USGS
science for a changing world

Characterizing 12 Years of Wildland Fire Science at the U.S. Geological Survey: Wildland Fire Science Publications, 2006–17

Open-File Report 2019–1002

U.S. Department of the Interior
U.S. Geological Survey

USGS scientists Jeff Cordova and Fletcher Brinkerhoff set up the LiDAR and GPS equipment to survey a burned watershed within the Yarnell Hill Fire. Photograph by Brandon Forbes, U.S. Geological Survey

Controlled experiments that simulate fire environments provide critical information for understanding how fire intensity and duration impact archaeological resources. Photograph by Rachel Loehman, U.S. Geological Survey

Fireweed after fire in Alaska. Photograph by Florian Maldonado, U.S. Geological Survey

Characterizing 12 Years of Wildland Fire Science at the U.S. Geological Survey: Wildland Fire Science Publications, 2006–17

By Paul F. Steblein and Mark P. Miller

Open-File Report 2019–1002

U.S. Department of the Interior
U.S. Geological Survey

U.S. Department of the Interior
DAVID BERNHARDT, Acting Secretary

U.S. Geological Survey
James F. Reilly II, Director

U.S. Geological Survey, Reston, Virginia: 2019

For more information on the USGS—the Federal source for science about the Earth, its natural and living resources, natural hazards, and the environment—visit https://www.usgs.gov or call 1–888–ASK–USGS (1–888–275–8747).

For an overview of USGS information products, including maps, imagery, and publications, visit https://store.usgs.gov.

Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Although this information product, for the most part, is in the public domain, it also may contain copyrighted materials as noted in the text. Permission to reproduce copyrighted items must be secured from the copyright owner.

Suggested citation:
Steblein, P.F., and Miller, M.P., 2019, Characterizing 12 years of wildland fire science at the U.S. Geological Survey—Wildland fire science publications, 2006–17: U.S. Geological Survey Open-File Report 2019–1002, 67 p., https://doi.org/10.3133/ofr20191002

ISSN 2331-1258 (online)

Contents

Figures

Tables

Abbreviations

DOI	Department of the Interior
RIS	Research Information System
USGS	U.S. Geological Survey

Characterizing 12 Years of Wildland Fire Science at the U.S. Geological Survey: Wildland Fire Science Publications, 2006–17

By Paul F. Steblein and Mark P. Miller

Introduction

Wildland fire characteristics, such as area burned, number of large fires, burn intensity, and fire season duration, have increased steadily over the past 30 years, resulting in substantial increases in the costs of suppressing fires and managing damages from wildland fire events (National Academies of Sciences, Engineering, and Medicine, 2017). Wildland fire management could benefit from sound decision making based on reliable scientific information. Fire scientists produce data, tools, and information to support fire and land management decision making. With ever-changing land use scenarios, environmental conditions, and emerging technological capabilities, new assessments and studies are continually needed. Established by Congress in 1879, the U.S. Geological Survey (USGS) is the primary science branch of the Department of the Interior (DOI), which manages more than 400 million acres of public lands in the United States (Vincent and others, 2017). The USGS has more than 100 scientists across seven Mission Areas that help address the wildland fire science needs of DOI bureaus and their stakeholders. The diverse expertise of these scientists allows them to address complex interdisciplinary challenges (Coloff and others, 1998; Coffelt and Livingston, 2002; Livingston, 2004). In this report, we identify and characterize scientific literature produced by USGS scientists during 2006–17 that addresses topics associated with wildland fire science. Our goals were to (1) make the most complete list possible of product citations readily available in an organized format, and (2) use bibliometric analysis approaches (Cronin, 2001; Hirsch, 2005) to highlight the productivity of USGS scientists and the impact of contributions that the Bureau has provided to the scientific, land management, and fire management communities.

Methods

We used the USGS Publications Warehouse (https://pubs.er.usgs.gov/) to search for research products that are thematically associated with wildland fire. The Publications Warehouse serves as the primary online index of research products developed by USGS scientists and provides citations to more than 150,000 publications written by USGS scientists over the history of the bureau. Searches were performed using four wildland fire-related key words (“fire,” “fuel,” “carbon,” and “burn”) and restricted to the publication dates of 2006–17. Search results for each keyword were exported from the Publications Warehouse as a text-based file using the Research Information Systems (RIS) format. The four separate RIS files were imported into the Mendeley citation management software package (https://www.mendeley.com) and combined into a single bibliography by screening for duplicate entries that may have appeared in the searches using the four separate key words. Each citation was then evaluated to ensure its direct relevance to wildland fire science as opposed to other topics that may contain identical key words (for example, fire ants, nuclear fuel, coal-burning electrical plant, and so forth). Publication abstracts were also examined when additional information was required to ascertain relevance.

We then summarized the overall body of work by characterizing individual research products based on whether they dealt with topics before fires, during fires, or after fires and if they were associated with one or more of four additional wildland fire science themes:

1. Wildland fire history and management, including fire risk, fuels treatment, and fire-adapted invasive species as fuels;
2. Effects of wildland fire on plants, wildlife, and ecosystems, post-fire recovery, and restoration;
3. Post-fire risks of water, debris flow, smoke, and ash; and
4. Remote sensing and geospatial data and products to support decision making by fire and land managers.

Note that individual products may not fall into one specific science theme or temporal category and that assignment to multiple categories may be possible (for example, effects of a pre-fire fuel treatment may be assessed during or after wildfires). Results of these characterizations were summarized in a 3 × 4 matrix (3 time points by 4 science themes) to provide a quantitative overview of topics addressed by the USGS wildland fire science program.

The broader impact of USGS wildland fire science publications on literature produced by the larger scientific community (academia, other Federal agencies, nongovernmental organizations, and so forth) was assessed by collating citation metrics for individual USGS products. The number of times that each USGS product has been cited in other literature was obtained using the search functions from Google Scholar (https://scholar.google.com/). Google Scholar was manually searched from February 27 to March 9, 2018, for each item in this bibliography, and the total number of references to USGS wildland fire science products was summed for each year to provide a snapshot of the cumulative impact of work produced by the USGS since 2006. Google Scholar was chosen as the source of citation information over other databases such as Scopus (https://www.scopus.com/) or Web of Science (https://clarivate.com/products/web-of-science/) because these latter resources focus primarily on scientific journal articles. By contrast, Google Scholar indexes diverse types of scientific products (Falagas and others, 2008; Harzing and van der Wal, 2008), including both journal articles and peer-reviewed reports published by government agencies such as USGS series publications.

Using the citation data from Google Scholar, we also calculated Hirsch's (2005) h index to characterize the broader impacts of USGS wildland fire science. The h index is defined as the largest number of manuscripts in a set such that h manuscripts have been cited h or more times. This measure has been broadly used to quantify the scientific impact of individual researchers (Hirsch, 2007; Bornmann and Daniel, 2009) as well as to characterize the output of research groups (van Raan, 2006; Hirsch, 2007).

Results and Discussion

Our analysis of relevant research products in the USGS Publications Warehouse identified 970 papers released from 2006–17 that were associated with the general theme of wildland fire science (table 1). On average, USGS scientists produced 81 scholarly publications each year (range of 39–116), and these research efforts span diverse conceptual themes (table 2). A complete list of citations for all wildland fire science publications (organized alphabetically by year for clarity) is available in appendix 1.

In addition to producing information that is relevant to land managers, USGS wildland fire science products are also highly cited by the scientific community at large (table 1). Since 2006, products published by the USGS wildland fire science community have been referenced and cited 42,436 times (mean of 43.7 citations per publication and range of 0–3,483) with an h index of 85 (85 publications have been cited 85 times or more). Fifty-five publications have been cited more than 100 times, and 9 have been cited more than 500 times (fig. 1). These numbers represent a snapshot of the impact that USGS wildland fire scientists have in their field. These values will likely increase over time as new publications get disseminated among the scientific, land management, and fire management communities and become familiar to a wider audience.

Although this document illustrates the existence of a productive and influential USGS wildland fire science program, the analysis of citations presented in this report highlights only one facet of the impact that USGS has in the field of wildland fire science. In the future, investigations that document ways that USGS science has been used to make management or policy decisions could also be initiated to further characterize the outcomes of research programs within the bureau. Such investigations may provide clear links between science and management in the field (Hunter, 2016) and can highlight practices that may help facilitate the use of science in decision making processes.

Table 1. Number of publications and citation metrics for publications associated with the U.S. Geological Survey wildland fire science program from 2006 to 2017.

Publication year	Number of publications	Number of times publications have been cited
2017	65	115
2016	91	732
2015	82	1,123
2014	71	1,321
2013	98	4,470
2012	88	2,703
2011	116	7,704
2010	39	4,383
2009	83	8,055
2008	106	2,284
2007	74	3,009
2006	57	6,537
Total	970	42,436

Table 2. Number of U.S. Geological Survey science products and the wildland fire science themes addressed relative to three temporal phases of wildland fire.

Science theme	Number of products		
	Before fire	During fire	After fire
Wildland fire history and management, including fire risk, fuels treatment, and fire-adapted invasive species as fuels	169	9	149
Effects of wildland fire on plants, wildlife, and ecosystems, post–fire recovery, and restoration	174	5	312
Post-fire risks of water, debris flow, and smoke and ash	40	2	114
Remote sensing and geospatial data and products to support decision making by fire and land managers	57	7	114

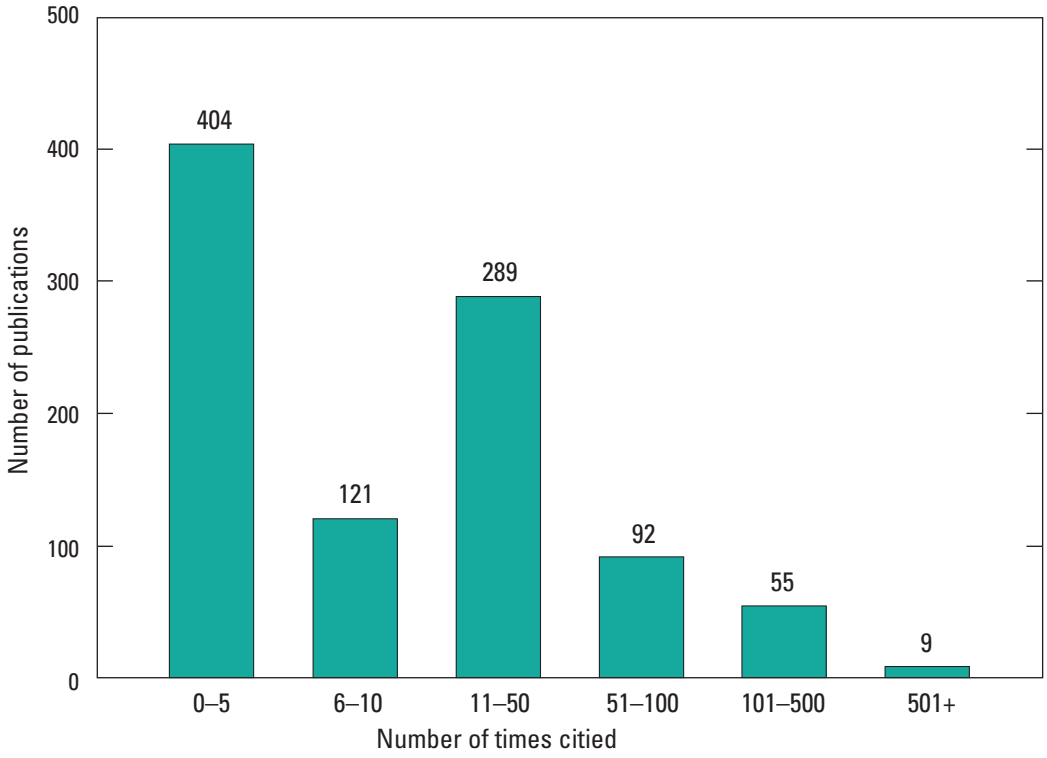

Figure 1. Histogram illustrating the distribution of citation counts for U.S. Geological Survey wildland fire science publications.

Acknowledgments

The authors thank Gabriel Reiziss, U.S. Geological Survey student volunteer, for his assistance with assembling the citation data reported in this document.

References Cited

Bornmann, L., and Daniel, H.-D., 2009, The state of h index research: EMBO Reports, v. 10, no. 1, p. 2–6.

Coffelt, J.L., and Livingston, R.K., 2002, Second U.S. Geological Survey Wildland Fire Workshop: Los Alamos, New Mexico, October 31–November 3, 2000, U.S. Geological Survey Open-File Report 2002–11, accessed March 30, 2018, at https://doi.org/10.3133/ofr0211.

Coloff, S.G., Findley, J., and Helz, R.L., 1998, USGS Wildland Fire Workshop, EROS Data Center, Sioux Falls, S.D., July 9–10, 1997: Reston, Va., U.S. Geological Survey OMB no. 0704–0188, accessed March 30, 2018, at http://www.dtic.mil/docs/citations/ADA347475.

Cronin, B., 2001, Bibliometrics and beyond—Some thoughts on web-based citation analysis: Journal of Information Science, v. 27, no. 1, p. 1–7, accessed September 28, 2018, at https://doi.org/10.1177/016555150102700101.

Falagas, M.E., Pitsouni, E.I., Malietzis, G.A., and Pappas, G., 2008, Comparison of PubMed, Scopus, Web of Science, and Google Scholar—Strengths and weaknesses: The FASEB Journal, v. 22, no. 2, p. 338–342, accessed September 28, 2018, at https://doi.org/10.1096/fj.07-9492LSF.

Harzing, A.-W., and van der Wal, R., 2008, Google Scholar as a new source for citation analysis: Ethics in Science and Environmental Politics, v. 8, no. 1, p. 61–73, accessed September 28, 2018, at https://doi.org/10.3354/esep00076.

Hirsch, J.E., 2005, An index to quantify an individual's scientific research output: Proceedings of the National Academy of Sciences of the United States of America, v. 102, no. 46, p. 16569–16572, accessed September 28, 2018, at https://doi.org/10.1073/pnas.0507655102.

Hirsch, J.E., 2007, Does the h index have predictive power?: Proceedings of the National Academy of Sciences of the United States of America, v. 104, no. 59, p. 19193–19198, accessed September 28, 2018, at https://doi.org/10.1073/pnas.0707962104.

Hunter, M.E., 2016, Outcomes of fire research—Is science used?: International Journal of Wildland Fire, v. 25, no. 5, p. 495–504, accessed September 28, 2018, at https://doi.org/10.1071/WF15202.

Livingston, R.K., 2004, Third U.S. Geological Survey Wildland Fire-Science Workshop, Denver, Colorado, November 12–15, 2002: U.S. Geological Survey Scientific Investigations Report 2004–5005, 67 p., accessed March 30, 2018, at https://doi.org/10.3133/sir20045005.

The National Academies of Sciences, Engineering, and Medicine, 2017, A century of wildland fire research, Contributions to long-term approaches for wildland fire management—Proceedings of a workshop: Washington, D.C., The National Academies Press, 108 p., accessed July 26, 2018, at https://doi.org/10.17226/24792.

van Raan, A.F.J., 2006, Comparison of the Hirsch-index with standard bibliometric indicators and with peer judgment for 147 chemistry research groups: Scientometrics, v. 67, no. 3, p. 491–502, accessed September 28, 2018, at https://doi.org/10.1556/Scient.67.2006.3.10.

Vincent, C.H., Hanson, L.A., and Argueta, C.N., 2017, Federal land ownership—Overview and data: Congressional Research Service Report for Congress R42346, 28 p., accessed March 30, 2018, at https://www.hsdl.org/?view&did=799426.

Appendix 1. Bibliography

2017: 65 publications

Aanderud, Z.T., Schoolmaster, D.R., Rigby, D., Bybee, J., Campbell, T., and Roundy, B.A., 2017, Soils mediate the impact of fine woody debris on invasive and native grasses as whole trees are mechanically shredded into firebreaks in piñon-juniper woodlands: Journal of Arid Environments, v. 137, February, p. 60–68, https://doi.org/10.1016/j.jaridenv.2016.11.002.

Albano, C.M., Dettinger, M.D., and Soulard, C.E., 2017, Influence of atmospheric rivers on vegetation productivity and fire patterns in the southwestern U.S.: Journal of Geophysical Research, Biogeosciences, v. 122, no. 2, p. 308–323, https://doi.org/10.1002/2016JG003608.

Bottero, A., D'Amato, A.W., Palik, B.J., Kern, C.C., Bradford, J.B., and Scherer, S.S., 2017, Influence of repeated prescribed fire on tree growth and mortality in Pinus resinosa forests, Northern Minnesota: Forest Science, v. 63, no. 1, p. 94–100, https://doi.org/10.5849/forsci.16-035.

Brabec, M.M., Germino, M.J., and Richardson, B.A., 2017, Climate adaption and post-fire restoration of a foundational perennial in cold desert—insights from intraspecific variation in response to weather: Journal of Applied Ecology, v. 54, no. 1, p. 293–302, https://doi.org/10.1111/1365-2664.12679.

Brenkert-Smith, H., Meldrum, J.R., Champ, P.A., and Barth, C.M., 2017, Where you stand depends on where you sit—Qualitative inquiry into notions of fire adaptation: Ecology and Society, v. 22, no. 3, article no. 7, 15 p., https://doi.org/10.5751/ES-09471-220307.

Bright, B.C., Hudak, A.T., Meddens, A.J.H., Hawbaker, T.J., Briggs, J.S., and Kennedy, R.E., 2017, Prediction of forest canopy and surface fuels from lidar and satellite time series data in a bark beetle-affected forest: Forests, v. 8, no. 9, 22 p., https://doi.org/10.3390/f8090322.

Butsic, V., Syphard, A.D., Keeley, J.E., and Bar-Massada, A., 2017, Can private land conservation reduce wildfire risk to homes? A case study in San Diego County, California, USA: Landscape and Urban Planning, v. 157, January, p. 161–169, https://doi.org/10.1016/j.landurbplan.2016.05.002.

Campbell, J.L., and Shinneman, D.J., 2017, Potential influence of wildfire in modulating climate-induced forest redistribution in a central Rocky Mountain landscape: Ecological Processes, v. 6, no. 1, 17 p., https://doi.org/10.1186/s13717-017-0073-9.

Carlson, A.R., Sibold, J.S., Assal, T.J., and Negrón, J.F., 2017, Evidence of compounded disturbance effects on vegetation recovery following high-severity wildfire and spruce beetle outbreak: PLOS ONE, v. 12, no. 8, e0181778, 24 p., https://doi.org/10.1371/journal.pone.0181778.

Chambers, J.C., Beck, J.L., Bradford, J.B., Bybee, J., Campbell, S., Carlson, J., Christiansen, T.J., Clause, K.J., Collins, G., Crist, M.R., Dinkins, J.B., Doherty, K.E., Edwards, F., Espinosa, S., Griffin, K.A., Griffin, P., Haas, J.R., Hanser, S.E., Havlina, D.W., Henke, K.F., Hennig, J.D., Joyce, L.A., Kilkenny, F.F., Kulpa, S.M., Kurth, L.L., Maestas, J.D., Manning, M., Mayer, K.E., Mealor, B.A., McCarthy, C., Pellant, M., Perea, M.A., Prentice, K.L., Pyke, D.A., Wiechman, L.A., and Wuenschel, A., 2017, Science framework for conservation and restoration of the sagebrush biome—Linking the Department of the Interior's Integrated Rangeland Fire Management Strategy to long-term strategic conservation actions, Part 1.—Science basis and applications: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, General Technical Report RMRS–GTR–360, 213 p., https://www.fs.usda.gov/treesearch/pubs/53983.

Chen, G., Hayes, D.J., and McGuire, A.D., 2017, Contributions of wildland fire to terrestrial ecosystem carbon dynamics in North America from 1990 to 2012: Global Biogeochemical Cycles, v. 31, no. 5, p. 878–900, https://doi.org/10.1002/2016GB005548.

Clark, J.A., Loehman, R.A., and Keane, R.E., 2017, Climate changes and wildfire alter vegetation of Yellowstone National Park, but forest cover persists: Ecosphere, v. 8, no. 1, e01636, 16 p., https://doi.org/10.1002/ecs2.1636.

D'Antonio, C.M., Yelenik, S.G., and Mack, M.C., 2017, Ecosystem vs. community recovery 25 years after grass invasions and fire in a subtropical woodland: Journal of Ecology, v. 105, no. 6, p. 1462–1474, https://doi.org/10.1111/1365-2745.12855.

Ebel, B.A., and Martin, D.A., 2017, Meta-analysis of field-saturated hydraulic conductivity recovery following wildland fire—Applications for hydrologic model parameterization and resilience assessment: Hydrological Processes, v. 31, no. 21, p. 3682–3696, accessed April 10, 2018, at https://doi.org/10.1002/hyp.11288.

Ebel, B.A., and Moody, J.A., 2017, Synthesis of soil-hydraulic properties and infiltration timescales in wildfire-affected soils: Hydrological Processes, v. 31, no. 2, p. 324–340, https://doi.org/10.1002/hyp.10998.

Fernelius, K.J., Madsen, M.D., Hopkins, B.G., Bansal, S., Anderson, V.J., Eggett, D.L., and Roundy, B.A., 2017, Post-fire interactions between soil water repellency, soil fertility and plant growth in soil collected from a burned piñon-juniper woodland: Journal of Arid Environments, v. 144, p. 98–109, https://doi.org/10.1016/j.jaridenv.2017.04.005.

Gigliotti, L.C., Jones, B.C., Lovallo, M.J., and Diefenbach, D.R., 2017, Snowshoe hare multi-level habitat use in a fire-adapted ecosystem: The Journal of Wildlife Management, v. 82, no. 2, p. 435–444, https://doi.org/10.1002/jwmg.21375.

Guiterman, C.H., Margolis, E.Q., Allen, C.D., Falk, D.A., and Swetnam, T.W., 2017, Long-term persistence and fire resilience of oak shrubfields in dry conifer forests of northern New Mexico: Ecosystems, v. 21, no. 5, p. 1–17, https://doi.org/10.1007/s10021-017-0192-2.

Haas, J.R., Thompson, M.P., Tillery, A.C., and Scott, J.H., 2017, Capturing spatiotemporal variation in wildfires for improving postwildfire debris-flow hazard assessments, chap. 20 *of* Natural hazard uncertainty assessment—Modeling and decision support: Washington, D.C., American Geophysical Union, p. 301–317, https://doi.org/10.1002/9781119028116.ch20.

Hawbaker, T.J., Trauernicht, C., Howard, S.M., Litton, C.M., Giardina, C.P., Jacobi, J.D., Fortini, L.B., Hughes, R.F., Selmants, P.C., and Zhu, Z., 2017, Wildland fire and greenhouse gas emissions in Hawai`i, chap. 5 *of* Baseline and projected future carbon storage and carbon fluxes in ecosystems of Hawai`i: U.S. Geological Survey Professional Paper 1834, p. 57–73, https://pubs.usgs.gov/pp/1834/a/pp1834_chapter5.pdf.

Hawbaker, T.J., Vanderhoof, M.K., Beal, Y.G., Takacs, J.D., Schmidt, G.L., Falgout, J.T., Williams, B., Brunner, N.M., Caldwell, M.K., Picotte, J.J., Howard, S.M., Stitt, S., and Dwyer, J.L., 2017, Landsat Burned Area Essential Climate Variable products for the conterminous United States (1984–2015) (ver. 1.1): U.S. Geological Survey data release, [revised September 2017], https://doi.org/10.5066/F73B5X76.

Hawbaker, T.J., Vanderhoof, M.K., Beal, Y.J., Takacs, J.D., Schmidt, G.L., Falgout, J.T., Williams, B., Fairaux, N.M., Caldwell, M.K., Picotte, J.J., Howard, S.M., Stitt, S., and Dwyer, J.L., 2017, Mapping burned areas using dense time-series of Landsat data: Remote Sensing of Environment, v. 198, September, p. 504–522, https://doi.org/10.1016/j.rse.2017.06.027.

Hossack, B.R., and Honeycutt, R.K., 2017, Declines revisited—Long-term recovery and spatial population dynamics of tailed frog larvae after wildfire: Biological Conservation, v. 212, pt. A, p. 274–278, https://doi.org/10.1016/j.biocon.2017.06.022.

Huang, C., He, H.S., Hawbaker, T.J., Liang, Y., Gong, P., Wu, Z., and Zhu, Z., 2017, A coupled modeling framework for predicting ecosystem carbon dynamics in boreal forests: Environmental Modelling & Software, v. 93, July, p. 332–343, https://doi.org/10.1016/j.envsoft.2017.03.009.

Huang, S., Ramirez, C., Conway, S., Kennedy, K., Kohler, T., and Liu, J., 2017, Mapping site index and volume increment from forest inventory, Landsat, and ecological variables in Tahoe National Forest, California, USA: Canadian Journal of Forest Research, v. 47, no. 1, p. 113–124, https://doi.org/10.1139/cjfr-2016-0209.

Itter, M.S., Finley, A.O., Hooten, M.B., Higuera, P.E., Marlon, J.R., Kelly, R., and McLachlan, J.S., 2017, A model-based approach to wildland fire reconstruction using sediment charcoal records: Environmetrics, v. 28, no. 7, e2450, 15 p., https://doi.org/10.1002/env.2450.

Kane, J.M., van Mantgem, P.J., Lalemand, L.B., and Keifer, M., 2017, Higher sensitivity and lower specificity in post-fire mortality model validation of 11 western US tree species: International Journal of Wildland Fire, v. 26, no. 5, p. 444–454, https://doi.org/10.1071/WF16081.

Kane, J.M., Varner, J.M., Metz, M.R., and van Mantgem, P.J., 2017, Characterizing interactions between fire and other disturbances and their impacts on tree mortality in western U.S. Forests: Forest Ecology and Management, v. 405, December, p. 188–199, https://doi.org/10.1016/j.foreco.2017.09.037.

Keeley, J., 2017, Why were California's wine country fires so destructive?: The Conversation U.S. website, accessed April 10, 2018, at https://theconversation.com/why-were-californias-wine-country-fires-so-destructive-86043.

Keeley, J.E., and Syphard, A.D., 2017, Different historical fire-climate patterns in California: International Journal of Wildland Fire, v. 26, no. 4, p. 253–268, https://doi.org/10.1071/WF16102.

Klinger, R., and Brooks, M., 2017, Alternative pathways to landscape transformation—invasive grasses, burn severity and fire frequency in arid ecosystems: Journal of Ecology, v. 105, no. 6, p. 1521–1533, https://doi.org/10.1111/1365-2745.12863.

Lautenbach, J.M., Plumb, R.T., Robinson, S.G., Hagen, C.A., Haukos, D.A., and Pitman, J.C., 2017, Lesser prairie-chicken avoidance of trees in a grassland landscape: Rangeland Ecology and Management, v. 70, no. 1, p. 78–86, https://doi.org/10.1016/j.rama.2016.07.008.

Lovich, J.E., Quillman, M., Zitt, B., Schroeder, A., Green, D.E., Yackulic, C., Gibbons, P., and Goode, E., 2017, The effects of drought and fire in the extirpation of an abundant semi-aquatic turtle from a lacustrine environment in the southwestern USA: Knowledge & Management of Aquatic Ecosystems, v. 418, article no. 18, 11 p., https://doi.org/10.1051/kmae/2017008.

Lü, X.-T., Reed, S., Hou, S.-L., Hu, Y.-Y., Wei, H.-W., Lü, F.-M., Cui, Q., and Han, X.-G., 2017, Temporal variability of foliar nutrients—responses to nitrogen deposition and prescribed fire in a temperate steppe: Biogeochemistry, v. 133, no. 3, p. 295–305, https://doi.org/10.1007/s10533-017-0333-x.

Lutz, J.A., Matchett, J.R., Tarnay, L.W., Smith, D.F., Becker, K.M.L., Furniss, T.J., and Brooks, M.L., 2017, Fire and the distribution and uncertainty of carbon sequestered as aboveground tree biomass in Yosemite and Sequoia & Kings Canyon National Parks: Land, v. 6, no. 1, 24 p., https://doi.org/10.3390/land6010010.

Lydersen, J.M., Collins, B.M., Brooks, M.L., Matchett, J.R., Shive, K.L., Povak, N.A., Kane, V.R., and Smith, D.F., 2017, Evidence of fuels management and fire weather influencing fire severity in an extreme fire event: Ecological Applications, v. 27, no. 7, p. 2013–2030, https://doi.org/10.1002/eap.1586.

Margolis, E.Q., Woodhouse, C.A., and Swetnam, T.W., 2017, Drought, multi-seasonal climate, and wildfire in northern New Mexico: Climatic Change, v. 142, nos. 3–4, p. 433–446, https://doi.org/10.1007/s10584-017-1958-4.

McCarley, T.R., Kolden, C.A., Vaillant, N.M., Hudak, A.T., Smith, A.M.S., and Kreitler, J., 2017, Landscape-scale quantification of fire-induced change in canopy cover following mountain pine beetle outbreak and timber harvest: Forest Ecology and Management, v. 391, May, p. 164–175, https://doi.org/10.1016/j.foreco.2017.02.015.

McCarley, T.R., Kolden, C.A., Vaillant, N.M., Hudak, A.T., Smith, A.M.S., Wing, B.M., Kellogg, B.S., and Kreitler, J., 2017, Multi-temporal LiDAR and Landsat quantification of fire-induced changes to forest structure: Remote Sensing of Environment, v. 191, March, p. 419–432, https://doi.org/10.1016/j.rse.2016.12.022.

McCullough, K., Albanese, G., and Haukos, D.A., 2017, Novel observations of larval fire survival, feeding behavior, and host plant use in the regal fritillary, *Speyeria idalia* (Drury) (Nymphalidae): Journal of the Lepidopterists' Society, v. 71, no. 3, p. 146–152, https://doi.org/10.18473/lepi.71i3.a4.

McKenzie, D., and Littell, J.S., 2017, Climate change and the eco-hydrology of fire—Will area burned increase in a warming western USA: Ecological Applications, v. 27, no. 1, p. 26–36, https://doi.org/10.1002/eap.1420.

Moody, J.A., and Martin, D.A., 2017, Description of chronostratigraphic units preserved as channel deposits and geomorphic processes following a basin-scale disturbance by a wildfire in Colorado: U.S. Geological Survey Open-File Report 2017–1090, 73 p., https://doi.org/10.3133/ofr20171090.

Moody, J.A., and Martin, D.A., 2017, Eighteen years (1996–2014) of channel cross-sectional measurements made in Spring Creek after the 1996 Buffalo Creek wildfire and subsequent flood: U.S. Geological Survey data release, https://doi.org/10.5066/F7QV3JQX.

Murphy, R.K., Shaffer, T.L., Grant, T.A., Derrig, J.L., Rubin, C.S., and Kerns, C.K., 2017, Sparrow nest survival in relation to prescribed fire and woody plant invasion in a northern mixed-grass prairie: Wildlife Society Bulletin, v. 41, no. 3, p. 442–452, https://doi.org/10.1002/wsb.780.

Parthum, B., Pindilli, E., and Hogan, D., 2017, Benefits of the fire mitigation ecosystem service in The Great Dismal Swamp National Wildlife Refuge, Virginia, USA: Journal of Environmental Management, v. 203, December, p. 375–382, https://doi.org/10.1016/j.jenvman.2017.08.018.

Pastick, N.J., Duffy, P., Genet, H., Rupp, T.S., Wylie, B.K., Johnson, K.D., Jorgenson, M.T., Bliss, N., McGuire, A.D., Jafarov, E.E., and Knight, J.F., 2017, Historical and projected trends in landscape drivers affecting carbon dynamics in Alaska: Ecological Applications, v. 27, no. 5, p. 1383–1402, https://doi.org/10.1002/eap.1538.

Pausas, J.G., and Keeley, J.E., 2017, Epicormic resprouting in fire-prone ecosystems: Trends in Plant Science, v. 22, no. 12, p. 1008–1015, https://doi.org/10.1016/j.tplants.2017.08.010.

Picotte, J.J., Long, J., Peterson, B., and Nelson, K., 2017, LANDFIRE 2015 Remap—Utilization of remotely sensed data to classify existing vegetation type and structure to support strategic planning and tactical response: Earthzine website, https://earthzine.org/2017/03/20/landfire-2015-remap-utilization-of-remotely-sensed-data-to-classify-existing-vegetation-type-and-structure-to-support-strategic-planning-and-tactical-response/.

Pilliod, D.S., Welty, J.L., and Arkle, R.S., 2017, Refining the cheatgrass-fire cycle in the Great Basin—Precipitation timing and fine fuel composition predict wildfire trends: Ecology and Evolution, v. 7, no. 19, p. 8126–8151, https://doi.org/10.1002/ece3.3414.

Roberts, A.J., Boal, C.W., and Whitlaw, H.A., 2017, Nesting ecology of grassland birds following a wildfire in the southern Great Plains: The Southwestern Naturalist, v. 62, no. 1, p. 39–45, https://doi.org/10.1894/0038-4909-62.1.39.

Sankey, J.B., Kreitler, J., Hawbaker, T.J., McVay, J.L., Miller, M.E., Mueller, E.R., Vaillant, N.M., Lowe, S.E., and Sankey, T.T., 2017, Climate, wildfire, and erosion ensemble foretells more sediment in western USA watersheds: Geophysical Research Letters, v. 44, no. 17, p. 8884–8892, https://doi.org/10.1002/2017GL073979.

Schultz, L.D., Heck, M.P., Hockman-Wert, D., Allai, T., Wenger, S., Cook, N.A., and Dunham, J.B., 2017, Spatial and temporal variability in the effects of wildfire and drought on thermal habitat for a desert trout: Journal of Arid Environments, v. 145, October, p. 60–68, https://doi.org/10.1016/j.jaridenv.2017.05.008.

Sleeter, R., 2017, Historic simulation of net ecosystem carbon balance for the Great Dismal Swamp: U.S. Geological Survey data release, https://doi.org/10.5066/F7KW5D6D.

Sleeter, R., Sleeter, B.M., Williams, B., Hogan, D., Hawbaker, T., and Zhu, Z., 2017, A carbon balance model for the Great Dismal Swamp ecosystem: Carbon Balance and Management, v. 12, no. 2, 20 p., https://doi.org/10.1186/s13021-017-0070-4.

Staley, D.M., Negri, J.A., Kean, J.W., Laber, J.L., Tillery, A.C., and Youberg, A.M., 2017, Prediction of spatially explicit rainfall intensity—duration thresholds for post-fire debris-flow generation in the western United States: Geomorphology, v. 278, February, p. 149–162, https://doi.org/10.1016/j.geomorph.2016.10.019.

Syphard, A.D., Brennan, T.J., and Keeley, J.E., 2017, The importance of building construction materials relative to other factors affecting structure survival during wildfire: International Journal of Disaster Risk Reduction, v. 21, March, p. 140–147, https://doi.org/10.1016/j.ijdrr.2016.11.011.

Syphard, A.D., Keeley, J.E., and Abatzoglou, J.T., 2017, Trends and drivers of fire activity vary across California aridland ecosystems: Journal of Arid Environments, v. 144, September, p. 110–122, https://doi.org/10.1016/j.jaridenv.2017.03.017.

Thomas, K.A., Jarchow, C.J., and Crawford, J.A., 2017, Survival of the endangered Pima pineapple cactus—Does clearing before prescribed fire alter survival postfire?: Southwestern Naturalist, v. 62, no. 3, p. 200–206, https://doi.org/10.1894/0038-4909-62.3.200.

Vanderhoof, M.K., Brunner, N., Beal, G.Y.-J., and Hawbaker, T.J., 2017, Evaluation of the U.S. Geological Survey Landsat Burned Area Essential Climate Variable across the conterminous U.S. using commercial high-resolution imagery: Remote Sensing, v. 9, no. 7, 24 p., https://doi.org/10.3390/rs9070743.

Vanderhoof, M.K., Fairaux, N.M., Beal, Y.-J., and Hawbaker, T.J., 2017, Data release for the validation of the USGS Landsat Burned Area Essential Climate Variable (BAECV) across the conterminous U.S.: U.S. Geological Survey data release, https://doi.org/10.5066/F7T151VX.

Vanderhoof, M.K., Fairaux, N., Beal, Y.-J.G., and Hawbaker, T.J., 2017, Validation of the USGS Landsat Burned Area Essential Climate Variable (BAECV) across the conterminous United States: Remote Sensing of Environment, v. 198, September, p. 393–406, https://doi.org/10.1016/j.rse.2017.06.025.

van Marle, M.J.E., Kloster, S., Magi, B.I., Marlon, J.R., Daniau, A.-L., Field, R.D., Arneth, A., Forrest, M., Hantson, S., Kehrwald, N.M., Knorr, W., Lasslop, G., Li, F., Mangeon, S., Yue, C., Kaiser, J.W., and van der Werf, G.R., 2017, Historic global biomass burning emissions for CMIP6 (BB4CMIP) based on merging satellite observations with proxies and fire models (1750–2015): Geoscientific Model Development, v. 10, no. 9, p. 3329–3357, https://doi.org/10.5194/gmd-10-3329-2017.

West, A.M., Evangelista, P.H., Jarnevich, C.S., Kumar, S., Swallow, A., Luizza, M.W., and Chignell, S.M., 2017, Using multi-date satellite imagery to monitor invasive grass species distribution in post-wildfire landscapes—An iterative, adaptable approach that employs open-source data and software: International Journal of Applied Earth Observation and Geoinformation, v. 59, July, p. 135–146, https://doi.org/10.1016/j.jag.2017.03.009.

Wieting, C., Ebel, B.A., and Singha, K., 2017, Quantifying the effects of wildfire on changes in soil properties by surface burning of soils from the Boulder Creek Critical Zone Observatory: Journal of Hydrology, Regional Studies, v. 13, October, p. 43–57, https://doi.org/10.1016/j.ejrh.2017.07.006.

Wonkka, C.L., Twidwell, D., Bielski, C.H., Allen, C.R., and Stambaugh, M.C., 2017, Regeneration and invasion of cottonwood riparian forest following wildfire: Restoration Ecology, v. 26, no. 3, p. 456–465, https://doi.org/10.1111/rec.12577.

2016: 91 publications

Abella, S.R., and Berry, K.H., 2016, Enhancing and restoring habitat for the desert tortoise: Journal of Fish and Wildlife Management, v. 7, no. 1, p. 255–279, https://doi.org/10.3996/052015-JFWM-046.

Albano, C.M., Dettinger, M., and Soulard, C.E., 2016, Data on influence of atmospheric rivers on vegetation productivity and fire patterns in the southwestern US: U.S. Geological Survey data release, https://doi.org/10.5066/F71Z42KJ.

Allen, C.D., 2016, Forest ecosystem reorganization underway in the southwestern United States—A preview of widespread forest changes in the Anthropocene?, chap. 4 *of* Sample, V.A., Bixler, R.P., and Miller, C., eds., Forest conservation and management in the Anthropocene—Adaptation of science, policy and practices: Boulder, Colo., Colorado U.P., p. 103–122. [Also available at https://doi.org/10.5876/9781607324591.c004.]

Anderson, L., and Wahl, D., 2016, Two Holocene paleofire records from Peten, Guatemala—Implications for natural fire regime and prehispanic Maya land use: Global and Planetary Change, v. 138, March, p. 82–92, https://doi.org/10.1016/j.gloplacha.2015.09.012.

Ashton, I.W., Symstad, A.J., Davis, C.J., and Swanson, D.J., 2016, Preserving prairies—Understanding temporal and spatial patterns of invasive annual bromes in the northern Great Plains: Ecosphere, v. 7, no. 8, https://doi.org/10.1002/ecs2.1438.

Boyte, S.P., Wylie, B.K., and Major, D.J., 2016, Cheatgrass percent cover change—Comparing recent estimates to climate change-driven predictions in the northern Great Basin: Rangeland Ecology & Management, v. 69, no. 4, p. 265–279, https://doi.org/10.1016/j.rama.2016.03.002.

Brooks, M.L., and Matchett, J.R., 2016, Fire patterns among ecological zones in the California desert, 1984–2013: U.S. Geological Survey data release, https://doi.org/10.5066/F75B00MP.

Brovkin, V., Brücher, T., Kleinen, T., Zaehle, S., Joos, F., Roth, R., Spahni, R., Schmitt, J., Fischer, H., Leuenberger, M., Stone, E.J., Ridgwell, A., Chappellaz, J., Kehrwald, N., Barbante, C., Blunier, T., and Jensen, D.D., 2016, Comparative carbon cycle dynamics of the present and last interglacial: Quaternary Science Reviews, v. 137, April, p. 15–32, https://doi.org/10.1016/j.quascirev.2016.01.028.

Brown, D.R.N., Jorgenson, M.T., Kielland, K., Verbyla, D.L., Prakash, A., and Koch, J.C., 2016, Landscape effects of wildfire on permafrost distribution in interior Alaska derived from remote sensing: Remote Sensing, v. 8, no. 8, 22 p., https://doi.org/10.3390/rs8080654.

Burton, C.A., Hoefen, T.M., Plumlee, G.S., Baumberger, K.L., Backlin, A.R., Gallegos, E., and Fisher, R.N., 2016, Trace elements in stormflow, ash, and burned soil following the 2009 station fire in southern California: PLOS ONE, v. 11, no. 5, e0153372, 26 p., https://doi.org/10.1371/journal.pone.0153372.

Caggiano, M.D., Tinkham, W.T., Hoffman, C., Cheng, A.S., and Hawbaker, T.J., 2016, High resolution mapping of development in the wildland-urban interface using object based image extraction: Heliyon, v. 2, no. 10, e00174, 19 p., https://doi.org/10.1016/j.heliyon.2016.e00174.

