wildland fire protection system. California State Board of Forestry, Sacramento, California.

***An Early View on Stopping Wildfire Conflagrations***

Countryman, C. M. 1974. Can southern California wildland conflagrations be stopped? , USDA Forest Service, General Technical Note PSW-7, Pacific Southwest Forest and Range Experiment Station, Berkeley, California.

***Source of Sediment Hazards on Steep Slopes***

DiBiase, R. A. and M. P. Lamb. 2013. Vegetation and wildfire controls on sediment yield in bedrock landscapes. *Geophysical Research Letters* **40**:1093-1097.

***Post-fire Shifts in Bishop Pine Distributions***

Forrestel, A., M. Moritz, and S. Stephens. 2011. Landscape-scale vegetation change following fire in Point Reyes, California, USA. *Fire Ecology* **7**:114-128.

***Modeling How Fire Frequency Alters Species Composition***

Franklin, J., A. Syphard, H. He, and D. Mladenoff. 2005. Altered Fire Regimes Affect Landscape Patterns of Plant Succession in the Foothills and Mountains of Southern California. *Ecosystems* **8**:885-898

***A Shifting Mosaic of Grasslands and Shrublands***

Freudenberger, D. O., B. E. Fish, and J. E. Keeley. 1987. Distribution and stability of grasslands in the Los Angeles Basin. *Bulletin of the Southern California Academy of Sciences* **86**:13-26.

***The 1957-1970's Fuelbreak Program Summarized***

Green, L. R. 1977. Fuel breaks and other fuel modification for wildland fire control. *Agriculture Handbook* 499, USDA.

***Five Historic Fire Regimes in the Monterey Bay Region***

Greenlee, J. M. and J. H. Langenheim. 1990. Historic fire regimes and their relation to vegetation patterns in the Monterey Bay area of California. *American Midland Naturalist* **124**:239-253.

***Resource Impacts Due to Frequent Fires in Shrublands***

Haidinger, T. L. and J. E. Keeley. 1993. Role of high fire frequency in destruction of mixed chaparral. *Madroño* **40**:141-147.

***Non-sprouting Chaparral is Killed by Frequent Fire***

Jacobsen, A. L., S. D. Davis, and S. L. Fabritius. 2004. Fire frequency impacts non-sprouting chaparral shrubs in the Santa Monica Mountains of southern California. *in* MEDECOS conference. Millpress, Rhodes, Greece, Arianoutsou & Papanastasis.

***Growing Summer and Fall SoCal Fires Have Differing Seasonal Controls***

Jin, Y., J. T. Randerson, N. Faivre, S. Capps, A. Hall, and M. L. Goulden. 2014. Contrasting controls on wildland fires in Southern California during periods with and without Santa Ana winds. *Journal of Geophysical Research: Biogeosciences* **119**:432-450.

***A Tale of Two Fire Syndromes: Recruiters vs. Resisters***

---

Keeley, J. E. 1991. Seed germination and life history syndromes in the California chaparral. *Botanical Review* **57**:81-116.

***Shrubs That Recruit in the Understory of Chaparral***

Keeley, J. E. 1992. Recruitment of seedlings and vegetative sprouts in unburned chaparral. *Ecology* **73**:1194-1208.

***Annual Growth Rings Reliably Tell Age of Chaparral***

Keeley, J. E. 1993. Utility of growth rings in the age determination of chaparral shrubs. *Madroño* **40**:1-14.

***Type-converting Chaparral is Bad for Biodiversity***

Keeley, J. E. 2005. Fire as a threat to biodiversity in fire-type shrublands. Pages 97-106 in B. Kus and J. Beyers, editors. Planning for biodiversity: bringing research and management together. USGS Forest Service, General Technical Report PSW-GTR-195, Pacific Southwest Research Center, Albany, California.

***Immaturity Risk from Frequent Fire in Knobcone Pine***

Keeley, J. E., G. Ne'eman, and C. J. Fotheringham. 1999. Immaturity risk in a fire-dependent pine. *Journal of Mediterranean Ecology* **1**:41-48.

***Are Large Fires the Result of Fire Suppression?***

Keeley, J. E., C. J. Fotheringham, and M. Morais. 1999. Reexamining fire suppression impacts on brushland fire regimes. *Science* **284**:1829-1832.

***Type Conversion Leads to Reduced Vertebrate Diversity***

Lillywhite, H. B. 1977. Effects of chaparral conversion on small vertebrates in southern California. *Biological Conservation* **11**:171-184.

***The Hardest Grasses for Type-converting Chaparral***

McKell, C. M., V. W. Brown, C. F. Walker, and R. M. Love. 1965. Species composition changes in seeded grasslands converted from chaparral. *Journal of Range Management* **18**:321-326.