Caputo, J., Beier, C.M., Groffman, P.M., Burns, D.A., Beall, F.D., Hazlett, P.W., and Yorks, T.E., 2016, Effects of harvesting forest biomass on water and climate regulation services—A synthesis of long-term ecosystem experiments in eastern North America: Ecosystems, v. 19, no. 2, p. 271–283, https://doi.org/10.1007/s10021-015-9928-z.

Carr, J., D'Odorico, P., Engel, V., and Redwine, J., 2016, Tree island pattern formation in the Florida Everglades: Ecological Complexity, v. 26, p. 37–44, https://doi.org/10.1016/j.ecocom.2016.03.007.

Cartwright, J.M., and Wolfe, W.J., 2016, Insular ecosystems of the southeastern United States—A regional synthesis to support biodiversity conservation in a changing climate: U.S. Geological Survey Professional Paper 1828, 162 p., https://doi.org/10.3133/pp1828.

Chambers, J.C., Beck, J.L., Campbell, S., Carlson, J., Christiansen, T.J., Clause, K.J., Dinkins, J.B., Doherty, K.E., Griffin, K.A., Havlina, D.W., Henke, K.F., Hennig, J.D., Kurth, L.L., Maestas, J.D., Manning, M., Mayer, K.E., Mealor, B.A., McCarthy, C., Perea, M.A., and Pyke, D.A., 2016, Using resilience and resistance concepts to manage threats to sagebrush ecosystems, Gunnison sage-grouse, and greater sage-grouse in their eastern range—A strategic multi-scale approach: U.S. Forest Service General Technical Report RMRS–GTR–356, 143 p., https://www.fs.usda.gov/treesearch/pubs/53201.

Chambers, J.C., Campbell, S., Carlson, J., Beck, J.L., Clause, K.J., Dinkins, J.B., Doherty, K.E., Espinosa, S., Griffin, K.A., Christiansen, T.J., Crist, M.R., Hanser, S.E., Havlina, D.W., Henke, K.F., Hennig, J.D., Kurth, L.L., Maestas, J.D., Mayer, K.E., Manning, M.E., Mealor, B.A., McCarthy, C., Pellant, M., Prentice, K.L., Perea, M.A., Pyke, D.A., Wiechman, L.A., and Wuenschel, A., 2016, Science framework for the conservation and restoration strategy of DOI Secretarial Order 3336—Utilizing resilience and resistance concepts to assess threats to sagebrush ecosystems and greater sage-grouse, prioritize conservation and restoration actions, and inform management strategies: U.S. Forest Service, Rocky Mountain Research Station, unnumbered Federal Government series report, 202 p., https://www.fs.usda.gov/treesearch/pubs/52275.

Clark, J.S., Iverson, L., and Woodall, C.W., 2016, Impacts of increasing drought on forest dynamics, structure, diversity, and management, *in* Vose, J.M., Clark, J.S., Luce, C.H., and Patel-Weynard, T., eds., Effects of drought on forests and rangelands in the United States—A comprehensive science synthesis: U.S. Forest Service General Technical Report WO–93b, p. 59–96, https://www.fs.usda.gov/treesearch/pubs/52694.

Clark, J.S., Iverson, L., Woodall, C.W., Allen, C.D., Bell, D.M., Bragg, D.C., D'Amato, A.W., Davis, F.W., Hersh, M.H., Ibanez, I., Jackson, S.T., Matthews, S., Pederson, N., Peters, M., Schwartz, M.W., Waring, K.M., and Zimmermann, N.E., 2016, The impacts of increasing drought on forest dynamics, structure, and biodiversity in the United States: Global Change Biology, v. 22, no. 7, p. 2329–2352, https://doi.org/10.1111/gcb.13160.

Coates, P.S., Ricca, M.A., Prochazka, B.G., Brooks, M.L., Doherty, K.E., Kroger, T., Blomberg, E.J., Hagen, C.A., and Casazza, M.L., 2016, Wildfire, climate, and invasive grass interactions negatively impact an indicator species by reshaping sagebrush ecosystems: Proceedings of the National Academy of Sciences, v. 113, no. 45, p. 12745–12750, https://doi.org/10.1073/pnas.1606898113.

Curry, B., Henne, P.D., Mezquita-Joanes, F., Marrone, F., Pieri, V., La Mantia, T., Calò, C., and Tinner, W., 2016, Holocene paleoclimate inferred from salinity histories of adjacent lakes in southwestern Sicily (Italy): Quaternary Science Reviews, v. 150, p. 67–83, https://doi.org/10.1016/j.quascirev.2016.08.013.

Ebel, B.A., 2016, Soil depth and soil-hydraulic properties of the Sugarloaf experimental catchment; 2010 Fourmile Canyon fire area, Colorado: U.S. Geological Survey data release, https://doi.org/10.5066/F7F769NK.

Edwards, M., Grosse, G., Jones, B.M., and McDowell, P., 2016, The evolution of a thermokarst-lake landscape—Late Quaternary permafrost degradation and stabilization in interior Alaska: Sedimentary Geology, v. 340, p. 3–14, https://doi.org/10.1016/j.sedgeo.2016.01.018.

Fischer, A.P., Spies, T.A., Steelman, T.A., Moseley, C., Johnson, B.R., Bailey, J.D., Ager, A.A., Bourgeron, P., Charnley, S., Collins, B.M., Kline, J.D., Leahy, J.E., Littell, J.S., Millington, J.D.A., Nielsen-Pincus, M., Olsen, C.S., Paveglio, T.B., Roos, C.I., Steen-Adams, M.M., Stevens, F.R., Vukomanovic, J., White, E.M., and Bowman, D.M.J.S., 2016, Wildfire risk as a socioecological pathology: Frontiers in Ecology and the Environment, v. 14, no. 5, p. 276–284, https://doi.org/10.1002/fee.1283.

Flitcroft, R.L., Falke, J.A., Reeves, G.H., Hessburg, P.F., McNyset, K.M., and Benda, L.E., 2016, Wildfire may increase habitat quality for spring Chinook salmon in the Wenatchee River subbasin, WA, USA: Forest Ecology and Management, v. 359, p. 126–140, https://doi.org/10.1016/j.foreco.2015.09.049.

Ford, W.M., Silvis, A., Johnson, J.B., Edwards, J.W., and Karp, M., 2016, Northern long-eared bat day-roosting and prescribed fire in the central Appalachians, USA: Fire Ecology, v. 12, no. 2, p. 13–27, https://doi.org/10.4996/fireecology.1202013.

Gaglioti, B.V., Mann, D.H., Jones, B.M., Wooller, M.J., and Finney, B.P., 2016, High-resolution records detect human-caused changes to the boreal forest wildfire regime in interior Alaska: Holocene, v. 26, no. 7, p. 1064–1074, https://doi.org/10.1177/0959683616632893.

Germino, M.J., Belnap, J., Stark, J.M., Allen, E.B., and Rau, B.M., 2016, Ecosystem impacts of exotic annual invaders in the Genus *Bromus*, chap. 3 *of* Germino M., Chambers J., and Brown C., eds., Exotic brome-grasses in arid and semiarid ecosystems of the western US—Causes, consequences, and management implications: Cham, Switzerland, Springer, p. 61–95,https://doi.org/10.1007/978-3-319-24930-8_3.

Glenn, N.F., Neuenschwander, A., Vierling, L.A., Spaete, L., Li, A., Shinneman, D.J., Pilliod, D.S., Arkle, R.S., and McIlroy, S.K., 2016, Landsat 8 and ICESat-2—Performance and potential synergies for quantifying dryland ecosystem vegetation cover and biomass: Remote Sensing of Environment, v. 185, p. 233–242, https://doi.org/10.1016/j.rse.2016.02.039.

Gosselin, E.N., Holbrook, J.D., Huggler, K., Brown, E., Vierling, K.T., Arkle, R., and Pilliod, D.S., 2016, Ecosystem engineering of harvester ants—Effects on vegetation in a sagebrush-steppe ecosystem: Western North American Naturalist, v. 76, no. 1, p. 82–89, https://doi.org/10.3398/064.076.0109.

Halsey, R.W., and Keeley, J.E., 2016, Conservation issues—California chaparral, *in* Elias, S.A., DellaSala, D.A., Lajtha, K., Xiao, J.-Y., Alderton, D.H.M., Funiciello, F., Marshall, S.J., Bliznak, V., Goldstein, M.I., Mineau, P., Cochran, J.K., Gröcke, D., and Wohl, E., eds., Reference module in Earth systems and environmental sciences: Amersterdam, Elsevier, [Curated online reference repository], 12 p., https://doi.org/10.1016/b978-0-12-409548-9.09584-1.

Hantson, S., Kloster, S., Coughlan, M., Daniau, A.-L., Vannière, B., Brücher, T., Kehrwald, N., and Magi, B.I., 2016, Fire in the earth system—Bridging data and modeling research: Bulletin of the American Meteorological Society, v. 97, no. 6. p. 1069–1072, https://doi.org/10.1175/BAMS-D-15-00319.1.

Harper, C.A., Ford, W.M., Lashley, M.A., Moorman, C.E., and Stambaugh, M.C., 2016, Fire effects on wildlife in the central hardwoods and Appalachian regions, USA: Fire Ecology, v. 12, no. 2, p. 127–159, https://doi.org/10.4996/fireecology.1202127.

Hess, S.C., 2016, A Tour de force by Hawaii's invasive mammals: Establishment, takeover, and ecosystem restoration through eradication: Mammal Study, v. 41, no. 2, p. 47–60, https://doi.org/10.3106/041.041.0202.

Holbrook, J.D., Pilliod, D.S., Arkle, R.S., Rachlow, J.L., Vierling, K.T., and Wiest, M.M., 2016, Transition of vegetation states positively affects harvester ants in the Great Basin, United States: Rangeland Ecology & Management, v. 69, no. 6, p. 449–456, https://doi.org/10.1016/j.rama.2016.06.009.

Huang, S., Liu, H., Dahal, D., Jin, S., Li, S., and Liu, S., 2016, Spatial variations in immediate greenhouse gases and aerosol emissions and resulting radiative forcing from wildfires in interior Alaska: Theoretical and Applied Climatology, v. 123, nos. 3–4, p. 581–592, https://doi.org/10.1007/s00704-015-1379-0.

Johnstone, J.F., Allen, C.D., Franklin, J.F., Frelich, L.E., Harvey, B.J., Higuera, P.E., Mack, M.C., Meentemeyer, R.K., Metz, M.R., Perry, G.L.W., Schoennagel, T., and Turner, M.G., 2016, Changing disturbance regimes, ecological memory, and forest resilience: Frontiers in Ecology and the Environment, v. 14, no. 7. p. 369–378, https://doi.org/10.1002/fee.1311.

Keeley, J.E., Parker, V.T., and Vasey, M.C., 2016, Resprouting and seeding hypotheses—A test of the gap-dependent model using resprouting and obligate seeding subspecies of Arctostaphylos: Plant Ecology, v. 217, no. 6, p. 743–750, https://doi.org/10.1007/s11258-015-0551-z.

Keeley, J.E., and Safford, H.D., 2016, Fire as an ecosystem process, chap. 3 *of* Mooney, H.A. and Zavaleta, E.S., eds., Ecosystems of California: Oakland, University of California Press, p. 27–46.

Keeley, J., and Syphard, A., 2016, Climate change and future fire regimes—Examples from California: Geosciences, v. 6, no. 3, 14 p., https://doi.org/10.3390/geosciences6030037.

Kehrwald, N.M., Aleman, J., Coughlan, M., Courtney-Mustalphi, C., Githumbi, E., Magi, B., Marlon, J., and Power, M.J., 2016, One thousand years of fires—Integrating proxy and model data: Frontiers of Biogeography, v. 8, no. 1, e29606, 5 p., https://escholarship.org/uc/item/1d92610x.

Kelly, R., Genet, H., McGuire, A.D., and Hu, F.S., 2016, Palaeodata-informed modelling of large carbon losses from recent burning of boreal forests: Nature Climate Change, v. 6, no. 1, p. 79–82, https://doi.org/10.1038/nclimate2832.

Kendrick, K.J., Partin, C.A., and Graham, R.C., 2016, Granitic boulder erosion caused by chaparral wildfire—Implications for cosmogenic radionuclide dating of bedrock surfaces: The Journal of Geology, v. 124, no. 4, p. 529–539, https://doi.org/10.1086/686273.

Krawchuk, M.A., Haire, S.L., Coop, J., Parisien, M.-A., Whitman, E., Chong, G., and Miller, C., 2016, Topographic and fire weather controls of fire refugia in forested ecosystems of northwestern North America: Ecosphere, v. 7, no. 12, e01632, 18 p., https://doi.org/10.1002/ecs2.1632.

Lewis, T.L., Schmutz, J.A., Amundson, C.L., and Lindberg, M.S., 2016, Waterfowl populations are resilient to immediate and lagged impacts of wildfires in the boreal forest: Journal of Applied Ecology, v. 53, no. 6, p. 1746–1754, https://doi.org/10.1111/1365-2664.12705.

Liang, L., Hawbaker, T.J., Zhu, Z., Li, X., and Gong, P., 2016, Forest disturbance interactions and successional pathways in the Southern Rocky Mountains: Forest Ecology and Management, v. 375, September, p. 35–45, https://doi.org/10.1016/j.foreco.2016.05.010.

Littell, J.S., Peterson, D.L., Riley, K.L., Liu, Y., and Luce, C.H., 2016, A review of the relationships between drought and forest fire in the United States: Global Change Biology, v. 22, no. 7, p. 2353–2369, https://doi.org/10.1111/gcb.13275.

Loehman, R.A., Keane, R.E., Holsinger, L.M., and Wu, Z., 2016, Interactions of landscape disturbances and climate change dictate ecological pattern and process—spatial modeling of wildfire, insect, and disease dynamics under future climates: Landscape Ecology, v. 32, no. 7, p. 1447–1459, https://doi.org/10.1007/s10980-016-0414-6.

Manies, K.L., Harden, J.W., Fuller, C.C., and Turetsky, M.R., 2016, Decadal and long-term boreal soil carbon and nitrogen sequestration rates across a variety of ecosystems: Biogeosciences, v. 13, no. 15, p. 4315–4327, https://doi.org/10.5194/bg-13-4315-2016.

Margolis, E.Q., and Malevich, S.B., 2016, Historical dominance of low-severity fire in dry and wet mixed-conifer forest habitats of the endangered terrestrial Jemez Mountains salamander (*Plethodon neomexicanus*): Forest Ecology and Management, v. 375, September, p. 12–26, https://doi.org/10.1016/j.foreco.2016.05.011.

Martin, D.A., 2016, At the nexus of fire, water and society: Philosophical Transactions of the Royal Society B, Biological Sciences, v. 371, no. 1696, article no. 20150172, [6 p.], https://doi.org/10.1098/rstb.2015.0172.

Mast, M.A., Murphy, S.F., Clow, D.W., Penn, C.A., and Sexstone, G.A., 2016, Water-quality response to a high-elevation wildfire in the Colorado Front Range: Hydrological Processes, v. 30, no. 12, p. 1811–1823, https://doi.org/10.1002/hyp.10755.

Mckerrow, A., Dewitz, J., Long, D.G., Nelson, K., Connot, J.A., and Smith, J., 2016, A Comparison of NLCD 2011 and LANDFIRE EVT 2010—Regional and national summaries: LANDFIRE website, http://pubs.er.usgs.gov/publication/70177839.

Minsley, B.J., Pastick, N.J., Wylie, B.K., Brown, D.R.N., and Kass, M.A., 2016, Evidence for nonuniform permafrost degradation after fire in boreal landscapes: Journal of Geophysical Research, Earth Surface, v. 121, no. 2, p. 320–335, https://doi.org/10.1002/2015JF003781.

Nelson, K.J., Long, D.G., and Connot, J.A., 2016, LANDFIRE 2010—Updates to the national dataset to support improved fire and natural resource management: U.S. Geological Survey Open-File Report 2016–1010, 48 p., https://doi.org/10.3133/ofr20161010.

Parker, V.T., Pratt, R.B., and Keeley, J.E., 2016, Chaparral, chap. 24 *of* Mooney, H.A., and Zavaleta, E.S., eds., Ecosystems of California: Oakland, University of California Press, p. 479–508.

Pausas, J.G., Pratt, R.B., Keeley, J.E., Jacobsen, A.L., Ramirez, A.R., Vilagrosa, A., Paula, S., Kaneakua-Pia, I.N., and Davis, S.D., 2016, Towards understanding resprouting at the global scale: New Phytologist, v. 209, no. 3, p. 945–954, https://doi.org/10.1111/nph.13644.

Pavlovic, N.B., Leicht-Young, S.A., and Grundel, R., 2016, Oriental bittersweet (*Celastrus orbiculatus*)—Spreading by fire: Forest Ecology and Management, v. 364, March, p. 183–194 https://doi.org/10.1016/j.foreco.2015.12.036.

Pennington, V.E., Schlaepfer, D.R., Beck, J.L., Bradford, J.B., Palmquist, K.A., and Lauenroth, W.K., 2016, Sagebrush, greater sage-grouse, and the occurrence and importance of forbs: Western North American Naturalist, v. 76, no. 3, p. 298–312, https://doi.org/10.3398/064.076.0307.

Peterson, B.E., and Nelson, K.J., 2016, Enhanced canopy fuel mapping by integrating lidar data: U.S. Geological Survey Fact Sheet 2015–3086, 2 p., https://doi.org/10.3133/fs20153086.

Picotte, J.J., Peterson, B., Meier, G., and Howard, S.M., 2016, 1984–2010 trends in fire burn severity and area for the conterminous US: International Journal of Wildland Fire, v. 25, no. 4, p. 413–420, https://doi.org/10.1071/WF15039.

Pyke, D.A., Chambers, J.C., Beck, J.L., Brooks, M.L., and Mealor, B.A., 2016, Land uses, fire, and invasion—Exotic annual *Bromus* and human dimensions, *in* Germino, M.J., Chambers, J.C., and Brown, C.S., eds., Exotic brome-grasses in arid and semiarid ecosystems of the Western US: Cham, Switzerland, Springer, p. 307–337, https://doi.org/10.1007/978-3-319-24930-8_11.

Rasmussen, C., and Shafroth, P.B., 2016, Conservation planning for the Colorado River in Utah: Grand Junction, Colo., Colorado Mesa University, Ruth Powell Hutchins Water Center, Scientific and Technical Report no. 3, 93 p., https://www.coloradomesa.edu/water-center/documents/rasmussen_shaftroth_2016_watercenter_cmu.pdf.

Reese, G.C., Manier, D.J., Carr, N.B., Callan, R., Leinwand, I.I.F., Assal, T.J., Burris, L., and Ignizio, D.A., 2016, Estimated historical distribution of grassland communities of the southern Great Plains: U.S. Geological Survey Open-File Report 2016–1184, 13 p., https://doi.org/10.3133/ofr20161184.

Rengers, F.K., McGuire, L.A., Kean, J.W., Staley, D.M., and Hobley, D.E.J., 2016, Model simulations of flood and debris flow timing in steep catchments after wildfire: Water Resources Research, v. 52, no. 8, p. 6041–6061, https://doi.org/10.1002/2015WR018176.

Rengers, F.K., Tucker, G.E., Moody, J.A., and Ebel, B.A., 2016, Illuminating wildfire erosion and deposition patterns with repeat terrestrial lidar: Journal of Geophysical Research, Earth Surface, v. 121, no. 3, p. 588–608, https://doi.org/10.1002/2015JF003600.

Rose, E.T., and Simons, T.R., 2016, Avian response to fire in pine-oak forests of Great Smoky Mountains National Park following decades of fire suppression: The Condor, v. 118, no. 1, p. 179–193, https://doi.org/10.1650/CONDOR-15-85.1.

Rose, E.T., Simons, T.R., Klein, R., and McKerrow, A.J., 2016, Normalized burn ratios link fire severity with patterns of avian occurrence: Landscape Ecology, v. 31, no. 7, p. 1537–1550, https://doi.org/10.1007/s10980-015-0334-x.

Rundel, P.W., Arroyo, M.T.K., Cowling, R.M., Keeley, J.E., Lamont, B.B., and Vargas, P., 2016, Mediterranean biomes—Evolution of their vegetation, floras, and climate: Annual Review of Ecology, Evolution, and Systematics, v. 47, no. 1, p. 383–407, https://doi.org/10.1146/annurev-ecolsys-121415-032330.

Shakesby, R.A., Moody, J.A., Martin, D.A., and Robichaud, P.R., 2016, Synthesising empirical results to improve predictions of post-wildfire runoff and erosion response: International Journal of Wildland Fire, v. 25, no. 3, p. 257–261, https://doi.org/10.1071/WF16021.

Shinneman, D.J., and McIlroy, S.K., 2016, Identifying key climate and environmental factors affecting rates of post-fire big sagebrush (*Artemisia tridentata*) recovery in the northern Columbia Basin, USA: International Journal of Wildland Fire, v. 25, no. 9, p. 933–945, https://doi.org/10.1071/WF16013.

Smith, D.S., Fettig, S.M., and Bowker, M.A., 2016, Elevated Rocky Mountain elk numbers prevent positive effects of fire on quaking aspen (*Populus tremuloides*) recruitment: Forest Ecology and Management, v. 362, February, p. 46–54, https://doi.org/10.1016/j.foreco.2015.11.020.

Soulard, C.E., Albano, C.M., Villarreal, M.L., and Walker, J.J., 2016, Continuous 1985–2012 Landsat monitoring to assess fire effects on meadows in Yosemite National Park, California: Remote Sensing, v. 8, no. 5, https://doi.org/10.3390/rs8050371.

Staley, D.M., Negri, J.A., Kean, J.W., Laber, J.L., Tillery, A.C., and Youberg, A.M., 2016, Updated logistic regression equations for the calculation of post-fire debris-flow likelihood in the western United States: U.S. Geological Survey Open-File Report 2016–1106, 13 p., https://doi.org/10.3133/ofr20161106.

Stoof, C.R., Gevaert, A.I., Baver, C., Hassanpour, B., Morales, V.L., Zhang, W., Martin, D., Giri, S.K., and Steenhuis, T.S., 2016, Can pore-clogging by ash explain post-fire runoff?: International Journal of Wildland Fire, v. 25, no. 3, p. 294–305, https://doi.org/10.1071/WF15037.

Swetnam, T.W., Farella, J., Roos, C.I., Liebmann, M.J., Falk, D.A., and Allen, C.D., 2016, Multiscale perspectives of fire, climate and humans in western North America and the Jemez Mountains, USA: Philosophical Transactions of the Royal Society B, Biological Sciences, v. 371, no. 1696, article no. 20150168, [13 p.], https://doi.org/10.1098/rstb.2015.0168.

Syphard, A.D., Butsic, V., Bar-Massada, A., Keeley, J.E., Tracey, J.A., and Fisher, R.N., 2016, Setting priorities for private land conservation in fire-prone landscapes—Are fire risk reduction and biodiversity conservation competing or compatible objectives?: Ecology and Society, v. 21, no. 3, article no. 2, 11 p., https://doi.org/10.5751/ES-08410-210302.

Syphard, A.D., and Keeley, J.E., 2016, Historical reconstructions of California wildfires vary by data source: International Journal of Wildland Fire, v. 25, no. 12, p. 1221–1227, https://doi.org/10.1071/WF16050.

Tagestad, J., Brooks, M., Cullinan, V., Downs, J., and McKinley, R., 2016, Precipitation regime classification for the Mojave Desert—Implications for fire occurrence: Journal of Arid Environments, v. 124, p. 388–397, https://doi.org/10.1016/j.jaridenv.2015.09.002.

Tarr, N.M., Rubino, M.J., Costanza, J.K., McKerrow, A.J., Collazo, J.A., and Abt, R.C., 2016, Projected gains and losses of wildlife habitat from bioenergy-induced landscape change: Global Change Biology Bioenergy, v. 9, no. 5, p. 909–923, https://doi.org/10.1111/gcbb.12383.

Tillery, A.C., and Haas, J.R., 2016, Potential postwildfire debris-flow hazards—A prewildfire evaluation for the Jemez Mountains, north-central New Mexico: U.S. Geological Survey Scientific Investigations Report 2016–5101, 27 p., https://doi.org/10.3133/sir20165101.

Tinner, W., Vescovi, E., van Leeuwen, J.F.N., Colombaroli, D., Henne, P.D., Kaltenrieder, P., Morales-Molino, C., Beffa, G., Gnaegi, B., van der Knaap, W.O., La Mantia, T., and Pasta, S., 2016, Holocene vegetation and fire history of the mountains of northern Sicily (Italy): Vegetation History and Archaeobotany, v. 25, no. 5, p. 499–519, https://doi.org/10.1007/s00334-016-0569-8.

Twidwell, D., Allen, C.R., Detweiler, C., Higgins, J., Laney, C., and Elbaum, S., 2016, Smokey comes of age—unmanned aerial systems for fire management: Frontiers in Ecology and the Environment, v. 14, no. 6, p. 333–339, https://doi.org/10.1002/fee.1299.

van Mantgem, P.J., Caprio, A.C., Stephenson, N.L., and Das, A.J., 2016, Does prescribed fire promote resistance to drought in low elevation forests of the Sierra Nevada, California, USA?: Fire Ecology, v. 12, no. 1, p. 13–25, https://doi.org/10.4996/fireecology.1201013.

van Mantgem, P.J., Lalemand, L.B., Keifer, M., and Kane, J.M., 2016, Duration of fuels reduction following prescribed fire in coniferous forests of U.S. national parks in California and the Colorado Plateau: Forest Ecology and Management, v. 379, November, p. 265–272, https://doi.org/10.1016/j.foreco.2016.07.028.

Villarreal, M.L., Norman, L.M., Buckley, S., Wallace, C.S.A., and Coe, M.A., 2016, Multi-index time series monitoring of drought and fire effects on desert grasslands: Remote Sensing of Environment, v. 183, September, p. 186–197, https://doi.org/10.1016/j.rse.2016.05.026.

Weber, B., Bowker, M., Zhang, Y., and Belnap, J., 2016, Natural recovery of biological soil crusts after disturbance, *in* Weber, B., Büdel, B., and Belnap, J., eds., Biological soil crusts—An organizing principle in drylands: Cham, Switzerland, Springer, p. 479–498, https://doi.org/10.1007/978-3-319-30214-0_23.

Webster, J.P., Kane, T.J., Obrist, D., Ryan, J.N., and Aiken, G.R., 2016, Estimating mercury emissions resulting from wildfire in forests of the western United States: Science of The Total Environment, v. 568, October, p. 578–586, https://doi.org/10.1016/j.scitotenv.2016.01.166.

Williams, P.J., and Hooten, M.B., 2016, Combining statistical inference and decisions in ecology: Ecological Applications, v. 26, no. 6, p. 1930–1942, https://doi.org/10.1890/15-1593.1.

Wise, D.R., and O'Connor, J., 2016, A spatially explicit suspended-sediment load model for western Oregon: U.S. Geological Survey Scientific Investigations Report 2016–5079, 25 p., https://doi.org/10.3133/sir20165079.

Xiao, J., Liu, S., and Stoy, P.C., 2016, Preface—Impacts of extreme climate events and disturbances on carbon dynamics: Biogeosciences, v. 13, no. 12, p. 3665–3675, https://doi.org/10.5194/bg-13-3665-2016.

Zangrando, R., Barbaro, E., Vecchiato, M., Kehrwald, N.M., Barbante, C., and Gambaro, A., 2016, Levoglucosan and phenols in Antarctic marine, coastal and plateau aerosols: Science of The Total Environment, v. 544, February, p. 606–616, https://doi.org/10.1016/j.scitotenv.2015.11.166.

2015: 82 Publications

Allen, C.D., Breshears, D.D., and McDowell, N.G., 2015, On underestimation of global vulnerability to tree mortality and forest die-off from hotter drought in the Anthropocene: Ecosphere, v. 6, no. 8, article no. 129, 55 p., https://doi.org/10.1890/ES15-00203.1.

Anderson, L., Brunelle, A., and Thompson, R.S., 2015, A multi-proxy record of hydroclimate, vegetation, fire, and post-settlement impacts for a subalpine plateau, central Rocky Mountains, U.S.A.: Holocene, v. 25, no. 6, p. 932–943, https://doi.org/10.1177/0959683615574583.

Assal, T.J., Melcher, C.P., and Carr, N.B., eds., 2015, Southern Great Plains rapid ecoregional assessment—Pre-assessment report: U.S. Geological Survey Open-File Report 2015–1003, 284 p., https://doi.org/10.3133/ofr20151003.

Baughman, C.A., Mann, D.H., Verbyla, D.L., and Kunz, M.L., 2015, Soil surface organic layers in Arctic Alaska—Spatial distribution, rates of formation, and microclimatic effects: Journal of Geophysical Research, Biogeosciences, v. 120, no. 6, p. 1150–1164, https://doi.org/10.1002/2015JG002983.

Beyers, J.L., Pyke, D.A., and Wirth, T., 2015, Synthesis of current knowledge on post-fire seeding for soil stabilization and invasive species control: U.S. Geological Survey unnumbered series report, 15 p., https://doi.org/10.3133/70185272.

Bixby, R.J., Cooper, S.D., Gresswell, R.E., Brown, L.E., Dahm, C.N., and Dwire, K.A., 2015, Fire effects on aquatic ecosystems—an assessment of the current state of the science: Freshwater Science, v. 34, no. 4, p. 1340–1350, https://doi.org/10.1086/684073.

Bowen, L., Miles, A.K., Kolden, C.A., Saarinen, J.A., Bodkin, J.L., Murray, M.J., and Tinker, M.T., 2015, Effects of wildfire on sea otter (*Enhydra lutris*) gene transcript profiles: Marine Mammal Science, v. 31, no. 1, p. 191–210, https://doi.org/10.1111/mms.12151.

Boyte, S.P., Wylie, B.K., and Major, D.J., 2015, Mapping and monitoring cheatgrass dieoff in rangelands of the Northern Great Basin, USA: Rangeland Ecology & Management, v. 68, no. 1, p. 18–28, https://doi.org/10.1016/j.rama.2014.12.005.

Brabec, M.M., Germino, M.J., Shinneman, D.J., Pilliod, D.S., McIlroy, S.K., and Arkle, R.S., 2015, Challenges of establishing big sagebrush (*Artemisia tridentata*) in rangeland restoration—Effects of herbicide, mowing, whole-community seeding, and sagebrush seed sources: Rangeland Ecology & Management, v. 68, no. 5, p. 432–435, https://doi.org/10.1016/j.rama.2015.07.001.

Brennan, T.J., and Keeley, J.E., 2015, Effect of mastication and other mechanical treatments on fuel structure in chaparral: International Journal of Wildland Fire, v. 24, no. 7, p. 949–963, https://doi.org/10.1071/WF14140.

Briggs, J.S., Hawbaker, T.J., and Vandendriesche, D., 2015, Resilience of ponderosa and lodgepole pine forests to mountain pine beetle disturbance and limited regeneration: Forest Science, v. 61, no. 4, p. 689–702, https://doi.org/10.5849/forsci.14-192.

Brooks, M.L., Matchett, J.R., Shinneman, D.J., and Coates, P.S., 2015, Fire patterns in the range of the greater sage-grouse, 1984–2013—Implications for conservation and management: U.S. Geological Survey Open-File Report 2015–1167, 66 p., https://doi.org/10.3133/ofr20151167.

Brown, J.F., Howard, D., Wylie, B., Frieze, A., Ji, L., and Gacke, C., 2015, Application-ready expedited MODIS data for operational land surface monitoring of vegetation condition: Remote Sensing, v. 7, no. 12, p. 16226–16240, https://doi.org/10.3390/rs71215825.

Carr, N.B., and Melcher, C.P., eds., 2015, Wyoming Basin rapid ecoregional assessment: U.S. Geological Survey Open-File Report 2015–1155, 896 p., https://doi.org/10.3133/ofr20151155.

Coates, P.S., Ricca, M.A., Prochazka, B.G., Doherty, K.E., Brooks, M.L., and Casazza, M.L., 2015, Long-term effects of wildfire on greater sage-grouse—integrating population and ecosystem concepts for management in the Great Basin: U.S. Geological Survey Open-File Report 2015–1165, 42 p., https://doi.org/10.3133/ofr20151165.

Costanza, J.K., Terando, A.J., McKerrow, A.J., and Collazo, J.A., 2015, Modeling climate change, urbanization, and fire effects on *Pinus palustris* ecosystems of the southeastern U.S.: Journal of Environmental Management, v. 151, March, p. 186–199, https://doi.org/10.1016/j.jenvman.2014.12.032.

DeGraff, J.V., Cannon, S.H., and Gartner, J.E., 2015, The timing of susceptibility to post-fire debris flows in the Western United States: Environmental and Engineering Geoscience, v. 21, no. 4, p. 277–292, https://doi.org/10.2113/gseegeosci.21.4.277.

Drake, K.K., Esque, T.C., Nussear, K.E., Defalco, L.A., Scoles-Sciulla, S.J., Modlin, A.T., and Medica, P.A., 2015, Desert tortoise use of burned habitat in the eastern Mojave Desert: Journal of Wildlife Management, v. 79, no. 4, p. 618–629, https://doi.org/10.1002/jwmg.874.

Drummond, M.A., Stier, M.P., Auch, R.F., Taylor, J.L., Griffith, G.E., Riegle, J.L., Hester, D.J., Soulard, C.E., and McBeth, J.L., 2015, Assessing landscape change and processes of recurrence, replacement, and recovery in the southeastern Coastal Plains, USA: Environmental Management, v. 56, no. 5, p. 1252–1271, https://doi.org/10.1007/s00267-015-0574-1.

Duniway, M.C., Palmquist, E., and Miller, M.E., 2015, Evaluating rehabilitation efforts following the Milford Flat fire—successes, failures, and controlling factors: Ecosphere, v. 6, no. 5, article no. 80, p. 1–33, https://doi.org/10.1890/ES14-00318.1.

Ebel, B.A., Rengers, F.K., and Tucker, G.E., 2015, Aspect-dependent soil saturation and insight into debris-flow initiation during extreme rainfall in the Colorado Front Range: Geology, v. 43, no. 8, p. 659–662, https://doi.org/10.1130/G36741.1.

Falcone, J.A., 2015, U.S. conterminous wall-to-wall anthropogenic land use trends (NWALT), 1974–2012: U.S. Geological Survey Data Series 948, 33 p., 4 app., 1 spatial data file, https://doi.org/10.3133/ds948.

Falke, J.A., Flitcroft, R.L., Dunham, J.B., McNyset, K.M., Hessburg, P.F., and Reeves, G.H., 2015, Climate change and vulnerability of bull trout (*Salvelinus confluentus*) in a fire-prone landscape: Canadian Journal of Fisheries and Aquatic Sciences, v. 72, no. 2, p. 304–318, https://doi.org/10.1139/cjfas-2014-0098.

Farzan, S., Young, D.J.N., Dedrick, A.G., Hamilton, M., Porse, E.C., Coates, P.S., and Sampson, G., 2015, Western juniper management—Assessing strategies for improving greater sage-grouse habitat and rangeland productivity: Environmental Management, v. 56, no. 3, p. 675–683, https://doi.org/10.1007/s00267-015-0521-1.

Gartner, J.E., Santi, P.M., and Cannon, S.H., 2015, Predicting locations of post-fire debris-flow erosion in the San Gabriel Mountains of southern California: Natural Hazards, v. 77, no. 2, p. 1305–1321, https://doi.org/10.1007/s11069-015-1656-3.

Harden, T.M., O'Connor, J.E., and Driscoll, D.G., 2015, Late Holocene flood probabilities in the Black Hills, South Dakota with emphasis on the Medieval Climate Anomaly: Catena, v. 130, July, p. 62–68, https://doi.org/10.1016/j.catena.2014.10.002.

Higuera, P.E., Abatzoglou, J.T., Littell, J.S., and Morgan, P., 2015, The changing strength and nature of fire-climate relationships in the northern Rocky Mountains, U.S.A., 1902–2008: PLOS ONE, v. 10, no. 6, e0127563, 21 p., https://doi.org/10.1371/journal.pone.0127563.

Huang, S., Dahal, D., Liu, H., Jin, S., Young, C., Li, S., and Liu, S., 2015, Spatiotemporal variation of surface shortwave forcing from fire-induced albedo change in interior Alaska: Canadian Journal of Forest Research, v. 45, no. 3, p. 276–285, https://doi.org/10.1139/cjfr-2014-0309.

Huang, S., Liu, S., Liu, J., Dahal, D., Young, C., Davis, B., Sohl, T.L., Hawbaker, T.J., Sleeter, B., and Zhu, Z., 2015, Projecting the spatiotemporal carbon dynamics of the Greater Yellowstone Ecosystem from 2006 to 2050: Carbon Balance and Management, v. 10, no. 1, article no. 7, 15 p., https://doi.org/10.1186/s13021-015-0017-6.

Jarnevich, C.S., Holcombe, T.R., Thomas, C.C., Frid, L., and Olsson, A., 2015, Simulating long-term effectiveness and efficiency of management scenarios for an invasive grass: AIMS Environmental Science, v. 2, no. 2, p. 427–447, https://doi.org/10.3934/environsci.2015.2.427.

Jones, B.M., Grosse, G., Arp, C.D., Miller, E., Liu, L., Hayes, D.J., and Larsen, C.F., 2015, Recent Arctic tundra fire initiates widespread thermokarst development: Scientific Reports, v. 5, no. 1, aricle no. 15865, 13 p.,https://doi.org/10.1038/srep15865.

Keeley, J.E., 2015, Attacking invasive grasses: Applied Vegetation Science, v. 18, no. 4, p. 541–542, https://doi.org/10.1111/avsc.12192.

Keeley, J.E., and Brennan, T.J., 2015, Research on the effects of wildland fire and fire management on federally listed species and their habitats on San Clemente Island, Southern California: U.S. Geological Survey Open-File Report 2015–1194, 34 p., https://doi.org/10.3133/ofr20151194.

Keeley, J.E., and Syphard, A.D., 2015, Different fire-climate relationships on forested and non-forested landscapes in the Sierra Nevada ecoregion: International Journal of Wildland Fire, v. 24, no. 1, p. 27–36, https://doi.org/10.1071/WF14102.

King, D.A., Bachelet, D., and Symstad, A.J., 2015, Application of MC1 to Wind Cave National Park—Lessons from a small-scale study, chap. 8 *of* Bachelet, D., and Turner, D., eds., Global vegetation dynamics: Concepts and applications in the MC1 model: Hoboken, N.J., American Geophysical Union, p. 115–134, https://doi.org/10.1002/9781119011705.ch8.

Liu, Z., Wimberly, M.C., Lamsal, A., Sohl, T.L., and Hawbaker, T.J., 2015, Climate change and wildfire risk in an expanding wildland–urban interface—a case study from the Colorado Front Range corridor: Landscape Ecology, v. 30, no. 10, p. 1943–1957, https://doi.org/10.1007/s10980-015-0222-4.

Lockyer, Z.B., Coates, P.S., Casazza, M.L., Espinosa, S., and Delehanty, D.J., 2015, Nest-site selection and reproductive success of greater sage-grouse in a fire-affected habitat of northwestern Nevada: Journal of Wildlife Management, v. 79, no. 5, p. 785–797, https://doi.org/10.1002/jwmg.899.

Mahoney, K.R., Russell, K.R., Ford, W.M., Rodrigue, J.L., Riddle, J.D., Schuler, T.M., and Adams, M.B., 2015, Woodland salamander responses to a shelterwood harvest-prescribed burn silvicultural treatment within Appalachian mixed-oak forests: Forest Ecology and Management, v. 359, January, p. 277–285, https://doi.org/10.1016/j.foreco.2015.09.042.

Matchett, J.R., Lutz, J.A., Tarnay, L.W., Smith, D.G., Becker, K.M.L., and Brooks, M.L., 2015, Impacts of fire management on aboveground tree carbon stocks in Yosemite and Sequoia & Kings Canyon National Parks: National Park Service, Natural Resource Stewardship and Science, Natural Resource Report NPS/SIEN/NRR—2015/910, https://irma.nps.gov/DataStore/Reference/Profile/2219463.

McCreedy, C., van Riper, C., III, Esque, T.C., and Darrah, A.J., 2015, Effects of drought and fire on bird communities of the Kofa National Wildlife Refuge, Arizona: U.S. Geological Survey Open-File Report 2015–1240, 34 p., https://doi.org/10.3133/ofr20151240.

McNally, A., Husak, G.J., Brown, M., Carroll, M., Funk, C., Yatheendradas, S., Arsenault, K., Peters-Lidard, C., and Verdin, J.P., 2015, Calculating crop water requirement satisfaction in the West Africa Sahel with remotely sensed soil moisture: Journal of Hydrometeorology, v. 16, no. 1, p. 295–305, https://doi.org/10.1175/JHM-D-14-0049.1.

Meyer, M.D., Roberts, S.L., Wills, R., Brooks, M.L., and Winford, E.M., 2015, Principles of effective USA Federal fire management plans: Fire Ecology, v. 11, no. 2, p. 59–83, https://doi.org/10.4996/fireecology.1102059.

Millar, C.I., and Stephenson, N.L., 2015, Temperate forest health in an era of emerging megadisturbance: Science, v. 349, no. 6520, p. 823–826, https://doi.org/10.1126/science.aaa9933.

Miller, J.E.D., Damschen, E.I., Harrison, S.P., and Grace, J.B., 2015, Landscape structure affects specialists but not generalists in naturally fragmented grasslands: Ecology, v. 96, no. 12, p. 3323–3331, https://doi.org/10.1890/15-0245.1.

Moody, J.A., Ebel, B.A., Nyman, P., Martin, D.A., Stoof, C., and McKinley, R., 2015, Relations between soil hydraulic properties and burn severity: International Journal of Wildland Fire, v. 25, no. 3, p. 279–293, https://doi.org/10.1071/WF14062.

Munson, S.M., Long, A.L., Decker, C., Johnson, K.A., Walsh, K., and Miller, M.E., 2015, Repeated landscape-scale treatments following fire suppress a non-native annual grass and promote recovery of native perennial vegetation: Biological Invasions, v. 17, no. 6, p. 1915–1926, https://doi.org/10.1007/s10530-015-0847-x.

Murphy, S.F., Writer, J.H., McCleskey, R.B., and Martin, D.A., 2015, The role of precipitation type, intensity, and spatial distribution in source water quality after wildfire: Environmental Research Letters, v. 10, no. 8, article no. 084007, 13 p., https://doi.org/10.1088/1748-9326/10/8/084007.

Nesmith, J.C.B., Das, A.J., O'Hara, K.L., and van Mantgem, P.J., 2015, The influence of prefire tree growth and crown condition on postfire mortality of sugar pine following prescribed fire in Sequoia National Park: Canadian Journal of Forest Research, v. 45, no. 7, p. 910–919, https://doi.org/10.1139/cjfr-2014-0449.

O'Donnell, M., 2015, Encapsulating model complexity and landscape-scale analyses of state-and-transition simulation models—an application of ecoinformatics and juniper encroachment in sagebrush steppe ecosystems: AIMS Environmental Science, v. 2, no. 3, p. 464–493, https://doi.org/10.3934/environsci.2015.3.464.

Pardo, L.H., Robin-Abbott, M.J., Fenn, M.E., Goodale, C.L., Geiser, L.H., Driscoll, C.T., Allen, E.B., Baron, J.S., Bobbink, R., Bowman, W.D., Clark, C.M., Emmett, B., Gilliam, F.S., Greaver, T.L., Hall, S.J., Lilleskov, E.A., Liu, L., Lynch, J.A., Nadelhoffer, K.J., Perakis, S.J., Stoddard, J.L., Weathers, K.C., and Dennis, R.L., 2015, Effects and empirical critical loads of nitrogen for ecoregions of the United States, chap. 5 *of* Critical loads and dynamic risk assessments: Springer, p. 129–169. https://www.fs.usda.gov/treesearch/pubs/48506.

Pastick, N.J., Jorgenson, M.T., Wylie, B.K., Nield, S.J., Johnson, K.D., and Finley, A.O., 2015, Distribution of near-surface permafrost in Alaska—Estimates of present and future conditions: Remote Sensing of Environment, v. 168, p. 301–315, https://doi.org/10.1016/j.rse.2015.07.019.

Peterson, B., Nelson, K.J., Seielstad, C., Stoker, J., Jolly, W.M., and Parsons, R., 2015, Automated integration of lidar into the LANDFIRE product suite: Remote Sensing Letters, v. 6, p. 247–256, https://doi.org/10.1080/2150704X.2015.1029086.

Pyke, D., Chambers, J., Pellant, M., Knick, S., Miller, R.F., Beck, J.L., Doescher, P., Schupp, E., Roundy, B., Brunson, M., and McIver, J., 2015, Restoration handbook for sagebrush steppe ecosystems with emphasis on greater sage-grouse habitat —Part 1. Concepts for understanding and applying restoration: U.S. Geological Survey Circular 1416, 44 p., https://doi.org/10.3133/cir1416.

Reddy, A.D., Hawbaker, T.J., Wurster, F., Zhu, Z., Ward, S., Newcomb, D., and Murray, R., 2015, Quantifying soil carbon loss and uncertainty from a peatland wildfire using multi-temporal LIDAR: Remote Sensing of Environment, v. 170, p. 306–316, https://doi.org/10.1016/j.rse.2015.09.017.

Reisner, M.D., Doescher, P.S., and Pyke, D.A., 2015, Stress-gradient hypothesis explains susceptibility to *Bromus tectorum* invasion and community stability in North America's semi-arid *Artemisia tridentata wyomingensis* ecosystems: Journal of Vegetation Science, v. 26, no. 6, p. 1212–1224, https://doi.org/10.1111/jvs.12327.

Reker, R., Sohl, T.L., and Gallant, A.L., 2015, Using Landsat imagery to detect, monitor, and project net landscape change: All-Bird Bulletin, Spring 2015, p. 13–17, 25, http://www.nabci-us.org/assets/bulletin/Bulletin-Spring2015.pdf.

Roberts, S.L., Kelt, D.A., van Wagtendonk, J.W., Miles, A.K., and Meyer, M.D., 2015, Effects of fire on small mammal communities in frequent-fire forests in California: Journal of Mammalogy, v. 96, no. 1, p. 107–119, https://doi.org/10.1093/jmammal/gyu011.

Rosenberger, A.E., Dunham, J.B., Neuswanger, J.R., and Railsback, S.F., 2015, Legacy effects of wildfire on stream thermal regimes and rainbow trout ecology—an integrated analysis of observation and individual-based models: Freshwater Science, v. 34, no. 4, p. 1571–1584, https://doi.org/10.1086/683338.

Sankey, J.B., McVay, J., Kreitler, J., Hawbaker, T., Vaillant, N., and Lowe, S., 2015, Predicting watershed post-fire sediment yield with the InVEST sediment retention model—Accuracy and uncertainties, *in* Post fire analyses and restoration 1, sect. 5E *of* Proceedings of the [3rd] Joint Federal Interagency Conference 2015 (JFIC 2015), Apr. 19–23, Reno, Nev.: Reno, Nev., 3rd JFIC, 2015, Advisory Committee on Water Information, Subcommittee on Sedimentation, p. 987–998, https://acwi.gov/sos/pubs/3rdJFIC/Proceedings.pdf.

Schwartz, M.W., Butt, N., Dolanc, C.R., Holguin, A., Moritz, M.A., North, M.P., Safford, H.D., Stephenson, N.L., Thorne, J.H., and van Mantgem, P.J., 2015, Increasing elevation of fire in the Sierra Nevada and implications for forest change: Ecosphere, v. 6, no. 7, article no. 121, 10 p., https://doi.org/10.1890/ES15-00003.1.

Scoles-Sciulla, S.J., DeFalco, L.A., and Esque, T.C., 2015, Contrasting long-term survival of two outplanted Mojave Desert perennials for post-fire revegetation: Arid Land Research and Management, v. 29, no. 1, p. 110–124, https://doi.org/10.1080/15324982.2014.901994.

Sedell, E.R., Gresswell, R.E., and McMahon, T.E., 2015, Predicting spatial distribution of postfire debris flows and potential consequences for native trout in headwater streams: Freshwater Science, v. 34, no. 4, p. 1558–1570, https://doi.org/10.1086/684094.

Sherson, L.R., and Rice, S.E., 2015, Water resources during drought conditions and postfire water quality in the upper Rio Hondo Basin, Lincoln County, New Mexico, 2010–13: U.S. Geological Survey Scientific Investigations Report 2015–5086, 56 p., https://doi.org/10.3133/sir20155086.

Shinneman, D.J., Halford, A.S., Howell, C., Krasnow, K.D., and Strand, E.K., 2015, Management of aspen in a changing environment: Great Basin Fact Sheet no. 12, 8 p., https://www.sagegrouseinitiative.com/management-of-aspen-in-a-changing-environment/.

Shinneman, D., Pilliod, D., Arkle, R., and Glenn, N.F., 2015, Quantifying and predicting fuels and the effects of reduction treatments along successional and invasion gradients in sagebrush habitats: U.S. Geological Survey unnumbered series report, 44 p., https://doi.org/10.3133/70159656.

Shryock, D.F., Esque, T.C., and Chen, F.C., 2015, A 30-year chronosequence of burned areas in Arizona—Effects of wildfires on vegetation in Sonoran Desert Tortoise (*Gopherus morafkai*) habitats: U.S. Geological Survey Open-File Report 2015–1060, 61 p., https://doi.org/10.3133/ofr20151060.

Shryock, D.F., Esque, T.C., and Chen, F.C., 2015, Topography and climate are more important drivers of long-term, post-fire vegetation assembly than time-since-fire in the Sonoran Desert, US: Journal of Vegetation Science, v. 26, no. 6, p. 1134–1147, https://doi.org/10.1111/jvs.12324.

Smith, T.J., III, Foster, A.M., and Jones, J.W., 2015, Fire history of Everglades National Park and Big Cypress National Preserve, southern Florida: U.S. Geological Survey Open-File Report 2015–1034, 86 p., https://doi.org/10.3133/ofr20151034.

Staley, D.M., Gartner, J.E., and Kean, J.W., 2015, Objective definition of rainfall intensity-duration thresholds for post-fire flash floods and debris flows in the area burned by the Waldo Canyon fire, Colorado, USA, chap. 103 *of* Lollino, G., Giordan, D., Crosta, G.B., Corominas, J., Azzam, R., Wasowski, J., and Sciarra, N., eds., Engineering geology for society and territory—Volume 2—Landslide processes: New York, Springer, p. 621–624, https://doi.org/10.1007/978-3-319-09057-3_103.

Symstad, A.J., Smith, A.T., Newton, W.E., and Knapp, A.K., 2015, Potential nitrogen critical loads for northern Great Plains grassland vegetation: U.S. National Park Service, Natural Resource Report NPS/NGPN/NRR—2015/989, 59 p., https://irma.nps.gov/DataStore/Reference/Profile/2222974.

Syphard, A.D., and Keeley, J.E., 2015, Location, timing and extent of wildfire vary by cause of ignition: International Journal of Wildland Fire, v. 24, no. 1, p. 37–47, https://doi.org/10.1071/WF14024.

Tadesse, T., Wardlow, B.D., Brown, J.F., Svoboda, M.D., Hayes, M.J., Fuchs, B., and Gutzmer, D., 2015, Assessing the vegetation condition impacts of the 2011 drought across the U.S. southern Great Plains using the Vegetation Drought Response Index (VegDRI): Journal of Applied Meteorology and Climatology, v. 54, no. 1, p. 153–169, https://doi.org/10.1175/JAMC-D-14-0048.1.

Telis, P.A., Xie, Z., Liu, Z., Li, Y., and Conrads, P.A., 2015, The Everglades Depth Estimation Network (EDEN) surface-water model, version 2: U.S. Geological Survey Scientific Investigations Report 2014–5209, 42 p., https://doi.org/10.3133/sir20145209.

Tillman, F.D., Flynn, M.E., and Anning, D.W., 2015, Geospatial datasets for assessing the effects of rangeland conditions on dissolved-solids yields in the Upper Colorado River Basin: U.S. Geological Survey Open-File Report 2015–1007, 21 p., https://doi.org/10.3133/ofr20151007.

Urbieta, I.R., Zavala, G., Bedia, J., Gutiérrez, J.M., Miguel-Ayanz, J.S., Camia, A., Keeley, J.E., and Moreno, J.M., 2015, Fire activity as a function of fire-weather seasonal severity and antecedent climate across spatial scales in southern Europe and Pacific western USA: Environmental Research Letters, v. 10, no. 11, article no. 114013, 12 p., https://doi.org/10.1088/1748-9326/10/11/114013.

van Mantgem, E.F., Keeley, J.E., and Witter, M., 2015, Faunal responses to fire in chaparral and sage scrub in California, USA: Fire Ecology, v. 11, no. 3, p. 128–148, https://doi.org/10.4996/fireecology.1103128.

Varner, J., Lambert, M.S., Horns, J.J., Laverty, S., Dizney, L., Beever, E.A., and Dearing, M.D., 2015, Too hot to trot? Evaluating the effects of wildfire on patterns of occupancy and abundance for a climate-sensitive habitat specialist: International Journal of Wildland Fire, v. 24, no. 7, p. 921–932, https://doi.org/10.1071/WF15038.

White, A.M., Manley, P.N., Tarbill, G.L., Richardson, T.W., Russell, R.E., Safford, H.D., and Dobrowski, S.Z., 2015, Avian community responses to post-fire forest structure—implications for fire management in mixed conifer forests: Animal Conservation, v. 19, no. 3, p. 256–264, https://doi.org/10.1111/acv.12237.

Wu, Z., Middleton, B., Hetzler, R., Vogel, J., and Dye, D., 2015, Vegetation burn severity mapping using Landsat-8 and WorldView-2: Photogrammetric Engineering & Remote Sensing, v. 81, no. 2, p. 143–154, https://doi.org/10.14358/PERS.81.2.143.

Yang, J., Weisberg, P.J., Shinneman, D.J., Dilts, T.E., Earnst, S.L., and Scheller, R.M., 2015, Fire modulates climate change response of simulated aspen distribution across topoclimatic gradients in a semi-arid montane landscape: Landscape Ecology, v. 30, no. 6, p. 1055–1073, https://doi.org/10.1007/s10980-015-0160-1.

Zahn, S.G., 2015, LANDFIRE: U.S. Geological Survey Fact Sheet 2015–3047, 2 p., https://doi.org/10.3133/fs20153047.

Zeigenfuss, L.C., and Johnson, T.L., 2015, Monitoring of vegetation response to elk population and habitat management in Rocky Mountain National Park, 2008–14: U.S. Geological Survey Open-File Report 2015–1216, 44 p., https://doi.org/10.3133/ofr20151216.

2014: 71 Publications

Adamson, T., 2014, Earthshots—Satellite images of environmental change—Yellowstone National Park, USA web page: U.S. Geological Survey website, https://earthshots.usgs.gov/earthshots/node/66.

Arkle, R.S., Pilliod, D.S., Hanser, S.E., Brooks, M.L., Chambers, J.C., Grace, J.B., Knutson, K.C., Pyke, D.A., Welty, J.L., and Wirth, T.A., 2014, Quantifying restoration effectiveness using multi-scale habitat models—implications for sage-grouse in the Great Basin: Ecosphere, v. 5, no. 3, article no. 31, 32 p., https://doi.org/10.1890/ES13-00278.1.

Bodi, M.B., Martin, D.A., Balfour, V.N., Santin, C., Doerr, S.H., Pereira, P., Cerdà, A., and Mataix-Solera, J., 2014, Wildland fire ash—Production, composition and eco-hydro-geomorphic effects: Earth-Science Reviews, v. 130, March, p. 103–127, https://doi.org/10.1016/j.earscirev.2013.12.007.

Bradford, J.B., Schlaepfer, D.R., and Lauenroth, W.K., 2014, Ecohydrology of adjacent sagebrush and lodgepole pine ecosystems—The consequences of climate change and disturbance: Ecosystems, v. 17, no. 4, p. 590–605, https://doi.org/10.1007/s10021-013-9745-1.

Breininger, D., Duncan, B., Eaton, M., Johnson, F., and Nichols, J., 2014, Integrating land cover modeling and adaptive management to conserve endangered species and reduce catastrophic fire risk: Land, v. 3, no. 3, p. 874–897, https://doi.org/10.3390/land3030874.

Chambers, J.C., Miller, R.F., Board, D.I., Pyke, D.A., Roundy, B.A., Grace, J.B., Schupp, E.W., and Tausch, R.J., 2014, Resilience and resistance of sagebrush ecosystems—Implications for state and transition models and management treatments: Rangeland Ecology & Management, v. 67, no. 5, p. 440–454, https://doi.org/10.2111/REM-D-13-00074.1.

Chambers, J.C., Pyke, D.A., Maestas, J.D., Pellant, M., Boyd, C.S., Campbell, S.B., Espinosa, S., Havlina, D.W., Mayer, K.E., and Wuenschel, A., 2014, Using resistance and resilience concepts to reduce impacts of invasive annual grasses and altered fire regimes on the sagebrush ecosystem and greater sage-grouse—A strategic multi-scale approach: U.S. Forest Service, Rocky Mountain Research Station, General Technical Report RMRS–GTR–326, 73 p., https://doi.org/10.2737/RMRS-GTR-326.

Cole, C.J., Friesen, B.A., and Wilson, E.M., 2014, Use of satellite imagery to identify vegetation cover changes following the Waldo Canyon fire event, Colorado, 2012–2013: U.S. Geological Survey Open-File Report 2014–1078, 1 sheet, https://doi.org/10.3133/ofr20141078.

Collins, B.M., Das, A.J., Battles, J.J., Fry, D.L., Krasnow, K.D., and Stephens, S.L., 2014, Beyond reducing fire hazard—fuel treatment impacts on overstory tree survival: Ecological Applications, v. 24, no. 8, p. 1879–1886, https://doi.org/10.1890/14-0971.1.

Connot, J.A., 2014, LANDFIRE 2001 and 2008 refresh—Geographic area report—Alaska: U.S. Geological Survey unnumbered series report, 68 p., https://doi.org/10.3133/70103363.

Douglas, T.A., Jones, M.C., Hiemstra, C.A., and Arnold, J.R., 2014, Sources and sinks of carbon in boreal ecosystems of interior Alaska—A review: Elementa, Science of the Anthropocene, v. 2, article no. 000032, 39 p., https://doi.org/10.12952/journal.elementa.000032.

Drus, G.M., Dudley, T.L., D'Antonio, C.M., Even, T.J., Brooks, M.L., and Matchett, J.R., 2014, Synergistic interactions between leaf beetle herbivory and fire enhance tamarisk (*Tamarix* spp.) mortality: Biological Control, v. 77, October, p. 29–40, https://doi.org/10.1016/j.biocontrol.2014.04.010.

Fulé, P.Z., Swetnam, T.W., Brown, P.M., Falk, D.A., Peterson, D.L., Allen, C.D., Aplet, G.H., Battaglia, M.A., Binkley, D., Farris, C., Keane, R.E., Margolis, E.Q., Grissino-Mayer, H., Miller, C., Sieg, C.H., Skinner, C., Stephens, S.L., and Taylor, A., 2014, Unsupported inferences of high-severity fire in historical dry forests of the western United States—response to Williams and Baker: Global Ecology and Biogeography, v. 23, no. 7, p. 825–830, https://doi.org/10.1111/geb.12136.

Gartner, J.E., Cannon, S.H., and Santi, P.M., 2014, Empirical models for predicting volumes of sediment deposited by debris flows and sediment-laden floods in the transverse ranges of southern California: Engineering Geology, v. 176, June, p. 45–56, https://doi.org/10.1016/j.enggeo.2014.04.008.

Gillan, J.K., Karl, J.W., Duniway, M., and Elaksher, A., 2014, Modeling vegetation heights from high resolution stereo aerial photography—An application for broad-scale rangeland monitoring: Journal of Environmental Management, v. 144, November, p. 226–235, https://doi.org/10.1016/j.jenvman.2014.05.028.

Grundel, R., Beamer, D.A., Glowacki, G.A., Frohnapple, K.J., and Pavlovic, N.B., 2014, Opposing resonses to ecological gradients structure amphibian and reptile communities across a temperate grassland-savanna-forest landscape: Biodiversity and Conservation, v. 24, no. 5, p. 1089–1108, https://doi.org/10.1007/s10531-014-0844-x.

Gunther, K.A., Shoemaker, R.R., Frey, K.L., Haroldson, M.A., Cain, S.L., van Manen, F.T., and Fortin, J.K., 2014, Dietary breadth of grizzly bears in the Greater Yellowstone Ecosystem: Ursus, v. 25, no. 1, p. 60–72, https://doi.org/10.2192/URSUS-D-13-00008.1.

Gustine, D.D., Brinkman, T.J., Lindgren, M.A., Schmidt, J.I., Rupp, T.S., and Adams, L.G., 2014, Climate-driven effects of fire on winter habitat for caribou in the Alaskan-Yukon Arctic: PLOS ONE, v. 9, no. 7, e100588, 11 p., https://doi.org/10.1371/journal.pone.0100588.

Hatten, J.R., 2014, Mapping and monitoring Mount Graham red squirrel habitat with lidar and Landsat imagery: Ecological Modelling, v. 289, October, p. 106–123, https://doi.org/10.1016/j.ecolmodel.2014.07.004.

Hawbaker, T.J., and Zhu, Z., 2014, Wildland fire occurrence and emissions in the eastern United States from 2001 through 2050, chap. 4 *of* Zhu, Z.-L., and Reed, B.C., eds., Baseline and projected future carbon storage and greenhouse-gas fluxes in ecosystems of the Eastern United States: U.S. Geological Survey Professional Paper 1804, p. 7–16, https://doi.org/10.3133/pp1804.

Howe, K.B., Coates, P.S., and Delehanty, D.J., 2014, Selection of anthropogenic features and vegetation characteristics by nesting common ravens in the sagebrush ecosystem: The Condor, v. 116, no. 1, p. 35–49, https://doi.org/10.1650/CONDOR-13-115-R2.1.

Hurteau, M.D., Bradford, J.B., Fulé, P.Z., Taylor, A.H., and Martin, K.L., 2014, Climate change, fire management, and ecological services in the southwestern US: Forest Ecology and Management, v. 327, September, p. 280–289, https://doi.org/10.1016/j.foreco.2013.08.007.

Jones, L.C., Schwinning, S., and Esque, T.C., 2014, Seedling ecology and restoration of blackbrush (*Coleogyne ramosissima*) in the Mojave Desert, United States: Restoration Ecology, v. 22, no. 5, p. 692–700, https://doi.org/10.1111/rec.12128.

Jones, M.C., Bernhardt, C.E., and Willard, D.A., 2014, Late Holocene vegetation, climate, and land-use impacts on carbon dynamics in the Florida Everglades: Quaternary Science Reviews, v. 90, April, p. 90–105, https://doi.org/10.1016/j.quascirev.2014.02.010.

Kane, V.R., North, M.P., Lutz, J.A., Churchill, D.J., Roberts, S.L., Smith, D.F., McGaughey, R.J., Kane, J.T., and Brooks, M.L., 2014, Assessing fire effects on forest spatial structure using a fusion of Landsat and airborne lidar data in Yosemite National Park: Remote Sensing of Environment, v. 151, August, p. 89–101, https://doi.org/10.1016/j.rse.2013.07.041.

Karl, J.W., Gillan, J.K., Barger, N.N., Herrick, J.E., and Duniway, M.C., 2014, Interpretation of high-resolution imagery for detecting vegetation cover composition change after fuels reduction treatments in woodlands: Ecological Indicators, v. 45, October, p. 570–578, https://doi.org/10.1016/j.ecolind.2014.05.017.

Knick, S.T., Hanser, S.E., and Leu, M., 2014, Ecological scale of bird community response to piñon-juniper removal: Rangeland Ecology & Management, v. 67, no. 5, p. 553–562, https://doi.org/10.2111/REM-D-13-00023.1.

Knutson, K.C., Pyke, D.A., Wirth, T.A., Arkle, R.S., Pilliod, D.S., Brooks, M.L., Chambers, J.C., and Grace, J.B., 2014, Long-term effects of seeding after wildfire on vegetation in Great Basin shrubland ecosystems: Journal of Applied Ecology, v. 51, no. 5, p. 1414–1424, https://doi.org/10.1111/1365-2664.12309.

Koch, J.C., Kikuchi, C.P., Wickland, K.P., and Schuster, P., 2014, Runoff sources and flow paths in a partially burned, upland boreal catchment underlain by permafrost: Water Resources Research, v. 50, no. 10, p. 8141–8158, https://doi.org/10.1002/2014WR015586.

Kurth, V.J., D'Amato, A.W., Palik, B.J., and Bradford, J.B., 2014, Fifteen-year patterns of soil carbon and nitrogen following biomass harvesting: Soil Science Society of America Journal, v. 78, no. 2, p. 624, https://doi.org/10.2136/sssaj2013.08.0360.

Lewis, T.L., Lindberg, M.S., Schmutz, J.A., and Bertram, M.R., 2014, Multi-trophic resilience of boreal lake ecosystems to forest fires: Ecology, v. 95, no. 5, p. 1253–1263, https://doi.org/10.1890/13-1170.1.

Liu, L., Jafarov, E.E., Schaefer, K.M., Jones, B.M., Zebker, H.A., Williams, C.A., Rogan, J., and Zhang, T., 2014, InSAR detects increase in surface subsidence caused by an Arctic tundra fire: Geophysical Research Letters, v. 41, no. 11, p. 3906–3913, https://doi.org/10.1002/2014GL060533.

Lovich, J.E., Agha, M., Yackulic, C.B., Meyer-Wilkins, K., Bjurlin, C., Ennen, J.R., Arundel, T.R., and Austin, M., 2014, Nest site characteristics, nesting movements, and lack of long-term nest site fidelity in Agassiz's desert tortoises at a wind energy facility in southern California: California Fish and Game, v. 100, no. 3, p. 404–416, https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=93571&inline.

Manies, K.L., Harden, J.W., and Holingsworth, T.N., 2014, Soils, vegetation, and woody debris data from the 2001 survey line fire and a comparable unburned site, Tanana Flats region, Alaska: U.S. Geological Survey Open-File Report 2014–1049, 36 p., https://doi.org/10.3133/ofr20141049.

Marcot, B.G., Jorgenson, M.T., and DeGange, A.R., 2014, Low-altitude photographic transects of the Arctic Network of National Park Units and Selawik National Wildlife Refuge, Alaska, July 2013: U.S. Geological Survey Data Series 846, 44 p., https://doi.org/10.3133/ds846.

McIver, J., Brunson, M., Bunting, S., Chambers, J., Doescher, P., Grace, J., Hulet, A., Johnson, D., Knick, S., Miller, R., Pellant, M., Pierson, F., Pyke, D., Rau, B., Rollins, K., Roundy, B., Schupp, E., Tausch, R., and Williams, J., 2014, A synopsis of short-term response to alternative restoration treatments in sagebrush-steppe—The SageSTEP Project: Rangeland Ecology & Management, v. 67, no. 5, p. 584–598, https://doi.org/10.2111/REM-D-14-00084.1.

Moody, J.A., and Ebel, B.A., 2014, Infiltration and runoff generation processes in fire-affected soils: Hydrological Processes, v. 28, no. 9, p. 3432–3453, https://doi.org/10.1002/hyp.9857.

Muhs, D.R., 2014, The contributions of Donald Lee Johnson to understanding the Quaternary geologic and biogeographic history of the California Channel Islands: Monographs of the Western North American Naturalist, v. 7, no. 1, 20 p., https://doi.org/10.3398/042.007.0105.

Ostoja, S.M., Brooks, M.L., Dudley, T., and Lee, S.R., 2014, Short-term vegetation response following mechanical control of saltcedar (*Tamarix* spp.) on the Virgin River, Nevada, USA: Invasive Plant Science and Management, v. 7, no. 2, p. 310–319, https://doi.org/10.1614/IPSM-D-13-00064.1.

Pastick, N.J., Rigge, M., Wylie, B.K., Jorgenson, M.T., Rose, J.R., Johnson, K.D., and Ji, L., 2014, Distribution and landscape controls of organic layer thickness and carbon within the Alaskan Yukon River Basin: Geoderma, v. 230–231, October, p. 79–94, https://doi.org/10.1016/j.geoderma.2014.04.008.

Pausas, J.G., and Keeley, J.E., 2014, Abrupt climate-independent fire regime changes: Ecosystems, v. 17, no. 6, p. 1109–1120, https://doi.org/10.1007/s10021-014-9773-5.

Pausas, J.G., and Keeley, J.E., 2014, Evolutionary ecology of resprouting and seeding in fire-prone ecosystems: New Phytologist, v. 204, no. 1, p. 55–65, https://doi.org/10.1111/nph.12921.

Pellerin, B.A, and Bergamaschi, B.A., 2014, Optical sensors for water quality: Lakeline, Spring 2014, p. 13–17, https://water.usgs.gov/coop/features/LakeLine_Spring_2014_p13-17.pdf.

Penman, T.D., Collins, L., Syphard, A.D., Keeley, J.E., Bradstock, R.A., and Dutta, R., ed., 2014, Influence of fuels, weather and the built environment on the exposure of property to wildfire: PLOS ONE, v. 9, no. 10, e111414, 9 p., https://doi.org/10.1371/journal.pone.0111414.

Perkins, K.S., Nimmo, J.R., Medeiros, A.C., Szutu, D.J., and von Allmen, E., 2014, Assessing effects of native forest restoration on soil moisture dynamics and potential aquifer recharge, Auwahi, Maui: Ecohydrology, v. 7, no. 5, p. 1437–1451, https://doi.org/10.1002/eco.1469.

Peterson, B., and Nelson, K.J., 2014, Mapping forest height in Alaska using GLAS, Landsat composites, and airborne lidar: Remote Sensing, v. 6, no. 12, p. 12409–12426, https://doi.org/10.3390/rs61212409.

Pickens, B.A., and King, S.L., 2014, Linking multi-temporal satellite imagery to coastal wetland dynamics and bird distribution: Ecological Modelling, v. 285, August, p. 1–12, https://doi.org/10.1016/j.ecolmodel.2014.04.013.

Picotte, J.J., Coan, M., and Howard, S.M., 2014, Use of multi-sensor active fire detections to map fires in the United States—The future of monitoring trends in burn severity, *in* Waldrop, T.A., ed., Wildland fire in the Appalachians—Discussions among managers and scientists, Roanoke, Va., October 8–10, 2013, Proceedings: USDA Forest Service, General Technical Report SRS–199, p. 155–161, https://www.srs.fs.usda.gov/pubs/gtr/gtr_srs199/gtr_srs199.pdf.

Pierce, K.L., Licciardi, J.M., Krause, T.R., and Whitlock, C., 2014, Glacial and Quaternary geology of the northern Yellowstone area, Montana and Wyoming, chap. 9 *of* Shaw, C.A., and Tikoff, B., eds., Exploring the northern Rocky Mountains: Boulder, Colo., Geological Society of America, Field guide no. 37, p. 189–203, https://doi.org/10.1130/2014.0037(09).

Pigati, J.S., McGeehin, J.P., Skipp, G.L., and Muhs, D.R., 2014, Evidence of repeated wildfires prior to human occupation on San Nicolas Island, California: Monographs of the Western North American Naturalist, v. 7, no. 1, p. 35–47, https://doi.org/10.3398/042.007.0107.

Preisler, H.K., Eidenshink, J., Howard, S., and Burgan, R.E., 2014, Forecasting distribution of numbers of large fires, *in* Keane, R.E., Jolly, M., Parsons, R., and Riley, K., eds., Proceedings of the large wildland fires conference, May 19–23, 2014, Missoula, Mont.: U.S. Forest Service, Rocky Mountain Research Station, RMRS–P–73, p. 181–187, https://www.fs.usda.gov/treesearch/pubs/49442.

Prouty, N.G., Storlazzi, C.D., McCutcheon, A.L., and Jenson, J.W., 2014, Historic impact of watershed change and sedimentation to reefs along west-central Guam: Coral Reefs, v. 33, no. 3, p. 733–749, https://doi.org/10.1007/s00338-014-1166-x.

Pyke, D.A., Shaff, S.E., Lindgren, A.I., Schupp, E.W., Doescher, P.S., Chambers, J.C., Burnham, J.S., and Huso, M.M., 2014, Region-wide ecological responses of arid Wyoming big sagebrush communities to fuel treatments: Rangeland Ecology & Management, v. 67, no. 5, p. 455–467, https://doi.org/10.2111/REM-D-13-00090.1.

Quirk, B.K., and Hutt, M.E., 2014, Unmanned aircraft systems (UAS) activities at the Department of the Interior: Photogrammetric Engineering and Remote Sensing, v. 80, no. 12, p. 1089–1095, http://www.asprs.org/a/publications/pers/2014journals/PERS_December_2014/HTML/files/assets/basic-html/index.html#1089.

Rao, L.E., Matchett, J.R., Brooks, M.L., Johnson, R.F., Minnich, R.A., and Allen, E.B., 2014, Relationships between annual plant productivity, nitrogen deposition and fire size in low-elevation California desert scrub: International Journal of Wildland Fire, v. 24, no. 1, p. 48–58, https://doi.org/10.1071/WF13152.

Rau, B.M., Chambers, J.C., Pyke, D.A., Roundy, B.A., Schupp, E.W., Doescher, P., and Caldwell, T.G., 2014, Soil resources influence vegetation and response to fire and fire-surrogate treatments in sagebrush-steppe ecosystems: Rangeland Ecology & Management, v. 67, no. 5, p. 506–521, https://doi.org/10.2111/REM-D-14-00027.1.

Saracco, J.F., Holmgren, A.L., Wilkerson, R.L., Siegel, R.B., Kuntz, R.C., II, Jenkins, K.J., Happe, P.J., Boetsch, J.R., and Huff, M.H., 2014, Landbird trends in National Parks of the North Coast and Cascades Network, 2005–12: U.S. Geological Survey Open-File Report 2014–1202, 36 p., https://doi.org/10.3133/ofr20141202.

Schuette, P.A., Diffendorfer, J.E., Deutschman, D.H., Tremor, S., and Spencer, W., 2014, Carnivore distributions across chaparral habitats exposed to wildfire and rural housing in southern California: International Journal of Wildland Fire, v. 23, no. 4, p. 591–600, https://doi.org/10.1071/WF13062.

Shanahan, E., Irvine, K.M., Roberts, D., Litt, A.R., Legg, K., and Daley, R., 2014, Status of whitebarkpine in the Greater Yellowstone Ecosystem—A step-trend analysis comparing 2004–2007 to 2008–2011: U.S. National Park Service, Natural Resource Technical Report NPS/GRYN/NRTR—2014/917, 27 p., https://irma.nps.gov/DataStore/Reference/Profile/2216554.

Shryock, D.F., Defalco, L.A., and Esque, T.C., 2014, Life-history traits predict perennial species response to fire in a desert ecosystem: Ecology and Evolution, v. 4, no. 15, p. 3046–3059, https://doi.org/10.1002/ece3.1159.

Staley, D.M., 2014, Emergency assessment of post-fire debris-flow hazards for the 2013 Springs fire, Ventura County, California: U.S. Geological Survey Open-File Report 2014–1001, 10 p., 3 pls., https://doi.org/10.3133/ofr20141001.

Staley, D.M., Wasklewicz, T.A., and Kean, J.W., 2014, Characterizing the primary material sources and dominant erosional processes for post-fire debris-flow initiation in a headwater basin using multi-temporal terrestrial laser scanning data: Geomorphology, v. 214, June, p. 324–338, https://doi.org/10.1016/j.geomorph.2014.02.015.

Stephens, S.L., Burrows, N., Buyantuyev, A., Gray, R.W., Keane, R.E., Kubian, R., Liu, S., Seijo, F., Shu, L., Tolhurst, K.G., and van Wagtendonk, J.W., 2014, Temperate and boreal forest mega-fires—characteristics and challenges: Frontiers in Ecology and the Environment, v. 12, no. 2, p. 115–122, https://doi.org/10.1890/120332.

Symstad, A.J., Newton, W.E., and Swanson, D.J., 2014, Strategies for preventing invasive plant outbreaks after prescribed fire in ponderosa pine forest: Forest Ecology and Management, v. 324, July, p. 81–88, https://doi.org/10.1016/j.foreco.2014.04.022.

Syphard, A.D., Brennan, T.J., and Keeley, J.E., 2014, The role of defensible space for residential structure protection during wildfires: International Journal of Wildland Fire, v. 23, no. 8, p. 1165–1175, https://doi.org/10.1071/WF13158.

Tillery, A.C., Haas, J.R., Miller, L.W., Scott, J.H., and Thompson, M.P., 2014, Potential postwildfire debris-flow hazards—A prewildfire evaluation for the Sandia and Manzano Mountains and surrounding areas, central New Mexico: U.S. Geological Survey Scientific Investigations Report 2014–5161, 24 p., https://doi.org/10.3133/sir20145161.

West, D.R., Briggs, J.S., Jacobi, W.R., and Negrón, J.F., 2014, Mountain pine beetle-caused mortality over eight years in two pine hosts in mixed-conifer stands of the southern Rocky Mountains: Forest Ecology and Management, v. 334, December, p. 321–330, https://doi.org/10.1016/j.foreco.2014.09.012.

Weyenberg, S.A., and Pavlovic, N.B., 2014, Vegetation dynamics after spring and summer fires in red and white pine stands at Voyageurs National Park: Natural Areas Journal, v. 34, no. 4, p. 443–458, https://doi.org/10.3375/043.034.0406.

Wickham, J., Homer, C., Vogelmann, J., McKerrow, A., Mueller, R., Herold, N., and Coulston, J., 2014, The Multi-Resolution Land Characteristics (MRLC) consortium—20 years of development and integration of USA national land cover data: Remote Sensing, v. 6, no. 8, p. 7424–7441, https://doi.org/10.3390/rs6087424.

Willey, D.W., and Van Riper, C., III, 2014, Home range characteristics of Mexican spotted owls in the Rincon Mountains, Arizona: The Wilson Journal of Ornithology, v. 126, no. 1, p. 53–59, https://doi.org/10.1676/13-029.1.

Wylie, B., Rigge, M., Brisco, B., Murnaghan, K., Rover, J., and Long, J., 2014, Effects of disturbance and climate change on ecosystem performance in the Yukon River Basin boreal forest: Remote Sensing, v. 6, no. 10, p. 9145–9169, https://doi.org/10.3390/rs6109145.

2013: 98 Publications

Assal, T., and Sibold, J., 2013, Modeling mountain pine beetle disturbance in Glacier National Park using multiple lines of evidence, *in* Vegetation Dynamics II, Association of American Geographers 2013 Annual Meeting, Los Angeles, Calif., April 9–13, 2013, Proceedings: Washington, D.C., Association of American Geographers, https://pubs.er.usgs.gov/publication/70118022.

Austin, J.E., and Buhl, D.A., 2013, Relating yellow rail (*Coturnicops noveboracensis*) occupancy to habitat and landscape features in the context of fire: Waterbirds, v. 36, no. 2, p. 199–213, https://doi.org/10.1675/063.036.0209.

Baron, J.S., Seastedt, T., Fagre, D., Hicke, J.A., Tomback, D., Garcia, E., Bowen, Z., and Logan, J.A., 2013, Symposium 9—Rocky Mountain futures—Preserving, utilizing, and sustaining Rocky Mountain ecosystems: Bulletin of the Ecological Society of America, v. 94, no. 2, p. 195–199, https://doi.org/10.1890/0012-9623-94.2.195.

Barrett, K., and Kasischke, E.S., 2013, Controls on variations in MODIS fire radiative power in Alaskan boreal forests—Implications for fire severity conditions: Remote Sensing of Environment, v. 130, March, p. 171–181, https://doi.org/10.1016/j.rse.2012.11.017.

Boves, T.J., Buehler, D.A., Sheehan, J., Wood, P.B., Rodewald, A.D., Larkin, J.L., Keyser, P.D., Newell, F.L., George, G.A., Bakermans, M.H., Evans, A., Beachy, T.A., McDermott, M.E., Perkins, K.A., White, M., and Wigley, T.B., 2013, Emulating natural disturbances for declining late-successional species—A case study of the consequences for cerulean warblers (*Setophaga cerulea*): PLOS ONE, v. 8, no. 1, p. 1–13, https://doi.org/10.1371/journal.pone.0052107.

Brooks, M.L., Chambers, J.C., and McKinley, R., 2013, Fire history, effects and management in southern Nevada, chap. 5 *of* Chambers, J.C., Brooks, M.L., Pendleton, B.K., and Raish, C.B., eds., The Southern Nevada Agency Partnership science and research synthesis—Science to support land management in southern Nevada: USDA Forest Service, General Technical Report RMRS–GTR–303, p. 75–96, https://www.fs.fed.us/rmrs/publications/fire-history-effects-and-management-southern-nevada-chapter-5.

Bursik, M., and Sieh, K., 2013, Digital database of the Holocene tephras of the Mono-Inyo Craters, California: U.S. Geological Survey Data Series 758, 6 p., https://doi.org/10.3133/ds758.

Caldwell, C.A., Jacobi, G.Z., Anderson, M.C., Parmenter, R.R., McGann, J., Gould, W.R., DuBey, R., and Jacobi, M.D., 2013, Prescribed-fire effects on an aquatic community of a southwest montane grassland system: North American Journal of Fisheries Management, v. 33, no. 5, p. 1049–1062, https://doi.org/10.1080/02755947.2013.824934.

Caldwell, M.K., Hawbaker, T.J., Briggs, J.S., Cigan, P.W., and Stitt, S., 2013, Simulated impacts of mountain pine beetle and wildfire disturbances on forest vegetation composition and carbon stocks in the southern Rocky Mountains: Biogeosciences, v. 10, no. 12, p. 8203–8222, https://doi.org/10.5194/bg-10-8203-2013.

Carr, N.B., Garman, S.L., Walters, A., Ray, A., Melcher, C.P., Wesner, J.S., O'Donnell, M.S., Sherrill, K.R., Babel, N.C., and Bowen, Z.H., 2013, Wyoming Basin rapid ecoregional assessment work plan: U.S. Geological Survey Open-File Report 2013–1223, 58 p., https://doi.org/10.3133/ofr20131223.

Chambers, J.C., Bradley, B.A., Brown, C.S., D'Antonio, C., Germino, M.J., Grace, J.B., Hardegree, S.P., Miller, R.F., and Pyke, D.A., 2013, Resilience to stress and disturbance, and resistance to *Bromus tectorum* L. invasion in cold desert shrublands of western North America: Ecosystems, v. 17, no. 2, p. 360–375, https://doi.org/10.1007/s10021-013-9725-5.