***Chaparral Removal Increases Soil Moisture***

McKell, C. M., J. R. Goodin, and C. C. Duncan. 1969. Chaparral manipulation affects soil moisture depletion patterns and seedling establishment. *Journal of Range Management* **22**:159-165.

***Fire Mosaics in Southern California and Baja California***

Minnich, R. A. 1983. Fire mosaics in southern California and northern Baja California. *Science* **219**:1287-1294.

***Very Limited Age Dependent Burning in Chaparral***

Moritz, M. A. 2003. Spatiotemporal analysis of controls on shrubland fire regimes: age dependency and fire hazard. *Ecology* **84**:351-361.

***2014 USGS WERC Publication Brief. Abrupt Fire Regime Changes Unrelated to Climate. Updated June 2014.***

Pausas, J. G. and J. E. Keeley. 2014. Abrupt climate-independent fire regime changes. *Ecosystems* **17**:1109-1120.

***Evolution of Resprouting and Seeding by Fire***

Pausas, J. G. and J. E. Keeley. 2014. Evolutionary ecology of resprouting and seeding in fire-prone ecosystems. *New Phytologist*:n/a-n/a.

***Predicting the Complex Responses of Resprouters***

Pausas, J. G., R. B. Pratt, J. E. Keeley, A. L. Jacobsen, A. R. Ramirez, A. Vilagrosa, S. Paula, I. N. Kaneakua-Pia, and S. D. Davis. 2015. Towards understanding resprouting at the global scale. *New Phytologist*:n/a-n/a.



---

***Resprouting Chaparral Dies from Postfire Drought***

Pratt, R. B., A. L. Jacobsen, A. R. Ramirez, A. M. Helms, C. A. Traugh, M. F. Tobin, M. S. Heffner, and S. D. Davis. 2014. Mortality of resprouting chaparral shrubs after a fire and during a record drought: physiological mechanisms and demographic consequences. *Global Change Biology* **20**:893-907.

***Burning and Damming to Type-convert Chaparral***

Roberts, T. A. 1980. Approaches to chaparral management for wildlife. *Cal-Neva Wildlife Transactions*:112-119.

***Comparison of Natural and Type-converted Chaparral***

Rosario, J. A. and E. W. Lathrop. 1974. Comparison of vegetation structure and composition in modified and natural chaparral. *Journal of Range Management* **27**:310-312.

***Vegetation Succession & Fire in California's Bay Area***

Russell, W. H. and J. R. McBride. 2003. Landscape scale vegetation-type conversion and fire hazard in the San Francisco bay area open spaces. *Landscape and Urban Planning* **64**:201-208.

***Converting Chaparral to Grassland in 1944***

Sampson, A. W. 1944. Plant succession and burned chaparral lands in northern California. University of California, Berkeley, Agricultural Experiment Station Bulletin 685, Berkeley, California.

***Spanish Goats Harm Type-converted Land in Arizona***

Severson, K. E. and L. F. DeBano. 1991. Influence of Spanish goats on vegetation and soils in Arizona chaparral. *Journal of Range Management* **44**.

***Hot Fires, Big Fuels Keep Soils Cooler***

Stoof, C. R., D. Moore, P. M. Fernandes, J. J. Stoorvogel, R. E. Fernandes, A. J. Ferreira, and C. J. Ritsema. 2013. Hot fire, cool soil. *Geophysical Research Letters* **40**:1534-1539.

***Do 1% of Fires Cause 99% of the Acres Burned?***

Strauss, D., L. Dednar, and R. Mees. 1989. Do one percent of forest fires cause ninety-nine percent of the damage. *Forest Science* **35**:319-328.

***Factors Behind Vegetation Mosaics in the Central Coast***

Wells, P. V. 1962. Vegetation in relation to geological substratum and fire in the San Luis Obispo quadrangle, California. *Ecological Monographs* **32**:79-103.

***Convergent Life Histories and Fire-Driven Speciation***

Wells, P. V. 1969. The relation between mode of reproduction and extent of speciation in woody genera of the California chaparral. *Evolution* **23**:264-267.

***Type Conversion From Forest to Shrubland***

Wilken, G. C. 1967. History and fire record of a timberland brush field in the Sierra Nevada of California. *Ecology* **48**:302-304.

***Hydrologic Changes After 40 Years of Type Conversion***

Williamson, T. N., R. C. Graham, and P. J. Shouse. 2004. Effects of a chaparral-to-grass conversion on soil physical and hydrologic properties after four decades. *Geoderma* **123**:99-114.