Clark, G.M., Fosness, R.L., and Wood, M.S., 2013, Sediment transport in the lower Snake and Clearwater River Basins, Idaho and Washington, 2008–11: U.S. Geological Survey Scientific Investigations Report 2013–5083, 56 p., https://doi.org/10.3133/sir20135083.

DeGraff, J.V., Cannon, S.H., and Parise, M., 2013, Limiting the immediate and subsequent hazards associated with wildfires, *in* Margottini, C., Canuti, P., and Sassa, K., eds., Landslide science and practice, Volume 4—Global environmental change: Berlin, Germany, Springer, p. 199–209. [Also available at https://doi.org/10.1007/978-3-642-31337-0_26.]

Ebel, B.A., 2013, Wildfire and aspect effects on hydrologic states after the 2010 Fourmile Canyon fire: Vadose Zone Journal, v. 12, no. 1, 19 p., https://doi.org/10.2136/vzj2012.0089.

Esque, T.C., Webb, R.H., Wallace, C.S.A., van Riper, C., McCreedy, C., and Smythe, L., 2013, Desert fires fueled by native annual forbs—Effects of fire on communities of plants and birds in the lower Sonoran Desert of Arizona: The Southwestern Naturalist, v. 58, no. 2, p. 223–233, https://doi.org/10.1894/0038-4909-58.2.223.

Forney, W.M., Oldham, I.B., and Crescenti, N., 2013, The development and application of a decision support system for land management in the Lake Tahoe Basin—The Land Use Simulation Model: U.S. Geological Survey Scientific Investigations Report 2012–5229, 52 p., https://doi.org/10.3133/sir20125229.

Frid, L., Holcombe, T., Morisette, J.T., Olsson, A.D., Brigham, L., Bean, T.M., Betancourt, J.L., and Bryan, K., 2013, Using state-and-transition modeling to account for imperfect detection in invasive species management: Invasive Plant Science and Management, v. 6, no. 1, p. 36–47, https://doi.org/10.1614/IPSM-D-11-00065.1.

Gannon, J.J., Shaffer, T.L., and Moore, C.T., 2013, Native Prairie Adaptive Management—A multi region adaptive approach to invasive plant management on Fish and Wildlife Service owned native prairies: U.S. Geological Survey Open-File Report 2013–1279, 184 p., https://doi.org/10.3133/ofr20131279.

Garmestani, A.S., and Allen, C.R., 2013, Panarchy, *in* El-Shaarawi, A.H. and Piegorsch, W.W., eds., Encyclopedia of Environmetrics: New York, Wiley, https://doi.org/10.1002/9780470057339.vnn160.

Genet, H., McGuire, A.D., Barrett, K., Breen, A., Euskirchen, E.S., Johnstone, J.F., Kasischke, E.S., Melvin, A.M., Bennett, A., Mack, M.C., Rupp, T.S., Schuur, A.E.G., Turetsky, M.R., and Yuan, F., 2013, Modeling the effects of fire severity and climate warming on active layer thickness and soil carbon storage of black spruce forests across the landscape in interior Alaska: Environmental Research Letters, v. 8, no. 4, 13 p., https://doi.org/10.1088/1748-9326/8/4/045016.

Gergely, K.J., and McKerrow, A., 2013, Terrestrial ecosystems—National inventory of vegetation and land use (ver 1.1, August 2016): U.S. Geological Survey Fact Sheet 2013–3085, 1 p., https://doi.org/10.3133/fs20133085.

Glenn, E.P., Mexicano, L., Garcia-Hernandez, J., Nagler, P.L., Gomez-Sapiens, M.M., Tang, D., Lomeli, M.A., Ramirez-Hernandez, J., and Zamora-Arroyo, F., 2013, Evapotranspiration and water balance of an anthropogenic coastal desert wetland—Responses to fire, inflows and salinities: Ecological Engineering, v. 59, October, p. 176–184, https://doi.org/10.1016/j.ecoleng.2012.06.043.

Grabner, K.W., Stambaugh, M.C., Marschall, J.M., and Abadir, E.R., 2013, Oak woodlands and forests fire consortium—A regional view of fire science sharing, *in* Wade, D.D., and Fox, R.L., eds., and Robinson, M.L., comp., Fourth Fire Behavior and Fuels Conference Proceedings—At the crossroads—Looking toward the future in a changing environment: Fire Behavior and Fuels Conference, Raleigh, N.C., Feb. 18–22, 2013, and St. Petersburg, Russia, July 1–4, 2013, Fairfield, Wash., International Association of Wildland Fire, p. 287–297, https://iawf.wpengine.com/wp-content/uploads/2018/02/4th_Fuels_Conference_Proceedings_USA-Russia_updated_5.28.2015.pdf.

Hansen, M.C., Potapov, P.V., Moore, R., Hancher, M., Turubanova, S.A., Tyukavina, A., Thau, D., Stehman, S.V., Goetz, S.J., Loveland, T.R., Kommareddy, A., Egorov, A., Chini, L., Justice, C.O., and Townshend, J.R.G., 2013, High-resolution global maps of 21st-century forest cover change: Science, v. 342, no. 6160, p. 850–853, https://doi.org/10.1126/science.1244693.

Hawbaker, T.J., Briggs, J.S., Caldwell, M.K., and Stitt, S., 2013, Mountain pine beetle impacts on vegetation and carbon stocks: U.S. Geological Survey Fact Sheet 2013–3095, 2 p., https://doi.org/10.3133/fs20133095.

Hawbaker, T.J., Radeloff, V.C., Stewart, S.I., Hammer, R.B., Keuler, N.S., and Clayton, M.K., 2013, Human and biophysical influences on fire occurrence in the United States: Ecological Applications, v. 23, no. 3, p. 565–582, https://doi.org/10.1890/12-1816.1.

Hicke, J.A., Meddens, A.J.H., Allen, C.D., and Kolden, C.A., 2013, Carbon stocks of trees killed by bark beetles and wildfire in the western United States: Environmental Research Letters, v. 8, no. 3, 8 p., https://doi.org/10.1088/1748-9326/8/3/035032.

Hossack, B.R., Lowe, W.H., and Corn, P.S., 2013, Rapid increases and time-lagged declines in amphibian occupancy after wildfire: Conservation Biology, v. 27, no. 1, p. 219–228, https://doi.org/10.1111/j.1523-1739.2012.01921.x.

Huang, S., Jin, S., Dahal, D., Chen, X., Young, C., Liu, H., and Liu, S., 2013, Reconstructing satellite images to quantify spatially explicit land surface change caused by fires and succession—A demonstration in the Yukon River Basin of interior Alaska: ISPRS Journal of Photogrammetry and Remote Sensing, v. 79, May, p. 94–105, https://doi.org/10.1016/j.isprsjprs.2013.02.010.

Huang, S., Liu, H., Dahal, D., Jin, S., Welp, L.R., Liu, J., and Liu, S., 2013, Modeling spatially explicit fire impact on gross primary production in interior Alaska using satellite images coupled with eddy covariance: Remote Sensing of Environment, v. 135, August, p. 178–188, https://doi.org/10.1016/j.rse.2013.04.003.

Jafarov, E.E., Romanovsky, V.E., Genet, H., McGuire, A.D., and Marchenko, S.S., 2013, The effects of fire on the thermal stability of permafrost in lowland and upland black spruce forests of interior Alaska in a changing climate: Environmental Research Letters, v. 8, no. 3, 11 p., https://doi.org/10.1088/1748-9326/8/3/035030.

Jones, B.M., Breen, A.L., Gaglioti, B.V., Mann, D.H., Rocha, A.V., Grosse, G., Arp, C.D., Kunz, M.L., and Walker, D.A., 2013, Identification of unrecognized tundra fire events on the north slope of Alaska: Journal of Geophysical Research, Biogeosciences, v. 118, no. 3, p. 1334–1344, https://doi.org/10.1002/jgrg.20113.

Jones, J.W., Hall, A.E., Foster, A.M., and Smith, T.J., III, 2013, Wetland fire scar monitoring and analysis using archival Landsat data for the Everglades: Fire Ecology, v. 9, no. 1, https://link.springer.com/article/10.4996/fireecology.0901133.

Jorgenson, M.T., Harden, J., Kanevskiy, M., O'Donnell, J., Wickland, K., Ewing, S., Manies, K., Zhuang, Q., Shur, Y., Striegl, R., and Koch, J., 2013, Reorganization of vegetation, hydrology and soil carbon after permafrost degradation across heterogeneous boreal landscapes: Environmental Research Letters, v. 8, no. 3, 13 p., https://doi.org/10.1088/1748-9326/8/3/035017.

Kane, V.R., Lutz, J.A., Roberts, S.L., Smith, D.F., McGaughey, R.J., Povak, N.A., and Brooks, M.L., 2013, Landscape-scale effects of fire severity on mixed-conifer and red fir forest structure in Yosemite National Park: Forest Ecology and Management, v. 287, January, p. 17–31, https://doi.org/10.1016/j.foreco.2012.08.044.

Keeley, J.E., Syphard, A.D., and Fotheringham, C.J., 2013, The 2003 and 2007 wildfires in southern California, chap. 5 *of* Boulter, S., Palutikof, J., Karoly, D.J., and Guitart, D., eds., Natural disasters and adaptation to climate change: Cambridge, U.K., Cambridge University Press, p. 42–52, https://doi.org/10.1017/CBO9780511845710.007.

Keeley, W.H., Germaine, S.S., Stanley, T.R., Spaulding, S.E., and Wanner, C.E., 2013, Response of brown-headed cowbirds and three host species to thinning treatments in low-elevation ponderosa pine forests along the northern Colorado Front Range: Forest Ecology and Management, v. 306, October, p. 226–233, https://doi.org/10.1016/j.foreco.2013.06.037.

King, D.A., Bachelet, D.M., and Symstad, A.J., 2013, Climate change and fire effects on a prairie-woodland ecotone—Projecting species range shifts with a dynamic global vegetation model: Ecology and Evolution, v. 3, no. 15, p. 5076–5097, https://doi.org/10.1002/ece3.877.

King, D.A., Bachelet, D.M., and Symstad, A.J., 2013, Vegetation projections for Wind Cave National Park with three future climate scenarios—Final report in completion of task agreement J8W07100052: U.S. National Park Service, Natural Resource Technical Report NPS/WICA/NRTRT—2013/681, 58 p., https://irma.nps.gov/DataStore/Reference/Profile/2192953.

Kolden, C.A., and Rogan, J., 2013, Mapping wildfire burn severity in the Arctic tundra from downsampled MODIS data: Arctic, Antarctic, and Alpine Research, v. 45, no. 1, p. 64–76, https://doi.org/10.1657/1938-4246-45.1.64.

Leicht-Young, S.A., Pavlovic, N.B., and Grundel, R., 2013, Susceptibility of eastern US habitats to invasion of *Celastrus orbiculatus* (oriental bittersweet) following fire: Forest Ecology and Management, v. 302, August, p. 85–96, https://doi.org/10.1016/j.foreco.2013.03.019.

Littell, J.S., Hicke, J.A., Shafer, S.L., Capalbo, S.M., Houston, L.L., and Glick, P., 2013, Forest ecosystems—Vegetation, disturbance, and economics, chap. 5 *of* Dalton, M.M., Mote, P.W., and Snover, A.K., Climate change in the northwest—Implications for our landscapes, waters, and communities: Washington, D.C., Island Press, p. 110–148, https://link.springer.com/book/10.5822%2F978-1-61091-512-0.

Lockyer, Z.B., Coates, P.S., Casazza, M.L., Espinosa, S., and Delehanty, D.J., 2013, Greater sage-grouse nest predators in the Virginia Mountains of northwestern Nevada: Journal of Fish and Wildlife Management, v. 4, no. 2, p. 242–255, https://doi.org/10.3996/122012-JFWM-110R1.

López-Hoffman, L., Breshears, D.D., Allen, C.D., and Miller, M.L., 2013, Key landscape ecology metrics for assessing climate change adaptation options—Rate of change and patchiness of impacts: Ecosphere, v. 4, no. 8, 18 p., https://doi.org/10.1890/ES13-00118.1.

Marañón-Jiménez, S., Castro, J., Querejeta, J.I., Fernández-Ondoño, E., and Allen, C.D., 2013, Post-fire wood management alters water stress, growth, and performance of pine regeneration in a Mediterranean ecosystem: Forest Ecology and Management, v. 308, November, p. 231–239, https://doi.org/10.1016/j.foreco.2013.07.009.

Mayer, K.F., Anderson, P., Chambers, J., Boyd, C., Christiansen, T., Davis, D., Espinosa, S., Havlina, D., Ielmini, M., Kemner, D., Kurth, L., Maestas, J., Mealor, B., Milesneck, T., Niell, L., Pellant, M., Pyke, D.A., Tague, J., and Vernon, J., 2013, Wildfire and invasive species in the west—Challenges that hinder current and future management and protection of the sagebrush-steppe ecosystem—A gap report: Unpublished technical report, Western Association of Fish and Wildlife Agencies, 8 p., https://ir.library.oregonstate.edu/concern/technical_reports/k0698d54m.

McNew, L., Handel, C., Pearce, J., DeGange, T., Holland-Bartels, L., and Whalen, M., 2013, Changing Arctic ecosystems—The role of ecosystem changes across the Boreal-Arctic transition zone on the distribution and abundance of wildlife populations: U.S. Geological Survey Fact Sheet 2013–3054, 2 p., https://doi.org/10.3133/fs20133054.

Mexicano, L., Nagler, P.L., Zamora-Arrroyo, F., and Glenn, E.P., 2013, Vegetation dynamics in response to water inflow rates and fire in a brackish *Typha domingensis* Pers. marsh in the delta of the Colorado River, Mexico: Ecological Engineering, v. 59, October, p. 167–175, https://doi.org/10.1016/j.ecoleng.2012.06.046.

Middleton, B.A., 2013, Rediscovering traditional vegetation management in preserves—Trading experiences between cultures and continents: Biological Conservation, v. 158, February, p. 271–279, https://doi.org/10.1016/j.biocon.2012.10.003.

Miller, R.F., Chambers, J.C., Pyke, D.A., Pierson, F.B., and Williams, C.J., 2013, A review of fire effects on vegetation and soils in the Great Basin Region—response and ecological site characteristics: U.S. Forest Service, General Technical Report RMRS–GTR–308, 126 p., https://www.fs.fed.us/rmrs/publications/review-fire-effects-vegetation-and-soils-great-basin-region-response-and-ecological.

Moody, J.A., and Nyman, P., 2013, Variations in soil detachment rates after wildfire as a function of soil depth, flow properties, and root properties: U.S. Geological Survey Scientific Investigations Report 2012–5233, 40 p., https://doi.org/10.3133/sir20125233.

Moody, J.A., Shakesby, R.A., Robichaud, P.R., Cannon, S.H., and Martin, D.A., 2013, Current research issues related to post-wildfire runoff and erosion processes: Earth-Science Reviews, v. 122, July, p. 10–37, https://doi.org/10.1016/j.earscirev.2013.03.004.

Moreno, J.M., Torres, I., Luna, B., Oechel, W.C., and Keeley, J.E., 2013, Changes in fire intensity have carry-over effects on plant responses after the next fire in southern California chaparral: Journal of Vegetation Science, v. 24, no. 2, p. 395–404, https://doi.org/10.1111/j.1654-1103.2012.01466.x.

Moritz, M.A., Krawchuk, M.A., and Keeley, J.E., 2013, Current fire regimes, impacts and the likely changes—Temperate-Mediterranean North America, chap. 8 *of* Goldamer, J.G., ed., Vegetation fires and global change—Challenges for concerted international action—A white paper directed to the United Nations and international organizations: Baden-Württemberg, Germany, Global Fire Monitoring Center; Remagen-Oberwinter, Germany, Kessel Publishing, p. 143–152, http://gfmc.online/latestnews/Vegetation-Fires-Global-Change-UN-White-Paper-GFMC-2013.pdf.

Nelson, K.J., Connot, J., Peterson, B., and Martin, C., 2013, The LANDFIRE refresh strategy—Updating the national dataset: Fire Ecology, v. 9, no. 2, p. 80–101, https://www.fireecologyjournal.org/docs/Journal/pdf/Volume09/Issue02/080.pdf.

Nelson, K.J., Connot, J., Peterson, B., and Picotte, J.J., 2013, LANDFIRE 2010—Updated data to support wildfire and ecological management: Earthzine, v. 12, no. 16, https://earthzine.org/2013/09/15/landfire-2010-updated-data-to-support-wildfire-and-ecological-management/.

O'Donnell, J.A., Harden, J.W., Manies, K.L., Jorgenson, M.T., Kanevskiy, M., and Xu, X., 2013, Soil data from fire and permafrost-thaw chronosequences in upland black spruce (*Picea mariana*) stands near Hess Creek and Tok, interior Alaska: U.S. Geological Survey Open-File Report 2013–1045, 16 p., https://doi.org/10.3133/ofr20131045.

Pastick, N.J., Jorgenson, M.T., Wylie, B.K., Minsley, B.J., Ji, L., Walvoord, M.A., Smith, B.D., Abraham, J.D., and Rose, J.R., 2013, Extending airborne electromagnetic surveys for regional active layer and permafrost mapping with remote sensing and ancillary data, Yukon Flats ecoregion, central Alaska: Permafrost and Periglacial Processes, v. 24, no. 3, p. 184–199, https://doi.org/10.1002/ppp.1775.

Pederson, G.T., Betancourt, J.L., and McCabe, G.J., 2013, Regional patterns and proximal causes of the recent snowpack decline in the Rocky Mountains, U.S.: Geophysical Research Letters, v. 40, no. 9, p. 1811–1816, https://doi.org/10.1002/grl.50424.

Pendleton, B.K., Chambers, J.C., Brooks, M.L., and Ostoja, S.M., 2013, Ecosystem stressors in southern Nevada, chap. 2 *of* The Southern Nevada Agency Partnership science and research synthesis—Science to support land management in southern Nevada: U.S. Forest Service General Technical Report RMRS–GTR–303, p. 17–36, https://www.fs.usda.gov/treesearch/pubs/43873.

Peters, D.P.C., Bestelmeyer, B.T., Havstad, K.M., Rango, A., Archer, S.R., Comrie, A.C., Gimblett, H.R., López-Hoffman, L., Sala, O.E., Vivoni, E.R., Brooks, M.L., Brown, J., Monger, H.C., Goldstein, J.H., Okin, G.S., and Tweedie, C.E., 2013, Desertification of rangelands, *in* Climate vulnerability—Understanding and addressing threats to essential resources: Elsevier, v. 4, p. 239–258, https://doi.org/10.1016/B978-0-12-384703-4.00426-3.

Peters, E.B., Wythers, K.R., Bradford, J.B., and Reich, P.B., 2013, Influence of disturbance on temperate forest productivity: Ecosystems, v. 16, no. 1, p. 95–110, https://doi.org/10.1007/s10021-012-9599-y.

Peterson, B., Nelson, K., and Wylie, B., 2013, Towards integration of GLAS into a national fuel mapping program: Photogrammetric Engineering & Remote Sensing, v. 79, no. 2, p. 175–183, https://doi.org/10.14358/PERS.79.2.175.

Polo, J.A., Hallgren, S.W., and Leslie, D.M., 2013, Effect of long-term understory prescribed burning on standing and down dead woody material in dry upland oak forests: Forest Ecology and Management, v. 291, March, p. 128–135, https://doi.org/10.1016/j.foreco.2012.10.048.

Pyke, D.A., Wirth, T.A., and Beyers, J.L., 2013, Does seeding after wildfires in rangelands reduce erosion or invasive species?: Restoration Ecology, v. 21, no. 4, p. 415–421, https://doi.org/10.1111/rec.12021.

Reed, S., Belnap, J., Floyd-Hanna, L., Crews, T., Herring, J., Hanna, D., Miller, M., Duniway, M., and Roybal, C., 2013, Assessing the risk of nitrogen deposition to natural resources in the Four Corners area: National Park Service final report, 53 p., https://www.nature.nps.gov/air/pubs/pdf/2013_Reed_NDep_FinalDraft.pdf.

Richmond, J.Q., Barr, K.R., Backlin, A.R., Vandergast, A.G., and Fisher, R.N., 2013, Evolutionary dynamics of a rapidly receding southern range boundary in the threatened California red-legged frog (*Rana draytonii*): Evolutionary Applications, v. 6, no. 5, p. 808–822, https://doi.org/10.1111/eva.12067.

Richardson, L., Loomis, J.B., and Champ, P.A., 2013, Valuing morbidity from wildfire smoke exposure—A comparison of revealed and stated preference techniques: Land Economics, v. 89, no. 1, p. 76–100, https://www.fs.usda.gov/treesearch/pubs/46795.

Rigge, M., Wylie, B., Gu, Y., Belnap, J., Phuyal, K., and Tieszen, L., 2013, Monitoring the status of forests and rangelands in the Western United States using ecosystem performance anomalies: International Journal of Remote Sensing, v. 34, no. 11, p. 4049–4068, https://doi.org/10.1080/01431161.2013.772311.

Rigge, M., Wylie, B., Zhang, L., and Boyte, S.P., 2013, Influence of management and precipitation on carbon fluxes in Great Plains grasslands: Ecological Indicators, v. 34, November, p. 590–599, https://doi.org/10.1016/j.ecolind.2013.06.028.

Sankeya, J.B., Wallace, C.S.A., and Ravi, S., 2013, Phenology-based, remote sensing of post-burn disturbance windows in rangelands: Ecological Indicators, v. 30, July, p. 35–44, https://doi.org/10.1016/j.ecolind.2013.02.004.

Santi, P., Cannon, S., and DeGraff, J., 2013, Wildfire and landscape change, chap. 16 *of* Treatise on geomorphology, volume 13: Elsevier, v. 13, p. 262–287, https://doi.org/10.1016/B978-0-12-374739-6.00365-1.

Schilling, J.W., Dugger, K.M., and Anthony, R.G., 2013, Survival and home-range size of northern spotted owls in southwestern Oregon: Journal of Raptor Research, v. 47, no. 1, p. 1–14, https://doi.org/10.3356/JRR-11-76.1.

Shinneman, D.J., Baker, W.L., Rogers, P.C., and Kulakowski, D., 2013, Fire regimes of quaking aspen in the mountain West: Forest Ecology and Management, v. 299, July, p. 22–34, https://doi.org/10.1016/j.foreco.2012.11.032.

Skinner, K.D., 2013, Post-fire debris-flow hazard assessment of the area burned by the 2013 Beaver Creek fire near Hailey, central Idaho: U.S. Geological Survey Open-File Report 2013–1273, 12 p., https://doi.org/10.3133/ofr20131273.

Smith, T.J., III, Foster, A.M., Tiling-Range, G., and Jones, J.W., 2013, Dynamics of mangrove-marsh ecotones in subtropical coastal wetlands—Fire, sea-level rise, and water levels: Fire Ecology, v. 9, no. 1, p. 66–77, https://doi.org/10.4996/fireecology.0901066.

Soulard, C.E., Esque, T.C., Bedford, D.R., and Bond, S., 2013, The role of fire on soil mounds and surface roughness in the Mojave Desert: Earth Surface Processes and Landforms, v. 38, no. 2, p. 111–121, https://doi.org/10.1002/esp.3264.

Staley, D.M., 2013, Emergency assessment of post-fire debris-flow hazards for the 2013 rim fire, Stanislaus National Forest and Yosemite National Park, California: U.S. Geological Survey Open-File Report 2013–1260, 11 p., 3 pls., https://doi.org/10.3133/ofr20131260.

Staley, D.M., Gartner, J.E., Smoczyk, G.M., and Reeves, R.R., 2013, Emergency assessment of post-fire debris-flow hazards for the 2013 mountain fire, southern California: U.S. Geological Survey Open-File Report 2013–1249, 13 p., 3 pls., https://doi.org/10.3133/ofr20131249.

Staley, D.M., Kean, J.W., Cannon, S.H., Schmidt, K.M., and Laber, J.L., 2013, Objective definition of rainfall intensity–duration thresholds for the initiation of post-fire debris flows in southern California: Landslides, v. 10, no. 5, p. 547–562, https://doi.org/10.1007/s10346-012-0341-9.

Staley, D.M., Smoczyk, G.M., and Reeves, R.R., 2013, Emergency assessment of post-fire debris-flow hazards for the 2013 powerhouse fire, southern California: U.S. Geological Survey Open-File Report 2013–1248, 13 p., 3 pls., https://doi.org/10.3133/ofr20131248.

Stevens, M.R., 2013, Analysis of postfire hydrology, water quality, and sediment transport for selected streams in areas of the 2002 Hayman and Hinman fires, Colorado: U.S. Geological Survey Scientific Investigations Report 2012–5267, 93 p., https://doi.org/10.3133/sir20125267.

Studd, S., Fallon, E., Crumbacher, L., Drake, S., and Villarreal, M., 2013, Vegetation inventory, mapping, and classification report, Fort Bowie National Historic Site: National Park Service, Natural Resource Report NPS/SODN/NRR—2013/673, 106 p., https://irma.nps.gov/DataStore/DownloadFile/578669.

Syphard, A.D., Bar Massada, A., Butsic, V., and Keeley, J.E., 2013, Land use planning and wildfire—Development policies influence future probability of housing loss: PLOS ONE, v. 8, no. 8, e71708, 12 p., https://doi.org/10.1371/journal.pone.0071708.

Tan, Z., Liu, S., Wylie, B.K., Jenkerson, C.B., Oeding, J., Rover, J., and Young, C., 2013, MODIS-informed greenness responses to daytime land surface temperature fluctuations and wildfire disturbances in the Alaskan Yukon River Basin: International Journal of Remote Sensing, v. 34, no. 6, p. 2187–2199, https://doi.org/10.1080/01431161.2012.742215.

Thompson, M.E., Halstead, B.J., Wylie, G.D., Amarello, M., Smith, J.J., Casazza, M.L., and Routman, E.J., 2013, Effects of prescribed fire on *Coluber constrictor mormon* in coastal San Mateo County, California: Herpetological Conservation and Biology, v. 8, no. 3, p. 602–615, http://www.herpconbio.org/Volume_8/Issue_3/Thompson_etal_2013.pdf.

Tillery, A.C., and Matherne, A.M., 2013, Postwildfire debris-flow hazard assessment of the area burned by the 2012 Little Bear fire, south-central New Mexico: U.S. Geological Survey Open-File Report 2013–1108, 15 p., 3 pls., https://doi.org/10.3133/ofr20131108.

Van Linn, P.F., III, Nussear, K.E., Esque, T.C., DeFalco, L.A., Inman, R.D., and Abella, S.R., 2013, Estimating wildfire risk on a Mojave Desert landscape using remote sensing and field sampling: International Journal of Wildland Fire, v. 22, no. 6, p. 770–779, https://doi.org/10.1071/WF12158.

van Mantgem, P.J., Nesmith, J.C.B., Keifer, M., and Brooks, M., 2013, Tree mortality patterns following prescribed fire for *Pinus* and *Abies* across the southwestern United States: Forest Ecology and Management, v. 289, February, p. 463–469, https://doi.org/10.1016/j.foreco.2012.09.029.

van Mantgem, P.J., Nesmith, J.C.B., Keifer, M., Knapp, E.E., Flint, A., and Flint, L., 2013, Climatic stress increases forest fire severity across the western United States: Ecology Letters, v. 16, no. 9, p. 1151–1156, https://doi.org/10.1111/ele.12151.

Verdin, K.L., Dupree, J.A., and Stevens, M.R., 2013, Postwildfire debris-flow hazard assessment of the area burned by the 2013 West Fork fire complex, southwestern Colorado: U.S. Geological Survey Open-File Report 2013–1259, 30 p., 3 pls., https://doi.org/10.3133/ofr20131259.

Wagenbrenner, N.S., Germino, M.J., Lamb, B.K., Robichaud, P.R., and Foltz, R.B., 2013, Wind erosion from a sagebrush steppe burned by wildfire—Measurements of PM_{10} and total horizontal sediment flux: Aeolian Research, v. 10, September, p. 25–36, https://doi.org/10.1016/j.aeolia.2012.10.003.

Wahl, D., Estrada-Belli, F., and Anderson, L., 2013, A 3400 year paleolimnological record of prehispanic human–environment interactions in the Holmul region of the southern Maya lowlands: Palaeogeography, Palaeoclimatology, Palaeoecology, v. 379–380, June, p. 17–31, https://doi.org/10.1016/j.palaeo.2013.03.006.

Weppner, K.N., Pierce, J.L., and Betancourt, J.L., 2013, Holocene fire occurrence and alluvial responses at the leading edge of pinyon-juniper migration in the Northern Great Basin, USA: Quaternary Research, v. 80, no. 2, p. 143–157, https://doi.org/10.1016/j.yqres.2013.06.004.

White, A.M., Zipkin, E.F., Manley, P.N., and Schlesinger, M.D., 2013, Conservation of avian diversity in the Sierra Nevada—Moving beyond a single-species management focus: PLOS ONE, v. 8, no. 5, e63088, 9 p., https://doi.org/10.1371/journal.pone.0063088.

Yager, T.J.B., Crock, J.G., Smith, D.B., Furlong, E.T., Hageman, P.L., Foreman, W.T., Gray, J.L., and ReVello, R.C., 2013, Effects of surface applications of biosolids on groundwater quality and trace-element concentrations in crops near Deer Trail, Colorado, 2004–2010: U.S. Geological Survey Scientific Investigations Report 2013–5065, 119 p., https://doi.org/10.3133/sir20135065.

Yelenik, S., Perakis, S., and Hibbs, D., 2013, Regional constraints to biological nitrogen fixation in post-fire forest communities: Ecology, v. 94, no. 3, p. 739–750, https://doi.org/10.1890/12-0278.1.

Yue, C., Ciais, P., Luyssaert, S., Cadule, P., Harden, J., Randerson, J., Bellassen, V., Wang, T., Piao, S.L., Poulter, B., and Viovy, N., 2013, Simulating boreal forest carbon dynamics after stand-replacing fire disturbance—insights from a global process-based vegetation model: Biogeosciences, v. 10, no. 12, p. 8233–8252, https://doi.org/10.5194/bg-10-8233-2013.

2012: 88 Publications

Arkle, R.S., Pilliod, D.S., and Welty, J.L., 2012, Pattern and process of prescribed fires influence effectiveness at reducing wildfire severity in dry coniferous forests: Forest Ecology and Management, v. 276, July, p. 174–184, https://doi.org/10.1016/j.foreco.2012.04.002.

Banta, J.R., and Slattery, R.N., 2012, Effects of brush management on the hydrologic budget and water quality in and adjacent to Honey Creek State Natural Area, Comal County, Texas, 2001–10: U.S. Geological Survey Fact Sheet 2012–3097, 4 p., https://doi.org/10.3133/fs20123097.

Bar-Massada, A., Hawbaker, T.J., Stewart, S.I., and Radeloff, V.C., 2012, Combining satellite-based fire observations and ground-based lightning detections to identify lightning fires across the conterminous USA: IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, v. 5, no. 5, p. 1438–1447, https://doi.org/10.1109/JSTARS.2012.2193665.

Barrett, K., Rocha, A.V., van de Weg, M.J., and Shaver, G., 2012, Vegetation shifts observed in arctic tundra 17 years after fire: Remote Sensing Letters, v. 3, no. 8, p. 729–736, https://doi.org/10.1080/2150704X.2012.676741.

Belnap, J., Ludwig, J.A., Wilcox, B.P., Betancourt, J.L., Dean, W.R.J., Hoffmann, B.D., and Milton, S.J., 2012, Introduced and invasive species in novel rangeland ecosystems—Friends or foes?: Rangeland Ecology & Management, v. 65, no. 6, p. 569–578, https://doi.org/10.2111/REM-D-11-00157.1.

Bradford, J.B., Fraver, S., Milo, A.M., D'Amato, A.W., Palik, B., and Shinneman, D.J., 2012, Effects of multiple interacting disturbances and salvage logging on forest carbon stocks: Forest Ecology and Management, v. 267, March, p. 209–214, https://doi.org/10.1016/j.foreco.2011.12.010.

Breshears, D.D., Kirchner, T.B., Whicker, J.J., Field, J.P., and Allen, C.D., 2012, Modeling aeolian transport in response to succession, disturbance and future climate—Dynamic long-term risk assessment for contaminant redistribution: Aeolian Research, v. 3, no. 4, p. 445–457, https://doi.org/10.1016/j.aeolia.2011.03.012.

Brooks, M.L., 2012, Effects of high fire frequency in creosote bush scrub vegetation of the Mojave Desert: International Journal of Wildland Fire, v. 21, no. 1, p. 61–68, https://doi.org/10.1071/WF10140.

Chen, X., Giri, C.P., and Vogelmann, J.E., 2012, Land-cover change detection, chap. 11 *of* Giri, C.P. ed., Remote sensing of land use and land cover (1st ed.) : Boca Raton, Fla., CRC Press, p. 153–176, https://www.taylorfrancis.com/books/9781420070750.

Cochrane, M.A., Moran, C.J., Wimberly, M.C., Baer, A.D., Finney, M.A., Beckendorf, K.L., Eidenshink, J., and Zhu, Z., 2012, Estimation of wildfire size and risk changes due to fuels treatments: International Journal of Wildland Fire, v. 21, no. 4, p. 357–367 https://doi.org/10.1071/WF11079.

Coupe, R.H., Barlow, J.R.B., and Capel, P.D., 2012, Complexity of human and ecosystem interactions in an agricultural landscape: Environmental Development, v. 4, October, p. 88–104, https://doi.org/10.1016/j.envdev.2012.09.009.

Drake, K.K., Medica, P.A., Esque, T.C., and Nussear, K.E., 2012, *Gopherus agassizii* (Agassiz's desert tortoise). Scute dysecdysis/scute sloughing: Herpetological Review, v. 43, no. 4, p. 473–474, https://ssarherps.org/herpetological-review-pdfs/.

Drus, G.M., Dudley, T.L., Brooks, M.L., and Matchett, J.R., 2012, The effect of leaf beetle herbivory on the fire behaviour of tamarisk (*Tamarix ramosissima* Lebed.): International Journal of Wildland Fire, v. 22, no. 4, p. 446–458, https://doi.org/10.1071/WF10089.

Ebel, B.A., 2012, Wildfire impacts on soil-water retention in the Colorado Front Range, United States: Water Resources Research, v. 48, no. 12, 12 p., https://doi.org/10.1029/2012WR012362.

Ebel, B.A., Hinckley, E.S., and Martin, D.A., 2012, Soil-water dynamics and unsaturated storage during snowmelt following wildfire: Hydrology and Earth System Sciences, v. 16, no. 5, p. 1401–1417, https://doi.org/10.5194/hess-16-1401-2012.

Ebel, B.A., Moody, J.A., and Martin, D.A., 2012, Hydrologic conditions controlling runoff generation immediately after wildfire: Water Resources Research, v. 48, no. 3, 13 p., https://doi.org/10.1029/2011WR011470.

Eidenshink, J.C., and Howard, S.M., 2012, United States Geological Survey fire science—Fire danger monitoring and forecasting (ver. 2, July 2015): U.S. Geological Survey Fact Sheet 2012–3121, 2 p., https://doi.org/10.3133/fs20123121.

Feng, Z., Alfaro-Murillo, J.A., DeAngelis, D.L., Schmidt, J., Barga, M., Zheng, Y., Ahmad Tamrin, M.H.B., Olson, M., Glaser, T., Kielland, K., Chapin F.S., III, and Bryant, J., 2012, Plant toxins and trophic cascades alter fire regime and succession on a boreal forest landscape: Ecological Modelling, v. 244, October, p. 79–92, https://doi.org/10.1016/j.ecolmodel.2012.06.022.

Germino, M.J., 2012, Selecting sagebrush seed sources for restoration in a variable climate—Ecophysiological variation among genotypes, *in* Shaw, N., and Pellant, M., eds., Great Basin Native Plant Selection and Increase Project—2011 progress report: U.S. Forest Service and U.S. Bureau of Land Management, unnumbered report, p. 24–29, https://www.fs.fed.us/rm/pubs_other/rmrs_2012_shaw_n001.pdf.

Grabner, K.W., Stambaugh, M.C., Guyette, R.P., Dey, D.C., and Willson, G.D., 2012, Genesis of an oak-fire science consortium, *in* Day, D.C., Stambaugh, M.C., Clark, S.L., and Schweitzer, C.J., Proceedings of the 4th Fire in Eastern Oak Forest Conference: U.S. Department of Agriculture, Forest Service, Northern Research Station, General Technical Report NRS–P–102, p. 207–211, https://www.nrs.fs.fed.us/pubs/41830.

Harden, J.W., Manies, K.L., O'Donnell, J., Johnson, K., Frolking, S., and Fan, Z., 2012, Spatiotemporal analysis of black spruce forest soils and implications for the fate of C: Journal of Geophysical Research, Biogeosciences, v. 117, no. G1, https://doi.org/10.1029/2011JG001826.

Hawbaker, T.J., and Zhu, Z., 2012, Baseline wildland fires and emissions for the Western United States, chap. 3 *of* Zhu, Z., and Reed, B.C., eds., Baseline and projected future carbon storage and greenhouse-gas fluxes in ecosystems of the Western United States (Revised February 2013): U.S. Geological Survey Professional Paper 1797, 9 p., https://pubs.usgs.gov/pp/1797/pdf/pp1797_Chapter3.pdf.

Herrick, J.E., Brown, J.R., Bestelmeyer, B.T., Andrews, S.S., Baldi, G., Davies, J., Duniway, M., Havstad, K.M., Karl, J.W., Karlen, D.L., Peters, D.P.C., Quinton, J.N., Riginos, C., Shaver, P.L., Steinaker, D., and Twomlow, S., 2012, Revolutionary land use change in the 21st century—Is (rangeland) science relevant?: Rangeland Ecology & Management, v. 65, no. 6, p. 590–598, https://doi.org/10.2111/REM-D-11-00186.1.

Homer, C.G., Aldridge, C.L., Meyer, D.K., and Schell, S.J., 2012, Multi-scale remote sensing sagebrush characterization with regression trees over Wyoming, USA—Laying a foundation for monitoring: International Journal of Applied Earth Observation and Geoinformation, v. 14, no. 1, p. 233–244, https://doi.org/10.1016/j.jag.2011.09.012.

Hoover, A.N., and Germino, M.J., 2012, A common-garden study of resource-island effects on a native and an exotic, annual grass after fire: Rangeland Ecology & Management, v. 65, no. 2, p. 160–170, https://doi.org/10.2111/REM-D-11-00026.1.

Howard, R.J., and Allain, L., 2012, Effects of a drawdown on plant communities in a freshwater impoundment at Lacassine National Wildlife Refuge, Louisiana: U.S. Geological Survey Scientific Investigations Report 2012–5221, 27 p., https://doi.org/10.3133/sir20125221.

Jain, T.B., Pilliod, D.S., Graham, R.T., Lentile, L.B., and Sandquist, J.E., 2012, Index for characterizing post-fire soil environments in temperate coniferous forests: Forests, v. 3, no. 3, p. 445–466, https://doi.org/10.3390/f3030445.

Ji, L., Wylie, B.K., Nossov, D.R., Peterson, B., Waldrop, M.P., McFarland, J.W., Rover, J., and Hollingsworth, T.N., 2012, Estimating aboveground biomass in interior Alaska with Landsat data and field measurements: International Journal of Applied Earth Observation and Geoinformation, v. 18, p. August, p. 451–461, https://doi.org/10.1016/j.jag.2012.03.019.

Johnson, J.B., Ford, W.M., and Edwards, J.W., 2012, Roost networks of northern myotis (*Myotis septentrionalis*) in a managed landscape: Forest Ecology and Management, v. 266, February, p. 223–231, https://doi.org/10.1016/j.foreco.2011.11.032.

Jones, J.W., 2012, Wetland fire remote sensing research—The Greater Everglades example: U.S. Geological Survey Fact Sheet 2012–3133, 2 p., https://doi.org/10.3133/fs20123133.

Jones, K.L., Keith, M.K., O'Connor, J.E., Mangano, J.F., and Wallick, J.R., 2012, Preliminary assessment of channel stability and bed-material transport in the Tillamook Bay tributaries and Nehalem River Basin, northwestern Oregon: U.S. Geological Survey Open-File Report 2012–1187, 120 p., https://doi.org/10.3133/ofr20121187.

Jones, K.L., O'Connor, J.E., Keith, M.K., Mangano, J.F., and Wallick, J.R., 2012, Preliminary assessment of channel stability and bed-material transport in the Rogue River Basin, southwestern Oregon: U.S. Geological Survey Open-File Report 2011–1280, 96 p., https://doi.org/10.3133/ofr20111280.

Jonescheit, L., 2012, Monitoring floods and fires during the summer of 2011—The value of the Landsat satellite 40-year archive: U.S. Geological Survey Fact Sheet 2012–3006, 2 p., https://doi.org/10.3133/fs20123006.

Kean, J.W., Staley, D.M., Leeper, R.J., Schmidt, K.M., and Gartner, J.E., 2012, A low-cost method to measure the timing of postfire flash floods and debris flows relative to rainfall: Water Resources Research, v. 48, no. 5, 8 p., https://doi.org/10.1029/2011WR011460.

Keeley, J.E., 2012, Ecology and evolution of pine life histories: Annals of Forest Science, v. 69, no. 4, p. 445–453, https://doi.org/10.1007/s13595-012-0201-8.

Keeley, J.E., 2012, Fire in Mediterranean climate ecosystems—A comparative overview: Israel Journal of Ecology & Evolution, v. 58, nos. 2–3, p. 123–135, https://www.tandfonline.com/doi/abs/10.1560/IJEE.58.2-3.123#.VBH0CfldWVM.

Keeley, J.E., and Brennan, T.J., 2012, Fire-driven alien invasion in a fire-adapted ecosystem: Oecologia, v. 169, no. 4, p. 1043–1052, https://doi.org/10.1007/s00442-012-2253-8.

Keeley, J.E., Fotheringham, C.J., and Rundel, P.W., 2012, Postfire chaparral regeneration under Mediterranean and non-Mediterranean climates: Madroño, v. 59, no. 3, p. 109–127, https://doi.org/10.3120/0024-9637-59.3.109.

Klaver, R.W., Backlund, D., Bartelt, P.E., Erickson, M.G., Knowles, C.J., Knowles, P.R., and Wimberly, M.C., 2012, Spatial analysis of northern goshawk territories in the Black Hills, South Dakota: The Condor, v. 114, no. 3, p. 532–543, https://doi.org/10.1525/cond.2012.110080.

Kocher, S.D., Toman, E., Trainor, S.F., Wright, V., Briggs, J.S., Goebel, C.P., MontBlanc, E.M., Oxarart, A., Pepin, D.L., Steelman, T.A., Thode, A., and Waldrop, T.A., 2012, How can we span the boundaries between wildland fire science and management in the United States?: Journal of Forestry, v. 110, no. 8, p. 421–428, https://doi.org/10.5849/jof.11-085.

Leicht-Young, S.A., Murphy, M.K., Pavlovic, N.B., Grundel, R., Weyenberg, S.A., and Mulconrey, N., 2012, To burn or not to burn oriental bittersweet—A fire manager's conundrum: U.S. Geological Survey unnumbered series report, 18 p. [Abs. available at https://doi.org/10.3133/70161820.]

Lemckert, F., Hecnar, S., and Pilliod, D.S., 2012, Loss and modification of habitat, chap. 1 *of* Heatwole, H., and Wilkinson, J.W., eds., Conservation and decline of amphibians—Ecological aspects, effect of humans, and management: Baulkham Hills, New South Wales, Australia, Surrey Beatty, p. 3291–3342. [Abs. available at https://pubs.er.usgs.gov/publication/70040182]

Lloyd, J.D., Slater, G.L., and Snyder, J.R., 2012, The role of fire-return interval and season of burn in snag dynamics in a south Florida slash pine forest: Fire Ecology, v. 8, no. 3, p. 18–31, https://doi.org/10.4996/fireecology.0803018.

Macy, J.P., Amoroso, L., Kennedy, J., and Unema, J., 2012, Depth of cinder deposits and water-storage capacity at Cinder Lake, Coconino County, Arizona: U.S. Geological Survey Open-File Report 2012–1018, 20 p., https://doi.org/10.3133/ofr20121018.

Markon, C.J., Trainor, S.F., and Chapin, F.S., III, 2012, The United States national climate assessment—Alaska technical regional report: U.S. Geological Survey Circular 1379, 148 p., https://doi.org/10.3133/cir1379.

McCleskey, R.B., Writer, J.H., and Murphy, S.F., 2012, Water chemistry of surface waters affected by the Fourmile Canyon wildfire, Colorado, 2010–2011: U.S. Geological Survey Open-File Report 2012–1104, 11 p., https://doi.org/10.3133/ofr20121104.

McKee, K.L., and Grace, J.B., 2012, Effects of prescribed burning on marsh-elevation change and the risk of wetland loss: U.S. Geological Survey Open-File Report 2012–1031, 51 p., https://doi.org/10.3133/ofr20121031.

Miller, M.E., Bowker, M.A., Reynolds, R.L., and Goldstein, H.L., 2012, Post-fire land treatments and wind erosion—Lessons from the Milford Flat fire, UT, USA: Aeolian Research, v. 7, December, p. 29–44, https://doi.org/10.1016/j.aeolia.2012.04.001.

Minsley, B.J., Abraham, J.D., Smith, B.D., Cannia, J.C., Voss, C.I., Jorgenson, M.T., Walvoord, M.A., Wylie, B.K., Anderson, L., Ball, L.B., Deszcz-Pan, M., Wellman, T.P., and Ager, T.A., 2012, Airborne electromagnetic imaging of discontinuous permafrost: Geophysical Research Letters, v. 39, no. 2, 8 p., https://doi.org/10.1029/2011GL050079.

Mitchell, J.J., Glenn, N.F., Sankey, T.T., Derryberry, D.R., and Germino, M.J., 2012, Remote sensing of sagebrush canopy nitrogen: Remote Sensing of Environment, v. 124, September, p. 217–223, https://doi.org/10.1016/j.rse.2012.05.002.

Moody, J.A., and Ebel, B.A., 2012, Difference infiltrometer—a method to measure temporally variable infiltration rates during rainstorms: Hydrological Processes, v. 26, no. 21, p. 3312–3318, https://doi.org/10.1002/hyp.9424.

Moody, J.A., and Ebel, B.A., 2012, Hyper-dry conditions provide new insights into the cause of extreme floods after wildfire: CATENA, v. 93, June, p. 58–63, https://doi.org/10.1016/j.catena.2012.01.006.

Murphy, S.F., Mccleskey, R.B., and Writer, J.H., 2012, Effects of flow regime on stream turbidity and suspended solids after wildfire, Colorado Front Range, *in* Stone, M., Collins, A., and Thoms, M., eds., Wildfire and water quality—Processes, impacts and challenges (conference proceedings; 2012, Banff, Alberta, Canada): Walligford, Oxfordshire, U.K., IAHS Press [Selection of peer-reviewed papers presented at conference in Banff, Alberta, Canada, June 11–14, 2012], publication no. 354, p. 51–58, https://iahs.info/uploads/dms/16021.10-51-58-354-15-SheilaMurphy_sm.pdf.

Neville, H.M., Gresswell, R.E., and Dunham, J.B., 2012, Genetic variation reveals influence of landscape connectivity on population dynamics and resiliency of western trout in disturbance-prone habitats, *in* Luce, C., Morgan, P., Dwire, K., Isaak, D., Holden, Z., and Rieman, B., Climate change, forests, fire, water, and fish—Building resilient landscapes, streams, and managers: U.S. Forest Service, General Technical Report RMRS–GTR–290, p. 177–186, https://doi.org/10.2737/RMRS-GTR-290.

Olsson, A.D., Betancourt, J.L., Crimmins, M.A., and Marsh, S.E., 2012, Constancy of local spread rates for buffelgrass (*Pennisetum ciliare* L.) in the Arizona Upland of the Sonoran Desert: Journal of Arid Environments, v. 87, December, p. 136–143, https://doi.org/10.1016/j.jaridenv.2012.06.005.

Olsson, A.D., Betancourt, J., McClaran, M.P., and Marsh, S.E., 2012, Sonoran Desert ecosystem transformation by a C_4 grass without the grass/fire cycle: Diversity and Distributions, v. 18, no. 1, p. 10–21, https://doi.org/10.1111/j.1472-4642.2011.00825.x.

Parise, M., and Cannon, S.H., 2012, Wildfire impacts on the processes that generate debris flows in burned watersheds: Natural Hazards, v. 61, no. 1, p. 217–227, https://doi.org/10.1007/s11069-011-9769-9.

Powers, M.D., Kolka, R.K., Bradford, J.B., Palik, B.J., Fraver, S., and Jurgensen, M.F., 2012, Carbon stocks across a chronosequence of thinned and unmanaged red pine (*Pinus resinosa*) stands: Ecological Applications, v. 22, no. 4, p. 1297–1307, https://doi.org/10.1890/11-0411.1.

Price, O.F., Bradstock, R.A., Keeley, J.E., and Syphard, A.D., 2012, The impact of antecedent fire area on burned area in southern California coastal ecosystems: Journal of Environmental Management, v. 113, December, p. 301–307, https://doi.org/10.1016/j.jenvman.2012.08.042.

Reynolds, M.B.J., DeFalco, L.A., and Esque, T.C., 2012, Short seed longevity, variable germination conditions, and infrequent establishment events provide a narrow window for *Yucca brevifolia* (Agavaceae) recruitment: American Journal of Botany, v. 99, no. 10, p. 1647–1654, https://doi.org/10.3732/ajb.1200099.

Roberts, S.C., and Brooks, M.L., 2012, California spotted owls, chap. 5 *of* North, M., ed., Managing Sierra Nevada forests: U.S. forest Service, General Technical Report GTR–PSW–237, p. 61–71, https://www.fs.fed.us/psw/publications/documents/psw_gtr237/.

Rocha, A.V., Loranty, M.M., Higuera, P.E., Mack, M.C., Hu, F.S., Jones, B.M., Breen, A.L., Rastetter, E.B., Goetz, S.J., and Shaver, G.R., 2012, The footprint of Alaskan tundra fires during the past half-century—implications for surface properties and radiative forcing: Environmental Research Letters, v. 7, no. 4, 8 p., https://doi.org/10.1088/1748-9326/7/4/044039.

Sankey, J.B., Germino, M.J., Benner, S.G., Glenn, N.F., and Hoover, A.N., 2012, Transport of biologically important nutrients by wind in an eroding cold desert: Aeolian Research, v. 7, December, p. 17–27, https://doi.org/10.1016/j.aeolia.2012.01.003.

Sankey, J.B., Ravi, S., Wallace, C.S.A., Webb, R.H., and Huxman, T.E., 2012, Quantifying soil surface change in degraded drylands—Shrub encroachment and effects of fire and vegetation removal in a desert grassland: Journal of Geophysical Research, Biogeosciences, v. 117, no. G2, 11 p., https://doi.org/10.1029/2012JG002002.

Schwilk, D.W., and Keeley, J.E., 2012, A plant distribution shift—Temperature, drought or past disturbance? PLOS ONE, v. 7, no. 2, e31173, 6 p., https://doi.org/10.1371/journal.pone.0031173.

Soulard, C.E., and Sleeter, B.M., 2012, Late twentieth century land-cover change in the basin and range ecoregions of the United States: Regional Environmental Change, v. 12, no. 4, p. 813–823, https://doi.org/10.1007/s10113-012-0296-3.

Staudinger, M.D., Grimm, N.B., Staudt, A., Carter, S.L., Chapin, F.S., III, Kareiva, P., Ruckelshaus, M., and Stein, B.A., 2012, Impacts of climate change on biodiversity, ecosystems, and ecosystem services—Technical input to the 2013 National Climate Assessment: United States Global Change Research Program [cooperative report to the 2013 National Climate Assessment], 296 p., https://data.globalchange.gov/report/nca3/chapter/ecosystems/finding/critical-biological-events-shift/reference/7406884d-2302-4644-aa50-12ed8baf4fd7.

Stephens, S.L., Boerner, R.E.J., Moghaddas, J.J., Moghaddas, E.E.Y., Collins, B.M., Dow, C.B., Edminster, C., Fiedler, C.E., Fry, D.L., Hartsough, B.R., Keeley, J.E., Knapp, E.E., McIver, J.D., Skinner, C.N., and Youngblood, A., 2012, Fuel treatment impacts on estimated wildfire carbon loss from forests in Montana, Oregon, California, and Arizona: Ecosphere, v. 3, no. 5, article no. 38, 17 p., https://doi.org/10.1890/ES11-00289.1.

Sturtevant, B.R., Miranda, B.R., Shinneman, D.J., Gustafson, E.J., and Wolter, P.T., 2012, Comparing modern and presettlement forest dynamics of a subboreal wilderness—Does spruce budworm enhance fire risk?: Ecological Applications, v. 22, no. 4, p. 1278–1296, https://doi.org/10.1890/11-0590.1.

Sumner, D.M., Nicholson, R.S., and Clark, K.L., 2012, Measurement and simulation of evapotranspiration at a wetland site in the New Jersey Pinelands: U.S. Geological Survey Scientific Investigations Report 2012–5118, 30 p., https://doi.org/10.3133/sir20125118.

Syphard, A.D., Keeley, J.E., Massada, A.B., Brennan, T.J., and Radeloff, V.C., 2012, Housing arrangement and location determine the likelihood of housing loss due to wildfire: PLOS ONE, v. 7, no. 3, e33954, 13 p., https://doi.org/10.1371/journal.pone.0033954.

Tillery, A.C., Matherne, A.M., and Verdin, K.L., 2012, Estimated probability of postwildfire debris flows in the 2012 Whitewater-Baldy fire burn area, southwestern New Mexico: U.S. Geological Survey Open-File Report 2012–1188, 11 p., 3 pls., https://doi.org/10.3133/ofr20121188.

Turnbull, L., Wilcox, B.P., Belnap, J., Ravi, S., D'Odorico, P., Childers, D., Gwenzi, W., Okin, G., Wainwright, J., Caylor, K.K., and Sankey, T., 2012, Understanding the role of ecohydrological feedbacks in ecosystem state change in drylands: Ecohydrology, v. 5, no. 2, p. 174–183, https://doi.org/10.1002/eco.265.

Van Riper III, C., and Crow, C., 2012, Avian community responses to vegetation structure within chained and hand-cut pinyon-juniper woodlands on the Colorado Plateau, chap. 7 *of* van Riper, C., III, Villarreal M.L., van Riper, C.J., and Johnson, M.J., eds., The Colorado Plateau V—Research, environmental planning, and management for collaborative conservation: Biennial Conference of Research on the Colorado Plateau, 10th, Northern Arizona University, 2009, Tucson, Ariz., University of Arizona Press, [based on conference research], p. 113–132.

van Wagtendonk, J.W., van Wagtendonk, K.A., and Thode, A.E., 2012, Factors associated with the severity of interacting fires in Yosemite National Park, California, USA: Fire Ecology, v. 8, no. 1, p. 11–31, https://doi.org/10.4996/fireecology.0801011.

Verdin, K.L., Dupree, J.A., and Elliot, J.G., 2012, Probability and volume of potential postwildfire debris flows in the 2012 High Park burn area near Fort Collins, Colorado: U.S. Geological Survey Open-file Report 2012–1148, 9 p., https://doi.org/10.3133/ofr20121148.

Verdin, K.L., Dupree, J.A., and Elliott, J.G., 2012, Probability and volume of potential postwildfire debris flows in the 2012 Waldo Canyon burn area near Colorado Springs, Colorado: U.S. Geological Survey Open-File Report 2012–1158, 8 p., 2 pls., https://doi.org/10.3133/ofr20121158.

Villarreal, M.L., Gass, L., Norman, L., Sankey, J.B., Wallace, C.S.A., McMacken, D., Childs, J.L., and Petrakis, R., 2012, Examining wildlife responses to phenology and wildfire using a landscape-scale camera trap network, *in* Gottfried, G.J., Ffolliott, P.F., Gebow, B.S., Eskew, L.G., and Collins, L.C., (comps.), Merging science and management in a rapidly changing world—Biodiversity and management of the Madrean Archipelago III and 7th Conference on Research and Resource Management in the Southwestern Deserts, 2012, May 1–5, Tucson, AZ, [Proceedings]: U.S. Forest Service, Rocky Mountain Research Station, p. 503–505, https://www.fs.usda.gov/treesearch/pubs/43871.

Vogelmann, J.E., Xian, G., Homer, C., and Tolk, B., 2012, Monitoring gradual ecosystem change using Landsat time series analyses—Case studies in selected forest and rangeland ecosystems: Remote Sensing of Environment, v. 122, July, p. 92–105, https://doi.org/10.1016/j.rse.2011.06.027.

Warrick, J.A., Hatten, J.A., Pasternack, G.B., Gray, A.B., Goni, M.A., and Wheatcroft, R.A., 2012, The effects of wildfire on the sediment yield of a coastal California watershed: Bulletin of the Geological Society of America, v. 124, nos. 7–8, p. 1130–1146, https://doi.org/10.1130/B30451.1.

Watts, A.C., Kobziar, L.N., and Snyder, J.R., 2012, Fire reinforces structure of pondcypress (*Taxodium distichum* var. *imbricarium*) domes in a wetland landscape: Wetlands, v. 32, no. 3, p. 439–448, https://doi.org/10.1007/s13157-012-0277-9.

Whitlock, C., Dean, W.E., Fritz, S.C., Stevens, L.R., Stone, J.R., Power, M.J., Rosenbaum, J.R., Pierce, K.L., and Bracht-Flyr, B.B., 2012, Holocene seasonal variability inferred from multiple proxy records from Crevice Lake, Yellowstone National Park, USA: Palaeogeography, Palaeoclimatology, Palaeoecology, v. 331–332, May, p. 90–103, https://doi.org/10.1016/j.palaeo.2012.03.001.

Wijayratne, U.C., and Pyke, D.A., 2012, Burial increases seed longevity of two *Artemisia tridentata* (Asteraceae) subspecies: American Journal of Botany, v. 99, no. 3, p. 438–447, https://doi.org/10.3732/ajb.1000477.

Williams, A.P., Allen, C.D., Macalady, A.K., Griffin, D., Woodhouse, C.A., Meko, D.M., Swetnam, T.W., Rauscher, S.A., Seager, R., Grissino-Mayer, H.D., Dean, J.S., Cook, E.R., Gangodagamage, C., Cai, M., and McDowell, N.G., 2012, Temperature as a potent driver of regional forest drought stress and tree mortality: Nature Climate Change, v. 3, no. 3, p. 292–297, https://doi.org/10.1038/nclimate1693.

Winter, S.L., Fuhlendorf, S.D., Goad, C.L., Davis, C.A., Hickman, K.R., and Leslie, D.M., Jr., 2012, Restoration of the fire-grazing interaction in *Artemisia filifolia* shrubland: Journal of Applied Ecology, v. 49, no. 1, p. 242–250, https://doi.org/10.1111/j.1365-2664.2011.02067.x.

Writer, J.H., McCleskey, R.B., and Murphy, S.F., 2012, Effects of wildfire on source-water quality and aquatic ecosystems, Colorado Front Range, *in* Wildfire and Water Quality—Processes, Impacts, and Challenges, [Proceedings]: Conference on Wildfire and Water Quality—Processes, Impacts and Challenges, Banff, Alberta, Canada, June 11–14, 2012; Wallingford, Oxfordshire, United Kingdom, International Association of Hydrological Sciences (IAHS), IAHS publication no. 354, p. 117–122, https://iahs.info/uploads/dms/16029.18-117-122-354-09-Writer-et-al-CORR.pdf.

Writer, J.H., and Murphy, S.F., 2012, Wildfire effects on source-water quality—Lessons from Fourmile Canyon fire, Colorado, and implications for drinking-water treatment: U.S. Geological Survey Fact Sheet 2012–3095, 4 p., https://doi.org/10.3133/fs20123095.

Yuan, F.-M., Yi, S.-H., Mcguire, A.D., Johnson, K.D., Liang, J., Harden, J.W., Kasischke, E.S., and Kurz, W.A., 2012, Assessment of boreal forest historical C dynamics in the Yukon River Basin—relative roles of warming and fire regime change: Ecological Applications, v. 22, no. 8, p. 2091–2109, https://doi.org/10.1890/11-1957.1.

2011: 116 Publications

Anacker, B., Rajakaruna, N., Ackerly, D., Harrison, S., Keeley, J., and Vasey, M., 2011, Ecological strategies in California chaparral—interacting effects of soils, climate, and fire on specific leaf area: Plant Ecology and Diversity, v. 4, nos. 2–3, p. 179–188, https://doi.org/10.1080/17550874.2011.633573.

Augustine, D.J., 2011, Habitat selection by mountain plovers in shortgrass steppe: Journal of Wildlife Management, v. 75, no. 2, p. 297–304, https://doi.org/10.1002/jwmg.57.

Bar-Massada, A., Syphard, A.D., Hawbaker, T.J., Stewart, S.I., and Radeloff, V.C., 2011, Effects of ignition location models on the burn patterns of simulated wildfires: Environmental Modelling and Software, v. 26, no. 5, p. 583–592, https://doi.org/10.1016/j.envsoft.2010.11.016.

Barrett, K., McGuire, A.D., Hoy, E.E., and Kasischke, E.S., 2011, Potential shifts in dominant forest cover in interior Alaska driven by variations in fire severity: Ecological Applications, v. 21, no. 7, p. 2380–2396, https://doi.org/10.1890/10-0896.1.

Bastion, H., Long, D., Lundberg, B., Kost, J., Natharius, J.A., Kreilick, H., Martin, C., Smail, T., Napoli, J., and Hann, W., 2011, LANDFIRE 2001 and 2008 Refresh Geographic Area Report—Pacific Southwest: U.S. Geological Survey unnumbered report, 94 p., https://doi.org/10.3133/70042134.

Belnap, J., Campbell, D., and Kershner, J., 2011, Upper Colorado River Basin Climate Effects Network: U.S. Geological Survey Fact Sheet 2010–3092, 2 p., https://doi.org/10.3133/20103092.

Bernhardt, C., 2011, Native Americans, regional drought and tree island evolution in the Florida Everglades: The Holocene, v. 21, no. 6, p. 967–978, https://doi.org/10.1177/0959683611400204.

Bowen, Z.H., Aldridge, C.L., Anderson, P.J., Assal, T.J., Biewick, L.R.H., Blecker, S.W., Boughton, G.K., Bristol, S., Carr, N.B., Chalfoun, A.D., Chong, G.W., Clark, M.L., Diffendorfer, J.E., Fedy, B.C., Foster, K., Garman, S.L., Germaine, S., Holloway, J., Homer, C., Kauffman, M.J., Keinath, D., Latysh, N., Manier, D., McDougal, R.R., Melcher, C.P., Miller, K.A., Montag, J., Potter, C.J., Schell, S., Shafer, S.L., Smith, D.B., Stillings, L.L., Tuttle, M., and Wilson, A.B., 2011, U.S. Geological Survey Science for the Wyoming Landscape Conservation Initiative—2010 annual report: U.S. Geological Survey Open-File Report 2011–1219, 146 p., https://doi.org/10.3133/ofr20111219.

Bowman, D.M.J.S., Balch, J., Artaxo, P., Bond, W.J., Cochrane, M.A., D'Antonio, C.M., DeFries, R., Johnston, F.H., Keeley, J.E., Krawchuk, M.A., Kull, C.A., Mack, M., Moritz, M.A., Pyne, S., Roos, C.I., Scott, A.C., Sodhi, N.S., and Swetnam, T.W., 2011, The human dimension of fire regimes on Earth: Journal of Biogeography, v. 38, no. 12, p. 2223–2236, https://doi.org/10.1111/j.1365-2699.2011.02595.x.

Brehme, C.S., Clark, D.R., Rochester, C.J., and Fisher, R.N., 2011, Wildfires alter rodent community structure across four vegetation types in southern California, USA: Fire Ecology, v. 7, no. 2, p. 81–98, https://doi.org/10.4996/fireecology.0702081.

Brooks, M.L., and Chambers, J.C., 2011, Resistance to invasion and resilience to fire in desert shrublands of North America: Rangeland Ecology and Management, v. 64, p. 431–438, https://pubs.er.usgs.gov/publication/70006355.

Burton, J.A., Hallgren, S.W., Fuhlendorf, S.D., and Leslie, D.M., Jr., 2011, Understory response to varying fire frequencies after 20 years of prescribed burning in an upland oak forest: Plant Ecology, v. 212, no. 9, p. 1513–1525, https://doi.org/10.1007/s11258-011-9926-y.

Cannon, S.H., and Michael, J.A., 2011, Emergency assessment of postwildfire debris-flow hazards for the 2011 Motor fire, Sierra and Stanislaus National Forests, California: U.S. Geological Survey Open-File Report 2011–1251, 10 p., https://doi.org/10.3133/ofr20111251.

Castro, J., Allen, C.D., Molina-Morales, M., Marañón-Jiménez, S., Sánchez-Miranda, Á., and Zamora, R., 2011, Salvage logging versus the use of burnt wood as a nurse object to promote post-fire tree seedling establishment: Restoration Ecology, v. 19, no. 4, p. 537–544, https://doi.org/10.1111/j.1526-100X.2009.00619.x.

Chen, X., Liu, S., Zhu, Z., Vogelmann, J., Li, Z., and Ohlen, D., 2011, Estimating aboveground forest biomass carbon and fire consumption in the U.S. Utah High Plateaus using data from the Forest Inventory and Analysis Program, Landsat, and LANDFIRE: Ecological Indicators, v. 11, no. 1, p. 140–148, https://doi.org/10.1016/j.ecolind.2009.03.013.

Chen, X., Vogelmann, J.E., Rollins, M., Ohlen, D., Key, C.H., Yang, L., Huang, C., and Shi, H., 2011, Detecting post-fire burn severity and vegetation recovery using multitemporal remote sensing spectral indices and field-collected composite burn index data in a ponderosa pine forest: International Journal of Remote Sensing, v. 32, no. 23, p. 7905–7927, https://doi.org/10.1080/01431161.2010.524678.

Collins, W.B., Dale, B.W., Adams, L.G., McElwain, D.E., and Joly, K., 2011, Fire, grazing history, lichen abundance, and winter distribution of caribou in Alaska's taiga: Journal of Wildlife Management, v. 75, no. 2, p. 369–377, https://doi.org/10.1002/jwmg.39.

Cordova, C.E., Johnson, W.C., Mandel, R.D., and Palmer, M.W., 2011, Late Quaternary environmental change inferred from phytoliths and other soil-related proxies—Case studies from the central and southern Great Plains, USA: Catena, v. 85, no. 2, p. 87–108, https://doi.org/10.1016/j.catena.2010.08.015.

Cross, A., and Perakis, S.S., 2011, Tree species and soil nutrient profiles in old-growth forests of the Oregon Coast Range: Canadian Journal of Forest Research, v. 41, no. 1, p. 195–210, https://doi.org/10.1139/X10-199.

Crow, C., and van Riper, C., III, 2011, Avian community responses to juniper woodland structure and thinning treatments on the Colorado Plateau: U.S. Geological Survey Open-File Report 2011–1109, 32 p., https://doi.org/10.3133/ofr20111109.

D'Amato, A.W., Fraver, S., Palik, B.J., Bradford, J.B., and Patty, L., 2011, Singular and interactive effects of blowdown, salvage logging, and wildfire in sub-boreal pine systems: Forest Ecology and Management, v. 262, no. 11, p. 2070–2078, https://doi.org/10.1016/j.foreco.2011.09.003.

Dwyer, J., Dinardo, T., and Muchoney, D., 2011, Developing climate data records and essential climate variables from Landsat data, 34th International Symposium on Remote Sensing of Environment, Proceedings, Sydney, Australia, April 10–15, 2011: Sydney, International Symposium on Remote Sensing of Environment, p. 1–3, http://www.isprs.org/proceedings/2011/ISRSE-34/.

Flores, C., Bounds, D.L., and Ruby, D.E., 2011, Does prescribed fire benefit wetland vegetation? Wetlands, v. 31, no. 1, p. 35–44, https://doi.org/10.1007/s13157-010-0131-x.

Fraver, S., Jain, T., Bradford, J.B., D'Amato, A.W., Kastendick, D., Palik, B., Shinneman, D., and Stanovick, J., 2011, The efficacy of salvage logging in reducing subsequent fire severity in conifer-dominated forests of Minnesota, USA: Ecological Applications, v. 21, no. 6, p. 1895–1901, https://doi.org/10.1890/11-0380.1.

Friedel, M.J., 2011, A data-driven approach for modeling post-fire debris-flow volumes and their uncertainty: Environmental Modelling and Software, v. 26, no. 12, p. 1583–1598, https://doi.org/10.1016/j.envsoft.2011.07.014.

Friedel, M.J., 2011, Modeling hydrologic and geomorphic hazards across post-fire landscapes using a self-organizing map approach: Environmental Modelling and Software, v. 26, no. 12, p. 1660–1674, https://doi.org/10.1016/j.envsoft.2011.07.001.

Goulden, M.L., McMillan, A.M.S., Winston, G.C., Rocha, A.V., Manies, K.L., Harden, J.W., and Bond-Lamberty, B.P., 2011, Patterns of NPP, GPP, respiration, and NEP during boreal forest succession: Global Change Biology, v. 17, no. 2, p. 855–871, https://doi.org/10.1111/j.1365-2486.2010.02274.x.

Grant, T.A., Shaffer, T.L., Madden, E.M., and Berkey, G.B., 2011, Ducks and passerines nesting in northern mixed-grass prairie treated with fire: Wildlife Society Bulletin, v. 35, no. 4, p. 368–376, https://doi.org/10.1002/wsb.65.

Hasselquist, N.J., Germino, M.J., Sankey, J.B., Ingram, L.J., and Glenn, N.F., 2011, Aeolian nutrient fluxes following wildfire in sagebrush steppe—implications for soil carbon storage: Biogeosciences, v. 8, no. 12, p. 3649–3659, https://doi.org/10.5194/bg-8-3649-2011.

Hibbs, D., and Jacobs, R., 2011, Vegetation recovery after fire in the Klamath-Siskiyou Region, southern Oregon: U.S. Geological Survey Fact Sheet 2011–3140, 4 p., https://doi.org/10.3133/fs20113140.

Holcombe, T.R., 2011, Buffelgrass—Integrated modeling of an invasive plant: U.S. Geological Survey Fact Sheet 2011–3022, 2 p., https://doi.org/10.3133/fs20113022.

Hossack, B.R., and Pilliod, D.S., 2011, Amphibian responses to wildfire in the Western United States—Emerging patterns from short-term studies: Fire Ecology, v. 7, no. 2, p. 129–144, https://doi.org/10.4996/fireecology.0702129.

Hovick, T.J., Miller, J.R., Koford, R.R., Engle, D.M., and Debinski, D.M., 2011, Postfledging survival of grasshopper sparrows in grasslands managed with fire and grazing: The Condor, v. 113, no. 2, p. 429–437, https://doi.org/10.1525/cond.2011.100135.

Hurteau, M.D., and Brooks, M.L., 2011, Short- and long-term effects of fire on carbon in US dry temperate forest systems: BioScience, v. 61, no. 2, p. 139–146, https://doi.org/10.1525/bio.2011.61.2.9.

Jenkins, S.E., Sieg, C.H., Anderson, D.E., Kaufman, D.S., and Pearthree, P.A., 2011, Late Holocene geomorphic record of fire in ponderosa pine and mixed-conifer forests, Kendrick Mountain, northern Arizona, USA: International Journal of Wildland Fire, v. 20, p. 125–141, https://www.fs.usda.gov/treesearch/pubs/38460.

Johnson, J.B., Edwards, J.W., and Ford, W.M., 2011, Nocturnal activity patterns of northern Myotis (*Myotis septentrionalis*) during the maternity season in West Virginia (USA): Acta Chiropterologica, v. 13, no. 2, p. 391–397, https://doi.org/10.3161/150811011X624866.

Johnson, K.D., Harden, J., McGuire, A.D., Bliss, N.B., Bockheim, J.G., Clark, M., Nettleton-Hollingsworth, T., Jorgenson, M.T., Kane, E.S., Mack, M., O'Donnell, J., Ping, C.-L., Schuur, E.A.G., Turetsky, M.R., and Valentine, D.W., 2011, Soil carbon distribution in Alaska in relation to soil-forming factors: Geoderma, v. 167–168, p. 71–84, https://doi.org/10.1016/j.geoderma.2011.10.006.

Kaczynski, K.M., Beatty, S.W., van Wagtendonk, J.W., and Marshall, K.N., 2011, Burn severity and non-native species in Yosemite National Park, California, USA: Fire Ecology, v. 7, no. 2, p. 145–459, https://doi.org/10.4996/fireecology.0702145.

Kean, J.W., Staley, D.M., and Cannon, S.H., 2011, In situ measurements of post-fire debris flows in southern California—Comparisons of the timing and magnitude of 24 debris-flow events with rainfall and soil moisture conditions: Journal of Geophysical Research—Earth Surface, v. 116, December, 21 p., https://doi.org/10.1029/2011JF002005.

Keeley, J.E., Bond, W.J., Bradstock, R.A., Pausas, J.G., and Rundel, P.W., 2011, Alien species and fire, chap. 12 *of* Fire in Mediterranean ecosystems—Ecology, evolution and management: Cambridge University Press, p. 330–348, https://doi.org/10.1017/CBO9781139033091.015.

Keeley, J.E., Bond, W.J., Bradstock, R.A., Pausas, J.G., and Rundel, P.W., 2011, Climate, fire and geology in the convergence of Mediterranean-type climate ecosystems, chap. 14 *of* Fire in Mediterranean ecosystems—Ecology, evolution and management: Cambridge University Press, p. 388–397, https://doi.org/10.1017/CBO9781139033091.017.

Keeley, J.E., Bond, W.J., Bradstock, R.A., Pausas, J.G., and Rundel, P.W., 2011, Fire-adaptive trait evolution, chap. 9 *of* Fire in Mediterranean ecosystems—Ecology, evolution and management: Cambridge University Press, p. 233–274, https://doi.org/10.1017/CBO9781139033091.012.

Keeley, J.E., Bond, W.J., Bradstock, R.A., Pausas, J.G., and Rundel, P.W., 2011, Fire and the fire regime framework, chap. 2 *of* Fire in Mediterranean ecosystems—Ecology, evolution and management: Cambridge University Press, p. 30–57, https://doi.org/10.1017/CBO9781139033091.003.

Keeley, J.E., Bond, W.J., Bradstock, R.A., Pausas, J.G., and Rundel, P.W., 2011, Fire and the origins of Mediterranean-type vegetation, chap. 10 *of* Fire in Mediterranean ecosystems—Ecology, evolution and management: Cambridge University Press, p. 275–309, https://doi.org/10.1017/CBO9781139033091.013.

Keeley, J.E., Bond, W.J., Bradstock, R.A., Pausas, J.G., and Rundel, P.W., 2011, Fire in California, chap. 5 *of* Fire in Mediterranean ecosystems—Ecology, evolution and management: Cambridge University Press, p. 113–149, https://doi.org/10.1017/CBO9781139033091.007.

Keeley, J.E., Bond, W.J., Bradstock, R.A., Pausas, J.G., and Rundel, P.W., 2011, Fire in Chile, chap. 6 *of* Fire in Mediterranean ecosystems—Ecology, evolution and management: Cambridge University Press, p. 150–167, https://doi.org/10.1017/CBO9781139033091.008.

Keeley, J.E., Bond, W.J., Bradstock, R.A., Pausas, J.G., and Rundel, P.W., 2011, Fire in Southern Australia, chap. 8 *of* Fire in Mediterranean ecosystems—Ecology, evolution and management: Cambridge University Press, p. 201–230, https://doi.org/10.1017/CBO9781139033091.010.

Keeley, J.E., Bond, W.J., Bradstock, R.A., Pausas, J.G., and Rundel, P.W., 2011, Fire in the Cape Region of South Africa, chap. 7 *of* Fire in Mediterranean ecosystems—Ecology, evolution and management: Cambridge University Press, p. 168–200, https://doi.org/10.1017/CBO9781139033091.009.

Keeley, J.E., Bond, W.J., Bradstock, R.A., Pausas, J.G., and Rundel, P.W., 2011, Fire in the Mediterranean Basin, chap. 4 *of* Fire in Mediterranean ecosystems—Ecology, evolution and management: Cambridge University Press, p. 83–112, https://doi.org/10.1017/CBO9781139033091.006.

Keeley, J.E., Bond, W.J., Bradstock, R.A., Pausas, J.G., and Rundel, P.W., 2011, Fire management of Mediterranean landscapes, chap. 13 *of* Fire in Mediterranean ecosystems—Ecology, evolution and management: Cambridge University Press, p. 349–387, https://doi.org/10.1017/CBO9781139033091.016.

Keeley, J.E., Bond, W.J., Bradstock, R.A., Pausas, J.G., and Rundel, P.W., 2011, Fire-related plant traits, chap. 3 *of* Fire in Mediterranean ecosystems—Ecology, evolution and management: Cambridge University Press, p. 58–80, https://doi.org/10.1017/CBO9781139033091.004.

Keeley, J.E., Bond, W.J., Bradstock, R.A., Pausas, J.G., and Rundel, P.W., 2011, Mediterranean-type climate ecosystems and fire, chap. 1 *of* Fire in Mediterranean ecosystems—Ecology, evolution and management: Cambridge University Press, p. 3–29, https://doi.org/10.1017/CBO9781139033091.002.

Keeley, J.E., Bond, W.J., Bradstock, R.A., Pausas, J.G., and Rundel, P.W., 2011, Plant diversity and fire, chap. 11 *of* Fire in Mediterranean ecosystems—Ecology, evolution and management: Cambridge University Press, p. 310–329, https://doi.org/10.1017/CBO9781139033091.014.

Keeley, J.E., Franklin, J., and D'Antonio, C., 2011, Fire and invasive plants on California landscapes, chap. 8 *of* McKenzie, D., Miller, C., and Falk, D.A., eds., The landscape ecology of fire: Dordrecht, Springer, p. 193–221, https://doi.org/10.1007/978-94-007-0301-8_8.

Klinger, R.C., Brooks, M.L., Frakes, N., Matchett, J.R., and McKinley, R., 2011, Vegetation trends following the 2005 Southern Nevada Complex fire, chap. 6 *of* Bauer, K.L., Brooks, M.L., DeFalco, LA., Derasary, L., Drake, K., Frakes, N., Gentilcore, D., Klinger, R.C., Matchett, J.R., McKinley, R.A., Prentice, K., and Scoles-Sciulla, S.J., comps., Southern Nevada Complex emergency stabilization and rehabilitation final report: U.S. Bureau of Land Management, Western Ecological Research Center, Federal Government series report, p. 118–194.

Knick, S.T., and Hanser, S.E., 2011, Connecting pattern and process in greater sage-grouse populations and sagebrush landscapes, chap. 16 *of* Knick, S.T., and Connelly, J.W., eds., Greater sage-grouse—Ecology and conservation of a landscape species and its habitats: University of California Press, p. 383–406, https://www.jstor.org/stable/10.1525/j.ctt1ppq0j.22.

Leu, M., and Hanser, S.E., 2011, Influences of the human footprint on sagebrush landscape patterns—Implications for sage-grouse conservation, chap. 13 *of* Knick, S.T., and Connelly, J.W., eds., Greater sage-grouse—Ecology and conservation of a landscape species and its habitats: University of California Press, p. 253–272, https://www.jstor.org/stable/10.1525/j.ctt1ppq0j.19.

Liang, C.T., and Stohlgren, T.J., 2011, Habitat suitability of patch types—A case study of the Yosemite toad: Frontiers of Earth Science, v. 5, p. 217–228, https://doi.org/10.1007/s11707-011-0157-2.

Liu, J., Vogelmann, J.E., Zhu, Z., Key, C.H., Sleeter, B.M., Price, D.T., Chen, J.M., Cochrane, M.A., Eidenshink, J.C., Howard, S.M., Bliss, N.B., and Jiang, H., 2011, Estimating California ecosystem carbon change using process model and land cover disturbance data—1951–2000: Ecological Modelling, v. 222, no. 14, p. 2333–2341, https://doi.org/10.1016/j.ecolmodel.2011.03.042.

Lovich, J.E., and Ennen, J.R., 2011, Wildlife conservation and solar energy development in the desert Southwest, United States: BioScience, v. 61, no. 12, p. 982–992, https://doi.org/10.1525/bio.2011.61.12.8.

Lovich, J.E., Ennen, J.R., Madrak, S.V., Loughran, C.L., Meyer, K.P., Arundel, T.R., and Bjurlin, C.D., 2011, Long-term post-fire effects on spatial ecology and reproductive output of female Agassiz's desert tortoises (*Gopherus agassizii*) at a wind energy facility near Palm Springs, California, USA: Fire Ecology, v. 7, no. 3, p. 75–87, https://doi.org/10.4996/fireecology.0703075.

Lutz, J.A., Key, C.H., Kolden, C.A., Kane, J.T., and van Wagtendonk, J.W., 2011, Fire frequency, area burned, and severity—A quantitative approach to defining a normal fire year: Fire Ecology, v. 7, no. 2, p. 51–65, https://doi.org/10.4996/fireecology.0702051.

Manies, K.L., and Harden, J.W., 2011, Soil data from different-age *Picea mariana* stands near Delta Junction, Alaska: U.S. Geological Survey Open-File Report 2011–1061, 10 p., https://doi.org/10.3133/ofr20111061.

Manies, K.L., Harden, J.W., and Ottmar, R., 2011, Soils data related to the 1999 Frostfire Burn: U.S. Geological Survey Open-File Report 2011–1216, 8 p., https://doi.org/10.3133/ofr20111216.

Massada, A.B., Syphard, A.D., Hawbaker, T.J., Stewart, S.I., and Radeloff, V.C., 2011, Effects of ignition location models on the burn patterns of simulated wildfires: Environmental Modelling and Software, v. 26, no. 5, p. 583–592, https://doi.org/10.1016/j.envsoft.2010.11.016.

Matchett, J.R., and Brooks, M.L., 2011, Soil erosion risks following the 2005 Southern Nevada Fire Complex, chap. 8 *of* Bauer, K.L., Brooks, M.L., DeFalco, L.A., Derasary, L., Drake, K., Frakes, N., Gentilcore, D., Klinger, R.C., Matchett, J.R., McKinley, R.A., Prentice, K., and Scoles-Sciulla, S.J., comps., Southern Nevada Complex emergency stabilization and rehabilitation final report: U.S. Bureau of Land Management, Western Ecological Research Center, Federal Government series report, p. 217–229.

Matsuda, T., Turschak, G., Brehme, C., Rochester, C., Mitrovich, M., and Fisher, R., 2011, Effects of large-scale wildfires on ground foraging ants (Hymenoptera: Formicidae) in southern California: Environmental Entomology, v. 40, no. 2, p. 204–216, https://doi.org/10.1603/EN10061.