***Vulnerability of Chaparral Shrubs to Fire Intervals***

Zedler, P. H. 1995. Fire frequency in southern California shrublands: biological effects and management options. Pages 101-112 in J. E. Keeley and T. Scott, editors. *Brushfires in California wildlands: ecology and resource management*. International Association of Wildland Fire, Fairfield, Washington.

***Impact of Short Interval Fires in Shrublands***

---

Zedler, P. H., C. R. Gautier, and G. S. McMaster. 1983. Vegetation change in response to extreme events: the effect of a short interval between fires in California chaparral and coastal scrub. *Ecology* **64**:809-818.

## **Wildlife & Aquatic Ecosystems**

### ***10-Year Small Mammal Use on a Chaparral Fire Edge***

Borchert, M. and S. M. Borchert. 2013. Small Mammal Use of the Burn Perimeter Following a Chaparral Wildfire in Southern California. *Bulletin, Southern California Academy of Sciences* **112**:63-73.

### ***Carnivores Unbothered by One San Bernardino Mt. Fire***

Borchert, M. I. 2012. Mammalian carnivore use of a high-severity burn in conifer forests in the San Bernardino mountains of southern California, USA. *Hystrix, the Italian Journal of Mammalogy* **23**:51-57.

### ***5-Years of Small Mammal Trapping after a Santa Barbara Mountain Wildfire***

Borchert, M. I., D. P. Farr, M. A. Rimbenieks-Negrete, and M. N. Pawlowski. 2014. Responses of small mammals to wildfire in a mixed conifer forest in the San Bernardino Mountains, California. *Bulletin, Southern California Academy of Sciences* **113**:81-95.

### ***Fire Induced Changes in Mice and Vole Populations***

Cook, S. F., Jr. 1959. The effects of fire on a population of small rodents. *Ecology* **40**:102-108.

### ***Post-Fire Habitat Structure Affects Small Mammals***

Diffendorfer, J., G. M. Fleming, S. Tremor, W. Spencer, and J. L. Beyers. 2012. The role of fire severity, distance from fire perimeter and vegetation on post-fire recovery of small-mammal communities in chaparral. *International Journal of Wildland Fire* **21**:436-448.

### ***Three-year Mashing Operations for Better Deer Forage***

Gibbens, R. P. and A. M. Schultz. 1963. Brush manipulation on a deer winter range. *California Fish and Game* **49**:95-118.

### ***Yikes! An Old-school Wildlife "Experiment" Involving Fire***

Howard, W. E., Fenner RL and H. Childs. 1959. Wildlife survival in brush burns. *Journal of Range Management* **12**:230-234.

### ***Grazing Keeps the Chaparral Out***

Johnson, W. H. 1990. Grazing helps maintain brush growth on cleared land. *California Agriculture* **44**:31-32.

### ***Southern CA Spotted Owls After Fire Plus Logging***

Lee, D. E., M. L. Bond, M. I. Borchert, and R. Tanner. 2013. Influence of fire and salvage logging on site occupancy of spotted owls in the San Bernardino and San Jacinto Mountains of southern California. *The Journal of Wildlife Management* **77**:1327-1341.

### ***Type Conversion Leads to Reduced Vertebrate Diversity***

Lillywhite, H. B. 1977. Effects of chaparral conversion on small vertebrates in southern California. *Biological Conservation* **11**:171-184.

### ***Small Mammal Impacts on *Ceanothus* Seedlings***

Mills, J. N. 1983. Herbivory and seedling establishment in post-fire southern California chaparral. *Oecologia* **60**:267-270.

### ***100-Years of Australian Reptiles After Shrubland Fire***

Nimmo, D., L. Kelly, L. SPENCE-BAILEY, S. Watson, R. Taylor, M. Clarke, and A. Bennett. 2013. Fire mosaics and reptile conservation in a fire-prone region. *Conservation biology* **27**:345-353.



---

***Endemic Walking-sticks Persist Through Chaparral Fire***

Sandoval, C. 2000. Persistence of a walking-stick population (Phasmatoptera: Timematodea) after a wildfire. The Southwestern Naturalist **45**:123-127.

***Post-fire Shrubland Rodent Densities: Edge vs. Center***

Schwilk, D. W. and J. E. Keeley. 1998. Rodent populations after a large wildfire in California chaparral and coastal sage scrub. Southwestern Naturalist **43**:480-483.

***Spanish Goats Harm Type-converted Land in Arizona***

Severson, K. E. and L. F. Debano. 1991. Influence of Spanish goats on vegetation and soils in Arizona chaparral. Journal of Range Management **44**.

***Wildlife Responses to California Shrubland Wildfire***

van Mantgem, E., J. E. Keeley, and M. Witter. 2015. Faunal responses to fire in chaparral and sage scrub in California, USA. Fire Ecology **11**:128-148.