McGinnis, T., and Keeley, J., 2011, Effects of eradication and restoration treatments on Italian thistle (*Carduus pycnocephalus*): Madroño, v. 58, no. 4, p. 207–213, https://doi.org/10.3120/0024-9637-58.4.207.

Miller, M.W., Pearlstine, E. V., Dorazio, R.M., and Mazzotti, F.J., 2011, Occupancy and abundance of wintering birds in a dynamic agricultural landscape: Journal of Wildlife Management, v. 75, no. 4, p. 751–761, https://doi.org/10.1002/jwmg.98.

Moore, C.T., Fonnesbeck, C.J., Shea, K., Lah, K.J., McKenzie, P.M., Ball, L.C., Runge, M.C., and Alexander, H.M., 2011, An adaptive decision framework for the conservation of a threatened plant: Journal of Fish and Wildlife Management, v. 2, no. 2, p. 247–261, https://doi.org/10.3996/012011-JFWM-007.

Murphy, R.W., Berry, K.H., Edwards, T., Leviton, A.E., Lathrop, A., and Riedle, J.D., 2011, The dazed and confused identity of Agassiz's land tortoise, *Gopherus agassizii* (Testudines, Testudinidae) with the description of a new species, and its consequences for conservation: ZooKeys, v. 113, p. 39–71, https://doi.org/10.3897/zookeys.113.1353.

Murphy, S.F., and Writer, J.H., 2011, Evaluating the effects of wildfire on stream processes in a Colorado front range watershed, USA: Applied Geochemistry, v. 26, p. S363–S364, https://doi.org/10.1016/j.apgeochem.2011.03.061.

Nagler, P.L., Glenn, E.P., Jarnevich, C.S., and Shafroth, P.B., 2011, Distribution and abundance of saltcedar and Russian olive in the western United States: Critical Reviews in Plant Sciences, v. 30, no. 6, p. 508–523, https://doi.org/10.1080/07352689.2011.615689.

Nesmith, J.C.B., Caprio, A.C., Pfaff, A.H., McGinnis, T.W., and Keeley, J.E., 2011, A comparison of effects from prescribed fires and wildfires managed for resource objectives in Sequoia and Kings Canyon National Parks: Forest Ecology and Management, v. 261, no. 7, p. 1275–1282, https://doi.org/10.1016/j.foreco.2011.01.006.

Nichols, K., Schoenberg, F.P., Keeley, J.E., Bray, A., and Diez, D., 2011, The application of prototype point processes for the summary and description of California wildfires: Journal of Time Series Analysis, v. 32, no. 4, p. 420–429, https://doi.org/10.1111/j.1467-9892.2011.00734.x.

O'Donnell, J.A., Harden, J.W., and Manies, K.L., 2011, Soil physical, chemical, and gas-flux characterization from *Picea mariana* stands near Erickson Creek, Alaska: U.S. Geological Survey Open-File Report 2011–1153, 15 p., https://doi.org/10.3133/ofr20111153.

O'Donnell, J.A., Harden, J.W., McGuire, A.D., Kanevskiy, M.Z., Jorgenson, M.T., and Xu, X., 2011, The effect of fire and permafrost interactions on soil carbon accumulation in an upland black spruce ecosystem of interior Alaska—Implications for post-thaw carbon loss: Global Change Biology, v. 17, no. 3, p. 1461–1474, https://doi.org/10.1111/j.1365-2486.2010.02358.x.

O'Donnell, J.A., Harden, J.W., McGuire, A.D., and Romanovsky, V.E., 2011, Exploring the sensitivity of soil carbon dynamics to climate change, fire disturbance and permafrost thaw in a black spruce ecosystem: Biogeosciences, v. 8, no. 5, p. 1367–1382, https://doi.org/10.5194/bg-8-1367-2011.

O'Shea, T.J., Cryan, P.M., Snider, E.A., Valdez, E.W., Ellison, L.E., and Neubaum, D.J., 2011, Bats of Mesa Verde National Park, Colorado—Composition, reproduction, and roosting habits: Monographs of the Western North American Naturalist, v. 5, no. 1, p. 1–19, https://doi.org/10.3398/042.005.0101.

Pan, Y., Birdsey, R.A., Fang, J., Houghton, R., Kauppi, P.E., Kurz, W.A., Phillips, O.L., Shvidenko, A., Lewis, S.L., Canadell, J.G., Ciais, P., Jackson, R.B., Pacala, S.W., McGuire, A.D., Piao, S., Rautiainen, A., Sitch, S., and Hayes, D., 2011, A large and persistent carbon sink in the world's forests: Science, v. 333, p. 988–993, https://doi.org/10.1126/science.1201609.

Pardo, L.H., Fenn, M.E., Goodale, C.L., Geiser, L.H., Driscoll, C.T., Allen, E.B., Baron, J.S., Bobbink, R., Bowman, W.D., Clark, C.M., Emmett, B., Gilliam, F.S., Greaver, T.L., Hall, S.J., Lilleskov, E.A., Liu, L., Lynch, J.A., Nadelhoffer, K.J., Perakis, S.S., Robin-Abbott, M.J., Stoddard, J.L., Weathers, K.C., and Dennis, R.L., 2011, Effects of nitrogen deposition and empirical nitrogen critical loads for ecoregions of the United States: Ecological Applications, v. 21, no. 8, p. 3049–3082, https://doi.org/10.1890/10-2341.1.

Pavlovic, N.B., Leicht-Young, S.A., and Grundel, R., 2011, Short-term effects of burn season on flowering phenology of savanna plants: Plant Ecology, v. 212, no. 4, p. 611–625, https://doi.org/10.1007/s11258-010-9851-5.

Perakis, S.S., Sinkhorn, E.R., and Compton, J.E., 2011, $\delta^{15}N$ constraints on long-term nitrogen balances in temperate forests: Oecologia, v. 167, no. 3, p. 793–807, https://doi.org/10.1007/s00442-011-2016-y.

Pereira, P., Úbeda, X., Martin, D., Mataix-Solera, J., and Guerrero, C., 2011, Effects of a low severity prescribed fire on water-soluble elements in ash from a cork oak (*Quercus suber*) forest located in the northeast of the Iberian Peninsula: Environmental Research, v. 111, no. 2, p. 237–247, https://doi.org/10.1016/j.envres.2010.09.002.

Peterson, B., and Nelson, K., 2011, Developing a regional canopy fuels assessment strategy using multi-scale Lidar, *in* SilviLaser 2011—11th International Conference on LiDAR Applications for Assessing Forest Ecosystems, Hobart, Australia, October 16–20, 2011, Proceedings: International Union of Forest Research Organizations, 8 p., https://www.iufro.org/publications/proceedings/proceedings-meetings-2011.

Peterson, D.L., Allen, C.D., Baron, J.S., Fagre, D.B., McKenzie, D., Stephenson, N.L., Fountain, A.G., Hicke, J.A., Malanson, G.P., Ojima, D.S., Tague, C.L., and van Mantgem, P.J., 2011, Response of western mountain ecosystems to climatic variability and change—A collaborative research approach, *in* Beever, E.A., and Belant, J.L., eds., Ecological consequences of climate change—Mechanisms, conservation, and management: New York, CRC Press, p. 187–213, https://www.crcpress.com/Ecological-Consequences-of-Climate-Change-Mechanisms-Conservation-and/Beever-Belant/p/book/9781138114692.

Picotte, J.J., and Robertson, K., 2011, Timing constraints on remote sensing of wildland fire burned area in the Southeastern US: Remote Sensing, v. 3, no. 8, p. 1680–1690, https://doi.org/10.3390/rs3081680.

Pinter, N., Fiedel, S., and Keeley, J.E., 2011, Fire and vegetation shifts in the Americas at the vanguard of Paleoindian migration: Quaternary Science Reviews, v. 30, nos. 3–4, p. 269–272, https://doi.org/10.1016/j.quascirev.2010.12.010.

Roberts, S.L., van Wagtendonk, J.W., Miles, A.K., and Kelt, D.A., 2011, Effects of fire on spotted owl site occupancy in a late-successional forest: Biological Conservation, v. 144, no. 1, p. 610–619, https://doi.org/10.1016/j.biocon.2010.11.002.

Romme, W.H., Boyce, M.S., Gresswell, R., Merrill, E.H., Minshall, G.W., Whitlock, C., and Turner, M.G., 2011, Twenty years after the 1988 Yellowstone fires—Lessons about disturbance and ecosystems: Ecosystems, v. 14, no. 7, p. 1196–1215, https://doi.org/10.1007/s10021-011-9470-6.

Rostad, C.E., and Rutherford, D.W., 2011, Biochar for soil fertility and natural carbon sequestration: U.S. Geological Survey Fact Sheet 2010–3117, 2 p., https://pubs.usgs.gov/fs/2010/3117/.

Rowland, M.M., and Leu, M., 2011, Study area description, chap. 1 *of* Hanser, S.E., Leu, M., Knick, S.T., and Aldridge, C.L., eds., Sagebrush ecosystem conservation and management—Ecoregional assessment tools and models for the Wyoming Basins: Lawrence, Kans., Allen Press, p. 10–45, http://greatbasinfirescience.org/research-publications/2017/6/19/sagebrush-ecosystem-conservation-and-management-ecoregional-assessment-tools-and-models-for-the-wyoming-basins.

Rykhus, R., and Lu, Z., 2011, Monitoring a boreal wildfire using multi-temporal Radarsat-1 intensity and coherence images: Geomatics, Natural Hazards and Risk, v. 2, no. 1, p. 15–32, https://doi.org/10.1080/19475705.2010.532971.

Schmidt, K.M., Hanshaw, M.N., Howle, J.F., Kean, J.W., Staley, D.M., Stock, J.D., and Bawden, G.W., 2011, Hydrologic conditions and terrestrial laser scanning of post-fire debris flows in the San Gabriel Mountains, CA, U.S.A., *in* Fifth International Conference on Debris-Flow Hazards—Mitigation, Mechanics, Prediction, and Assessment, Padua, Italy, June 14–17, 2011, Proceedings: Università La Sapienza, Italian Journal of Engineering Geology and Environment, p. 583–593, https://doi.org/10.4408/IJEGE.2011-03.B-064.

Shoemaker, W.B., Lopez, C.D., and Duever, M.J., 2011, Evapotranspiration over spatially extensive plant communities in the Big Cypress National Preserve, southern Florida, 2007–2010: U.S. Geological Survey Scientific Investigations Report 2011–5212, 46 p., https://doi.org/10.3133/sir20115212.

Sleeter, B.M., Wilson, T.S., Soulard, C.E., and Liu, J., 2011, Estimation of late twentieth century land-cover change in California: Environmental Monitoring and Assessment, v. 173, nos. 1–4, p. 251–266, https://doi.org/10.1007/s10661-010-1385-8.

Soulard, C.E., and Bogle, R.C., 2011, Using terrestrial light detection and ranging (Lidar) technology for land-surface analysis in the Southwest: U.S. Geological Survey Fact Sheet 2011–3017, 2 p., https://doi.org/10.3133/fs20113017.

Stitt, S., Guthrie, J., Hawbaker, T., and Dolhancey, M., 2011, U.S. Geological Survey development of a Landsat-based fire disturbance ECV, *in* 34th International Symposium on Remote Sensing of Environment—The GEOSS Era—Towards Operational Environmental Monitoring, Sydney, Australia, April 10–15, 2011, Proceedings: International Symposium for Remote Sensing of the Environment, http://www.isprs.org/proceedings/2011/ISRSE-34/.

Stoleson, S.H., King, D.I., and Tomosy, M., 2011, Avian research on U.S. Forest Service experimental forests and ranges—Emergent themes, opportunities, and challenges: Forest Ecology and Management, v. 262, no. 1, p. 49–52, https://doi.org/10.1016/j.foreco.2010.07.038.

Syphard, A.D., Keeley, J.E., and Brennan, T.J., 2011, Comparing the role of fuel breaks across southern California national forests: Forest Ecology and Management, v. 261, no. 11, p. 2038–2048, https://doi.org/10.1016/j.foreco.2011.02.030.

Syphard, A.D., Keeley, J.E., and Brennan, T.J., 2011, Factors affecting fuel break effectiveness in the control of large fires on the Los Padres National Forest, California: International Journal of Wildland Fire, v. 20, no. 6, p. 764–775, https://doi.org/10.1071/WF10065.

Thode, A.E., Van Wagtendonk, J.W., Miller, J.D., and Quinn, J.F., 2011, Quantifying the fire regime distributions for severity in Yosemite National Park, California, USA: International Journal of Wildland Fire, v. 20, p. 223–239, https://doi.org/10.1016/j.foreco.2011.02.030.

Tillery, A.C., Darr, M.J., Cannon, S.H., and Michael, J.A., 2011, Postwildfire debris flow hazard assessment for the area burned by the 2011 Track Fire, northeastern New Mexico and southeastern Colorado: U.S. Geological Survey Open-File Report 2011–1257, 9 p., https://doi.org/10.3133/ofr20111257.

Tillery, A.C., Darr, M.J., Cannon, S.H., and Michael, J.A., 2011, Postwildfire preliminary debris flow hazard assessment for the area burned by the 2011 Las Conchas Fire in north-central New Mexico: U.S. Geological Survey Open-File Report 2011–1308, 11 p., https://doi.org/10.3133/ofr20111308.

Turetsky, M.R., Kane, E.S., Harden, J.W., Ottmar, R.D., Manies, K.L., Hoy, E., and Kasischke, E.S., 2011, Recent acceleration of biomass burning and carbon losses in Alaskan forests and peatlands: Nature Geoscience, v. 4, p. 27–31, https://doi.org/10.1038/ngeo1027.

van Mantgem, P.J., Stephenson, N.L., Knapp, E., Battles, J., and Keeley, J.E., 2011, Long-term effects of prescribed fire on mixed conifer forest structure in the Sierra Nevada, California: Forest Ecology and Management, v. 261, no. 6, p. 989–994, https://doi.org/10.1016/j.foreco.2010.12.013.

van Mantgem, P.J., and Stuart, J.D., 2011, Structure and dynamics of an upland old-growth forest at Redwood National Park, California, *in* Standiford, R.B., Weller, T.J., Piirto, D.D., and Stuart, J.D. [technical coordinators], Proceedings of the Coast Redwood Forests in a changing California—A symposium for scientists and managers, Santa Cruz, Calif., June 21–23, 2011: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station, p. 333–343, https://www.fs.fed.us/psw/publications/documents/psw_gtr238/.

Vogelmann, J.E., Kost, J.R., Tolk, B., Howard, S., Short, K., Chen, X., Huang, C., Pabst, K., and Rollins, M.G., 2011, Monitoring landscape change for LANDFIRE using multi-temporal satellite imagery and ancillary data: IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, v. 4, no. 2, p. 252–264, https://doi.org/10.1109/JSTARS.2010.2044478.

Walters, S.P., Schneider, N.J., and Guthrie, J.D., 2011, Geospatial Multi-Agency Coordination (GeoMAC) wildland fire perimeters, 2008: U.S. Geological Survey Data Series 612, 6 p., https://doi.org/10.3133/ds612.

White, J.D., Gutzwiller, K.J., Barrow, W.C., Johnson-Randall, L., Zygo, L., and Swint, P., 2011, Understanding interaction effects of climate change and fire management on bird distributions through combined process and habitat models: Conservation Biology, v. 25, no. 3, p. 536–546, https://doi.org/10.1111/j.1523-1739.2011.01684.x.

Wilson, J., and Allen, C.D., 2011, Seeing the forest and the trees—USGS scientist links local changes to global scale: U.S. Geological Survey unnumbered report, 1 p. [Abs. available at https://pubs.er.usgs.gov/publication/70118809.]

Winter, S.L., Fuhlendorf, S.D., Goad, C.L., Davis, C.A., Hickman, K.R., and Leslie, D.M., Jr., 2011, Fire tolerance of a resprouting *Artemisia* (Asteraceae) shrub: Plant Ecology, v. 212, no. 12, p. 2085–2094, https://doi.org/10.1007/s11258-011-9975-2.

Winter, S.L., Fuhlendorf, S.D., Goad, C.L., Davis, C.A., Hickman, K.R., and Leslie, D.M., Jr., 2011, Restoration of the fire-grazing interaction in *Artemisia filifolia* shrubland of the southern Great Plains, North America: Journal of Applied Ecology, v. 49, no. 1, p. 242–250, https://doi.org/10.1111/j.1365-2664.2011.02067.x.

Wirth, T.A., and Pyke, D.A., 2011, Effectiveness of post-fire seeding at the Fitzner-Eberhardt Arid Land Ecology Reserve, Washington: U.S. Geological Survey Open-File Report 2011–1241, 42 p., https://doi.org/10.3133/ofr20111241.

Yamaura, Y., Royle, J.A., Kuboi, K., Tada, T., Ikeno, S., and Makino, S., 2011, Modelling community dynamics based on species-level abundance models from detection/nondetection data: Journal of Applied Ecology, v. 48, no. 1, p. 67–75, https://doi.org/10.1111/j.1365-2664.2010.01922.x.

Zhu, Z., and Stackpoole, S., 2011, Assessing carbon stocks, carbon sequestration, and greenhouse-gas fluxes in ecosystems of the United States under present conditions and future scenarios: U.S. Geological Survey Fact Sheet 2011–3007, 2 p., https://doi.org/10.3133/fs20113007.

2010: 39 Publications

Allen, C.D., Macalady, A.K., Chenchouni, H., Bachelet, D., McDowell, N., Vennetier, M., Kitzberger, T., Rigling, A., Breshears, D.D., Hogg, E.H., Gonzalez, P., Fensham, R., Zhang, Z., Castro, J., Demidova, N., Lim, J.-H., Allard, G., Running, S.W., Semerci, A., and Cobb, N., 2010, A global overview of drought and heat-induced tree mortality reveals emerging climate change risks for forests: Forest Ecology and Management, v. 259, no. 4, p. 660–684, https://doi.org/10.1016/j.foreco.2009.09.001.

Arkle, R.S., and Pilliod, D.S., 2010, Prescribed fires as ecological surrogates for wildfires—A stream and riparian perspective: Forest Ecology and Management, v. 259, no. 5, p. 893–903, https://doi.org/10.1016/j.foreco.2009.11.029.

Arkle, R.S., Pilliod, D.S., and Strickler, K., 2010, Fire, flow and dynamic equilibrium in stream macroinvertebrate communities: Freshwater Biology, v. 55, no. 2, p. 299–314, https://doi.org/10.1111/j.1365-2427.2009.02275.x.

Barrett, K., Kasischke, E.S., McGuire, A.D., Turetsky, M.R., and Kane, E.S., 2010, Modeling fire severity in black spruce stands in the Alaskan boreal forest using spectral and non-spectral geospatial data: Remote Sensing of Environment, v. 114, no. 7, p. 1494–1503, https://doi.org/10.1016/j.rse.2010.02.001.

Betts, M.G., Hagar, J.C., Rivers, J.W., Alexander, J.D., McGarigal, K., and McComb, B.C., 2010, Thresholds in forest bird occurrence as a function of the amount of early-seral broadleaf forest at landscape scales: Ecological Applications, v. 20, no. 8, p. 2116–2130, https://doi.org/10.1890/09-1305.1.

Breininger, D.R., Nichols, J.D., Duncan, B.W., Stolen, E.D., Carter, G.M., Hunt, D.K., and Drese, J.H., 2010, Multistate modeling of habitat dynamics—Factors affecting Florida scrub transition probabilities: Ecology, v. 91, no. 11, p. 3354–3364, https://doi.org/10.1890/09-0964.1.

Burgman, M.A., Wintle, B.A., Thompson, C.A., Moilanen, A., Runge, M.C., and Ben-Haim, Y., 2010, Reconciling uncertain costs and benefits in Bayes nets for invasive species management: Risk Analysis, v. 30, no. 2, p. 277–284, https://doi.org/10.1111/j.1539-6924.2009.01273.x.

Cannon, S.H., Gartner, J.E., Rupert, M.G., and Michael, J.A., 2010, Emergency assessments of postfire debris-flow hazards for the 2009 La Brea, Jesusita, Guiberson, Morris, Sheep, Oak Glen, Pendleton, and Cottonwood fires in southern California: U.S. Geological Survey Open-File Report 2010–1186, 31 p., https://doi.org/10.3133/ofr20101186.

Cannon, S.H., Gartner, J.E., Rupert, M.G., Michael, J.A., Rea, A.H., and Parrett, C., 2010, Predicting the probability and volume of postwildfire debris flows in the intermountain western United States: Bulletin of the Geological Society of America, v. 122, nos. 1–2, p. 127–144, https://doi.org/10.1130/B26459.1.

Conway, C.J., Nadeau, C.P., and Piest, L., 2010, Fire helps restore natural disturbance regime to benefit rare and endangered marsh birds endemic to the Colorado River: Ecological Applications, v. 20, no. 7, p. 2024–2035, https://doi.org/10.1890/09-1624.1.

DeFalco, L.A., Esque, T.C., Scoles-Sciulla, S.J., and Rodgers, J., 2010, Desert wildfire and severe drought diminish survivorship of the long-lived Joshua Tree (*Yucca brevifolia*; Agavaceae): American Journal of Botany, v. 97, no. 2, p. 243–250, https://doi.org/10.3732/ajb.0900032.

Esque, T.C., Young, J.A., and Tracy, C.R., 2010, Short-term effects of experimental fires on a Mojave Desert seed bank: Journal of Arid Environments, v. 74, no. 10, p. 1302–1308, https://doi.org/10.1016/j.jaridenv.2010.04.011.

Finn, S.P., Kitchell, K., Baer, L.A., Bedford, D., Brooks, M.L., Flint, A.L., Flint, L.E., Matchett, J.R., Mathie, A., Miller, D.M., Pilliod, D., Torregrosa, A., and Woodward, A., 2010, Great Basin integrated landscape monitoring pilot summary report: U.S. Geological Survey Open-File Report 2010–1324, 50 p., https://pubs.usgs.gov/of/2010/1324/.

Grant, T.A., Madden, E.M., Shaffer, T.L., and Dockens, J.S., 2010, Effects of prescribed fire on vegetation and passerine birds in northern mixed-grass prairie: Journal of Wildlife Management, v. 74, no. 8, p. 1841–1851, https://doi.org/10.2193/2010-006.

Grundel, R., Jean, R.P., Frohnapple, K.J., Glowacki, G.A., Scott, P.E., and Pavlovic, N.B., 2010, Floral and nesting resources, habitat structure, and fire influence bee distribution across an open-forest gradient: Ecological Applications, v. 20, no. 6, p. 1678–1692, https://doi.org/10.1890/08-1792.1.

Haak, A.L., Williams, J.E., Isaak, D., Todd, A., Muhlfeld, C.C., Kershner, J.L., Gresswell, R.E., Hostetler, S.W., and Neville, H.M., 2010, The potential influence of changing climate on the persistence of salmonids of the inland West: U.S. Geological Survey Open-File Report 2010–1236, 74 p., https://doi.org/10.3133/of/2010/1236/.

Haines, A.M., Leu, M., Svancara, L.K., Wilson, G., and Scott, J.M., 2010, Using a distribution and conservation status weighted hotspot approach to identify areas in need of conservation action to benefit Idaho bird species: Northwest Science, v. 84, no. 2, p. 170–182, https://doi.org/10.3955/046.084.0206.

Kasischke, E.S., Verbyla, D.L., Rupp, T.S., McGuire, A.D., Murphy, K.A., Jandt, R., Barnes, J.L., Hoy, E.E., Duffy, P.A., Calef, M., and Turetsky, M.R., 2010, Alaska's changing fire regime—Implications for the vulnerability of its boreal forests: Canadian Journal of Forest Research, v. 40, no. 7, p. 1313–1324, https://doi.org/10.1139/X10-098.

Larson, D.L., 2010, Can prescribed fire be used to control yellow sweetclover (*Meliotus officinalis*) in a cool-season mixed-grass prairie?: U.S. Geological Survey Data Series 515, 12 p., https://doi.org/10.3133/ds515.

Lu, Z., Dzurisin, D., Jung, H.-S., Zhang, J., and Zhang, Y., 2010, Radar image and data fusion for natural hazards characterisation: International Journal of Image and Data Fusion, v. 1, no. 3, p. 217–242, https://doi.org/10.1080/19479832.2010.499219.

Lu, Z., Zhang, J., Zhang, Y., and Dzurisin, D., 2010, Monitoring and characterizing natural hazards with satellite InSAR imagery: Annals of GIS, v. 16, no. 1, p. 55–66, https://doi.org/10.1080/19475681003700914.

Lynch, D.K., Hudnut, K.W., and Dearborn, D.S.P., 2010, Low-altitude aerial color digital photographic survey of the San Andreas Fault: Seismological Research Letters, v. 81, no. 3, p. 453–459, https://doi.org/10.1785/gssrl.81.3.453.

McGinnis, T.W., Keeley, J.E., Stephens, S.L., and Roller, G.B., 2010, Fuel buildup and potential fire behavior after stand-replacing fires, logging fire-killed trees and herbicide shrub removal in Sierra Nevada forests: Forest Ecology and Management, v. 260, no. 1, p. 22–35, https://doi.org/10.1016/j.foreco.2010.03.026.

McGinnis, T.W., Shook, C.D., and Keeley, J.E., 2010, Estimating aboveground biomass for broadleaf woody plants and young conifers in Sierra Nevada, California, forests: Western Journal of Applied Forestry, v. 25, no. 4, p. 203–209, https://academic.oup.com/wjaf/article-abstract/25/4/203/4683537.

McGuire, A.D., Hayes, D.J., Kicklighter, D.W., Manizza, M., Zhuang, Q., Chen, M., Follows, M.J., Gurney, K.R., McClelland, J.W., Melillo, J.M., Peterson, B.J., and Prinn, R.G., 2010, An analysis of the carbon balance of the Arctic Basin from 1997 to 2006: Tellus B—Chemical and Physical Meteorology, v. 62, no. 5, p. 455–474, https://doi.org/10.1111/j.1600-0889.2010.00497.x.

McGuire, A.D., Macdonald, R.W., Schuur, E.A.G., Harden, J.W., Kuhry, P., Hayes, D.J., Christensen, T.R., and Heimann, M., 2010, The carbon budget of the northern cryosphere region: Current Opinion in Environmental Sustainability, v. 2, no. 4, p. 231–236, https://doi.org/10.1016/j.cosust.2010.05.003.

Mendez, G.O., 2010, Water-quality data from storm runoff after the 2007 fires, San Diego County, California: U.S. Geological Survey Open-File Report 2010–1234, 8 p., https://doi.org/10.3133/ofr20101234.

Nesmith, J.C.B., O'Hara, K.L., van Mantgem, P.J., and de Valpine, P., 2010, The effects of raking on sugar pine mortality following prescribed fire in Sequoia and Kings Canyon National Parks, California, USA: Fire Ecology, v. 6, no. 3, p. 97–116, https://doi.org/10.4996/fireecology.0603097.

Rochester, C.J., Brehme, C.S., Clark, D.R., Stokes, D.C., Hathaway, S.A., and Fisher, R.N., 2010, Reptile and amphibian responses to large-scale wildfires in southern California: Journal of Herpetology, v. 44, no. 3, p. 333–351, https://doi.org/10.1670/08-143.1.

Ruddy, B.C., Stevens, M.R., Verdin, K.L., and Elliott, J.G., 2010, Probability and volume of potential postwildfire debris flows in the 2010 Fourmile burn area, Boulder County, Colorado: U.S. Geological Survey Open-File Report 2010–1244, 5 p., https://doi.org/10.3133/ofr20101244.

Sah, J.P., Ross, M.S., Snyder, J.R., and Ogurcak, D.E., 2010, Tree mortality following prescribed fire and a storm surge event in slash pine (*Pinus elliottii* var. *densa*) forests in the Florida Keys, USA: International Journal of Forestry Research, v. 2010, p. 1–13, https://doi.org/10.1155/2010/204795.

Scoles-Sciulla, S.J., Bauer, K.L., Drake, K.K., and DeFalco, L.A., 2010, Effectiveness of post-fire seeding in desert tortoise critical habitat following the 2005 Southern Nevada Fire Complex, chap 3 *of* BLM Emergency Stabilization and Rehabilitation Southern Nevada Complex Report: U.S. Bureau of Land Management, p. 43–76. [Abs. available at http://pubs.er.usgs.gov/publication/70139963.]

Sherrouse, B.C., Riegle, J.L., and Semmens, D.J., 2010, Social Values for Ecosystem Services (SolVES)—A GIS application for assessing, mapping, and quantifying the social values of ecosystem services—Documentation and user manual, version 1.0: U.S. Geological Survey Open-File Report 2010–1219, 44 p., https://doi.org/10.3133/ofr20101219.

Turner, R.M., Webb, R.H., Esque, T.C., and Rogers, G.F., 2010, Repeat photography and low-elevation fire responses in the Southwestern United States, chap. 17 *of* Webb, R.H., Boyer, D.E., and Turner, R.M. eds., Repeat photography—Methods and applications in the natural sciences: Island Press, pt. IV, p. 223–244, https://islandpress.org/book/repeat-photography.

van Wagtendonk, J.W., and Moore, P.E., 2010, Fuel deposition rates of montane and subalpine conifers in the central Sierra Nevada, California, USA: Forest Ecology and Management, v. 259, no. 10, p. 2122–2132, https://doi.org/10.1016/j.foreco.2010.02.024.

Vogel, J.A., Koford, R.R., and Debinski, D.M., 2010, Direct and indirect responses of tallgrass prairie butterflies to prescribed burning: Journal of Insect Conservation, v. 14, no. 6, p. 663–677, https://doi.org/10.1007/s10841-010-9295-1.

Walsh, M.K., Pearl, C.A., Whitlock, C., Bartlein, P.J., and Worona, M.A., 2010, An 11000-year-long record of fire and vegetation history at Beaver Lake, Oregon, central Willamette Valley: Quaternary Science Reviews, v. 29, nos. 9–10, p. 1093–1106, https://doi.org/10.1016/j.quascirev.2010.02.011.

Wickland, K.P., Neff, J.C., and Harden, J.W., 2010, The role of soil drainage class in carbon dioxide exchange and decomposition in boreal black spruce (*Picea mariana*) forest stands: Canadian Journal of Forest Research, v. 40, no. 11, p. 2123–2134, https://doi.org/10.1139/X10-163.

Wolf, R.E., Hoefen, T.M., Hageman, P.L., Morman, S.A., and Plumlee, G.S., 2010, Speciation of arsenic, selenium, and chromium in wildfire impacted soils and ashes: U.S. Geological Survey Open-File Report 2010–1242, 29 p., https://doi.org/10.3133/ofr20101242.

2009: 83 Publications

Archuleta, C.-A.M., and Eames, D.R., 2009, Web application to access U.S. Army Corps of Engineers Civil Works and Restoration Projects information for the Rio Grande Basin, southern Colorado, New Mexico, and Texas: U.S. Geological Survey Fact Sheet 2009–3104, 2 p., https://pubs.usgs.gov/fs/2009/3104/.

Balouet, J.C., Smith, K.T., Vroblesky, D., and Oudijk, G., 2009, Use of dendrochronology and dendrochemistry in environmental forensics—Does it meet the *Daubert* criteria? Environmental Forensics, v. 10, no. 4, p. 268–276, https://doi.org/10.1080/15275920903347545.

Balshi, M.S., McGuire, A.D., Duffy, P., Flannigan, M., Kicklighter, D.W., and Melillo, J., 2009, Vulnerability of carbon storage in North American boreal forests to wildfires during the 21st century: Global Change Biology, v. 15, no. 6, p. 1491–1510, https://doi.org/10.1111/j.1365-2486.2009.01877.x.

Balshi, M.S., McGuire, A.D., Duffy, P., Flannigan, M., Walsh, J., and Melillo, J., 2009, Assessing the response of area burned to changing climate in western boreal North America using a Multivariate Adaptive Regression Splines (MARS) approach: Global Change Biology, v. 15, no. 3, p. 578–600, https://doi.org/10.1111/j.1365-2486.2008.01679.x.

Bar-Massada, A., Radeloff, V.C., Stewart, S.I., and Hawbaker, T.J., 2009, Wildfire risk in the wildland-urban interface—A simulation study in northwestern Wisconsin: Forest Ecology and Management, v. 258, no. 9, p. 1990–1999, https://doi.org/10.1016/j.foreco.2009.07.051.

Beldin, S.I., and Perakis, S.S., 2009, Unearthing secrets of the forest: U.S. Geological Survey Fact Sheet 2009–3078, 4 p., https://pubs.usgs.gov/fs/2009/3078/.

Bentz, B. (ed.), Allen, C.D., Ayres, M., Berg, E., Carroll, A., Hansen, M., Hicke, J., Joyce, L., Logan, J., MacFarlane, W., MacMahon, J., Munson, S., Negrón, J., Paine, T., Powell, J., Raffa, K., Régnière, J., Reid, M., Romme, W., Seybold, S.J., Six, D., Tomback, D., Vandygriff, J., Veblen, T., White, M., Witcosky, J., and Wood, D., 2009, Bark beetle outbreaks in western North America—Causes and consequences, Bark Beetle Symposium, Snowbird, Utah, November 2005: Salt Lake City, University of Utah Press, 42 p., https://www.fs.usda.gov/treesearch/pubs/43479.

Bowman, D.M.J.S., Balch, J.K., Artaxo, P., Bond, W.J., Carlson, J.M., Cochrane, M.A., D'Antonio, C.M., DeFries, R.S., Doyle, J.C., Harrison, S.P., Johnston, F.H., Keeley, J.E., Krawchuk, M.A., Kull, C.A., Marston, J.B., Moritz, M.A., Prentice, I.C., Roos, C.I., Scott, A.C., Swetnam, T.W., van der Werf, G.R., and Pyne, S.J., 2009, Fire in the earth system: Science, v. 324, no. 5926, p. 481–484, https://doi.org/10.1126/science.1163886.

Cannon, S.H., and DeGraff, J., 2009, The increasing wildfire and post-fire debris-flow threat in Western USA, and implications for consequences of climate change, *in* Sassa K., and Canuti, P., eds., Landslides—Disaster risk reduction: Berlin, Springer, p. 177–190, https://doi.org/10.1007/978-3-540-69970-5_9.

Cannon, S.H., Gartner, J.E., Rupert, M.G., Michael, J.A., Staley, D.M., and Worstell, B.B., 2009, Emergency assessment of postfire debris-flow hazards for the 2009 Station fire, San Gabriel Mountains, southern California: U.S. Geological Survey Open-File Report 2009–1227, 27 p., https://pubs.usgs.gov/of/2009/1227/.

Carrara, P.E., 2009, Preliminary map of landslide deposits in the Mesa Verde National Park area, Colorado: U.S. Geological Survey Scientific Investigations Map 3090, 1 sheet, scale 1:50,000, https://doi.org/10.3133/sim3090.

Carswell, W.J., Jr., and Newell, M.R., 2009, Hazards, disasters, and *The National Map*: U.S. Geological Survey Fact Sheet 2009–3010, 2 p., https://pubs.usgs.gov/fs/2009/3010/.

Chen, X., and Ohlen, D., 2009, Use of multi-temporal Landsat images to monitor forest disturbance (1987–2007) in the Black Hills of South Dakota, *in* Civco, D.L., ed., Fifth International Workshop on the Analysis of Multi-Temporal Remote Sensing Images 2009 (MultiTemp 2009), Proceedings, Groton, Conn., July 28–30, 2009: Red Hook, N.Y., Curran Associates, Inc., p. 3–10, https://www.tib.eu/en/search/id/TIBKAT%3A643901477.

Cole, C., Lile, E., and Briggs, J., 2009, Hazards management in Grand County, Colorado—Fire fuels characterization: U.S. Geological Survey Fact Sheet 2008–3078, 6 p., https://doi.org/10.3133/fs20083078.

Collins, B.M., Miller, J.D., Thode, A.E., Kelly, M., van Wagtendonk, J.W., and Stephens, S.L., 2009, Interactions among wildland fires in a long-established Sierra Nevada natural fire area: Ecosystems, v. 12, no. 1, p. 114–128, https://doi.org/10.1007/s10021-008-9211-7.

Davis, B., van Wagtendonk, J.W., Beck, J., and van Wagtendonk, K., 2009, Modeling fuel succession: Fire Management Today, v. 69, no. 2, p. 18–21, https://www.fs.usda.gov/treesearch/pubs/35440.

Doerr, S.H., Woods, S.W., Martin, D.A., and Casimiro, M., 2009, "Natural background" soil water repellency in conifer forests of the north-western USA —Its prediction and relationship to wildfire occurrence: Journal of Hydrology, v. 371, nos. 1–4, p. 12–21, https://doi.org/10.1016/j.jhydrol.2009.03.011.

Earnst, S.L., Newsome, H.L., LaFramboise, W.L., and LaFramboise, N., 2009, Avian response to wildfire in interior Columbia Basin shrubsteppe: The Condor, v. 111, no. 2, p. 370–376, https://doi.org/10.1525/cond.2009.080109.

Erickson, H.J., Aldridge, C.L., and Hobbs, N.T., 2009, Progress report—Stratton Ecological Research Site—An experimental approach to assess effects of various grazing treatments on vegetation and wildlife communities across managed burns and habitat controls: U.S. Geological Survey Open-File Report 2009–1016, 15 p., https://pubs.usgs.gov/of/2009/1016/.

Euskirchen, E.S., McGuire, A.D., Rupp, T.S., Chapin, F.S., III, and Walsh, J.E., 2009, Projected changes in atmospheric heating due to changes in fire disturbance and the snow season in the western Arctic, 2003–2100: Journal of Geophysical Research—Biogeosciences, v. 114, https://doi.org/10.1029/2009JG001095.

Fagre, D.B., Charles, C.W., Allen, C.D., Birkeland, C., Chapin, F.S., Groffman, P.M., Guntenspergen, G.R., Knapp, A.K., McGuire, A.D., Mulholland, P.J., Peters, D.P.C., Roby, D.D., and Sugihara, G., 2009, Thresholds of climate change in ecosystems—Final report, Synthesis and Assessment Product 4.2: U.S. Geological Survey, https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1009&context=usgspubs.

Fellers, G.M., and Osbourn, M.S., 2009, Fire effects on the Point Reyes Mountain beaver (*Aplodontia rufa phaea*) at Point Reyes National Seashore, 10 years after the Vision Fire: Northwestern Naturalist, v. 90, no. 3, p. 189–193, https://doi.org/10.1898/NWN08-08.1.

Fleming, G.M., Diffendorfer, J.E., and Zedler, P.H., 2009, The relative importance of disturbance and exotic-plant abundance in California coastal sage scrub: Ecological Applications, v. 19, no. 8, p. 2210–2227, https://doi.org/10.1890/07-1959.1.

Gartner, J.E., Cannon, S.H., Helsel, D.R., and Bandurraga, M., 2009, Multivariate statistical models for predicting sediment yields from southern California watersheds: U.S. Geological Survey Open-File Report 2009–1200, 42 p., https://pubs.usgs.gov/of/2009/1200/.

Goldstein, H.L., Miller, M.E., Yount, J.C., Reheis, M.C., Reynolds, R.L., Belnap, J., Lamothe, P.J., and McGeehan, J.P., 2009, Physical, chemical, ecological, and age data and trench logs from surficial deposits at Hatch Point, southeastern Utah: U.S. Geological Survey Open-File Report 2009–1219, 190 p., https://pubs.usgs.gov/of/2009/1219/.

Graham, J.H., Krzysik, A.J., Kovacic, D.A., Duda, J.J., Freeman, D.C., Emlen, J.M., Zak, J.C., Long, W.R., Wallace, M.P., Chamberlin-Graham, C., Nutter, J.P., and Balbach, H.E., 2009, Species richness, equitability, and abundance of ants in disturbed landscapes: Ecological Indicators, v. 9, no. 5, p. 866–877, https://doi.org/10.1016/j.ecolind.2008.10.003.

Grant, T.A., Flanders-Wanner, B., Shaffer, T.L., Murphy, R.K., and Knutsen, G.A., 2009, An emerging crisis across northern prairie refuges—Prevalence of invasive plants and a plan for adaptive management: Ecological Restoration, v. 27, no. 1, p. 58–65, https://doi.org/10.3368/er.27.1.58.

Halsey, R.W., Keeley, J.E., and Wilson, K., 2009, Fuel age and fire spread—Natural conditions versus opportunities for fire suppression: Fire Management Today, v. 69, no. 2, p. 22–28, https://www.fs.fed.us/fire/fmt/fmt_pdfs/FMT69-2.pdf.

Harden, J.W., Munster, J., Manies, K.L., Mack, M.C., and Bubier, J.L., 2009, Changes in species, areal cover, and production of moss across a fire chronosequence in interior Alaska: U.S. Geological Survey Open-File Report 2009–1208, https://pubs.usgs.gov/of/2009/1208/.

Hockaday, W.C., Masiello, C.A., Randerson, J.T., Smernik, R.J., Baldock, J.A., Chadwick, O.A., and Harden, J.W., 2009, Measurement of soil carbon oxidation state and oxidative ratio by ^{13}C nuclear magnetic resonance: Journal of Geophysical Research—Biogeosciences, v. 114, https://doi.org/10.1029/2008JG000803.

Hoefen, T.M., Kokaly, R.F., Martin, D.A., Rochester, C., Plumlee, G.S., Mendez, G., Reichard, E.G., and Fisher, R.N., 2009, Sample collection of ash and burned soils from the October 2007 southern California wildfires: U.S. Geological Survey Open-File Report 2009–1038, 64 p., https://pubs.usgs.gov/of/2009/1038/.

Hossack, B.R., Eby, L.A., Guscio, C.G., and Corn, P.S., 2009, Thermal characteristics of amphibian microhabitats in a fire-disturbed landscape: Forest Ecology and Management, v. 258, no. 7, p. 1414–1421, https://doi.org/10.1016/j.foreco.2009.06.043.

Huntington, T.G., Richardson, A.D., McGuire, K.J., and Hayhoe, K., 2009, Climate and hydrological changes in the northeastern United States—Recent trends and implications for forested and aquatic ecosystems: Canadian Journal of Forest Research, v. 39, no. 2, p. 199–212, https://doi.org/10.1139/X08-116.

Jones, B.M., Kolden, C.A., Jandt, R., Abatzoglou, J.T., Urban, F., and Arp, C.D., 2009, Fire behavior, weather, and burn severity of the 2007 Anaktuvuk River Tundra fire, North Slope, Alaska: Arctic, Antarctic, and Alpine Research, v. 41, no. 3, p. 309–316, https://doi.org/10.1657/1938-4246-41.3.309.

Keeley, J.E., 2009, Fire intensity, fire severity and burn severity—A brief review and suggested usage: International Journal of Wildland Fire, v. 18, no. 1, p. 116–126, https://doi.org/10.1071/WF07049.

Keeley, J.E., Safford, H., Fotheringham, C.J., Franklin, J., and Moritz, M., 2009, The 2007 southern California wildfires—Lessons in complexity: Journal of Forestry, v. 107, no. 6, p. 287–296, https://academic.oup.com/jof/article-abstract/107/6/287/4598876?redirectedFrom=PDF.

Keeley, J.E., and Zedler, P.H., 2009, Large, high-intensity fire events in southern California shrublands—Debunking the fine-grain age patch model: Ecological Applications, v. 19, no. 1, p. 69–94, https://doi.org/10.1890/08-0281.1.

Knutson, K.C., Pyke, D.A., Wirth, T.A., Pilliod, D.S., Brooks, M.L., and Chambers, J.C., 2009, A chronosequence feasibility assessment of emergency fire rehabilitation records within the Intermountain Western United States—Final report to the Joint Fire Science Program—Project 08–S–08: U.S. Geological Survey Open-File Report 2009–1099, 20 p., https://pubs.usgs.gov/of/2009/1099/.

Leidolf, A., and Bissonette, J.A., 2009, The effects of fire on avian communities—Spatio-temporal attributes of the literature 1912–2003: International Journal of Wildland Fire, v. 18, no. 5, p. 609–622, https://doi.org/10.1071/WF08019.

Lorimer, C.G., Porter, D.J., Madej, M.A., Stuart, J.D., Veirs, S.D., Jr., Norman, S.P., O'Hara, K.L., and Libby, W.J., 2009, Presettlement and modern disturbance regimes in coast redwood forests—Implications for the conservation of old-growth stands: Forest Ecology and Management, v. 258, no. 7, p. 1038–1054, https://doi.org/10.1016/j.foreco.2009.07.008.

Lutz, J.A., van Wagtendonk, J.W., and Franklin, J.F., 2009, Twentieth-century decline of large-diameter trees in Yosemite National Park, California, USA: Forest Ecology and Management, v. 257, no. 11, p. 2296–2307, https://doi.org/10.1016/j.foreco.2009.03.009.

Lutz, J.A., van Wagtendonk, J.W., Thode, A.E., Miller, J.D., and Franklin, J.F., 2009, Climate, lightning ignitions, and fire severity in Yosemite National Park, California, USA: International Journal of Wildland Fire, v. 18, no. 7, p. 765–774, https://doi.org/10.1071/WF08117.

Miller, J.D., Knapp, E.E., Key, C.H., Skinner, C.N., Isbell, C.J., Creasy, R.M., and Sherlock, J.W., 2009, Calibration and validation of the relative differenced Normalized Burn Ratio (RdNBR) to three measures of fire severity in the Sierra Nevada and Klamath Mountains, California, USA: Remote Sensing of Environment, v. 113, no. 3, p. 645–656, https://doi.org/10.1016/j.rse.2008.11.009.

Mitra, S., Zimmerman, A.R., Hunsinger, G.B., Willard, D., and Dunn, J.C., 2009, A Holocene record of climate-driven shifts in coastal carbon sequestration: Geophysical Research Letters, v. 36, no. 5, https://doi.org/10.1029/2008GL036875.

Moody, J.A., Kinner, D.A., and Úbeda, X., 2009, Linking hydraulic properties of fire-affected soils to infiltration and water repellency: Journal of Hydrology, v. 379, nos. 3–4, p. 291–303, https://doi.org/10.1016/j.jhydrol.2009.10.015.

Moody, J.A., and Martin, D.A., 2009, Synthesis of sediment yields after wildland fire in different rainfall regimes in the Western United States: International Journal of Wildland Fire, v. 18, no. 1, p. 96–115, https://doi.org/10.1071/WF07162.

O'Donnell, J.A., Turetsky, M.R., Harden, J.W., Manies, K.L., Pruett, L.E., Shetler, G., and Neff, J.C., 2009, Interactive effects of fire, soil climate, and moss on CO_2 fluxes in black spruce ecosystems of interior Alaska: Ecosystems, v. 12, no. 1, p. 57–72, https://doi.org/10.1007/s10021-008-9206-4.

Ostoja, S.M., and Schupp, E.W., 2009, Conversion of sagebrush shrublands to exotic annual grasslands negatively impacts small mammal communities: Diversity and Distributions, v. 15, no. 5, p. 863–870, https://doi.org/10.1111/j.1472-4642.2009.00593.x.

Pausas, J.G., and Keeley, J.E., 2009, A burning story—The role of fire in the history of life: BioScience, v. 59, no. 7, p. 593–601, https://doi.org/10.1525/bio.2009.59.7.10.

Preisler, H.K., Burgan, R.E., Eidenshink, J.C., Klaver, J.M., and Klaver, R.W., 2009, Forecasting distributions of large federal-lands fires utilizing satellite and gridded weather information: International Journal of Wildland Fire, v. 18, no. 5, p. 508–516, https://doi.org/10.1071/WF08032.

Pyke, D.A., Pilliod, D.S., Chambers, J.C., Brooks, M.L., and Grace, J., 2009, Fire rehabilitation effectiveness—A chronosequence approach for the Great Basin: U.S. Geological Survey unnumbered report, 34 p. [Abs. available at https://pubs.er.usgs.gov/publication/70058740.]

Reeves, M.C., Ryan, K.C., Rollins, M.G., and Thompson, T.G., 2009, Spatial fuel data products of the LANDFIRE Project: International Journal of Wildland Fire, v. 18, no. 3, p. 250–267, https://doi.org/10.1071/WF08086.

Rockwell, B.W., 2009, Comparison of ASTER- and AVIRIS-derived mineral and vegetation maps of the White Horse replacement alunite deposit and surrounding area, Marysvale volcanic field, Utah: U.S. Geological Survey Scientific Investigations Report 2009–5117, 31 p., https://pubs.usgs.gov/sir/2009/5117/.

Rollins, M.G., 2009, LANDFIRE—A nationally consistent vegetation, wildland fire, and fuel assessment: International Journal of Wildland Fire, v. 18, no. 3, p. 235–249, https://doi.org/10.1071/WF08088.

Romme, W.H., Allen, C.D., Bailey, J.D., Baker, W.L., Bestelmeyer, B.T., Brown, P.M., Eisenhart, K.S., Floyd, M.L., Huffman, D.W., Jacobs, B.F., Miller, R.F., Muldavin, E.H., Swetnam, T.W., Tausch, R.J., and Weisberg, P.J., 2009, Historical and modern disturbance regimes, stand structures, and landscape dynamics in piñon-juniper vegetation of the Western United States: Rangeland Ecology and Management, v. 62, no. 3, p. 203–222, https://doi.org/10.2111/08-188R1.1.

Russell, R.E., Royle, J.A., Saab, V.A., Lehmkuhl, J.F., Block, W.M., and Sauer, J.R., 2009, Modeling the effects of environmental disturbance on wildlife communities—Avian responses to prescribed fire: Ecological Applications, v. 19, no. 5, p. 1253–1263, https://doi.org/10.1890/08-0910.1.

Schwilk, D.W., Keeley, J.E., Knapp, E.E., McIver, J., Bailey, J.D., Fettig, C.J., Fiedler, C.E., Harrod, R.J., Moghaddas, J.J., Outcalt, K.W., Skinner, C.N., Stephens, S.L., Waldrop, T.A., Yaussy, D.A., and Youngblood, A., 2009, The national fire and fire surrogate study—Effects of fuel reduction methods on forest vegetation structure and fuels: Ecological Applications, v. 19, no. 2, p. 285–304, https://doi.org/10.1890/07-1747.1.

Seiler, R.L., and Wood, J.L., 2009, Sediment loads and yield, and selected water-quality parameters in Clear Creek, Carson City and Douglas County, Nevada, water years 2004–07: U.S. Geological Survey Scientific Investigations Report 2009–5005, 44 p., https://doi.org/10.3133/sir20095005.

Semmens, D.J., Briggs, J.S., and Martin, D.A., 2009, An ecosystem services framework for multidisciplinary research in the Colorado River headwaters, *in* Webb, R.M.T., and Semmens, D.J., eds., 2009, Planning for an uncertain future—Monitoring, integration, and adaptation: U.S. Geological Survey Scientific Investigations Report 2009–5049, p. 59–64, https://doi.org/10.3133/sir20095049.

Serieyssol, C.A., Edlund, M.B., and Kallemeyn, L.W., 2009, Impacts of settlement, damming, and hydromanagement in two boreal lakes—A comparative paleolimnological study: Journal of Paleolimnology, v. 42, no. 4, p. 497–513, https://doi.org/10.1007/s10933-008-9300-9.

Sharp, N.W., Mitchell, M.S., and Grand, J.B., 2009, Sources, sinks, and spatial ecology of cotton mice in longleaf pine stands undergoing restoration: Journal of Mammalogy, v. 90, no. 6, p. 1440–1448, https://doi.org/10.1644/08-MAMM-A-064R2.1.

Shevliakova, E., Pacala, S.W., Malyshev, S., Hurtt, G.C., Milly, P.C.D., Caspersen, J.P., Sentman, L.T., Fisk, J.P., Wirth, C., and Crevoisier, C., 2009, Carbon cycling under 300 years of land use change—Importance of the secondary vegetation sink: Global Biogeochemical Cycles, v. 23, no. 2, https://doi.org/10.1029/2007GB003176.

Shinneman, D.J., and Baker, W.L., 2009, Environmental and climatic variables as potential drivers of post-fire cover of cheatgrass (*Bromus tectorum*) in seeded and unseeded semiarid ecosystems: International Journal of Wildland Fire, v. 18, no. 2, p. 191–202, https://doi.org/10.1071/WF07043.

Shinneman, D.J., and Baker, W.L., 2009, Historical fire and multidecadal drought as context for piñon-juniper woodland restoration in western Colorado: Ecological Applications, v. 19, no. 5, p. 1231–1245, https://doi.org/10.1890/08-0846.1.

Sieg, C.H., Fulé, P.Z., Hunter, M.E., Allen, C.D., Brooks, M.L., and Balice, R., 2009, Fire in the Southwest—Integrating fire into management of changing ecosystems: Fire Ecology, v. 5, no. 1, p. 1–2, https://doi.org/10.4996/fireecology.0501001.

Stephens, S.L., Moghaddas, J.J., Edminster, C., Fiedler, C.E., Haase, S., Harrington, M., Keeley, J.E., Knapp, E.E., McIver, J.D., Metlen, K., Skinner, C.N., and Youngblood, A., 2009, Fire treatment effects on vegetation structure, fuels, and potential fire severity in western U.S. forests: Ecological Applications, v. 19, no. 2, p. 305–320, https://doi.org/10.1890/07-1755.1.

Stewart, S.I., Wilmer, B., Hammer, R.B., Aplet, G.H., Hawbaker, T.J., Miller, C., and Radeloff, V.C., 2009, Wildland-urban interface maps vary with purpose and context: Journal of Forestry, v. 107, no. 2, p. 78–83, http://www.ingentaconnect.com/content/saf/jof/2009/00000107/00000002/art00009.

Stryker, T., and Jones, B., 2009, Disaster response and the international charter program: Photogrammetric Engineering and Remote Sensing, v. 75, p. 1342–1344, https://www.asprs.org/wp-content/uploads/pers/2009journal/december/highlight.pdf.

Tausch, R.J., Miller, R.F., Roundy, B.A., and Chambers, J.C., 2009, Piñon and juniper field guide—Asking the right questions to select appropriate management actions: U.S. Geological Survey Circular 1335, 96 p., https://doi.org/10.3133/cir1335.

Thaxton, J.M., and Jacobi, J.D., 2009, Assessment of fuels, potential fire behavior, and management options in subalpine vegetation on Mauna Kea, Hawai'i: University of Hawaii at Hilo Technical Report HCSU–013, 39 p., http://hdl.handle.net/10790/2693.

Trainor, S.F., Calef, M., Natcher, D., Chapin, F.S., III, McGuire, A.D., Huntington, O., Duffy, P., Rupp, T.S., DeWilde, L., Kwart, M., Fresco, N., and Lovecraft, A.L., 2009, Vulnerability and adaptation to climate-related fire impacts in rural and urban interior Alaska: Polar Research, v. 28, no. 1, p. 100–118, https://doi.org/10.1111/j.1751-8369.2009.00101.x.

Úbeda, X., Pereira, P., Outeiro, L., and Martin, D.A., 2009, Effects of fire temperature on the physical and chemical characteristics of the ash from two plots of cork oak (*Quercus suber*): Land Degradation and Development, v. 20, no. 6, p. 589–608, https://doi.org/10.1002/ldr.930.

van Mantgem, P.J., and Schwilk, D.W., 2009, Negligible influence of spatial autocorrelation in the assessment of fire effects in a mixed conifer forest: Fire Ecology, v. 5, no. 2, p. 116–125, https://doi.org/10.4996/fireecology.0502116.

van Mantgem, P.J., Stephenson, N.L., Byrne, J.C., Daniels, L.D., Franklin, J.F., Fulé, P.Z., Harmon, M.E., Larson, A.J., Smith, J.M., Taylor, A.H., and Veblen, T.T., 2009, Widespread increase of tree mortality rates in the western United States: Science, v. 323, p. 521–524, https://doi.org/10.1126/science.1165000.

Vyas, N.B., Spann, J.W., and Hill, E.F., 2009, Acute oral toxicities of wildland fire control chemicals to birds: Ecotoxicology and Environmental Safety, v. 72, no. 3, p. 862–865, https://doi.org/10.1016/j.ecoenv.2008.09.001.

Waitman, B.A., Draper, T.M., and Esque, T.C., 2009, The effects of seeding sterile triticale on a native plant community after wildfire in a pinyon pine-mountain mahogany woodland: International Journal of Wildland Fire, v. 18, no. 6, p. 659–664, https://doi.org/10.1071/WF07157.

Walter, W.D., Zimmerman, T.J., Leslie, D.M., Jr., and Jenks, J.A., 2009, Dietary response of sympatric deer to fire using stable isotope analysis of liver tissue: Wildlife Biology in Practice, v. 5, no. 2, p. 128–135, http://openprairie.sdstate.edu/nrm_pubs/172.

Wijayratne, U.C., and Pyke, D.A., 2009, Investigating seed longevity of big sagebrush (*Artemisia tridentata*): U.S. Geological Survey Open-File Report 2009–1146, 26 p., https://pubs.usgs.gov/of/2009/1146/.

Wilson, J., Melcher, C., and Bowen, Z., 2009, Fort Collins Science Center Ecosystem Dynamics Branch: U.S. Geological Survey Fact Sheet 2008–3100, 4 p., https://pubs.usgs.gov/fs/2008/3100/.

Wirth, T.A., and Pyke, D.A., 2009, Final report for emergency stabilization and rehabilitation treatment monitoring of the Keeney Pass, Cow Hollow, Double Mountain, and Farewell Bend Fires: U.S. Geological Survey Open-File Report 2009–1152, 62 p., https://pubs.usgs.gov/of/2009/1152/.

Woodruff, L.G., Sandheinrich, M.B., Brigham, M.E., and Cannon, W.F., 2009, Impact of wildfire on levels of mercury in forested watershed systems—Voyageurs National Park, Minnesota: U.S. Geological Survey Scientific Investigations Report 2009–5151, 19 p., https://doi.org/10.3133/sir20095151.

Yi, S., McGuire, A.D., Harden, J., Kasischke, E., Manies, K., Hinzman, L., Liljedahl, A., Randerson, J., Liu, H., Romanovsky, V., Marchenko, S., and Kim, Y., 2009, Interactions between soil thermal and hydrological dynamics in the response of Alaska ecosystems to fire disturbance: Journal of Geophysical Research—Biogeosciences, v. 114, p. 1–20, https://doi.org/10.1029/2008JG000841.

Youngblood, A., Grace, J.B., and McIver, J.D., 2009, Delayed conifer mortality after fuel reduction treatments—Interactive effects of fuel, fire intensity, and bark beetles: Ecological Applications, v. 19, no. 2, p. 321–337, https://doi.org/10.1890/07-1751.1.

2008: 106 Publications

Allen, C.D., Anderson, R.S., Jass, R.B., Toney, J.L., and Baisan, C.H., 2008, Paired charcoal and tree-ring records of high-frequency Holocene fire from two New Mexico bog sites: International Journal of Wildland Fire, v. 17, no. 1, p. 115–130, https://doi.org/10.1071/WF07165.

Anderson, R.S., Allen, C.D., Toney, J.L., Jass, R.B., and Bair, A.N., 2008, Holocene vegetation and fire regimes in subalpine and mixed conifer forests, southern Rocky Mountains, USA: International Journal of Wildland Fire, v. 17, no. 1, p. 96–114, https://doi.org/10.1071/WF07028.

Bartlein, P.J., Hostetler, S.W., Shafer, S.L., Holman, J.O., and Solomon, A.M., 2008, Temporal and spatial structure in a daily wildfire-start data set from the western United States (1986–96): International Journal of Wildland Fire, v. 17, no. 1, p. 8–17, https://doi.org/10.1071/WF07022.

Beever, E.A., Tausch, R.J., and Thogmartin, W.E., 2008, Multi-scale responses of vegetation to removal of horse grazing from Great Basin (USA) mountain ranges: Plant Ecology, v. 196, no. 2, p. 163–184, https://doi.org/10.1007/s11258-007-9342-5.

Cannon, S.H., Gartner, J.E., Wilson, R.C., Bowers, J.C., and Laber, J.L., 2008, Storm rainfall conditions for floods and debris flows from recently burned areas in southwestern Colorado and southern California: Geomorphology, v. 96, p. 250–269, https://doi.org/10.1016/j.geomorph.2007.03.019.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Ammo Fire perimeter, Las Pulgas Canyon Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1047, 1 sheet, scale 1:24,000, https://doi.org/10.3133/ofr20081047.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Ammo Fire perimeter, Margarita Peak Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1049, 1 sheet, scale 1:24,000, https://doi.org/10.3133/ofr20081049.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Ammo Fire perimeter, San Clemente Quadrangle, Orange and San Diego Counties, California: U.S. Geological Survey Open-File Report 2008–1067, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1067/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Ammo Fire perimeter, San Onofre Bluff Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1068, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1068/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Buckweed Fire perimeter, Agua Dulce Quadrangle, Los Angeles County, California: U.S. Geological Survey Open-File Report 2008–1029, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1029/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Buckweed Fire perimeter, Green Valley Quadrangle, Los Angeles County, California: U.S. Geological Survey Open-File Report 2008–1041, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1041/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Buckweed Fire perimeter, Mint Canyon Quadrangle, Los Angeles County, California: U.S. Geological Survey Open-File Report 2008–1051, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1051/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Buckweed Fire perimeter, Sleepy Valley Quadrangle, Los Angeles County, California: U.S. Geological Survey Open-File Report 2008–1073, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1073/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Buckweed Fire perimeter, Warm Springs Mountain Quadrangle, Los Angeles County, California: U.S. Geological Survey Open-File Report 2008–1081, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1081/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Cajon Fire perimeter, Devore Quadrangle, San Bernardino County, California: U.S. Geological Survey Open-File Report 2008–1036, 1 sheet, scale 1:24,000, https://doi.org/10.3133/ofr20081036.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Cajon Fire perimeter, San Bernardino North Quadrangle, San Bernardino County, California: U.S. Geological Survey Open-File Report 2008–1066, 1 sheet, scale 1:24,000, https://doi.org/10.3133/ofr20081066.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Canyon Fire perimeter, Malibu Beach Quadrangle, Los Angeles County, California: U.S. Geological Survey Open-File Report 2008–1048, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1048/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Grass Valley Fire perimeter, Lake Arrowhead Quadrangle, San Bernardino County, California: U.S. Geological Survey Open-File Report 2008–1045, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1045/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Harris Fire perimeter, Barrett Lake Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1030, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1030/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary mage map of the 2007 Harris Fire perimeter, Dulzura Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1039, 1 sheet, scale 1:24,000, https://doi.org/10.3133/ofr20081039.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Harris Fire perimeter, Jamul Mountains Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1043, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1043/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Harris Fire perimeter, Morena Reservoir Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1052, 1 sheet, scale 1:24,000, https://doi.org/10.3133/ofr20081052.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Harris Fire perimeter, Otay Mesa Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1055, 1 sheet, scale 1:24,000, https://doi.org/10.3133/ofr20081055.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Harris Fire perimeter, Otay Mountain Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1056, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1056/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Harris Fire perimeter, Potrero Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1061, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1061/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Harris Fire perimeter, Tecate Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1074, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1074/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Magic and Buckweed Fire perimeters, Newhall Quadrangle, Los Angeles County, California: U.S. Geological Survey Open-File Report 2008–1053, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1053/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Poomacha Fire perimeter, Boucher Hill Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1033, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1033/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Poomacha Fire perimeter, Pala Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1057, 1 sheet, scale 1:24,000, https://doi.org/10.3133/ofr20081057.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Poomacha Fire perimeter, Palomar Observatory Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1058, 1 sheet, scale 1:24,000 https://pubs.usgs.gov/of/2008/1058/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Poomacha Fire perimeter, Pechanga Quadrangle, Riverside and San Diego Counties, California: U.S. Geological Survey Open-File Report 2008–1059, 1 sheet, scale 1:24,000, https://doi.org/10.3133/ofr20081059.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Poomacha Fire perimeter, Temecula Quadrangle, Riverside and San Diego Counties, California: U.S. Geological Survey Open-File Report 2008–1075, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1075/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Poomacha Fire perimeter, Vail Lake Quadrangle, Riverside and San Diego Counties, California: U.S. Geological Survey Open-File Report 2008–1078, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1078/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Ranch and Magic Fire perimeters, Val Verde Quadrangle, Los Angeles and Ventura Counties, California: U.S. Geological Survey Open-File Report 2008–1079, 1 sheet, scale 1:24,000, https://doi.org/10.3133/ofr20081079.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary mage map of the 2007 Ranch Fire perimeter, Cobblestone Mountain Quadrangle, Los Angeles and Ventura Counties, California: U.S. Geological Survey Open-File Report 2008–1035, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1035/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Ranch Fire perimeter, Fillmore Quadrangle, Ventura County, California: U.S. Geological Survey Open-File Report 2008–1040, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1040/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Ranch Fire perimeter, Piru Quadrangle, Ventura County, California: U.S. Geological Survey Open-File Report 2008–1060, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1060/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Ranch Fire perimeter, Whitaker Peak Quadrangle, Los Angeles and Ventura Counties, California: U.S. Geological Survey Open-File Report 2008–1083, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1083/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Rice Fire perimeter, Bonsall Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1032, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1032/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Santiago Fire perimeter, Black Star Canyon Quadrangle, Orange, Riverside, and San Bernardino Counties, California: U.S. Geological Survey Open-File Report 2008–1031, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1031/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Santiago Fire perimeter, Lake Forest Quadrangle, Orange County, California: U.S. Geological Survey Open-File Report 2008–1046, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1046/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Santiago Fire perimeter, Santiago Peak Quadrangle, Orange and Riverside Counties, California: U.S. Geological Survey Open-File Report 2008–1072, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1072/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Santiago Fire perimeter, Tustin Quadrangle, Orange County, California: U.S. Geological Survey Open-File Report 2008–1077, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1077/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Slide Fire perimeter, Butler Peak Quadrangle, San Bernardino County, California: U.S. Geological Survey Open-File Report 2008–1034, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1034/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Slide Fire perimeter, Harrison Mountain Quadrangle, San Bernardino County, California: U.S. Geological Survey Open-File Report 2008–1042, 1 sheet, scale 1:24,000, https://doi.org/10.3133/ofr20081042.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Slide Fire perimeter, Keller Peak Quadrangle, San Bernardino County, California: U.S. Geological Survey Open-File Report 2008–1044, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1044/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Witch and Poomacha Fire perimeters, Mesa Grande Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1050, 1 sheet, scale 1:24,000, https://doi.org/10.3133/ofr20081050.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Witch and Poomacha Fire perimeters, Rodriguez Mountain Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1065, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1065/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image ap of the 2007 Witch Fire perimeter, El Cajon Mountain Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1038, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1038/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Witch Fire perimeter, Escondido Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1037, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1037/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Witch Fire perimeter, Poway Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1062, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1062/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Witch Fire perimeter, Ramona Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1063, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1063/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Witch Fire perimeter, Rancho Santa Fe Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1064, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1064/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Witch Fire perimeter, San Pasqual Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1069, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1069/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Witch Fire perimeter, San Vicente Reservoir Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1070, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1070/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Witch Fire perimeter, Santa Ysabel Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1071, 1 sheet, scale 1:24,000, https://doi.org/10.3133/ofr20081071.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Witch Fire perimeter, Tule Springs Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1076, 1 sheet, scale 1:24,000, https://doi.org/10.3133/ofr20081076.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Witch Fire perimeter, Valley Center Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1080, 1 sheet, scale 1:24,000, https://pubs.usgs.gov/of/2008/1080/.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Witch Fire perimeter, Warners Ranch Quadrangle, San Diego County, California: U.S. Geological Survey Open-File Report 2008–1082, 1 sheet, scale 1:24,000, https://doi.org/10.3133/ofr20081082.

Clark, P.S., Scratch, W.S., Bias, G.W., Stander, G.B., Sexton, J.L., and Krawczak, B.J., 2008, Preliminary image map of the 2007 Santiago Fire perimeter, Orange Quadrangle, Orange County, California: U.S. Geological Survey Open-File Report 2008-1054, 1 sheet, scale 1:24,000, https://pubs.er.usgs.gov/publication/ofr20081054.

deWolfe, V.G., Santi, P.M., Ey, J., and Gartner, J.E., 2008, Effective mitigation of debris flows at Lemon Dam, La Plata County, Colorado: Geomorphology, v. 96, nos. 3–4. p. 366–377, https://doi.org/10.1016/j.geomorph.2007.04.008.

Drewa, P.B., Platt, W.J., Kwit, C., and Doyle, T.W., 2008, Stand structure and dynamics of sand pine differ between the Florida panhandle and peninsula: Plant Ecology, v. 196, no. 1, p. 15–25, https://doi.org/10.1007/s11258-007-9333-6.

Engle, D.L., Sickman, J.O., Moore, C.M., Esperanza, A.M., Melack, J.M., and Keeley, J.E., 2008, Biogeochemical legacy of prescribed fire in a giant sequoia-mixed conifer forest—A 16-year record of watershed balances: Journal of Geophysical Research—Biogeosciences, v. 113, https://doi.org/10.1029/2006JG000391.

Engle, D.M., Fuhlendorf, S.D., Roper, A., and Leslie, D.M., Jr., 2008, Invertebrate community response to a shifting mosaic of habitat: Rangeland Ecology and Management, v. 61, no. 1, p. 55–62, https://doi.org/10.2111/06-149R2.1.

Gartner, J.E., Cannon, S.H., Santi, P.M., and deWolfe, V.G., 2008, Empirical models to predict the volumes of debris flows generated by recently burned basins in the western U.S.: Geomorphology, v. 96, nos. 3–4, p. 339–354, https://doi.org/10.1016/j.geomorph.2007.02.033.

Giesen, T.W., Perakis, S.S., and Cromack, K., 2008, Four centuries of soil carbon and nitrogen change after stand-replacing fire in a forest landscape in the western Cascade Range of Oregon: Canadian Journal of Forest Research, v. 38, no. 9, p. 2455–2464, https://doi.org/10.1139/X08-092.

Guscio, C.G., Hossack, B.R., Eby, L.A., and Corn, P.S., 2008, Post-breeding habitat use by adult boreal toads (*Bufo boreas*) after wildfire in Glacier National Park, USA: Herpetological Conservation and Biology, v. 3, no. 1, p. 55–62, http://www.herpconbio.org/contents_vol3_issue1.html.

Hawbaker, T.J., Radeloff, V.C., Syphard, A.D., Zhu, Z., and Stewart, S.I., 2008, Detection rates of the MODIS active fire product in the United States: Remote Sensing of Environment, v. 112, no. 5, p. 2656–2664, https://doi.org/10.1016/j.rse.2007.12.008.

Hossack, B.R., and Corn, P.S., 2008, Wildfire effects on water temperature and selection of breeding sites by the boreal toad (*Bufo boreas*) in seasonal wetlands: Herpetological Conservation and Biology, v. 3, no. 1, p. 46–54, http://www.herpconbio.org/contents_vol3_issue1.html.

Jacobs, B.F., Romme, W.H., and Allen, C.D., 2008, Mapping "old" versus "young" piñon-juniper stands with a predictive topo-climatic model: Ecological Applications, v. 18, no. 7, p. 1627–1641, https://doi.org/10.1890/07-0847.1.

Jain, T.B., Gould, W.A., Graham, R.T., Pilliod, D.S., Lentile, L.B., and González, G., 2008, A soil burn severity index for understanding soil-fire relations in tropical forests: AMBIO—A Journal of the Human Environment, v. 37, no. 7, p. 563–568, https://doi.org/10.1579/0044-7447-37.7.563.

Jones, J.W., and Osborne, J.D., 2008, Detecting evidence of climate change in the forests of the eastern United States: U.S. Geological Survey Fact Sheet 2008–3046, 2 p., https://pubs.usgs.gov/fs/2008/3046/.

Keane, R.E., Agee, J.K., Fulé, P., Keeley, J.E., Key, C., Kitchen, S.G., Miller, R., and Schulte, L.A., 2008, Ecological effects of large fires on U.S. landscapes—Benefit or catastrophe? International Journal of Wildland Fire, v. 17, no. 6, p. 696–712, https://doi.org/10.1071/WF07148.

Keeley, J.E., Brennan, T., and Pfaff, A.H., 2008, Fire severity and ecosystem responses following crown fires in California shrublands: Ecological Applications, v. 18, no. 6, p. 1530–1546, https://doi.org/10.1890/07-0836.1.

Keigley, R.B., and Frisina, M.R., 2008, Aspen height, stem-girth and survivorship in an area of high ungulate use: Northwest Science, v. 82, no. 3, p. 199–210, https://doi.org/10.3955/0029-344X-82.3.199.

Kinner, D.A., and Moody, J.A., 2008, Infiltration and runoff measurements on steep burned hillslopes using a rainfall simulator with variable rain intensities: U.S. Geological Survey Scientific Investigations Report 2007–5211, 64 p., https://pubs.usgs.gov/sir/2007/5211/.

Kolden, C.A., and Brown, T.J., 2008, Using climate information for fuels management: Desert Research Institute Climate Ecosystem Fire Applications (CEFA) Report 08–01, 53 p., https://cefa.dri.edu/Publications/publications_home.php.

Kolker, A., Engle, M.A., Orem, W.H., Bunnell, J.E., Lerch, H.E., Krabbenhoft, D.P., Olson, M.L., and McCord, J.D., 2008, Mercury, trace elements and organic constituents in atmospheric fine particulate matter, Shenandoah National Park, Virginia, USA—A combined approach to sampling and analysis: Geostandards and Geoanalytical Research, v. 32, no. 3, p. 279–293, https://doi.org/10.1111/j.1751-908X.2008.00913.x.

Laird, D.A., Chappell, M.A., Martens, D.A., Wershaw, R.L., and Thompson, M., 2008, Distinguishing black carbon from biogenic humic substances in soil clay fractions: Geoderma, v. 143, nos. 1–2, p. 115–122, https://doi.org/10.1016/j.geoderma.2007.10.025.

Launchbaugh, K., Brammer, B., Brooks, M.L., Bunting, S., Clark, P., Davison, J., Fleming, M., Kay, R., Pellant, M., and Pyke, D.A., 2008, Interactions among livestock grazing, vegetation type, and fire behavior in the Murphy Wildland Fire Complex in Idaho and Nevada, July 2007: U.S. Geological Survey Open-File Report 2008–1214, 42 p., https://doi.org/10.3133/ofr20081214.

Leu, M., Hanser, S.E., and Knick, S.T., 2008, The human footprint in the West—A large-scale analysis of anthropogenic impacts: Ecological Applications, v. 18, no. 5, p. 1119–1139, https://doi.org/10.1890/07-0480.1.

Linkhart, B.D., Evers, E.M., Megler, J.D., Palm, E.C., Salipante, C.M., and Yanco, S.W., 2008, First observed instance of polygyny in flammulated owls: The Wilson Journal of Ornithology, v. 120, no. 3, p. 645–648, https://doi.org/10.1676/07-029.1.

Lundstrom, S.C., Mahan, S.A., Paces, J.B., Hudson, M.R., House, P.K., Malmon, D. V., Blair, J.L., and Howard, K.A., 2008, Late Pleistocene aggradation and degradation of the lower Colorado River—Perspectives from the Cottonwood area and other reconnaissance below Boulder Canyon, *in* Reheis, M.C., Hershler, R., and Miller, D.M., eds., Late Cenozoic drainage history of the southwestern Great Baisn and lower Colorado River region—Geologic and biotic perspectives: Geological Society of America Special Paper 439, p. 411–432, https://doi.org/10.1130/2008.2439(19).

Mack, M.C., Treseder, K.K., Manies, K.L., Harden, J.W., Schuur, E.A.G., Vogel, J.G., Randerson, J.T., and Chapin, F.S., III, 2008, Recovery of aboveground plant biomass and productivity after fire in mesic and dry black spruce forests of interior Alaska: Ecosystems, v. 11, no. 2, p. 209–225, https://doi.org/10.1007/s10021-007-9117-9.

Mast, M.A., and Clow, D.W., 2008, Effects of 2003 wildfires on stream chemistry in Glacier National Park, Montana: Hydrological Processes, v. 22, no. 26, p. 5013–5023, https://doi.org/10.1002/hyp.7121.

Mendelsohn, M.B., Brehme, C.S., Rochester, C.J., Stokes, D.C., Hathaway, S.A., and Fisher, R.N., 2008, Responses in bird communities to wildland fires in southern California: Fire Ecology, v. 4, no. 2, p. 63–82, https://doi.org/10.4996/fireecology.0402063.

Moody, J.A., Martin, D.A., Haire, S.L., and Kinner, D.A., 2008, Linking runoff response to burn severity after a wildfire: Hydrological Processes, v. 22, no. 13, p. 2063–2074, https://doi.org/10.1002/hyp.6806.

Myers-Smith, I.H., Harden, J.W., Wilmking, M., Fuller, C.C., McGuire, A.D., and Chapin, F.S., III, 2008, Wetland succession in a permafrost collapse—Interactions between fire and thermokarst: Biogeosciences, v. 5, no. 5, p. 1273–1286, https://doi.org/10.5194/bg-5-1273-2008.

Orem, W.H., 2008, Chemical results of laboratory dry/rewet experiments conducted on wetland soils from two sites in the Everglades, Florida: U.S. Geological Survey Open-File Report 2008–1090, 22 p., https://pubs.usgs.gov/of/2008/1090/.

Pincetl, S., Rundel, P.W., DeBlasio, J.C., Silver, D., Scott, T., Keeley, J.E., and Halsey, R.W., 2008, It's the land use not the fuels—Fires and land development in southern California: Real Estate Review, v. 37, no. 1, p. 25–42, https://www.researchgate.net/publication/285717864_It%27s_the_land_use_not_the_fuels_Fires_and_land_development_in_Southern_California.

Raumann, C.G., and Cablk, M.E., 2008, Change in the forested and developed landscape of the Lake Tahoe basin, California and Nevada, USA, 1940–2002: Forest Ecology and Management, v. 255, nos. 8–9, p. 3424–3439, https://doi.org/10.1016/j.foreco.2008.02.028.

Reeves, J.B., III, McCarty, G.W., Rutherford, D.W., and Wershaw, R.L., 2008, Mid-infrared diffuse reflectance spectroscopic examination of charred pine wood, bark, cellulose, and lignin—Implications for the quantitative determination of charcoal in soils: Applied Spectroscopy, v. 62, no. 2, p. 182–189, https://doi.org/10.1366/000370208783575618.

Roberts, S.L., van Wagtendonk, J.W., Miles, A.K., Kelt, D.A., and Lutz, J.A., 2008, Modeling the effects of fire severity and spatial complexity on small mammals in Yosemite National Park, California: Fire Ecology, v. 4, no. 2, p. 83–104, https://doi.org/10.4996/fireecology.0402083.

Rupert, M.G.., Cannon, S.H., Gartner, J.E., Michael, J.A., and Helsel, D.R., 2008, Using logistic regression to predict the probability of debris flows in areas burned by wildfires, southern California, 2003–2006: U.S. Geological Survey Open-File Report 2008–1370, 9 p., https://doi.org/10.3133/ofr20081370.

Santi, P.M., deWolfe, V.G., Higgins, J.D., Cannon, S.H., and Gartner, J.E., 2008, Sources of debris flow material in burned areas: Geomorphology, v. 96, nos. 3–4, p. 310–321, https://doi.org/10.1016/j.geomorph.2007.02.022.

Stevens, M.R., Bossong, C.R., Litke, D.W., Viger, R.J., Rupert, M.G., and Char, S.J., 2008, Estimated probability of post-wildfire debris-flow occurrence and estimated volume of debris flows from a pre-fire analysis in the Three Lakes Watershed, Grand County, Colorado: U.S. Geological Survey Scientific Investigations Map 3009, 1 sheet, https://pubs.usgs.gov/sim/3009/.

Stevens, M.R., Bossong, C.R., Rupert, M.G., Ranalli, A.J., Cassidy, E.W., and Druliner, A.D., 2008, Post-wildfire hydrologic hazards in the wildland urban interface of Colorado and the Western United States: U.S. Geological Survey Fact Sheet 2007–3036, 6 p., https://pubs.usgs.gov/fs/2007/3036/.

Waldrop, M.P., and Harden, J.W., 2008, Interactive effects of wildfire and permafrost on microbial communities and soil processes in an Alaskan black spruce forest: Global Change Biology, v. 14, no. 11, p. 2591–2602, https://doi.org/10.1111/j.1365-2486.2008.01661.x.

Wallace, C.S.A., and Thomas, K.A., 2008, An annual plant growth proxy in the Mojave Desert using MODIS-EVI data: Sensors, v. 8, no. 12, p. 7792–7808, https://doi.org/10.3390/s8127792.

Webb, R.H., Magirl, C.S., Griffiths, P.G., and Boyer, D.E., 2008, Debris flows and floods in southeastern Arizona from extreme precipitation in July 2006—Magnitude, frequency, and sediment delivery: U.S. Geological Survey Open-File Report 2008–1274, 95 p., https://doi.org/10.3133/ofr20081274.

White, J.D., Gutzwiller, K.J., Barrow, W.C., Randall, L.J., and Swint, P., 2008, Modeling mechanisms of vegetation change due to fire in a semi-arid ecosystem: Ecological Modelling, v. 214, nos. 2–4, p. 181–200, https://doi.org/10.1016/j.ecolmodel.2008.02.032.

Whitlock, C., Dean, W., Rosenbaum, J., Stevens, L., Fritz, S., Bracht, B., and Power, M., 2008, A 2650-year-long record of environmental change from northern Yellowstone National Park based on a comparison of multiple proxy data: Quaternary International, v. 188, no. 1, p. 126–138, https://doi.org/10.1016/j.quaint.2007.06.005.

Wolf, R.E., Morman, S.A., Plumlee, G.S., Hageman, P.L., and Adams, M., 2008, Release of hexavalent chromium by ash and soils in wildfire-impacted areas: U.S. Geological Survey Open-File Report 2008–1345, 22 p., https://pubs.usgs.gov/of/2008/1345/.

Wylie, B.K., Zhang, L., Bliss, N., Ji, L., Tieszen, L.L., and Jolly, W.M., 2008, Integrating modelling and remote sensing to identify ecosystem performance anomalies in the boreal forest, Yukon River Basin, Alaska: International Journal of Digital Earth, v. 1, no. 2, p. 196–220, https://doi.org/10.1080/17538940802038366.

Wylie, B.K., Zhang, L., Ji, L., Tieszen, L.L., and Bliss, N.B., 2008, Modeling and dynamic monitoring of ecosystem performance in the Yukon River Basin: U.S. Geological Survey Fact Sheet 2008–3016, 2 p., https://pubs.usgs.gov/fs/2008/3016/.

Zeigenfuss, L.C., Binkley, D., Tuskan, G.A., Romme, W.H., Yin, T., DiFazio, S., and Singer, F.J., 2008, Aspen cology in Rocky Mountain National Park—Age distribution, genetics, and the effects of elk herbivory: U.S. Geological Survey Open-File Report 2008–1337, 52 p., https://doi.org/10.3133/ofr20081337.

2007: 74 Publications

Allen, C.D., 2007, Interactions across spatial scales among forest dieback, fire, and erosion in northern New Mexico landscapes: Ecosystems, v. 10, no. 5, p. 797–808, https://doi.org/10.1007/s10021-007-9057-4.

Anderson, T.M., Ritchie, M.E., Mayemba, E., Eby, S., Grace, J.B., and McNaughton, S.J., 2007, Forage nutritive quality in the Serengeti Ecosystem—The roles of fire and herbivory: The American Naturalist, v. 170, no. 3, p. 343–357, https://doi.org/10.1086/520120.

Augustine, D.J., Cully, J.F., Jr., and Johnson, T.L., 2007, Influence of fire on black-tailed prairie dog colony expansion in shortgrass steppe: Rangeland Ecology and Management, v. 60, no. 5, p. 538–542, https://doi.org/10.2111/1551-5028(2007)60[538:IOFOBP]2.0.CO;2.

Baldwin, H.Q., Grace, J.B., Barrow, W.C., Jr., and Rohwer, F.C., 2007, Habitat relationships of birds overwintering in a managed coastal prairie: The Wilson Journal of Ornithology, v. 119, no. 2, p. 189–197, https://doi.org/10.1676/05-129.1.

Balshi, M.S., McGuire, A.D., Zhuang, Q., Melillo, J., Kicklighter, D.W., Kasischke, E., Wirth, C., Flannigan, M., Harden, J., Clein, J.S., Burnside, T.J., McAllister, J., Kurz, W.A., Apps, M., and Shvidenko, A., 2007, The role of historical fire disturbance in the carbon dynamics of the pan-boreal region—A process-based analysis: Journal of Geophysical Research—Biogeosciences, v. 112, June, https://doi.org/10.1029/2006JG000380.

Belnap, J., Phillips, S.L., and Smith, S.D., 2007, Dynamics of cover, UV-protective pigments, and quantum yield in biological soil crust communities of an undisturbed Mojave Desert shrubland: Flora—Morphology, Distribution, Functional Ecology of Plants, v. 202, no. 8, p. 674–686, https://doi.org/10.1016/j.flora.2007.05.007.

Brown, T.J., and Kolden, C.A., 2007, New technologies at the Desert Research Institute make a difference in wildland fire management: Wildland Firefighter, v. 11, no. 9, p. 28–32.

Busing, R.T., Solomon, A.M., McKane, R.B., and Burdick, C.A., 2007, Forest dynamics in Oregon landscapes—Evaluation and application of an individual-based model: Ecological Applications, v. 17, no. 7, p. 1967–1981, https://doi.org/10.1890/06-1838.1.

Cahoon, D.R., 2007, Factors affecting coastal wetland loss and restoration, chap. 12 *of* Phillips, S.W., ed., Synthesis of U.S. Geological Survey science for the Chesapeake Bay ecosystem and implications for environmental management: U.S. Geological Survey Circular 1316, p. 50–53, https://pubs.usgs.gov/circ/circ1316/.

Campbell, J.C., 2007, Geographic analysis and monitoring program: U.S. Geological Survey Fact Sheet 2007–3030, 4 p., https://doi.org/10.3133/fs20073030.

Cannon, S.H., Gartner, J.E., and Michael, J.A., 2007, Methods for the emergency assessment of debris-flow hazards from basins burned by the fires of 2007, southern California: U.S. Geological Survey Open File Report 2007–1384, 10 p., https://pubs.usgs.gov/of/2007/1384/.

Cannon, S.H., Gartner, J.E., Michael, J.A., Bauer, M.A., Stitt, S.C., Knifong, D.L., McNamara, B.J., and Roque, Y.M., 2007, Emergency assessment of debris-flow hazards from basins burned by the 2007 Ammo Fire, San Diego County, southern California: U.S. Geological Survey Open-File Report 2007–1413, 1 sheet, https://pubs.usgs.gov/of/2007/1413/.

Cannon, S.H., Gartner, J.E., Michael, J.A., Bauer, M.A., Stitt, S.C., Knifong, D.L., McNamara, B.J., and Roque, Y.M., 2007, Emergency assessment of debris-flow hazards from basins burned by the 2007 Buckweed Fire, Los Angeles County, southern California: U.S. Geological Survey Open-File Report 2007–1414, 1 sheet, https://doi.org/10.3133/ofr20071414.

Cannon, S.H., Gartner, J.E., Michael, J.A., Bauer, M.A., Stitt, S.C., Knifong, D.L., McNamara, B.J., and Roque, Y.M., 2007, Emergency assessment of debris-flow hazards from basins burned by the 2007 Canyon Fire, Los Angeles County, southern California: U.S. Geological Survey Open-File Report 2007–1415, 1 sheet, https://doi.org/10.3133/ofr20071415.

Cannon, S.H., Gartner, J.E., Michael, J.A., Bauer, M.A., Stitt, S.C., Knifong, D.L., McNamara, B.J., and Roque, Y.M., 2007, Emergency assessment of debris-flow hazards from basins burned by the 2007 Harris Fire, San Diego County, southern California: U.S. Geological Survey Open-File Report 2007–1421, 1 sheet, https://pubs.usgs.gov/of/2007/1421/.

Cannon, S.H., Gartner, J.E., Michael, J.A., Bauer, M.A., Stitt, S.C., Knifong, D.L., McNamara, B.J., and Roque, Y.M., 2007, Emergency assessment of debris-flow hazards from basins burned by the 2007 Poomacha Fire, San Diego County, southern California: U.S. Geological Survey Open-File Report 2007–1411, 1 sheet, https://pubs.usgs.gov/of/2007/1411/.

Cannon, S.H., Gartner, J.E., Michael, J.A., Bauer, M.A., Stitt, S.C., Knifong, D.L., McNamara, B.J., and Roque, Y.M., 2007, Emergency assessment of debris-flow hazards from basins burned by the 2007 Ranch Fire, Ventura and Los Angeles Counties, southern California: U.S. Geological Survey Open-File Report 2007–1418, 1 sheet, https://doi.org/10.3133/ofr20071418.

Cannon, S.H., Gartner, J.E., Michael, J.A., Bauer, M.A., Stitt, S.C., Knifong, D.L., McNamara, B.J., and Roque, Y.M., 2007, Emergency assessment of debris-flow hazards from basins burned by the 2007 Rice Fire, San Diego County, southern California: U.S. Geological Survey Open-File Report 2007–1417, 1 sheet, https://doi.org/10.3133/ofr20071417.

Cannon, S.H., Gartner, J.E., Michael, J.A., Bauer, M.A., Stitt, S.C., Knifong, D.L., McNamara, B.J., and Roque, Y.M., 2007, Emergency assessment of debris-flow hazards from basins burned by the 2007 Santiago Fire, Orange County, southern California: U.S. Geological Survey Open-File Report 2007–1419, 1 sheet, https://doi.org/10.3133/ofr20071419.

Cannon, S.H., Gartner, J.E., Michael, J.A., Bauer, M.A., Stitt, S.C., Knifong, D.L., McNamara, B.J., and Roque, Y.M., 2007, Emergency assessment of debris-flow hazards from basins burned by the 2007 Slide and Grass Valley Fires, San Bernardino County, southern California: U.S. Geological Survey Open-File Report 2007–1416, 1 sheet, https://doi.org/10.3133/ofr20071416.

Cannon, S.H., Gartner, J.E., Michael, J.A., Bauer, M.A., Stitt, S.C., Knifong, D.L., McNamara, B.J., and Roque, Y.M., 2007, Emergency assessment of debris-flow hazards from basins burned by the 2007 Witch Fire, San Diego County, southern California: U.S. Geological Survey Open-File Report 2007–1420, 1 sheet, https://pubs.usgs.gov/of/2007/1420/.

Coe, J.A. (ed.), Bigio, E.R., Blair, R.W., Jr., Burke, M., Cannon, S.H., deWolfe, V.G., Ey, J., Gartner, J.E., Gillam, M.L., Knowlton, N.D., Santi, P.M., and Schulz, W.H., 2007, Mass wasting following the 2002 Missionary Ridge fire near Durango, Colorado, a field trip guidebook: U.S. Geological Survey Open-File Report 2007–1289, 54 p., https://doi.org/10.3133/ofr20071289.

Collins, B.M., Kelly, M., van Wagtendonk, J.W., and Stephens, S.L., 2007, Spatial patterns of large natural fires in Sierra Nevada wilderness areas: Landscape Ecology, v. 22, no. 4, p. 545–557, https://doi.org/10.1007/s10980-006-9047-5.

Cress, J.J., and Goplen, S.E., 2007, Rapid Data Delivery System (RDDS): U.S. Geological Survey Fact Sheet 2007–3105, 2 p., https://doi.org/10.3133/fs20073105.

Duffy, P.A., Epting, J., Graham, J.M., Rupp, T.S., and McGuire, A.D., 2007, Analysis of Alaskan burn severity patterns using remotely sensed data: International Journal of Wildland Fire, v. 16, no. 3, p. 277–284, https://doi.org/10.1071/WF06034.

Dunham, J.B., Rosenberger, A.E., Luce, C.H., and Rieman, B.E., 2007, Influences of wildfire and channel reorganization on spatial and temporal variation in stream temperature and the distribution of fish and amphibians: Ecosystems, v. 10, no. 2, p. 335–346, https://doi.org/10.1007/s10021-007-9029-8.

Eidenshink, J., Schwind, B., Brewer, K., Zhu, Z.-L., Quayle, B., and Howard, S., 2007, A project for monitoring trends in burn severity: Fire Ecology, v. 3, no. 1, p. 3–21, https://doi.org/10.4996/fireecology.0301003.

Faber-Langendoen, D., Aaseng, N., Hop, K., Lew-Smith, M., and Drake, J., 2007, Vegetation classification, mapping, and monitoring at Voyageurs National Park, Minnesota—An application of the U.S. National Vegetation Classification: Applied Vegetation Science, v. 10, no. 3, p. 361–374, https://doi.org/10.1111/j.1654-109X.2007.tb00435.x.

Fagre, D.B., 2007, Adapting to the reality of climate change at Glacier National Park, Montana, USA, *in* Proceedings of The First International Conference on the Impact of Climate Change on High-Mountain Systems, Bogota, Columbia, November 21–23, 2005: Bogota, Columbia, Instituto de Hidrologia, Meteorologia y Estudios Ambientales–IDEAM, p. 221–234, http://lib.icimod.org/record/11839/files/1130.pdf.

Freeman, J.P., Stohlgren, T.J., Hunter, M.E., Omi, P.N., Martinson, E.J., Chong, G.W., and Brown, C.S., 2007, Rapid assessment of postfire plant invasions in coniferous forests of the western United States: Ecological Applications, v. 17, no. 6, p. 1656–1665, https://doi.org/10.1890/06-1859.1.

Grundel, R., and Pavlovic, N.B., 2007, Distinctiveness, use, and value of Midwestern oak savannas and woodlands as avian habitats: The Auk, v. 124, no. 3, p. 969–985, https://doi.org/10.1642/0004-8038(2007)124[969:DUAVOM]2.0.CO;2.

Grundel, R., and Pavlovic, N.B., 2007, Response of bird species densities to habitat structure and fire history along a Midwestern open-forest gradient: The Condor, v. 109, no. 4, p. 734–749, https://doi.org/10.1650/0010-5422(2007)109[734:ROBSDT]2.0.CO;2.

Hageman, P.L., 2007, U.S. Geological Survey field leach test for assessing water reactivity and leaching potential of mine wastes, soils, and other geologic and environmental materials: U.S. Geological Survey Techniques and Methods, book 5, chap. D3, 14 p., https://doi.org/10.3133/tm5D3.

Hartley, M.K., Rogers, W.E., Siemann, E., and Grace, J., 2007, Responses of prairie arthropod communities to fire and fertilizer—Balancing plant and arthropod conservation: The American Midland Naturalist, v. 157, no. 1, p. 92–105, https://doi.org/10.1674/0003-0031(2007)157[92:ROPACT]2.0.CO;2.

Hatten, J.R., and Sogge, M.K., 2007, Using a remote sensing/GIS model to predict southwestern willow flycatcher breeding habitat along the Rio Grande, New Mexico: U.S. Geological Survey Open-File Report 2007–1207, 27 p., https://doi.org/10.3133/ofr20071207.

Helz, R.L., and Gaynor, J.E., 2007, Reducing loss of life and property from disasters— societal benefit area of the strategic plan for U.S. Integrated Earth Observation System (IEOS): U.S. Geological Survey Open-File Report 2007–1147, 65 p., https://doi.org/10.3133/ofr20071147.

Hossack, B.R., and Corn, P.S., 2007, Responses of pond-breeding amphibians to wildfire—Short-term patterns in occupancy and colonization: Ecological Applications, v. 17, no. 5, p. 1403–1410, https://doi.org/10.1890/06-2037.1.

Izbicki, J.A., Pimentel, I.M., Johnson, R., Aiken, G.R., and Leenheer, J., 2007, Concentration, UV-spectroscopic characteristics and fractionation of DOC in stormflow from an urban stream, southern California, USA: Environmental Chemistry, v. 4, no. 1, p. 35–48, https://doi.org/10.1071/EN06046.

Jacobs, S.M., Bechtold, J.S., Biggs, H.C., Grimm, N.B., Lorentz, S., McClain, M.E., Naiman, R.J., Perakis, S.S., Pinay, G., and Scholes, M.C., 2007, Nutrient vectors and riparian processing—A review with special reference to African semiarid savanna ecosystems: Ecosystems, v. 10, no. 8, p. 1231–1249, https://doi.org/10.1007/s10021-007-9092-1.

Keane, R.E., and Key, C., 2007, CCE fire regimes and their management, *in* Prato, T., and Fagre, D., eds., Sustaining Rocky Mountain landscapes—Science, policy, and management for the Crown of the Continent Ecosystem: Washington, D.C., Resources for the Future, chap. 13, p. 201–212, https://www.fs.usda.gov/treesearch/pubs/27698.

Keane, R.E., Rollins, M., and Zhu, Z.-L., 2007, Using simulated historical time series to prioritize fuel treatments on landscapes across the United States—The LANDFIRE prototype project: Ecological Modelling, v. 204, p. 485–502, https://doi.org/10.1016/j.ecolmodel.2007.02.005.

Keeley, J.E., and McGinnis, T.W., 2007, Impact of prescribed fire and other factors on cheatgrass persistence in a Sierra Nevada ponderosa pine forest: International Journal of Wildland Fire, v. 16, no. 1, p. 96–106, https://doi.org/10.1071/WF06052.

Kennedy, B.W., and Langley, D.E., 2007, Assessment of hydrology, water quality, and trace elements in selected placer-mined creeks in the Birch creek watershed near central, Alaska, 2001–05: U.S. Geological Survey Scientific Investigations Report 2007–5124, https://doi.org/10.3133/sir20075124.

Knapp, E.E., Schwilk, D.W., Kane, J.M., and Keeley, J.E., 2007, Role of burning season on initial understory vegetation response to prescribed fire in a mixed conifer forest: Canadian Journal of Forest Research, v. 37, no. 1, p. 11–22, https://doi.org/10.1139/x06-200.

Kokaly, R.F., Rockwell, B.W., Haire, S.L., and King, T.V.V., 2007, Characterization of post-fire surface cover, soils, and burn severity at the Cerro Grande fire, New Mexico, using hyperspectral and multispectral remote sensing: Remote Sensing of Environment, v. 106, no. 3, p. 305–325, https://doi.org/10.1016/j.rse.2006.08.006.

Kolden, C.A., and Weigel, T.J., 2007, Fire risk in San Diego County, California—A weighted Bayesian model approach: The California Geographer, v. 47, p. 42–60, http://hndl.handle.net/10211.2/2777.

Kotliar, N.B., Kennedy, P.L., and Ferree, K., 2007, Avifaunal responses to fire in southwestern montane forests along a burn severity gradient: Ecological Applications, v. 17, no. 2, p. 491–507, https://doi.org/10.1890/06-0253.

Malmon, D.V., Reneau, S.L., Katzman, D., Lavine, A., and Lyman, J., 2007, Suspended sediment transport in an ephemeral stream following wildfire: Journal of Geophysical Research—Earth Surface, v. 112, June, https://doi.org/10.1029/2005JF000459.

Margolis, E.Q., Swetnam, T.W., and Allen, C.D., 2007, A stand-replacing fire history in upper montane forests of the southern Rocky Mountains: Canadian Journal of Forest Research, v. 37, no. 11, p. 2227–2241, https://doi.org/10.1139/X07-079.

McKenzie, D., and Allen, C.D., 2007, Climate change and disturbance interactions: EOS, Transactions, American Geophysical Union, v. 88, no. 21, p. 227, https://doi.org/10.1029/2007EO210010.

Merriam, K.E., Keeley, J.E., and Beyers, J.L., 2007, The role of fuel breaks in the invasion of nonnative plants: U.S. Geological Survey Scientific Investigations Report 2006–5185, 69 p., https://doi.org/10.3133/sir20065185.

Miller, R.F., Bates, J.D., Svejcar, T.J., Pierson, F.B., and Eddleman, L.E., 2007, Western juniper field guide—Asking the right questions to select appropriate management actions: U.S. Geological Survey Circular 1321, 61 p., https://pubs.usgs.gov/circ/1321/.

Nelson, S.J., Johnson, K.B., Kahl, J.S., Haines, T.A., and Fernandez, I.J., 2007, Mass balances of mercury and nitrogen in burned and unburned forested watersheds at Acadia National Park, Maine, USA: Environmental Monitoring and Assessment, v. 126, p. 69–80, https://doi.org/10.1007/s10661-006-9332-4.

Nielsen, M.G., and Kahl, J.S., 2007, Nutrient export from watersheds on Mt. Desert Island, Maine, as a function of land use and fire history: Environmental Monitoring and Assessment, v. 126, p. 81–96, https://doi.org/10.1007/s10661-006-9333-3.

Owens, A.B., Proffitt, C.E., and Grace, J.B., 2007, Prescribed fire and cutting as tools for reducing woody plant succession in a created salt marsh: Wetlands Ecology and Management, v. 15, no. 5, p. 405–416, https://doi.org/10.1007/s11273-007-9039-5.

Peckenham, J.M., Kahl, J.S., Nelson, S.J., Johnson, K.B., and Haines, T.A., 2007, Landscape controls on mercury in streamwater at Acadia National Park, USA: Environmental Monitoring and Assessment, v. 126, p. 97–104, https://doi.org/10.1007/s10661-006-9334-2.

Ponzetti, J.M., McCune, B., and Pyke, D.A., 2007, Biotic soil crusts in relation to topography, cheatgrass and fire in the Columbia Basin, Washington: Bryologist, v. 110, no. 4, p. 706–722, https://doi.org/10.1639/0007-2745(2007)110[706:BSCIRT]2.0.CO;2.

Raumann, C.G., 2007, Land-cover change in the southern Lake Tahoe Basin, California and Nevada, 1940–2002: U.S. Geological Survey Scientific Investigations Map 2962, 1 sheet, https://pubs.usgs.gov/sim/2007/2962/.

Raumann, C.G., and Soulard, C.E., 2007, Land-cover trends of the Sierra Nevada ecoregion, 1973–2000: U.S. Geological Survey Scientific Investigations Report 2007–5011, 29 p., https://pubs.usgs.gov/sir/2007/5011/.

Reeves, J.B., III, McCarty, G.W., Rutherford, D.W., and Wershaw, R.L., 2007, Near infrared spectroscopic examination of charred pine wood, bark, cellulose and lignin—Implications for the quantitative determination of charcoal in soils: Journal of Near Infrared Spectroscopy, v. 15, no. 5, p. 307–315, https://doi.org/10.1255/jnirs.742.

Reneau, S.L., Katzman, D., Kuyumjian, G.A., Lavine, A., and Malmon, D.V., 2007, Sediment delivery after a wildfire: Geology, v. 35, no. 2, p. 151–154, https://doi.org/10.1130/G23288A.1.

Robichaud, P.R., Lewis, S.A., Laes, D.Y.M., Hudak, A.T., Kokaly, R.F., and Zamudio, J.A., 2007, Postfire soil burn severity mapping with hyperspectral image unmixing: Remote Sensing of Environment, v. 108, no. 4, p. 467–480, https://doi.org/10.1016/j.rse.2006.11.027.

Saatchi, S., Halligan, K., Despain, D.G., and Crabtree, R.L., 2007, Estimation of forest fuel load from radar remote sensing: IEEE Transactions on Geoscience and Remote Sensing, v. 45, no. 6, p. 1726–1740, https://doi.org/10.1109/TGRS.2006.887002.

Schmidt, C.A. (ed.), Powell, B.F., Swann, D.E., and Halvorson, W.L., 2007, Vascular plant and vertebrate inventory of Coronado National Memorial: U.S. Geological Survey Open-File Report 2007–1393, 114 p., https://doi.org/10.3133/ofr20071393.

Schoenberg, F.P., Chang, C.-H., Keeley, J.E., Pompa, J., Woods, J., and Xu, H., 2007, A critical assessment of the Burning Index in Los Angeles County, California: International Journal of Wildland Fire, v. 16, no. 4, p. 473–483, https://doi.org/10.1071/WF05089.

Stewart, S.I., Radeloff, V.C., Hammer, R.B., and Hawbaker, T.J., 2007, Defining the wildland-urban interface: Journal of Forestry, v. 105, no. 4, p. 201–207, http://www.ingentaconnect.com/content/saf/jof/2007/00000105/00000004/art00012.

Syphard, A.D., Radeloff, V.C., Keeley, J.E., Hawbaker, T.J., Clayton, M.K., Stewart, S.I., and Hammer, R.B., 2007, Human influence on California fire regimes: Ecological Applications, v. 17, no. 5, p. 1388–1402, https://doi.org/10.1890/06-1128.1.

Syphard, A.D., Yang, J., Franklin, J., He, H.S., and Keeley, J.E., 2007, Calibrating a forest landscape model to simulate frequent fire in Mediterranean-type shrublands: Environmental Modelling and Software, v. 22, no. 11, p. 1641–1653, https://doi.org/10.1016/j.envsoft.2007.01.004.

Tan, Z., Tieszen, L.L., Zhu, Z., Liu, S., and Howard, S.M., 2007, An estimate of carbon emissions from 2004 wildfires across Alaskan Yukon River Basin: Carbon Balance and Management, v. 2, p. 1–8, https://doi.org/10.1186/1750-0680-2-12.

Taylor, J.G., Gillette, S.C., Hodgson, R.W., Downing, J.L., Burns, M.R., Chavez, D.J., and Hogan, J.T., 2007, Informing the network—Improving communication with interface communities during wildland fire: Human Ecology Review, v. 14, no. 2, p. 198–211, https://www.fs.usda.gov/treesearch/pubs/37028.

U.S. Geological Survey, 2007, Facing tomorrow's challenges—U.S. Geological Survey Science in the decade 2007–2017: U.S. Geological Survey Circular 1309, 67 p., https://pubs.usgs.gov/circ/2007/1309/.

Vogel, J.A., Debinski, D.M., Koford, R.R., and Miller, J.R., 2007, Butterfly responses to prairie restoration through fire and grazing: Biological Conservation, v. 140, p. 78–90, https://doi.org/10.1016/j.biocon.2007.07.027.

Webb, R.H., Griffiths, P.G., Wallace, C.S.A., and Boyer, D.E., 2007, Channel response to low-elevation desert fire—The King Valley fire of 2005: U.S. Geological Survey Data Series 275, 52 p., https://pubs.usgs.gov/ds/2007/275/.

Wirth, T.A., and Pyke, D.A., 2007, Monitoring post-fire vegetation rehabilitation projects—A common approach for non-forested ecosystems: U.S. Geological Survey Scientific Investigations Report 2006–5048, 36 p., https://pubs.usgs.gov/sir/2006/5048/.

2006: 57 Publications

Allen, J.C., Krieger, S.M., Walters, J.R., and Collazo, J.A., 2006, Associations of breeding birds with fire-influenced and riparian-upland gradients in a longleaf pine ecosystem: The Auk, v. 123, no. 4, p. 1110–1128, https://doi.org/10.1642/0004-8038(2006)123[1110:AOBBWF]2.0.CO;2.

Brooks, M.L., 2006, Effects of fire on plant communities, *in* DiTomaso, J.M., and Johnson, D.W., eds., The use of fire as a tool for controlling invasive plants: Berkeley, Calif., California Invasive Plant Council, Cal–IPC Publication 2006–01, chap. 4, p. 29–32, https://www.cal-ipc.org/docs/ip/management/UseofFire.pdf.

Brooks, M.L., and Berry, K.H., 2006, Dominance and environmental correlates of alien annual plants in the Mojave Desert, USA: Journal of Arid Environments, v. 67, supplement, p. 100–124, https://doi.org/10.1016/j.jaridenv.2006.09.021.

Brooks, M.L., and Matchett, J.R., 2006, Spatial and temporal patterns of wildfires in the Mojave Desert, 1980–2004: Journal of Arid Environments, v. 67, supplement, p. 148–164, https://doi.org/10.1016/j.jaridenv.2006.09.027.

Brunstein, F.C., 2006, Growth-form characteristics of ancient Rocky Mountain bristlecone pines (*Pinus aristata*), Colorado: U.S. Geological Survey Scientific Investigations Report 2006–5219, 90 p., https://doi.org/10.3133/sir20065219.

Busing, R.T., and Solomon, A.M., 2006, Modeling the effects of fire frequency and severity on forests in the Northwestern United States: U.S. Geological Survey Scientific Investigations Report 2006–5061, 16 p., https://doi.org/10.3133/sir20065061.

Carrasco, J.J., Neff, J.C., and Harden, J.W., 2006, Modeling physical and biogeochemical controls over carbon accumulation in a boreal forest soil: Journal of Geophysical Research—Biogeosciences, v. 111, https://doi.org/10.1029/2005JG000087.

Chastain, R.A., Struckhoff, M.A., and Grabner, K.W., Stroh, E.D., Hong, H., Larsen, D.R., Nigh, T.A., and Drake, J., 2006, Mapping vegetation communities in Ozark National Scenic Riverways—Final technical report to the National Park Service: U.S. Geological Survey Open-File Report 2006–1354, 62 p., 18 apps., https://doi.org/10.3133/ofr20061354.

CIRMOUNT Committee, 2006, Mapping new terrain—Climate change and America's West: U.S. Department of Agriculture PSW–MISC–77, 29 p., http://pubs.er.usgs.gov/publication/70160267.

Dornblaser, M.M., and Halm, D.R., eds., 2006, Water and sediment quality of the Yukon River and its tributaries, from Eagle to St. Marys, Alaska, 2002–2003: U.S. Geological Survey Open-File Report 2006–1228, 202 p., https://pubs.usgs.gov/of/2006/1228/.

Esque, T.C., Schwalbe, C.R., Lissow, J.A., Haines, D.F., Foster, D., and Garnet, M.C., 2006, Buffelgrass fuel loads in Saguaro National Park, Arizona, increase fire danger and threaten native species: Park Science, v. 24, no. 2, p. 33–37, https://www.nature.nps.gov/ParkScience/archive/PDF/Article_PDFs/ParkScience24(2)Winter2006-2007_33-37_56_Esque_2546.pdf.

Fuhlendorf, S.D., Harrell, W.C., Engle, D.M., Hamilton, R.G., Davis, C.A., and Leslie, D.M., Jr., 2006, Should heterogeneity be the basis for conservation? Grassland bird response to fire and grazing: Ecological Applications, v. 16, no. 5, p. 1706–1716, https://esajournals.onlinelibrary.wiley.com/doi/abs/10.1890/1051-0761%282006%29016%5B1706%3ASHBTBF%5D2.0.CO%3B2.

Grace, J.B., and Keeley, J.E., 2006, A structural equation model analysis of postfire plant diversity in California shrublands: Ecological Applications, v. 16, no. 2, p. 503–514, https://doi.org/10.1890/1051-0761(2006)016[0503:ASEMAO]2.0.CO;2.

Grant, T.A., Madden, E.M., Shaffer, T.L., Pietz, P.J., Berkey, G.B., and Kadrmas, N.J., 2006, Nest survival of clay-colored and vesper sparrows in relation to woodland edge in mixed-grass prairies: Journal of Wildlife Management, v. 70, no. 3, p. 691–701, https://doi.org/10.2193/0022-541X(2006)70[691:NSOCAV]2.0.CO;2.

Greenberg, C.H., Otis, D.L., and Waldrop, T.A., 2006, Response of white-footed mice (*Peromyscus leucopus*) to fire and fire surrogate fuel reduction treatments in a southern Appalachian hardwood forest: Forest Ecology and Management, v. 234, p. 355–362, https://doi.org/10.1016/j.foreco.2006.07.022.

Gresswell, R.E., 2006, Effects of fire on salmonid persistence, sidebar 7.3 *in* Shaffer, K.E., and Laudenslaye, W.F., Fire and animal interactions, chap. 7 of Sugihara, N.G., van Wagtendonk, J.W., Shaffer, K.E., Fites-Kaufman, J.A., and Thode, A.E. eds., and Agee, J.K., Fire in California's ecosystems (1st ed.): University of California Press, p. 137–138, https://doi.org/10.1525/california/9780520246058.003.0007.

Haire, S., 2006, High-severity fire in forests of the southwest—Conservation implications, Progress Report, August 2005: U.S. Geological Survey Open-File Report 2006–1077, 9 p., https://doi.org/10.3133/ofr20061077.

Harden, J.W., Manies, K.L., Turetsky, M.R., and Neff, J.C., 2006, Effects of wildfire and permafrost on soil organic matter and soil climate in interior Alaska: Global Change Biology, v. 12, no. 12, p. 2391–2403, https://doi.org/10.1111/j.1365-2486.2006.01255.x.

Holden, Z.A., Morgan, P., Rollins, M.G., and Wright, R.G., 2006, Ponderosa pine snag densities following multiple fires in the Gila Wilderness, New Mexico: Forest Ecology and Management, v. 221, p. 140–146, https://doi.org/10.1016/j.foreco.2005.09.014.

Hossack, B.R., Corn, P.S., and Fagre, D.B., 2006, Divergent patterns of abundance and age-class structure of headwater stream tadpoles in burned and unburned watersheds: Canadian Journal of Zoology, v. 84, no. 10, p. 1482–1488, https://doi.org/10.1139/z06-143.

Hostetler, S.W., Bartlein, P.J., and Holman, J.O., 2006, Atlas of climatic controls of wildfire in the western United States: U.S. Geological Survey Scientific Investigations Report 2006–5139, 69 p., https://doi.org/10.3133/sir20065139.

Hunter, M.E., Omi, P.N., Martinson, E.J., and Chong, G.W., 2006, Establishment of non-native plant species after wildfires—Effects of fuel treatments, abiotic and biotic factors, and post-fire grass seeding treatments: International Journal of Wildland Fire, v. 15, no. 2, p. 271–281, https://doi.org/10.1071/WF05074.

Jehle, G., Savidge, J.A., and Kotliar, N.B., 2006, Green-tailed towhee response to prescribed fire in montane shrubland: The Condor, v. 108, no. 3, p. 634–646, https://doi.org/10.1650/0010-5422(2006)108[634:GTRTPF]2.0.CO;2.

Keeley, J.E., Fotheringham, C.J., and Baer-Keeley, M., 2006, Demographic patterns of postfire regeneration in Mediterranean-climate shrublands of California: Ecological Monographs, v. 76, no. 2, p. 235–255, https://doi.org/10.1890/0012-9615(2006)076[0235:DPOPRI]2.0.CO;2.

Keifer, M., van Wagtendonk, J.W., and Buhler, M., 2006, Long-term surface fuel accumulation in burned and unburned mixed-conifer forests of the central and southern Sierra Nevada, CA (USA): Fire Ecology, v. 2, no. 1, p. 53–72, https://doi.org/10.4996/fireecology.0201053.

Key, C.H., 2006, Ecological and sampling constraints on defining landscape fire severity: Fire Ecology, v. 2, no. 2, p. 34–59, https://doi.org/10.4996/fireecology.0202034.

Kirkpatrick, C., Conway, C.J., and Jones, P.B., 2006, Distribution and relative abundance of forest birds in relation to burn severity in southeastern Arizona: Journal of Wildlife Management, v. 70, no. 4, p. 1005–1012, https://doi.org/10.2193/0022-541X(2006)70[1005:DARAOF]2.0.CO;2.

Klinger, R., Underwood, E.C., and Moore, P.E., 2006, The role of environmental gradients in non-native plant invasion into burnt areas of Yosemite National Park, California: Diversity and Distributions, v. 12, no. 2, p. 139–156, https://doi.org/10.1111/j.1366-9516.2005.00203.x.

Knapp, E.E., and Keeley, J.E., 2006, Heterogeneity in fire severity within early season and late season prescribed burns in a mixed-conifer forest: International Journal of Wildland Fire, v. 15, no. 1, p. 37–45, https://doi.org/10.1071/WF04068.

Laughlin, D.C., and Grace, J.B., 2006, A multivariate model of plant species richness in forested systems—Old-growth montane forests with a long history of fire: Oikos, v. 114, no. 1, p. 60–70, https://doi.org/10.1111/j.0030-1299.2006.14424.x.

Manies, K.L., Harden, J.W., Veldhuis, H., and Trumbore, S., 2006, Soil data from a moderately well and somewhat poorly drained fire chronosequence near Thompson, Manitoba, Canada: U.S. Geological Survey Open-File Report 2006–1291, 8 p., https://doi.org/10.3133/ofr20061291.

Medieros, A.C., and vonAllmen, E., 2006, Restoration of native Hawaiian dryland forest at Auwahi, Maui: U.S. Geological Survey Fact Sheet 2006–3035, 4., https://doi.org/10.3133/fs20063035.

Merriam, K.E., Keeley, J.E., and Beyers, J.L., 2006, Fuel breaks affect nonnative species abundance in Californian plant communities: Ecological Applications, v. 16, no. 2, p. 515–527, https://doi.org/10.1890/1051-0761(2006)016[0515:FBANSA]2.0.CO;2.

Middleton, B.A., 2006, Fire management in fens and wet grasslands grazed by cattle: U.S. Geological Survey Open-File Report 2006–1268, 2 p., https://doi.org/10.3133/ofr20061268.

Middleton, B.A., Holsten, B., and van Diggelen, R., 2006, Biodiversity management of fens and fen meadows by grazing, cutting and burning: Applied Vegetation Science, v. 9, no. 2, p. 307–316, https://doi.org/10.1111/j.1654-109X.2006.tb00680.x.

Mitchell, L.R., Gabrey, S., Marra, P.P., and Erwin, R.M., 2006, Impacts of marsh management on coastal-marsh bird habitats, *in* Greenberg, R.S., Maldonado, J.E., Droege, S., and McDonald, M.V., eds., Terrestrial vertebrates of tidal marshes—Evolution, ecology, and conservation: Camarillo, Calif., Cooper Orinthological Society, p. 155–175, https://repository.si.edu/handle/10088/6030.

Nelson, D.M., Hu, F.S., Grimm, E.C., Curry, B.B., and Slate, J.E., 2006, The influence of aridity and fire on Holocene prairie communities in the eastern Prairie Peninsula: Ecology, v. 87, no. 10, p. 2523–2536, https://doi.org/10.1890/0012-9658(2006)87[2523:TIOAAF]2.0.CO;2.

Parker, J.T.C., 2006, Post-wildfire sedimentation in Saguaro National Park, Rincon Mountain District, and effects on lowland leopard frog habitat: U.S. Geological Survey Scientific Investigations Report 2006–5235, 35 p., https://doi.org/10.3133/sir20065235.

Pausas, J.G., Keeley, J.E., and Verdú, M., 2006, Inferring differential evolutionary processes of plant persistence traits in Northern Hemisphere Mediterranean fire-prone ecosystems: Journal of Ecology, v. 94, no. 1, p. 31–9, https://doi.org/10.1111/j.1365-2745.2005.01092.x.

Pederson, G.T., Gray, S.T., Fagre, D.B., and Graumlich, L.J., 2006, Long-duration drought variability and impacts on ecosystem services—A case study from Glacier National Park, Montana: Earth Interactions, v. 10, p. 1–28, https://doi.org/10.1175/EI153.1.

Peterjohn, B., 2006, Conceptual ecological model for management of breeding shrubland birds in the Mid-Atlantic Region: National Park Service Tehnical Report NPS/NER/NRTR–2006/043, 61 p., https://pubs.er.usgs.gov/publication/70176689.

Randerson, J.T., Liu, H., Flanner, M.G., Chambers, S.D., Jin, Y., Hess, P.G., Pfister, G., Mack, M.C., Treseder, K.K., Welp, L.R., Chapin, F.S., Harden, J.W., Goulden, M.L., Lyons, E., Neff, J.C., Schuur, E.A.G., and Zender, C.S., 2006, The impact of boreal forest fire on climate warming: Science, v. 314, no. 5802, p. 1130–1132, https://doi.org/10.1126/science.1132075.

Rupp, T.S., Olson, M., Adams, L.G., Dale, B.W., Joly, K., Henkelman, J., Collins, W.B., and Starfield, A.M., 2006, Simulating the influences of various fire regimes on caribou winter habitat: Ecological Applications, v. 16, no. 5, p. 1730–1743, https://doi.org/10.1890/1051-0761(2006)016[1730:STIOVF]2.0.CO;2.

Sah, J.P., Ross, M.S., Snyder, J.R., Koptur, S., and Cooley, H.C., 2006, Fuel loads, fire regimes, and post-fire fuel dynamics in Florida Keys pine forests: International Journal of Wildland Fire, v. 15, no. 4, p. 463–478, https://doi.org/10.1071/WF05100.

Schuler, K.L., Leslie, D.M., Jr., Shaw, J.H., and Maichak, E.J., 2006, Temporal–spatial distribution of American bison (*Bison bison*) in a tallgrass prairie fire mosaic: Journal of Mammalogy, v. 87, no. 3, p. 539–544, https://doi.org/10.1644/05-MAMM-A-115R2.1.

Schulz, W.H., Coe, J.A., Ellis, W.L., and Kibler, J.D., 2006, Preliminary assessment of landslides along the Florida River downstream from Lemon Reservoir, La Plata County, Colorado: U.S. Geological Survey Open-File Report 2006–1343, 29 p., 1 pl., https://pubs.usgs.gov/of/2006/1343/.

Symstad, A.J., Wienk, C.L., and Thorstenson, A., 2006, Field-based evaluation of two herbaceous plant community sampling methods for long-term monitoring in northern Great Plains national parks: U.S. Geological Survey Open-File Report 2006–1282, 38 p., 3 app., https://pubs.usgs.gov/of/2006/1282/.

Syphard, A.D., Franklin, J., and Keeley, J.E., 2006, Simulating the effects of frequent fire on southern California coastal shrublands: Ecological Applications, v. 16, no. 5, p. 1744–1756, https://doi.org/10.1890/1051-0761(2006)016[1744:STEOFF]2.0.CO;2.

Turetsky, M.R., Harden, J.W., Friedli, H.R., Flannigan, M., Payne, N., Crock, J., and Radke, L., 2006, Wildfires threaten mercury stocks in northern soils: Geophysical Research Letters, v. 33, no. 16, https://doi.org/10.1029/2005GL025595.

U.S. Geological Survey, 2006, Wildfire hazards—A national threat: U.S. Geological Survey Fact Sheet 2006–3015, 2 p., https://doi.org/10.3133/fs20063015.

Van Mantgem, P.J., Stephenson, N.L., and Keeley, J.E., 2006, Forest reproduction along a climatic gradient in the Sierra Nevada, California: Forest Ecology and Management, v. 225, p. 391–399, https://doi.org/10.1016/j.foreco.2006.01.015.

van Wagtendonk, J.W., 2006, Fire ecology of the Sierra Nevada—Forests born to burn, *in* Wuerthner, G. ed., The wildfire reader—A century of failed forest policy: Washington, D.C., Island Press, p. 102–115, https://islandpress.org/books/wildfire-reader.

Verdi, R.J., Tomlinson, S.A., Marella, R.L., 2006, The drought of 1998–2002—Impacts on Florida's hydrology and landscape: U.S. Geological Survey Circular 1295, 34 p., https://pubs.usgs.gov/circ/2006/1295/.

Westerling, A.L., Hidalgo, H.G., Cayan, D.R., and Swetnam, T.W., 2006, Warming and earlier spring increase western U.S. forest wildfire activity: Science, v. 313, no. 5789, p. 940–943, https://doi.org/10.1126/science.1128834.

Zhu, Z.-L., 2006, LANDFIRE—Collaboration for national fire fuel assessment: U.S. Geological Survey Fact Sheet 2006–3019, 1 p., https://doi.org/10.3133/fs20063019.

Zhuang, Q., Melillo, J.M., Sarofim, M.C., Kicklighter, D.W., McGuire, A.D., Felzer, B.S., Sokolov, A., Prinn, R.G., Steudler, P.A., and Hu, S., 2006, CO_2 and CH_4 exchanges between land ecosystems and the atmosphere in northern high latitudes over the 21st century: Geophysical Research Letters, v. 33, no. 17, https://doi.org/10.1029/2006GL026972.

Zuellig, R.E., Kondratieff, B.C., Ruiter, D.E., and Thorp, R.A., 2006, An annotated list of the mayflies, stoneflies, and caddisflies of the Sand Creek Basin, Great Sand Dunes National Park and Preserve, Colorado, 2004 and 2005: U.S. Geological Survey Data Series 183, https://pubs.usgs.gov/ds/ds183/.

ISSN 2331-1258 (online)
https://doi.org/10.3133/ofr20191002